



# USER'S GUIDE TO DESIGN-BUILD-OPERATE CONTRACTS FOR WATER AND WASTEWATER GREENFIELD INFRASTRUCTURE PROJECTS

STANDARD BIDDING DOCUMENT

June 2018





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ISBN 978-92-9261-270-2 (print), 978-92-9261-271-9 (electronic) Publication Stock No. TIM189443-2 DOI: http://dx.doi.org/10.22617/TIM189443-2

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# **Abbreviations**

ADB	Asian Development Bank
ADR	alternative dispute resolution
BOD <sub>5</sub>	biological oxygen demand 5 days
ВОТ	build-operate-transfer
COD	chemical oxygen demand
CON	historical contract nonperformance
DAB	Dispute Adjudication Board
DBO	design-build-operate
ELC	eligible countries
ELI	eligibility form
EQC	evaluation and qualification criteria
ERQ	employer's requirements
EXP	experience form
FIDIC	Fédération Internationale des Ingénieurs-Conse
FIN	financial data form
GCC	general conditions of contract
IFB	invitation for bids
ITB	instructions to bidders
KPI	key performance indicator
LARP	land and resettlement plan
NRW	nonrevenue water
OCB	open competitive bidding
PCC	particular conditions of contract
SBD	standard bidding document
SS	suspended solids
WTP	water treatment plant

WWTP.....wastewater treatment plant

## Introduction

The purpose of this user's guide is to guide Employers on how to prepare a Bidding Document and conduct a bidding process based on the Standard Bidding Document of the Asian Development Bank (ADB) for the Procurement of Design-Build-Operate (DBO) Contracts for Water and Wastewater Greenfield Infrastructure Projects (SBD DBO W/WW). This guide should be read in conjunction with the relevant Guidance Notes on Procurement published by ADB.

This user's guide covers the SBD DBO W/WW using a "Single-Stage: Two-Envelope" or a "Two-Stage" Bidding Procedure. The envelopes are opened in public at the date and time advised in the Bidding Document. The bids are evaluated, and following approval by ADB, the Contract is awarded to the Bidder whose Bid has been determined to be the lowest evaluated substantially responsive Bid.

The SBD DBO W/WW documents are available only in electronic format. They must be used for the procurement of DBO Contracts in relation with water and wastewater greenfield infrastructure projects, financed in whole or in part by ADB, unless ADB agrees to the use of other forms of bidding documents acceptable to ADB.

The SBD DBO W/WW documents are intended to be used for the procurement of DBO Contracts through open competitive bidding when

- the contract involves the design, build, and operation of water and/or wastewater greenfield infrastructure;
   and
- the Employer wants the plant to meet the purpose of and to reach the performance standards defined under the Contract, and to have a Contractor contractually committed to deliver and operate a fit for purpose facility under a long-term performance-based contractual arrangement where the Employer's primary concern lies with the achievement of performance objectives by the Contractor.

The SBD DBO W/WW anticipates that the Contractor is acting as single point of responsibility for the overall design, build, and operation of the facility, over part of or all of the expected life span of the facility, including all necessary asset replacement during the so-called Operation Service Period.

The procedures and practices incorporated in the SBD DBO W/WW have been developed through best international practices in this emerging arena (versus more traditional forms of contracting such as build-only, design-build, build-operate-transfer [BOT], or concessions) of DBO Contracts in the water sector, with **whole life cycle costs and performance requirements being at the root of such contractual arrangements**. Relevant Bid evaluation mechanisms and contractual machinery have accordingly been developed.

The General Conditions of Contract are based on the FIDIC Conditions of Contract for Design, Build and Operate Projects, 2008 (1st edition) also known as the "Gold Book." It assumes a greenfield environment, and an Operation Service Period of around 20 years. Shorter Operation Service Periods can nevertheless be considered, as further explained in this SBD, but the attention of the users is brought to the fact that one of the key strengths of the Gold Book, besides performance obligations, lies with the obligation of the Contractor to provide for all necessary asset replacement during the Operation Service Period, for a price preset in the Contract—through the Asset Replacement Fund and Schedule. This requires the Contractor to optimize design, construction, and operation activities to deliver assets, the actual life span of which is optimized, since any early asset breakdown would be at the Contractor's risk and cost. Overly short Operation Service Periods will deprive an Employer of the benefit of this mechanism, if the Operation Service Period is shorter than the life span expectancy of the majority of the electrical and mechanical equipment. In such case, the Contract may come to an end before

it can be fully demonstrated whether the assets delivered by the Contractor are robust enough to withstand the passing of time and operation.

The Employer's Representative is appointed by the Employer to supervise and manage the Contract on behalf of the Employer, to contribute to the successful completion of the Contract. When appointing the Employer's Representative, the Employer may either select a reputable firm of consulting engineers experienced in the particular field, or appoint its own staff, if ADB is satisfied that the Employer has suitable in-house expertise.

The document foresees the nomination of a **Dispute Adjudication Board** whose role is to prevent and promptly resolve disputes which may occur in between the parties to the Contract. The costs of the Dispute Board are shared equally by both parties. Arbitration is resorted to only if the parties fail to settle a dispute through the Dispute Board.

The document also foresees the mobilization of an **Auditing Body**, being an independent and impartial body in between the parties, the primary role of which is to verify the parties' compliance with their obligations during the Operation Service Period.

This guide includes preliminary sections on

- the key features of a DBO Contract,
- the DBO project typology and risk matrix for Water and Wastewater infrastructure,
- the Bidding Process and the way to conduct Bid evaluation, and
- the Invitation for Bids.

ADB welcomes any feedback or experiences from both borrowers and bidders on the use of its SBD DBO W/WW. For information on procurement under ADB-financed projects, contact:

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### PART 1

Design-Build-Operate Contracts for Water and Wastewater Greenfield Infrastructure

# What Are the Key Features of Design-Build-Operate Contracts?

Design-Build-Operate (DBO) contracts are **long-term**, **contractual**, **performance-based arrangements** between an Employer and a Contractor, where the Contractor is to design, build, operate, and maintain a facility, to meet performance standards, to carry out asset replacement over its life cycle, or most of it, and to hand back the facility to the Employer upon the contract completion.

DBO arrangements are often confused with other forms of public–private partnership (PPP) projects, such as build–operate–transfer (BOT) or concessions, but, as a main difference with the latter, **DBO projects do not require the Contractor to finance the project nor to bear its commercial risk. Financing rests with the Employer**, hence contractual arrangements are shorter and simpler than with BOT or concessions.

As a difference with more traditional contracting methods, such as build-only or design-build, a DBO contract removes the usual interfaces encountered in the construction industry, in between the D, B, and O phases of a facility: the DBO Contractor acts as a **single point of responsibility over all or part of the life cycle of a facility**. Accordingly, where an Employer, many years after a design-build contract ended, has generally no other easily available recourse than to assume the financial consequences of an asset becoming obsolete earlier than the design life span announced by the design-build Contractor, or of Operating Expenditure (OPEX) becoming much higher than defined at design stage, a DBO arrangement makes the Contractor directly assume such shortcomings—as the contract commits to Operation Service fees and to an Asset Replacement Schedule and associated Fund. Any higher actual OPEX than committed, or earlier than planned asset replacement, is then its full risk.

As a result, the Employer benefits from a higher and earlier certainty as to the whole life cycle costs of a facility, and its performance—the DBO Contractor is contractually bound to meet performance standards and is sanctioned by the payment of performance damages if those are not met. DBO arrangements are also praised for allowing faster delivery schedules, due to the absence of D, B, and O interfaces, a higher long-term operational viability, and thus better value for money and lower life cycle costs than with traditional sequential contracting over the life span of a facility. Indeed, recent economic research studies tend to demonstrate that DBO is efficient and sustainable in economic terms, and with higher economic value potential than design—build or BOT arrangements.

# Design-Build-Operate Project Typology and Risk Matrix for Water and Wastewater Infrastructure

# Design-Build-Operate Water and Wastewater Infrastructure Project Typology

1. A simple and straightforward project classification can be drawn up for water and wastewater infrastructure, as presented in Table 1.

Table 1: Water and Wastewater Project Classification

Class 1	Greenfield		Brownfield	
Class 2	Treatment Plant	Pumping Station (electromechanical works)		Civil Works (networks, reservoirs)
Class 3	Water Supply		Was	tewater

Source: Asian Development Bank.

#### A) Greenfield versus Brownfield

- 2. Under Class 1:
  - "Greenfield projects" are those related to a new build facility or infrastructure. For example, a new water treatment plant (WTP) or wastewater treatment plant (WWTP), a new water transmission main or pumping stations, etc.
  - "Brownfield projects" are those where part or all of the facilities are existing facilities to be rehabilitated. Those are for instance frequently required for water supply networks, with rehabilitation works performed on an existing network with the underlying objective to reduce the level of nonrevenue water (NRW) and hence to improve the distribution efficiency.
- 3. This SBD is suitable for greenfield projects, but is not directly applicable for brownfield projects, for the following reasons:
  - The SBD is based on the FIDIC Conditions of Contract for Design, Build and Operate Projects, 2008
    (1st edition) also called the FIDIC "Gold Book," which assumes a greenfield and not a brownfield
    project.

- Brownfield projects require specific provisions to deal with existing facilities/assets which are handed over by the Employer to the Contractor at contract inception. Under those, the Contractor will perform an initial operation service period in a first phase of the Contract, during which they will undertake a diagnostic assessment of the infrastructure, and will define a rehabilitation scope of works to achieve the performance standards set in the Contract. Under a second phase of the Contract, they will then implement such rehabilitation works and will continue operating the infrastructure. Such projects require specific contractual mechanisms to deal with matters such as: defects liability on existing assets (especially latent defects) and relation with performance standards, classification of existing assets (in between those accessible and those which are not), replacement/repair liability, and operation of existing assets from the outset of the contract execution.
- Such brownfield provisions are not embedded in the FIDIC Gold Book. FIDIC plans to release in the future a so-called "Bronze Book," which will be an operate-design-build (ODB) form of contract designed to handle the specificities of such brownfield projects.
- 4. ADB may develop in the future an SBD for brownfield projects based on that upcoming form of Contract from FIDIC. In the meantime, users of this SBD should be warned that using it for brownfield project purposes would require extensive and sensitive amendments to various parts of the Bidding Document, in particular under Section 8 (Particular Conditions of Contract), Section 6 (Employer's Requirements), and Section 4 (Bidding Forms [in particular for Price Schedules and Schedule of Performance Guarantees]).
- 5. Users should also note that it is generally neither practical nor realistic to expect an ODB Contractor to perform due diligence of existing infrastructure within a short bidding period, and to then contractually commit to reach performance standards and provide for the necessary rehabilitation of such infrastructure that the Contractor never got to design, build, or operate. Status of existing assets is consequently a large uncertainty for the Contractor, hence a prominent risk, and a typical bidding period is insufficient to overcome this matter and reduce the uncertainty down to commercially reasonable levels. Experience shows that competent ODB Contractors would tend to walk away from projects where they are not given a reasonable opportunity to inspect and investigate the infrastructure they are meant to take over, and to endorse the rehabilitation and performance risk. Employers are accordingly encouraged to develop realistic expectations, in terms of procurement process, bid submission period, and allocation of risks. This would contribute to avoiding situations where competent Contractors either walk away or bid at high prices to financially cover their risk exposure, and where the Employer may be left to select among Contractors that are not the most competent and cost-effective, to the detriment of the project.
- 6. Contract solutions exist to handle the inherent specificities of ODB/brownfield projects, typically in the form of conditional contracts, or two-stage contracts with partnering arrangements between the Employer and the Contractor to align their respective objectives along one common goal—optimizing the scope of rehabilitation works, within a set budget, to meet achievable performance standards. Users interested to consider such ODB/brownfield projects can contact ADB for further information on partnering contractual arrangements, which are of growing use internationally, and should seek for specialist contractual advice and support when preparing and implementing their ODB project.

#### **B) Greenfield Projects Typology**

- 7. Development of the Bidding Document, based on this SBD, for DBO/greenfield projects will be based on the features of classes 2 and 3 in Table 1, since they affect the key elements of DBO contracts, i.e.:
  - the performance standards defined in Section 6 (Employer's Requirements);
  - the performance guarantees given by the Contractor under Section 4 (Bidding Forms); and

- the payment mechanism for the design-build period and for the Operation Service Period, as given under Appendix 1 to the Particular Conditions of Contract in Section 8.
- 8. The type of treatment (conventional technologies, new technologies, etc.) at stake for a process plant does not affect the definition of performance standards. Indeed, experience shows that focus is given, for process plants, on defining performance standards based on OPEX features and on compliance with quality standards for the water product, whatever the type of treatment. This is normal since DBO contracts are performance-based forms of contract; hence the Employer's focus is on the quality of the product, and on the costs of producing it. The Employer is generally not concerned with intermediary production stages, or the way to reach the performance standards set in the contract. What matters is the ultimate results reached by the plant, not the means to deliver them.
- 9. Typical performance standards can be defined as follows:
  - For WTP
    - » Water quality—treated water compliance with quality standards (pH, chlorine, bacteriological contents, etc.)
    - » Minimum water production outputs (in cubic meter [m³]/day [m³/day], with daily and/or seasonal peak demands to be met, etc.)
    - » Power consumption (per m³ of treated water)/efficiency
    - » Chemical consumption (per m³ of treated water)/efficiency
    - » Etc.

#### For WWTP

- » Wastewater effluent to the recipient water body—compliance with discharge standards (BOD<sub>5</sub>, COD, SS, etc.)
- » Wastewater treatment capacity (in m³/day, with daily and/or seasonal peak demands to be met, etc.)
- » Power consumption (per m³ of treated water) / efficiency
- » Chemical consumption (per m³ of treated water) / efficiency
- » By-products—sludge quantity, sludge dryness contents, etc.
- » Noise and smell/odor nuisance levels
- » Etc.
- For pipeline networks (water and wastewater)
  - » Continuity of water supply (24 hours per day)
  - » Pressure in the water network
  - » Decrease of NRW
  - » Residual chlorine contents in the water network
  - » Management of customer's complaints
  - » Leak repair performance
  - » Level of silts in wastewater networks
  - » Odor management
  - » Etc.

# Design-Build-Operate Water and Wastewater Greenfield Infrastructure Projects—Typology of Risks

#### A) From Risk Assessment to Risk Management in the Construction Industry

- 10. Risk is the impact of uncertainty on objectives, but is also often expressed in terms of a combination of the consequences of an event and the associated likelihood of occurrence of an event.<sup>1</sup> Applied to a construction project, risks can typically be classified based upon their possible timing of occurrence (pre-, during, or post-construction phase), and their effect if they eventuate: personal injury or loss of life, material damage to the works being constructed or to the property of others, and pure economic and/or time loss for the construction team, for example, when unforeseen physical conditions are encountered at site and make the construction operation more onerous than anticipated.<sup>2</sup> Construction projects, by nature, comprise activities where a wide range of risks may eventuate.<sup>3, 4</sup>
- 11. In contrast with this inherent uncertainty associated to the construction process, society at large expresses increasing demand for health and safety, as well as environmental hazards, to be better controlled and casualties to be limited if not nullified.<sup>5</sup> Project parties, and in particular project lenders/financers, require an increasing level of certainty on quality, time, and cost of a project and to see corresponding risks on those be minimized.<sup>6</sup> Risk inherently exists in construction and cannot be ignored. However, it can be "managed, minimized, shared, transferred, or accepted," for the better interests of project parties and of society.
- 12. This emphasis does echo a growing culture of risk management, openly and proactively addressing risks in construction operations, rather than keeping them hidden and liable to cause problems when they eventuate. This approach started to emerge in the 1980s upon the cornerstone work of Max Abrahamson, who defined that a construction party should bear a risk when it can control its occurrence, control its effect, transfer it by insurance, and/or have a preponderant economic benefit of running it.<sup>8</sup>
- 13. Standard forms of construction contracts have accordingly over the last decades increasingly tried to capture and allocate those risks, hence moving away from an initial no-risk sharing approach. The management of construction risks is better achieved by more proactive contractual strategies. 10

<sup>&</sup>lt;sup>1</sup> ISO 31000. 2009. p. 1.

N. Bunni. 2011. *Risk and Insurance in Construction* (2nd edition). Spon Press. p. 43.

<sup>&</sup>lt;sup>3</sup> J. H. M. Tah and V. Carr. 2000. *Information Modelling for a Construction Project Risk Management System*. Engineering, Construction and Architectural Management, Vol. 7 Iss:2, pp. 107–119.

<sup>&</sup>lt;sup>4</sup> Footnote 2, p. 33.

N. Bunni. 2005. The FIDIC Forms of Contract (3rd edition). Blackwell Publishing. p. 94.

J. Scriven. 1995. A Funder's View of Risk in Construction. Risk Management and Procurement in Construction by J. Uff and A. Odams (1st edition) King's College, London. p. 73.

M. Latham. 1994. Constructing the Team, Final Report of the Government/Industry Review of Procurement and Contractual Arrangements in the UK Construction Industry. p. 13.

<sup>&</sup>lt;sup>8</sup> M. Abrahamson. 1983. Risk Management. ICLR 241. Incorporated Council of Law Reporting, London.

Footnote 2, p. 141.

P. Capper. 1995. "Overview of Risk in Construction" in Risk Management and Procurement in Construction by J. Uff and A. Odams. (1st edition) King's College, London. p. 15.

- 14. FIDIC forms of Contract have for instance adopted such principles of risk allocation. Their Procurement Procedures Guide defines that the most beneficial distribution of risks is to allocate each risk to the party that is best able to deal with and handle it. <sup>11</sup> FIDIC advocates that
  - a sensible, balanced risk sharing between the contractor and the employer results in the lowest overall total cost for completed projects.<sup>12</sup>
- 15. In order to analyze the typical risks which can affect a DBO project, ADB has based its approach on the classification of risks on the aforementioned principles of risk allocation and management, as well as on authoritative textbooks in the industry, in particular the one of Nael Bunni, *Risk and Insurance in Construction*. <sup>13</sup>
- 16. Nael Bunni echoes the risk allocation principles defined by Max Abrahamson, which are reflected as follows:

A party should bear a construction risk if:

- (a) It is in his/her control, i.e., if it comes about it will be due to willful misconduct or lack of reasonable efficiency or care; or
- (b) He/she can transfer the risk by insurance and allow for the premium in settling his/her charges to the other party... and it is most economically beneficial and practical for the risk to be dealt with that way; or
- (c) The preponderant economic benefit of running the risk accrues to him/her; or
- (d) To place the risk on him/her is in the interests of efficiency (which includes planning, incentive, innovation) and the long-term health of the construction industry on which that depends; or
- (e) If the risk eventuates, the loss falls on him/her in the first instance, and it is not practicable or there is no reason under the above four principles to cause expense and uncertainty and possibly make mistakes in trying to transfer the loss to another.<sup>14</sup>
- 17. The FIDIC Gold Book, which is the standard form of contract used for this SBD for DBO projects, follows these risk allocation principles, under the same allocation spirit as highlighted under para. 14 above and which are applied across the FIDIC Suite of Contracts.
- 18. Accordingly, the typology of risks developed in section B of this chapter:
  - generally, does not amend the risk allocation principles adopted by the FIDIC Gold Book, since it is not the intention to do so owing to the fact that they are reflecting internationally recognized best practices (there are however few limited exceptions which will be developed below);
  - focuses primarily on risks which are non-insurable, i.e., those which, if they eventuate, will solely generate an economic and/or time loss for either party; and
  - for ease of reference, follows the life cycle of the contract, from its procurement stage, then design, build, and operation stages.
- 19. This is made in the view of optimizing risk management, since those non-insurable risks are typically those where the risk mitigation measures can be optimized, under a cost-benefit analysis, to determine their relevance in reducing the possible time and/or cost overrun suffered by the project if the risk eventuates.

<sup>&</sup>lt;sup>11</sup> FIDIC Procurement Procedures Guide. 2011 (1st edition). p. 35.

<sup>&</sup>lt;sup>12</sup> Footnote 11.

Footnote 2.

Footnote 2, p. 8.

20. Indeed, the other risks, i.e., the insurable risks, are typically those which, if they eventuate, will cause physical damage or loss, and/or personal injury. There are generic risk mitigation measures for those, which will be of course reflected below but in a summarized manner. As they are generally applied on all projects, this Guide takes the view that they do not necessitate specific elaboration.

#### B) Cross-Cutting Risks Throughout the Whole Contract Life

#### **Insolvency Risk—Insolvency of the Contractor**

#### **Risk Description**

- 21. Where will the Contractor be 10 years from now? That question bears particular importance in the frame of DBO projects which typically run over many years or even decades. Contracting with a large organisation tends to give comfort to Employers under the usual presumption that it is "too big to fail". However, such presumption has proved to be wrong with the 2008 financial crisis, where even large multinational firms were seen to become insolvent and then liquidated.
- 22. Once the Contractor becomes insolvent and enters into a liquidation process, an official receiver assumes office as liquidator and will deal with all creditors of the company being wound up. The Employer would then be one of those in the list of creditors toward which the insolvent Contractor is in debt. There is of course, in such situations, no guarantee that the Employer will be able to recover all his/her entitlements under the Contract. Typically, an insolvency situation allows the Employer to terminate the DBO contract, under, for example, GCC Subclause 15.2 item (f) of the FIDIC Gold Book under Section 7 of this Bidding Document. The Employer, according to GCC Subclause 15.4(c) will then be able to
  - "recover from the Contractor any losses and damages incurred by the Employer and any extra costs of completing the Works, after allowing for any sum due to the Contractor under Subclause 15.3 [Valuation at Date of Termination for Contractor's Default]. After recovering any such losses, damages, and extra costs, the Employer shall pay any balance to the Contractor."
- 23. In practical terms, assuming a DBO Contract Price of 100, this would mean that if the Contractor becomes bankrupt while 60 has been paid to him/her, the Employer can proceed with contract termination. Owing to the advance payment repayment mechanism defined under GCC Subclause 14.2, it would have been entirely repaid at that time and the corresponding bank guarantee released. The only available financial instrument in hand for the Employer would then be the Performance Security, issued under GCC Subclause 4.2 from the outset of the Contract. As its value is generally 10% of a Contract Price, we will assume it is the case here and that it is worth 10.
- 24. If it later turns out that there are latent defects with the Works as designed and built by the Contractor, and that the actual net worth of the Works delivered by the Contractor prior to termination is 40, it would mean two things as follows:
  - The Contractor now has a debt of 20 toward the Employer, but he/she might well not be in the financial position to pay that debt anymore owing to the liquidation process.
  - The Employer would now have to pay at least 60 to complete the DBO Contract, while having only 40 left in budget. The expression "at least" is to be stressed, since any retendering several years after the initial tendering, may lead to price increase from the market, especially in a situation where a new

contractor would be invited to take over uncompleted works from someone else. Any contractor would enter into such arrangement with a high degree of caution as to the quality of the incompleted works and the extent they might reliably be incorporated in the works needed to carry out the new contract. A high degree of caution would most probably be translated into a higher Contract Price. All in all, any retendering for completing the DBO Contract may reveal that the price for completing might well be over the 60 value mentioned above.

- 25. There is in that case a very high risk that the Employer will incur an extra cost of at least 20 to complete the DBO Contract, while only having 10 in hand which it can call upon through the performance security, assuming of course this is a proper on-demand bond and that there are no obstacles in the calling process, as it sometimes occurs. Ultimately, there is a very high risk that the Employer is short of at least 10 to complete the Works, being its financial net loss caused by the Contractor's insolvency and being impossible to recover from the Contractor if it has been liquidated.
- 26. Liquidation is indeed often referred to as the corporate equivalent of dying. There is nothing to recover from a dead entity, and all outstanding debts of the Employer would then be irrecoverable.
- 27. The contractual link within the supply chain would also be broken in this case. The Contractor may have been in contracts with Subcontractors and Suppliers, but those do not have a contractual link with the Employer. The Employer does not then have any direct contractual recourse toward the Subcontractors and Suppliers because they do not owe any contractual duty/obligation toward the Employer—they only owe such duty/obligation to the Contractor. At the same time, they do not have any recourse toward the Employer (typically for payment of outstanding monies) because the Employer does not owe such obligation to them, but to the Contractor—unless the provisions of the governing law give them any such right, as it is the case in some jurisdictions where laws on subcontracting do provide a direct payment mechanism in between an Employer and a Subcontractor.
- As seen from the above, the main risk from the Employer's perspective is to incur such financial loss which may not be recoverable from the Contractor if it has been liquidated before paying his/her debt, and without any remedy toward the rest of the supply chain due to the absence of any contractual open route to do so. This risk is further exacerbated with the long-lasting relationship implied by the DBO Contract—the financial situation of the Contractor might be sound at the time of contracting, but unsound several years later.

- 29. Several mitigation measures have been provided for as explained below.
- 30. Performance Security requirements have been supplemented by the need for the Contractor to mobilize a parent company guarantee, under a new Subclause 4.2A introduced under the PCC Part B in Section 8 of this SBD. Note that the feasibility of having bank guarantees maintained over an extended period (several years, and up to 20 years or more), as for more traditional contracts, raises specific concerns in the construction industry as to their practicability and their reasonableness.
- 31. Accordingly, the Performance Security regime under the GCC Subclause 4.2 in Section 7 of this SBD has been amended through the PCC to make the Performance Security requirements last until the end of the Retention Period, i.e., one year after the date stated in the Commissioning Certificate (which goes for the acceptance of the Design–Build of the Works as per GCC Subclause 11.7). This was made under the rationale that

- There is a Maintenance Retention of 5% deducted from the value of each interim payment to the Contractor over the Operation Service Period, as per GCC Subclause 14.19.
- The first half of the Retention Money, which is progressively built up over the Design–Build Period, is now (through PCC) released at the end of the Retention Period (1 year after the date stated in the Commissioning Certificate), and the second part is released at the end of the Operation Service Period. This differs from the standard GCC provision where the Retention Money was fully released at the end of the Retention Period, while it is now only released in half.
- As stated above, an additional Subclause (4.2A) under the PCC now requires the Contractor to obtain a parent company guarantee.
- 32. It was found that the above provides for a reasonable amount of security to the Employer.
- 33. It was also found that maintaining a security in place over the full life time of the DBO contract, as required by GCC Subclause 4.2, might be unnecessary. The FIDIC DBO Contracts Guide indeed states as follows:<sup>15</sup>
  - "it is recognized that there are other ways in which to arrange this Security.. some Employers may choose not to require a Performance Security during the Operation Service Period as they may see this phase of the Contract as being equivalent to a "service contract" where a Performance Security is not appropriate"
- 34. **The Contractor's financial strength is investigated at qualification stage** as laid down under Sections 3 and 4 of this Bidding Document, **through its net worth**, being the difference in between his/her assets and his/her liabilities, which should be positive over the last recent years. This is a standard practice, as recommended in several authoritative textbooks on construction risks<sup>16</sup> and as is already prescribed by ADB.
- 35. This is complemented by the **list of ongoing disputes**, as developed under Sections 3 and 4 of this SBD with the litigation history, to assess the impact on the bidders' net worth of those disputes should they all be resolved against the bidder.
- 36. In the frame of a long-lasting contract such as a DBO contract, regular financial net worth checks should be done across the life of the Contract, to give the Employer a contractual recourse, such as terminating the Contract in case the Contractor's net worth becomes negative (say several years after the DBO Contract was entered into) to such extent that the Employer is under the reasonable opinion that the Contractor will soon no longer be in the position to assume his/her obligations under the Contract. The FIDIC Gold Book has addressed this matter by introducing a new Subclause (against the 1999 Suite of FIDIC Contracts) called "Changes in the Contractor's Financial Situation", and being GCC Subclause 4.25 in Section 7 of this SBD, and which states as follows:

"If the Contractor becomes aware of any change in the Contractor's financial situation which will or could adversely affect his/her ability to complete and fulfill all his/her obligations under the Contract, he/she shall immediately give Notice to the Employer with detailed particulars. Within 28 days of receiving such notice, the Employer shall advise the Contractor of what action he/she intends to take and/or what action the Employer requires the Contractor to take. In any event, the Contractor shall annually provide the Employer with his/her audited financial statements and reports." (emphasis added)

Furthermore, GCC Subclause 15.2, item (e) provides that the Employer shall be entitled to terminate the Contract if the Employer:

"..in any event reasonably concludes that the Contractor will be unable to complete or fulfill his/her obligations under the Contract due to the Contractor's financial situation"

<sup>&</sup>lt;sup>15</sup> FIDIC DBO Contract Guide. 2011.

<sup>&</sup>lt;sup>16</sup> N. J. Smith, T. Merna, and P. Jobling. 2006. Managing Risk in Construction Projects. (2nd edition) Blackwell, Oxford. p. 139.

#### **Legal Risk—Contract Interpretation Difficulties/Illegal Contract Provisions**

#### **Risk Description**

- 37. Generally, bidding documents are developed by Consultants on behalf of Employers. Consultants are either firms or individuals. They usually act in the capacity of consulting engineers, from whom it is expected the reasonable skill and care of professional engineers when delivering their duties. Their inputs are expected to be delivered on the engineering/technical side of projects. They are not expected to provide legal services.
- 38. However, sections 7 to 9 of the ADB SBD cover the Conditions of Contract, and Consultants are the ones to draft the Particular Conditions of Contract which are found under Section 8 of the SBD. Owing to the high ranking of the PCC in terms of priority order along which an ambiguity under the Contract will be interpreted (GCC Subclause 1.5), the PCC is a document of high legal impact regarding the rights and the obligations of the Parties under, or in connection with, the Contract.
- 39. Two main issues are regularly encountered with the drafting of PCC, as follows.
- 40. The drafting introduces omissions and ambiguities. The style of the text may depart from the GCC style, the terminology used might be different from the one defined in the Contract (the drafter using "his/her own words," not necessarily applying the Contract defined terminology), or changes are brought to some subclauses without checking whether the related subclauses have been changed accordingly, while the Contract is to be read and construed as a whole. All this in practice does generate question marks from the Contract users during the contract execution, and the more contract interpretation difficulties are encountered, the more disputes are likely to occur. Errors/omissions in contract are a regular source of disputes. This issue has always been recognized by FIDIC, which repeatedly advises construction Parties against the severe negative consequences of improperly drafted PCC. The FIDIC Gold Book, in the "Particular Conditions Part B—Special Provisions" section of the Gold Book, states as follows:

"The tender documents should be prepared by suitably qualified engineers who are familiar with the technical aspects of the required works and the particular requirements and contractual provisions of a DBO project. **Furthermore, a review by suitably qualified lawyers may be advisable."** (emphasis added)

- 41. The drafting does not reflect mandatory provisions of the governing law, which is generally the law of the country where the project is executed. Mandatory provisions of the law are those which cannot be overridden by contract terms, hence which will apply in any case, whatever the contract stipulates. These are also sometimes called "public policies provisions" as they are meant to protect the society at large against what would otherwise be seen as detrimental practices for the sustainable and satisfactory operation of a society.
- 42. For example, terminating a Contract because an insolvency process started, as provided for in the FIDIC Gold Book Subclause 15.2 item (f), is against the law in many civil law jurisdictions, while perfectly acceptable in most common law jurisdictions. Other GCC provisions which are typically affected by the governing law, when it is the same as the law of the territory where the works are executed, are as follows:
  - GCC Subclause 4.4 and any Subcontractor particular legal treatment, such as any right for direct payment from the Employer
  - GCC Subclauses 4.8, 4.18, and 6.7 regarding Health, Safety, and Environment matters
  - GCC Clause 6 generally regarding labour laws
  - GCC Subclause 9.6 and Subclause 10.7 for the payment of delay damages and performance damages

- GCC Clause 12 on defects, where some jurisdictions impose specific legal liabilities—typically decennial liability on facilities for instance.
- GCC Clause 19 on insurance
- GCC Subclause 20.1 regarding the 28-day and 42-day time bars on Contractor's Claims which can be challenged, under some jurisdictions, as being an inequitable obstacle of what would otherwise be a legitimate right to claim.
- 43. Beside the above, there are also all specific local legal and regulatory requirements which affect the execution of the works. This will cover the Parties' obligations as to the obtaining of permits, any specific design review obligation (from an Authority), any requirements for Tests on Completion, etc.

- 44. The SBD, under Section 6 (Employer's Requirements), highlights sections of this document which shall contain details as to
  - the laws, regulations, codes, and standards applicable to the Contract;
  - the permits and licenses to be obtained by the Parties; and
  - the applicable health, safety, and environmental requirements.
- 45. The SBD, under the introductory part of the PCC Part B under Section 8, also states that **there shall systematically be a legal review done before a Bidding Document is finalized and sent out to the market.** This legal review should be done by law firms, or individual lawyers, who are construction lawyers:
  - Familiar with the General Conditions of Contract—it would be time wasting to mobilize a law firm/lawyer who does not know the FIDIC Conditions of Contract in general, and the Gold Book, as well as their case law and main authoritative textbooks when reviewing PCC developed under the ADB SBD for DBO projects. This, in practice, would only generate additional costs to the Employer (the lawyer charging time for getting familiar with the GCC, and spending time on proposing changes through the PCC which would not be necessary owing to relevant sources of authority—FIDIC DBO Contracts Guide, case law, textbooks), and
  - Experienced with the governing law of the Contract.
- 46. A regular objection to such legal reviews is the cost associated to those. However, in the frame of multimillion US dollar deals, which, in the specific case of DBO projects, will run for many years if not decades, the cost of such legal risk prevention measure, though limited against the overall DBO contract value, is outweighed by the benefit of avoiding the suffering from unclear/ambiguous contract terms over the contract life, and to incur costs because of claims and dispute proceedings which could have been greatly avoided by a sound contract drafting.

#### Dispute Risk—Disputes between the Parties

#### **Risk Description**

- 47. Many countries across the world have, over the last 40 years, progressively recognized the deleterious effect of claims, disputes, and litigation upon the efficiency of the construction process, leading to rapidly escalating costs for the construction parties, and generating unacceptable losses at the level of the general economy of a country. This has been recognized for instance by the United States in the 1970s, <sup>17</sup> by the United Kingdom in the 1990s, <sup>18</sup> and more recently by several other countries: Australia, among others. Indeed, in those countries the construction industry was found to be a litigious one, prone to disputes, and generating average performance and poor overall profitability. <sup>19</sup>
- 48. Those countries have implemented various kinds of answers to attempt to overcome such negative situations. These are called Alternative Dispute Resolution (ADR) methods, "alternative" meaning alternative to litigation. They work on the basis that although claims and disputes cannot necessarily be always avoidable, their protracted resolution can be avoided. Typically, when claims escalate into disputes in construction contracts, and do not get promptly resolved, there is a significant risk the dispute risk that the relationship between the parties progressively falls apart to such extent that the whole contract becomes jeopardized. Indeed, litigation proceedings are known to last several years and to be highly costly to the Parties, in particular due to legal fees and expert witness' fees. It is consequently in the interest of the global economy in general, and of the construction contract parties in particular, to have at their disposal fast-track and efficient dispute resolution mechanisms.
- 49. DBO contracts are particularly sensitive to this dispute risk, owing to their long-term nature. It would be highly detrimental for the project to leave the relationship between the Parties to fall apart because claims and disputes are not promptly addressed and resolved. Since the Parties will have "to live with each other for many years", it would not be satisfactory to run the risk of seeing acrimonious, posturing, opportunistic and/or adversarial behaviors developing over the contract implementation period.

- 50. The dispute resolution mechanism foreseen by FIDIC, i.e., the Dispute Adjudication Board (DAB), has been fully reflected under the Bidding Document. The FIDIC Gold Book provides that the DAB is to be mobilized from the outset of the Contract execution to be able to deliver its dual function:
  - **Dispute avoidance**—by providing informal assistance to the Parties, at their joint request during the contract implementation, to assist the Parties in resolving any disagreement they may have.
  - **Prompt dispute resolution**—deciding on a dispute formally referred to the DAB, within 84 days from the date the DAB receives the respondent's submission.
- 51. It is indeed unfortunately very frequent for DABs not to be mobilized from the outset of the Contract, despite express contract terms requiring such early mobilization. This is generally explained by several reasons, such as

Dispute Review Board Foundation. 2007. DRBF Practices and Procedures Manual. Chapter 1.1. http://www.drb.org/concept/manual/.

See M. Latham report (1994) in footnote 7.

J. Egan. 1998. Rethinking Construction. HMSO, Department of Trade and Industry. London.

- lack of awareness of the Parties as to the DAB's role and potential benefits for the project;
- in relation with the above, reluctance to consider paying for its costs when its role is not known/ understood hence its added value not perceived; and
- the belief that such mechanism is not permitted by the law of the country where the works are executed, while this is generally wrong since vast majority of the jurisdictions across the world have the principles of freedom of contract, and of legal force of contractual obligations, enshrined in their law.
- 52. The DAB is composed of generally one or three independent and impartial members, who are meant to act in a positive way to help prevent a claim from becoming a dispute. <sup>20</sup> Under a DAB, parties are deprived of any opportunity to posture, knowing they act under the monitoring of respected professionals. <sup>21</sup> "The accumulation of claims is minimized and there is generally not an ever growing backlog of unresolved issues" <sup>22</sup> creating an acrimonious atmosphere which would be detrimental to the execution of the construction operations.
- 53. The SBD fully integrates the DAB mechanism by
  - introducing provisional sums for the DAB, both under the design-build period (as laid down under Section 4 (Bidding Forms, Price Schedule No. 4) and under the Operation Service Period (as laid down under Section 4 (Bidding Forms, Price Schedule No. 6), and by detailing under Section 8 (PCC Subclause 13.5) how to use Provisional Sums in conjunction with the DAB services; and
  - recommending, when preparing the Bidding Document, and when determining which budget should
    be provided to cater for the DAB, to refer to practical guidance such as the one provided by the Japan
    International Cooperation Agency (JICA), which issued in 2012 a "Dispute Board Manual"<sup>23</sup> which
    provides practical guidance for those preparing bidding documents, in assisting in defining DAB
    budgets to be allocated in the contract, and the way to use those.

G. Owen and B. Totterdill. 2007. Dispute Boards: procedures and practice. (Thomas Telford). p. 5. London.

<sup>&</sup>lt;sup>21</sup> C. Chern. 2015. *Chern on Dispute Boards* (3rd edition). Informa Law. p. 27. London.

<sup>&</sup>lt;sup>22</sup> G. Owen (footnote 20). p. 47.

See http://www.jica.go.jp/activities/schemes/finance\_co/procedure/guideline/pdf/DisputeBoardManual\_201203\_e.pdf.

# Risk of Personal Injury to People/Physical Damage or Loss to the Works or to Other Property

#### **Risk Description**

- 54. This risk can originate from the following causes:
  - (a) Defective design, bad workmanship, or defective materials used by the Contractor. It is then a Contractor's risk;
  - (b) Any act or omission of the Employer, or the necessary result of the construction of the Works as defined in the Contract; or
  - (c) Occurrence of Exceptional Risks—these are risks which are external to the Parties, beyond their control and which they cannot overcome. Those exceptional risks were named "Force Majeure" risk events in the 1999 FIDIC Suite of Contracts and are also known as such in many jurisdictions. Typically, these are war, riots, civil unrest, natural catastrophes, etc.
- 55. Under cause (a) above, the Contractor would fully bear the risk under the provisions of the Gold Book—see Section 7 GCC Subclause 17.2 and 17.4 but would benefit from insurance cover for this under GCC Subclause 19.2—typically a Professional Indemnity (PI) for risk stemming from his/her design, and/or the equivalent of a Contractor's All Risk (CAR) insurance.
- 56. Under causes (b) and (c) above, the Employer would bear the risk as per GCC Subclause 17.1. Cause (b) is categorized, under the Gold Book, either as a "Commercial Risk" or as "Employer's Risk of Damage", while cause (c) falls under the "Employer's Risks of Damage" category. These are defined as follows:
  - Under GCC Subclause 1.1.7: "Commercial Risk" means a risk which results in financial loss and/or time loss for either of the Parties, where insurance is not generally or commercially available.
  - Under GCC Subclause 1.1.67: "Risk of Damage" means a risk which results in physical loss or damage to the Works or other property belonging to either Party, other than a Commercial Risk.

#### Risk Mitigation Measures Introduced by this SBD

- 57. As to the risk under cause (a) above:
  - The main risk mitigation in the frame of a DBO project is the one generally already in place in all ADB bidding processes. It consists of the qualification of bidders, to verify that the Contractor who will be selected has the necessary skills, resources, and experience to undertake the works. Users can then refer to sections 3 and 4 under this SBD.
  - Another risk mitigation lies with the emphasis which the Employer can put on Health and Safety at work through the Employer's Requirements. Section 6 of this SBD specifically requires that such matters are covered in the Employer's Requirements.

This will not of course eliminate all risks, as there is no such thing as "zero risk" no matter how competent and experienced the Contractor may be, but this does contribute to reduce the risk, and any residual occurrence would be covered by the Contractor's insurances.

As to the risk under cause (b) above, its occurrence is limited in the frame of a DBO project since the Employer is not meant to come and operate any parts of the Works during the execution of the Contract, since operation responsibility lies with the Contractor. There is accordingly little risk of having issues with the use or occupation of the Site or the Works by the Employer. And if the risk eventuates and causes

- loss, damage, or injury to third parties, this would typically be covered by the insurances defined under the Contract. If it is damage caused to the Works (for instance, Employer's personnel causing inadvertently a damage to the Works during an inspection), the Contractor will be instructed to proceed with the repair under GCC Subclause 17.6 but this will then be dealt with as a Variation.
- 59. The main mitigation measure for this risk is the compliance by the Employer's personnel with health and safety rules at the site, and the mobilization of professional specialized personnel to assist the Employer (for example, a consulting engineer acting as Employer's Representative) for tasks falling outside his/her scope of skills and competencies.
- 60. As to the risk under cause (c), this is typically the most complicated to handle since Exceptional Risks are by definition (under GCC 1.1.37 for Exceptional Events) those stemming from events that the Parties cannot overcome if it occurs and which the Parties could not have provided against before entering into the contract. However, natural catastrophe risks are assessed in terms of likelihood of occurrence. There are general risk assessment maps available, produced by a national institute, and identifying for each location in a country the risks of flood, typhoons, earthquakes, etc.
- 61. Since executing a project in an area which is subject to such Exceptional Risks, which are rare but severe, threatens the root of the project, it is recommended in that case **to liaise with the local insurance industry** of the country to see what coverage could be obtained if any of those risks listed under GCC Clause 18 eventuates. Where the risk is not insurable, it would be down to the Employer to decide whether he/she wants to maintain the project in that particular location since, if he/she does, he/she would bear, out of his/her own resources, the consequences of any non-insurable Exceptional Risk eventuating.
- 62. Note that this SBD specifically addresses insurance matters, owing to their criticality on construction projects in general and under DBO arrangements in particular. A specific Appendix in this respect has been developed to the PCC under Section 8 of the SBD, and the insurance risk is further analyzed below.

#### Insurances

#### **Risk Description**

- 63. Knowing which risks are insurable, and at which conditions, is key to fine-tune and finalize a risk assessment. Along the principles of risk allocation, defined by Max Abrahamson and Nael Bunni as highlighted under para. 16 above, one of the criteria for deciding to allocate a risk to a Party is its capacity to insure a risk.
- 64. As mentioned above, most of the construction risks which are highlighted in this chapter are non-insurable risks, also called "Commercial Risk" by FIDIC under the Gold Book in Section 7 of this SBD, and are of those for which the mitigation measures highlighted in this chapter are key to reduce their cost and time impact.
- 65. The other risks, i.e., the insurable risks (loss/damage caused to or by third parties, professional negligence, etc.) are potentially less of an issue, owing to the insurance coverage. However, that requires to know, within the local insurance market:
  - Which risks are insurable and which ones are not?
  - Are there exclusion clauses and if so how do they operate?
  - Will deductibles apply, and if so what is their amount?
  - What is the maximum insurance coverage? Is it capped per insurance claim? Per year? In the aggregate? Other?
  - Specific procedures for insurance claims?
- Anyone having had to make an insurance claim knows that care must be given to the details of an insurance policy, and that while one may think that he or she is properly covered this might not turn out to be the case when making an actual insurance claim. Such unfortunate situations inevitably make it that the Party which thought to be covered will end up bearing the financial loss it erroneously believed to be relieved from by insurance.

- 67. The SBD incorporates a specific Appendix to the PCC dedicated to the insurance matters under the Contract.
- 68. The Employer should review, and amend and/or supplement as necessary, the insurance provisions of the Contract under GCC Clause 19 and this Appendix 3, to reflect:
  - Any mandatory insurance requirements under the laws of the country. For example, certain jurisdictions
    impose insurances to be taken for the so-called decennial liability, being the liability of the Contractor,
    within 10 years from taking-over of the Works, for any defect which may affect the stability of the
    Works and/or their fitness for purpose, and
  - Any insurance locally available at commercially reasonable rates in relation with the facility to be designed, built, and operated under the Contract. For example, Business Interruption insurances can be available and cover losses in case the facility is to be shut down for a certain period of time.
- 69. Insurance due diligence should be carried out by the Employer at project preparation stage, in liaison with insurance specialists (lawyers, brokers, and/or consultants) familiar with the insurance practices in

the country, to determine what insurances can/must be implemented under the Contract, and at what terms. The insurance due diligence should also highlight whether, owing to the project features, it might be in the better interest of the Employer to directly take some of the insurances which are to be provided by the Contractor under GCC subclauses 19.2 and 19.3. If this is the case, Clause 19 should be amended accordingly by the Employer, under the Particular Conditions Part B, and its Appendix 3, found in Section 8 of this SBD.

#### **Risk of Contract Misadministration**

#### **Risk Description**

- 70. The administration of a FIDIC DBO contract partly equates to the administration of a FIDIC Yellow Book contract followed by an operation period, but there are additional specificities to handle such as the asset replacement mechanisms and performance damages.
- 71. This requires technical and engineering skills from the Employer (for all matters in relation with the design, execution, and operation of the works), but also administration skills to be able to handle the payment scheme, the set of performance standards defined under the Contract and their compliance, and the management of claims and variations as per the terms and timing set out in the contract.

- 72. It is frequent under projects financed by ADB that the Implementing Agency is not staffed to fulfill those tasks. A procurement risk assessment of the implementing agency's contract management/ administration resources should be made as part of the project preparation process,<sup>24</sup> which may lead to recommend reinforcement accordingly in case the capacities in place are assessed as insufficient to meet the requirements. Capacities strengthening can be done through training of in-house personnel and/or recruitment of new personnel and/or reinforcement through a Consulting Engineering firm's dedicated personnel.
- 73. Generally, a consulting engineering firm is mobilized to be the engineer under the construction contract, acting for and on behalf of the Employer. It is recommended to keep having such mechanism in place in the frame of a DBO Contract, at least for the design-build period. The Operation Service Period requires far less regular interactions with the Contractor, hence either the Employer would handle this directly, or a Consulting Engineer could still be mobilized but with obviously much more intermittent inputs than under the design-build period.
- 74. It is nevertheless recommended to ensure sufficient training/capacity building of the project administration team to make it able to cope with the specific requirements of DBO contractual arrangements. Not only the Employer's resources, but also the consulting engineering firms' resources and possibly the Contractor's resources would need to ensure that they build the required capacities to successfully deliver DBO projects, because, although being of growing use, DBO contractual arrangements are less known than other forms of contractual arrangements in the construction industry. This risk mitigation measure would then be better named as "training the construction team".
- 75. However, even if mobilizing a Consulting Engineer firm to act as Employer's Representative under the DBO Contract, the Employer needs to keep a sufficient control on his/her various contracts—both the DBO Contract, but also the consultancy services contract with the firm acting as Employer's Representative. Indeed, the Employer needs to be able to assess whether the latter firm fulfills its contracted services with reasonable skill and care, and, if not, the Employer needs to know how to implement the relevant contractual remedies. The Employer should not fully and only rely on the contract management resources of the firm acting as Employer's Representative, but should also have access to another source of relevant

Project procurement risk assessment (PPRA) should be conducted in accordance with the Guide on Assessing Procurement Risks and Determining Project Procurement Classification, which is available at the ADB Business Center website at https://www.adb.org/business/main.

contract management resources. Contract management matters should not fully rest in the hands of one service provider.

- Various options can be envisaged for the Employer to have access to a pool of relevant contract management resources, such as
  - mobilizing in-house personnel, with the relevant contract management skills and experience, and/or going through relevant training curriculum;
  - recruiting new personnel, with the relevant contract management skills and experience;
  - mobilizing individual consultants; and/or
  - as is often the case in large-scale construction projects, mobilizing a project management consultancy (PMC) firm which would deliver specific support services such as contract management services, cost control services, planning/programming services, document control, etc.—i.e., services which are often called "Project Controls". This option would also allow bridging several project management gaps which are encountered in practice, since beside contract management, there are often issues associated with the determination of cost and time impact of variations/changes for which forensic assessment capabilities are required, which are often lacking.

#### **Changes in Laws and Regulations**

#### **Risk Description**

- 77. Over the lifetime of a DBO project, especially under its 20-year Operation Service Period, it is highly likely that changes in laws and regulations relevant to the facility operation will occur. In particular, for treatment plants, water quality standards for water supply may change and become more stringent, and the same is expected for wastewater treatment plant effluents before their discharge into the recipient environment. This generally goes in the direction of requiring more technologies and processes to be mobilized and implemented.
- 78. Another typical occurrence is with the change in the applicable tax regime.

- 79. This risk is generally outside the control of the Parties, hence there are few preventive mitigation measures which the Employer could think of implementing, beyond what the FIDIC Gold Book contract terms already foresee and as integrated under Section 7 of this SBD. Indeed:
  - GCC Subclause 5.4 provides that in case the Laws and standards applicable to the Works change after the Base Date (which is 28 days prior to the latest date for submission of tenders, i.e., the time after which the Contractor cannot reasonably be expected to be able to reflect any such change into his/her bid), then necessary changes are dealt with as a variation entitling the Contractor to additional time and payment;
  - GCC Subclause 13.6 provides that if the Contractor suffers from any delay and/or incurs costs because of a change in laws occurring after the base date, he/she is then entitled to additional time and payment; and
  - GCC Subclause 13.7 provides for the same in case the Contractor is to adopt new technologies, materials, or products.
- 80. As can be seen from the above, the Gold Book allocates the risk of changes in laws to the Employer, by making him/her liable to compensate the Contractor for any delay suffered and/or costs incurred.

#### **Permits and Authorizations**

#### **Risk Description**

- 81. Many permits and authorizations are required for water facilities, and some examples are given below:
  - Planning/land use permit, issued by a municipality, a county, or any other local Authority, and sometimes State Authority depending on the magnitude of a facility
  - Building permit
  - Environmental Authority permit
  - Sanitation Authority permit
  - Permits related to the execution of the works—for example from a Transportation Authority when it is about doing an open-cut across a road, or from Utility Authorities for relocation of public services infrastructure (power, water, gas, telecommunication, heating, etc.).
- 82. Despite provisions such as under this SBD Section 7 (GCC Subclause 1.14), requiring that all necessary details be developed in the Employer's Requirements, it is in practice often the case that those do not detail who is to obtain which permit from whom, how, and by when. This can generate confusion in the contract implementation, and it is to be borne in mind that the Gold Book GCC Subclause 9.4 entitles the Contractor to an extension of the time for completion in case of delays caused by the authorities. Confusion on matter of permits and authorizations from authorities having jurisdiction over the project is then likely to be ruled against the Employer.
- 83. Even when the definition of the permits to obtain, and the allocation of responsibilities for those, is clear in the Contract, it is frequent that local authorities cause delays to the execution of the Works. There are many reasons for such delays such as, among other things, understaffing, lack of skills and resources, conflicting political influences, or inter-administration negative relationships.

- 84. Clear definition of which permits are to be obtained, how and by who and when, is required under a specific section of the Employer's Requirements in Section 6 of this SBD.
- 85. Beside the Bidding Document itself, early involvement (before the Contract starts) by the Employer of all involved local/state authority is recommended, by means of dedicated committee (consultation/advisory committee for instance), to develop project ownership from their side, and proactively tackle all issues and as early as possible.

#### **Contractor's Non-Excusable Delays**

#### **Risk Description**

- 86. There are many instances where the Contractor can end up being in default, i.e., failing to execute his/her contractual obligations. Several default cases are already specifically addressed elsewhere in this Preface (insolvency, underperforming facility, etc.), hence are not repeated here.
- 87. This section deals with the Contractor's non-excusable delays. Those delays are those suffered by the Contractor and for which he/she cannot be contractually excused, i.e., for which cannot benefit for an extension of the time for completion under the design-build period (as per GCC Subclause 9.3) or from a monetary compensation during the Operation Service Period (as per GCC Subclause 10.6).
- 88. This is typically the case when the Contractor is late in issuing design drawings, procuring and delivering to the Site the necessary Plant, Materials, and Contractor's Equipment, or in rectifying and remedying defective works. These are all the instances where, in the design, construction, and operation of the Works, the Contractor is acting below the standard of performance expected from an experienced Contractor in projects of similar size and nature, exercising due skill and care.
- 89. While delay damages are provided for under the Contract, it should not be forgotten that those are capped (generally 10% of the Contract Price) and that they are the sole remedy for the Contractor's default in meeting the time for completion. There are consequently instances where the amount of delay damages might be below the actual loss suffered by the Employer because of a Contractor's non-excusable delay, and the difference would not be recoverable by the Employer.

- 90. A first mitigation measure, which is always implemented under ADB financed projects, is to proceed with the qualification of the Contractor based on his/her demonstration that he/she has the required skills, experience, and resources to carry out the project. This is evidenced by successful past project experience, plus statements as to his/her capacity to timely mobilize the required resources for implementing the contract (personnel, equipment). This measure is duly reflected under sections 3, 4, and 6 of the Bidding Document.
- 91. Another risk mitigation measure, which is also generally always foreseen in contracts financed by ADB, is the use of delay damages acting as a deterrent toward the Contractor to be in delay for the execution of the Works. This is duly reflected under sections 7 and 8 of this SBD.
- 92. However, breaking down the time for completion of design-build into several intermediary progress milestones is also a useful way to monitor the progress, as it allows for more proactive time management of the execution of the works. Delays can be identified much earlier, especially if the Contract Employer's Requirements include a specific section dedicated to **Programme Requirements** which would define the level of details to be provided in the Contractor's programme (critical path method, number of tasks for programme level, type of logic links in between the tasks, etc.). This would facilitate the contract administration on the Employer's side, and allow for proactive, timely, and efficient decisions. Accordingly, Section 6 of this SBD integrates a specific area to be considered for Programme Requirements in particular, and for progress monitoring matters in general.
- lt should be noted that the progress milestones referred to here **are not necessarily Sections** of Works as defined under GCC Subclause 1.1.70. Sections are physical parts of the Works which are introduced

whenever the Employer contemplates different construction priorities and wants to allocate a different time for completion for each section. A typical example under a WTP project would be to have

- the raw water transmission main set as a specific Section;
- the WTP (strictly speaking) set as another Section of the Works; and
- where the contract would provide that the time for completion of the raw water main Section ends several months before the time for completion of the WTP.
- 94. As a difference with Sections, progress milestones may but may not be physical parts of the Works and are mainly there to reflect specific progress objectives which the Employer wants the Contractor to meet in time. In the example, the raw water main Section could for instance integrate several progress milestones to be met such as the delivery of preliminary design drawings, the delivery of detailed design drawings, the supply and delivery to the Site of the required pipes and fittings, the pressure testing of the first 500 meters of pipes laid, etc. Employers introduce progress milestones whenever there are interfacing requirements to be considered (for example, the Employer may need to have design drawings submitted by a certain time before construction starts to be able to obtain a necessary authorization from a third party in a timely manner), and/or whenever the Employer wants to keep close and detailed control over the progress of the Contractor.
- 95. Another measure also lies with the **skills and competencies of the contract administration staff** on the Employer's side. FIDIC Contracts in general, and the Gold Book in particular, provide powerful remedies in case of Contractor's non-excusable delays. Beside the application of delay damages under GCC Subclause 9.6, or the claim for losses and damages under the Operation Service Period as per GCC Subclause 10.6, there is also the possibility to instruct an acceleration of the rate of progress under GCC Subclause 9.5, the issue of Notices to correct under GCC Subclause 15.1, and, ultimately the Contract termination provisions under GCC Subclause 15.2 if the delay becomes too severe and to such an extent that it causes overly extensive losses and damages to the Employer. If experienced contract administration resources are not available in-house, the Employer's capacities can be reinforced by the mobilization of a consulting engineering firm acting as Employer's Representative, or by a project management consultancy firm or by individual consultants as defined under paras. 73 to 77 above.

#### C) Risks during the Contract Procurement Period

#### **Rushed Procurement Process**

#### **Risk Description**

- 96. The pressure to initiate the bidding process is sometimes intense for various reasons such as
  - Local political reasons, where a specific political agenda may impose time pressure on the Employer, hence on the project;
  - Upstream delays encountered in the project implementation and which the Employer tries to offset by initiating the bidding process as early as possible, for example in relation with deadlines in the loan agreement for implementing certain stages of the project;
  - Misconception that the bidding process is an "available float" time in the project schedule, which can be reduced as much as possible and which generates unnecessary delays in the project implementation;
  - One-sided views of the project or a lack of global view and understanding as to what can be seen as reasonable for bidding purposes, not considering, e.g., the Contractor's viewpoint; and
  - Unrealistic views on the market reality, under the erroneous beliefs that an "all risks on the Contractor" approach is fine since there will always be someone eager to get the job, whatever the risk profile is.
- 97. Entering into a DBO contract means, from a Contractor's perspective, entering a long-term relationship (many years and possibly decades) with an Employer. The DBO contract amount and duration at stake mechanically make it that the Contractor needs time for taking ownership on the bidding document, on the project situation, on what he/she is asked to price, and on the determination of the risk profile he/she is facing. A sustainable relationship cannot be envisaged without the parties getting to know each other for a sufficient minimum time to ascertain whether they agree to go forward and confirm their relationship—or break up before any harm is done (no bid submitted, no contract negotiations ended) and part ways.
- 98. International practice tends to show that
  - an overall DBO procurement process, from the time an Invitation for Prequalification is issued, to the time the DBO Contract is in place, is in the range of 12–18 months; and
  - the bid submission period, i.e., the time in between the issue of an Invitation for Bids and the bid submission deadline, is in the range of 3–5 months.
- 99. The risks which can arise from a rushed procurement process would typically be as follows:
  - A greater number of "no go" or "no bid" decisions from competent contractors, who would assess that
    the rushed procurement process would not give them enough time to properly ascertain the DBO
    contract requirements and risks, and would then not be worth the effort and expense of preparing a
    full-fledged bid.
  - Increase of risk premiums taken by Contractors, under the assumption that if there is not enough time or information to ascertain the DBO contract requirements and risks, then conservative risk financial provisions would be factored in in the Contractor's bid to be able to face "worst case scenario" situations. As a corollary, the Employer would possibly pay undue risk premium, and possibly face a situation where all qualified bids exceed the available budget.

- Increasing risk to select a bidder who may not be the most suitable one, but one who may have overlooked/underestimated the risk profile, since a rushed procurement process would tend to increase the financial bid gap in between those who assess carefully the risk profile, and those who overlook/underestimate it (for various reasons understaffing or not relevant bid preparation team staffing, commercial pressure to "get a job", etc.).
- Finally, by trying to do everything urgently, nothing is done properly. As a result, the benefit of trying to save several weeks in a procurement process by, for example, unduly reducing the bid submission period down to unreasonable levels, is often outweighed in practice by the drawback of delays suffered owing to many bidders' queries or to possible deadline extensions or re-bidding. In the end, what was initially meant to save a couple of weeks results in the process suffering from more delays than if a proper and reasonable timeframe had been allocated in the first place.

#### Risk Mitigation Measures Introduced by this SBD

100. Reasonable timing shall be allocated by the Employer in the procurement process, and in particular no less than 90 days for the bid submission period.

#### **Capacity of the Bid Evaluation Team**

#### **Risk Description**

- 101. The evaluation of Design-Build and Design-Build-Operate contract bids require specific skills and resources, related to:
  - The evaluation of various preliminary design proposals, and the verification whether they comply with Employer's Requirements. For example, a RFP for a DBO contract on a WWTP, may see bidders coming up with a wide range of treatment processes, both conventional processes such as activated sludge or trickling filters, but also more recent compact processes such as SBR, bio filtration, etc. including sometimes patented processes which are unique products of the bidder.
  - The assessment of the reliability and credibility of performance parameters announced by the bidders, including OPEX projections.
  - The capacity to handle requests for clarifications from the bidders in an efficient manner.
  - The capacity to enter into complex engineering discussions with the bidders, regarding their bids and the project site data and information.
- 102. Generally, Employers on projects financed by international financial institutions are public water utilities who may not have the necessary in-house, high-profile process experts available.
- 103. The risk for the Employer is then to either:
  - be "duped" by a bid, and miss elements which would have otherwise led to reject it; or
  - on the contrary, not being able to understand the specific added value brought by a bidder. By lack of confidence as to that bid, and under the fear to commit a mistake, the Employer may then prefer to reject it, hence may miss a valuable opportunity.

- 104. The bid evaluation team should be composed of suitably qualified experts, able to handle all the technological and engineering aspects of the bids. As stated in para. 73 above, capacity assessment of the Implementing Agency's resources should be made, which may lead to recommend reinforcement in case the capacities in place are assessed as insufficient to meet the requirements. Capacity strengthening can be done through training of in-house personnel and/or recruitment of in-house personnel and/or reinforcement through a consulting engineering firm's dedicated personnel.
- 105. If external consultants are recruited, they should be mobilized under time-based contract arrangements, since lump sum contracts are not practicable in such situations where the amount of inputs to be spent will be depending on the number of bids received, their complexity, and the level of interactions with the bidders during the bidding period. All being matters which are not precisely foreseeable input-wise.
- 106. Users are referred to the section called "How to Conduct the Bid Evaluation" below for further information on this matter.

#### D) Risks during the Design Period

#### **Input Data and Site Conditions Risk**

#### **Risk Description**

- 107. The Employer's Requirements may contain errors or omissions as to the input data provided to the Contractor at bidding stage. Examples drawn from practice are given below:
  - It was thought that a new WWTP was to be connected to a DN500 pipeline conveying municipal wastewater, while in actual fact this is a DN600. This will require adapting the design and changing the connection fittings.
  - The municipal wastewater loads (BOD<sub>5</sub>, COD, etc.) and flow which were foreseen in the Employer's Requirements, and defined as design loads and flow, are not corresponding to the actual loads and flow because the design data were based on existing literature and extrapolations, but without any site measurement campaign being done to verify those assumptions. This will require the Contractor to adapt the preliminary design he/she developed and upon which he/she submitted his/her bid.
  - No hard rock was foreseen in the ground where the WTP is to be built. No information in that direction
    was given to the Contractor at bidding stage, since no geotechnical surveys were done at project
    preparation stage, and no one knew the actual underground condition, but everyone thought that "it
    was fine."
  - It was anticipated that good stable soil would be available at the WWTP location, but when the Contractor started to make his/her own soil investigations, he/she found out that there is too much soft soil and that piling works will be required to support the WWTP on a lower subsurface stable stratum.
- 108. Those situations are often experienced when project preparation stages do not incorporate site investigations, such as geotechnical surveys, topographic surveys, flow and loads measurement campaigns in the catchment basin of a future WWTP, flow and pressure measurement in a water supply network, etc. Normally, the master plan of a water supply and sewerage system, defining a phased investment plan, shall be based on an up-to-date diagnostic assessment of the infrastructure. However, it is frequent that these are not carried out, for various reasons such as unintentional omissions, absence of budget allocation for executing the necessary measurement campaigns, or willingness to shorten the project preparation process to the expense of such investigations.

- 109. Execution of site investigations, before finalizing Employer's Requirements and starting the bidding process, to verify design basis assumptions, and validity/accuracy of key data contained in the Employer's Requirements. Such site investigations would typically be:
  - For a network DBO contract:
    - » location of existing utilities, which may be located adjacently to the place where the pipelines will be laid;
    - » geotechnical investigations—sample spots to be located to ascertain the composition and structural status of the ground (hard rock, soft soil, underground water, etc.), as well as underground manmade obstructions;
    - » etc.

- For a process plant DBO contract:
  - » geotechnical investigations to ascertain underground conditions—hard rock, soft soil, too soft soil making that piling works will be required, etc.;
  - » WWTP—flow and loads measurement campaign carried out in both dry and rainy periods on the catchment basin which will convey wastewater to the new plant;
  - » etc.
- 110. For all those surveys and investigations, a balance is obviously to be defined, on a project by project basis, among
  - » the costs of such pre-bid investigations carried out at the expense of the Employer;
  - » the cost of not doing those, i.e., the risk premium which a Contractor would price for and reflect in his/her bid; and
  - » the costs of potential subsequent claims from the Contractor.
- 111. As to the latter point, it should indeed be noted that physical conditions would be held as unforeseeable if it is construed that they cannot reasonably be foreseeable by an experienced Contractor by the date of submission of the bid. "Unforeseeable" is a defined term under the FIDIC Gold Book GCC Subclause 1.1.80 (Section 7 of the SBD), where "Unforeseeable physical conditions" entitle the Contractor to claim for additional time and payment under GCC Subclause 4.12, based on what the Contractor could practically find out/ascertain at the time of bid preparation, i.e., taking into account the cost and time for doing this assessment at bidding stage, as per the terms laid down under GCC Subclause 4.10.
- 112. As to other errors in Employer's Requirements, such as wrong assumptions on the input flow and loads coming to a WWTP to be designed and built, the Contractor will be able to obtain a time and financial relief according to the provisions of the GCC Subclause 5.1 once he/she reviews/scrutinizes the Employer's Requirements at Contract execution inception. It is recommended that the Contractor be expressly required, by the Employer's Requirements, to perform his/her own site investigations at that time. This will reduce the risk of finding such errors at a later stage during the contract execution, which may generate a Contractor's claim under the provisions of GCC Subclause 1.10.
- 113. There would typically be an iterative risk assessment process for each project. For instance, regarding the underground site conditions risk, once geotechnical surveys are conducted, they may reveal concerns as to some areas of the project footprint. Residual risk is then to be assessed, and three options will typically emerge:
  - "No further action" option, and maintaining the FIDIC Gold Book provisions which partly allocate the underground risk to the Employer (for whatever is deemed "unforeseeable" to the Contractor), and partly to the Contractor (for whatever is deemed to be foreseeable by the Contractor). The cost risk for the Employer is then the foreseeable cost of Contractor's claims for Unforeseeable physical conditions under GCC Subclause 4.12.
  - "No further action" option and changing the FIDIC Gold Book provisions as to transfer the residual underground risk to the Contractor. No claim would then be allowed on that matter. The cost risk for the Employer is then the cost of Contractor's risk premium he/she would reflect in his/her bid.
  - Carry out further geotechnical investigations to better ascertain and abate the residual risk, before deciding to initiate the bidding process based on FIDIC Gold Book Conditions as they are, or as amended to transfer all residual risk to the Contractor.

#### E) Risks during the Build Period

#### **Input Data and Site Conditions Risk**

- 114. This is as per what has been described above during the design period, although the risk should be lower here in case the Contractor has duly been required to perform his/her own necessary site investigations at design stage.
- 115. The aim of this early request for investigations is to anticipate any possible variation which may have to be decided depending on the errors or discrepancies identified. It is indeed well known that the earlier a change is introduced in a project cycle, the greater impact on cost reduction for the Employer. Conversely, the later a change is introduced, the higher its cost might be for the Employer.

#### **Weather Risk**

#### **Risk Description**

- Physical works are carried out in the open air and are then subject to the impact of the forces of nature. Those would be, among other things, the effects of rainfall, heat, cold, snow, or wind.
- 117. Under Section 7 of the SBD, GCC Subclause 9.3, the Contractor will benefit from an extension of the Time for Completion in case of "exceptionally adverse climatic conditions". This is very generic, and deliberately vague since the FIDIC Gold Book GCC is meant to be applied anywhere in the world. Understandably, FIDIC could then not be more specific as to what are precisely those exceptionally adverse climatic conditions. Obviously:
  - A monsoon would not be regarded as an "exceptionally adverse climatic condition" in Viet Nam as it occurs every year, while it would be regarded as such in Armenia.
  - However, a 10-year return monsoon could be regarded as an exceptionally adverse climatic condition in Viet Nam, since such monsoon is statistically occurring once every 10 years in the country.
- 118. In practice, many disputes occur because of the lack of precise definition of what is an "exceptionally adverse climatic condition" and what is not.
- 119. Even in cases where this is defined in contract, another hurdle generally comes from the measurement devices. This requires a reliable, regularly calibrated measurement device, as otherwise measures might be challenged by either Party. In practice, many disputes arise in relation with the reliability of the measurements, as well as with the definition of "exceptionally adverse climatic condition".

- 120. Defining in the Contract, for instance in the Employer's Requirements, what is meant to be an "exceptionally adverse climatic condition". Here below is an example of such kind of definition which could be considered, as recently used in a project in Western Europe
  - "Exceptionally Adverse Climatic Conditions" means any of the following weather event, as measured by the [National Meteorological Institute] weather station in the city of XXXX in the case of subparagraphs (i)(a)-(d) and (iii)(a):
  - (i) for parts of the Works carried out externally:
    - (a) wind speed in excess of 60km/hour lasting more than two hours continuously;
    - (b) rainfall resulting in more than 100mm of rainfall measured in any 12-hour period;
    - (c) a recorded temperature of minus 5 degrees Celsius or less at 10 a.m.;
    - (d) snow fall exceeding a 4-hour continuous duration between 7 a.m. and 6 p.m., or a recorded layer of snow at any time exceeding 20mm; and
    - (e) lasting black ice or compacted snow preventing transport and movement on the site or access areas.
  - (ii) for parts of the Works carried out under cover:
    - (a) a recorded temperature of minus 5 degrees Celsius or less at 10 a.m. within the area where Works are being performed; and
    - (b) lasting black ice or compacted snow preventing transport and movement on the site or access areas.

- (iii) for the pouring of concrete:
  - (a) a recorded temperature exceeding 37 degrees Celsius continuously between 7 a.m. and 6 p.m.
- 121. Defining in the Contract, for instance in the Employer's Requirements, the measurement device(s) to be used. Ideally this should come from a neutral and reputable institution, not being suspected of any possible bias in the favor of either party—for example, the local weather station of the National Meteorological Institute.
- 122. Otherwise, if no credit can be given to any external institution, the Contractor could be asked to install such measurement devices, under a procedure defined in the Employer's Requirements. A third party could also be relied on for that purpose, or simply to act as controller/verifier of supply and installation works done by the Contractor.

#### Land Clearance for Access to the Site

#### **Risk Description**

- 123. The Employer is to provide access and possession of all the Site to the Contractor, as per GCC Subclause 2.1. The Site is defined under GCC Subclause 1.1.72 as being:
  - "..the places where the Permanent Works are to be executed and to which Plant and Materials are to be delivered, and where the Operation Service is to be provided, and any other places as may be specified in the Contract as forming part of the Site."
- 124. Failure to do so will entitle the Contractor to claim for additional time and payment. In practice, access is not an issue for projects with a discreet and limited footprint, such as a WTP or a WWTP. However, it is a regular concern in the frame of pipeline construction works, especially in urban areas. The Employer should normally have carried out, at project preparation stage, a Land Acquisition and Resettlement Plan (LARP). In practice, it is often the case that a works contract is initiated while the LARP is not completed. The pressure to initiate the bidding process (for political reasons, or because of upstream delays encountered in the project implementation and which the Employer tries to offset by initiating the bidding process as early as possible) can lead to such situations.
- 125. The Employer is then straight away faced with difficulties, due to the claim process defined under Subclause 2.1, but also due to the fact that the programme is the Contractor's ownership under the FIDIC Gold Book, and that any interference from the Employer (such as instructing a change in the sequence of works foreseen under the programme) would be treated as a variation entitling the Contractor to additional time and payment.

- 126. Ideally, land clearance and the LARP should be completed before the Contract starts.
- 127. If it is not possible, then the contract terms should be amended to reflect the relevant project situation. Sections of Works could then be defined under Section 8 of the SBD, PCC Part A, Subclause 1.1.70 inter alia. Each of those would be given a specific Time for Completion, and a specific date for access to the Site. The Contractor would then, for example, know that he/she can start work on Section 1 within 28 days from the Commencement Date, but on Section 2 within 180 days only. The number of Sections, and timing associated to each of those, should obviously be defined in accordance with the LARP—first Section(s) would be the one(s) where land clearance is already completed, or planned to be completed, at the Contract formation stage. Last Section(s) would be those coming last under the LARP implementation schedule.

#### F) Risks during the Operation Period

#### Nonperforming Facility/Failure to Reach Production Output

#### **Risk Description**

128. Performance standards are not met by the Contractor, such as water treatment quality, power consumption, chemical consumption, etc.

- 129. A first mitigation measure is to proceed with either the qualification of the Contractor based on his/her demonstration that he/she has the required skills, experience, and resources to carry out the project. This is evidenced by successful past project experience, plus statements as to his/her its capacity to mobilize in a timely manner the required resources for implementing the contract (personnel, equipment). This measure is duly reflected under sections 3, 4, and 6 of the Bidding Document.
- 130. Another risk mitigation measure relates to the proper definition of performance damages. They are foreseen under the FIDIC Gold Book GCC Subclause 10.7 but not further detailed. This SBD has tackled this matter by introducing key performance requirements under Section 6 (Employer's Requirements). These are typically those which have the greatest impact on the operating expenditure of the facility and/or which are critical to verify that the facility is operating as per its intended purpose. They shall be measured by Key Performance Indicators (KPI) for which the Employer should define:
  - limit values (minimum, maximum) to be complied with by the Contractor, and against which the Contractor will commit to a value through his/her bid, and then under the Contract;
  - performance damages if a KPI measured value shows that there is a Contractor's non-excusable breach of performance guarantee. Those shall then be developed under commercial terms in Appendix 2 to the PCC; and
  - measurement methodology, which shall be developed in great detail in this section, typically by specifying:
    - » the measurement points to be used under the Contract for the set KPI;
    - » the regular calibration methodology to be complied with; and
    - » the measurement process to follow.
- 131. Indeed, owing to the severe contractual consequences of failure by the Contractor to meet performance requirements, since those are at the root of such kind of contracts, great care should be given to ensure that measures are both reliable (tamper-proof, regular calibration) and easily verifiable. If need be, the Employer may consider relying on an independent third party, selected by both Parties, for the setting-up and calibration of measurement points.
- 132. According to the above, a section is dedicated to Performance requirements under the Employer's Requirements in Section 6 of this SBD.
- 133. Examples of KPI are given in the Schedule of Performance Guarantees under Section 4 of the Bidding Document. The bidders will be required to fill in performance guarantees which shall meet any minimum/maximum value for the KPI.

- 134. If during the Operation Service Period under the Contract, it is found that the guaranteed performance is not met, performance damages will apply as per a mechanism to be detailed under Appendix 2 of the PCC Part B in Section 8 of this SBD. Users can refer to that section where appropriate guidance is provided as to the way to build a performance damages scheme. Different performance damages schemes shall apply in the two following instances:
  - Under GCC Subclause 10.7 [Failure to Reach Production Outputs], where performance damages apply during the Operation Service Period.
  - GCC Subclause 11.11 [Failure to Pass Tests Prior to Contract Completion], where performance damages apply at the end of the Operation Service Period, i.e., at the end of the DBO Contract Period. Damages are then meant to reflect the foreseeable losses likely to be incurred by the Employer over the residual life of the facility, i.e., in between the Contract Completion Date and the end of the expected design life of the facility.
- 135. Note that this SBD defines performance requirements as being those under the reasonable control of the Contractor, and directly related to his/her design, workmanship and operation skills, and experience. As such, the SBD does not allocate risks to the Contractor which are better found to be borne by the Employer. According to international best practices, the electricity tariff over the Operation Service Period is then an Employer's risk. The Contractor's risk lies with the Guaranteed Maximum Energy Consumption Rate, expressed in kWh per m³ produced by the WTP or the WWTP.
- 136. Accordingly, performance incentives have been explored in relation with the electricity costs of the facility, as it is the main OPEX component, to foster win–win arrangements. If the Contractor manages to find ways to do better than contracted in terms of energy consumption rate per m³ produced, the SBD provides that he/she can receive, as reward/incentive for its improvement efforts, a portion of the energy cost savings made by the Employer. Payment and incentives for electricity costs are developed under Appendix 1 to the PCC Part B in Section 8 of this SBD.
- 137. As meeting performance standards is a key element of DBO Contracts, the measurement of KPI is likely to be subject to disputes during the Contract implementation owing to the severe financial consequences they may generate to the Contractor. Beside the definition of the measurement methodology under the Employer's Requirements, as detailed above, another suitable risk mitigation measure under this SBD is to make efficient use of the Auditing Body, foreseen under the Contract, in relation with KPI measurement and performance damages application.
- 138. Indeed, under Section 7 of this SBD, GCC Subclause 10.3, the Auditing Body is an independent and impartial body whose primary role is to verify the Employer's and the Contractor's compliance with their Contract obligations during the Operation Service Period. The SBD lays down, as Appendix 1 to the Employer's Requirements in Section 6, the Auditing Body Terms of Reference to be used by the Employer and the Contractor when mobilizing the Auditing Body under the Contract.
- 139. The Auditing Body has been given the following duties in relation with KPI and performance damages:
  - Routine duties
    - » Assess the relevance of the KPI readings and recordings, and of the corresponding measurement points setting-up, running, and calibration
    - » Assess the relevance of any application of performance damages
    - » In relation with the above, make improvement recommendations to the Parties in the view of their full compliance with the Contract provisions

- » Identify any disagreement in between the Parties which has the potential of becoming a Dispute under the Contract, and propose a solution to the Parties
- Ad hoc duties, i.e., at the joint request of the Parties:
  - » Advise and give its opinion to the Parties as to the application of performance damages under the Contract, taking due regard to all relevant circumstances
  - » Assist the Parties in the resolution of any disagreement in view of avoiding that it escalates into a claim then Dispute under the Contract
  - » Act as expert witness in the frame of any Dispute resolution process defined under the Contract, i.e., whether in adjudication or arbitration
- 140. Finally, as described above, to have skillful and competent Contract Administration staff, able to determine and apply the performance damages with reasonable skill and care, is another measure required to mitigate this risk of a nonperforming facility.

# Availability and Suitability of Inputs from the Employer (raw water, wastewater, power, personnel, etc.)

#### **Risk Description**

- 141. The input conditions for the facility, defined in Contract, are no longer met. For instance, the Contractor does not receive the wastewater loads and flows foreseen in the contract, and its WWTP does not reach its performance standards as a result.
- 142. The Contractor would be relieved of his/her performance obligations and could claim for any additional cost incurred as per the FIDIC Gold Book GCC Subclauses 10.4 and 10.7.
- 143. The Employer might also become subject to complaints from the facility users, for production not meeting the required standards, from fines from environmental authorities, etc.

#### Risk Mitigation Measures Introduced by this SBD

144. Execution of site investigations, before finalizing Employer's Requirements and starting the bidding process, to verify design basis assumptions, and validity/accuracy of key data contained in the Employer's Requirements. This relates to the measures described above for the input data and site conditions risks.

#### **Asset Replacement**

#### **Risk Description**

145. The operation service is shorter than the life span of most of the plant equipment—say it is 5 years. The DBO contract ends. At year 8, most of motor pumps break down, while they were meant to last 12 years before being replaced.

- 146. The most direct remediation measure for the Employer is to make full use of the DBO Contract's inherent strengths by having Operation Service Periods which are greater than the life span of the majority of the assets (except civil works)—typically this could cover electrical and mechanical equipment which have life spans ranging from 5 to 15 years. It should be noted that the standard position advocated by FIDIC under the FIDIC Gold Book is for a 20-year Operation Service Period.
- 147. If not possible, and if the risk eventuates, then the Employer is back to a traditional design-build situation, such as under the ADB SBD for Plant, when an asset breaks down after the contract ends and the Contractor left the site. Taking due regard to the applicable statute of limitations, i.e., if the time which elapsed since the cause of action accrued is still within the applicable limitation period, then the Employer may consider a contractual claim toward the Contractor. This is of course a remedy which is harder to implement than when there is a contract in place, as there are no financial securities left or monies owed and against which to make deductions, but this would be the only resort available to the Employer in the case of an overly short operation period. This, of course, assumes that the Employer is successful in proving that the defect is attributable to the Contractor and not to the operation and maintenance practices of the Employer in between the DBO contract completion and the moment the breakdown occurred.

#### Design-Build-Operate Water and Wastewater Infrastructure Projects Risk Matrix

- 148. The above typical risks which affect a DBO Contract on water and wastewater greenfield infrastructure projects are to be reviewed, and possibly amended and/or supplemented by the Employer at project preparation stage, based on the inherent features of the project.
- 149. They can then be reflected through a risk matrix which is to be used as a live project management and decision-making support tool, being updated every time risk mitigation measures are implemented until such time the level of residual risk is considered as acceptable by the Employer. The Bidding Document is then finalized accordingly and the bidding process can start. This matrix should then also be used during the Contract implementation to make sure that risks remain monitored and controlled.
- 150. As a preliminary word of caution, the Employer shall by no means consider that the implementation of a risk management system will by itself solve all issues and make all projects be successful. Although being an important and useful tool, it is only one of the various tools available for decision makers and project managers, alongside the Contract itself. It is necessary to contribute to and to increase the chances of having a successful project, but it is not self-sufficient to ensure a successful project. As for any project, human resources skills, competences, and positive dynamics are required to use and operate such tools properly and satisfactorily run the project.
- 151. It is recommended that the DBO project risk matrix includes the following fields:

#### Risk reference

- » Risk category—Cross-cutting risk, Procurement risk, Design risk, etc.
- » Risk name
- » Date identified
- » Risk owner, i.e., the person/entity in charge of managing that risk

#### Risk details

- » Risk description
- » Risk potential cause
- » Risk impact if it eventuates

#### Risk assessment

- » Risk probability of occurrence score, split into 5 levels, from Very Low (VL) to Very High (VH), or 1 to 5
- » Risk impact score split into 5 levels, from Very Low (VL) to Very High (VH), or 1 to 5
- Risk score, being the multiplication of probability score by impact score, i.e., ranging from 1 to 25
   the higher the score, the higher the need to mitigate the risk

#### Risk mitigation

- » Mitigation measure
- » Mitigation owner, i.e., the one in charge of implementing the risk mitigation measure
- » Due date for implementation of the risk mitigation measure
- » Residual Risk score, upon risk mitigation measure implementation

- **Risk status**—upon implementation of the risk mitigation measure, the risk owner shall decide whether to declare the residual risk as:
  - » Live—Residual risk level not acceptable, further mitigation measures required/or mitigation measures in progress
  - » Closed—Residual risk marginal, risk no longer an issue and no further action required
  - » Accepted—Residual risk cannot be further reduced under reasonable terms. Residual risks accepted as such, no further risk mitigation but risk monitoring required.
- 152. It should be noted that the above addresses risks which have direct cost and time implications. There might be other natures of risk which do not necessarily translate into direct cost and time impact. Reputational risks are one of those, which can for instance occur for the Employer if and when a WTP does not operate satisfactorily and water of improper quality, or not supplied continuously, is delivered to water users. The Employer shall assess such kind of risks by using the same risk matrix, but then defining risk impact score by other terms than direct time and monetary costs.
- 153. The example table above also highlights that the methodology used to build up a project risk matrix (i.e., going through the steps of risk identification, risk assessment, and risk mitigation) can similarly be used to identify **project opportunities**, i.e., those which will are likely to have positive time and monetary effects, or other positive effects (reputation, public acceptability, etc.).

# **The Bidding Process**

#### **Prequalification**

International practice shows that prequalification is primarily used for DBO Contracts, owing to the following features:

- Bidders know the range of competition they are facing with the shortlist—they can appraise their success chances accordingly and make a better-informed decision (than if no prequalification occurred) as to whether it is worth committing resources to develop a DBO Contract Bid.
- Absence of prequalification tends to discourage the most competent DBO Contractors to bid, as it is seen as
  reflecting a lack of experience and seriousness from the Employer, and those Contractors may consider that
  they will not be facing a competition level playing field. Hence that their reasonable success chances are so
  slim that it is not worth investing resources in developing a Bid.

Note that there is no need to wait for the Bidding Document to be finalized before initiating Prequalification. Prequalification can be made as soon as the objectives of the DBO contract are sufficiently advanced for the qualification criteria to be set. Accordingly, prequalification can run in parallel with the Bidding Document completion, and the overall procurement process time is optimized thanks to this overlapping of activities.

The Open Competitive Bidding (OCB) process includes six main phases: (i) advertisement and notification, (ii) preparing and issuing the Bidding Document, (iii) bid preparation and submission, (iv) bid opening, (v) bid evaluation, and (vi) contract award.

#### **Advertisement and Notification**

Invitation for Bids (IFB) shall be advertised on the Asian Development Bank (ADB) website;<sup>1</sup> on a freely and publicly accessible website in English; and in a newspaper of national circulation (at least in one English language newspaper, if available) or website in the borrower's country. A copy of the IFB shall be submitted to ADB for no-objection and for publication on the ADB website in accordance with the Procurement Regulations for ADB Borrowers: Goods, Works, Nonconsulting and Consulting Services (2017, as amended from time to time).

ADB may additionally require that the IFB be advertised in well-known technical magazines or trade publications, or in newspapers of wide international circulation, in sufficient time to enable prospective Bidders to prepare and submit Bids.

https://www.adb.org/site/business-opportunities/main.

#### **Preparing and Issuing a Bidding Document**

The Employer is responsible for preparing and issuing the Bidding Document for a specific contract.

The Bidding Document shall be prepared by the Employer based on the appropriate SBD issued by ADB, as this is a mandatory requirement for contracts to be financed by ADB.

The Employer shall prepare the Bidding Document using the published version of the SBD without suppressing or adding text to the sections of the document that must be used without modification, which are Section 1 (Instructions to Bidders) and Section 7 (General Conditions of Contract). All information and data particular to each individual bidding process must be provided by the Employer in the following sections of the Bidding Document:

Section 2 Bid Data Sheet
 Section 3 Evaluation and Qualification Criteria
 Section 4 Bidding Forms
 Section 5 Eligible Countries
 Section 6 Employer's Requirements

Section 8 Particular Conditions of Contract

Section 9 Contract Forms

The following directions should be observed by the Employer when finalizing the Bidding Document:

- In preparing the Bidding Document, the Employer should refer to this User's Guide to Procurement of Design, Build and Operate Contracts for Water and Wastewater Greenfield Infrastructure Projects as it contains guidance and instructions for the Employer.
- Specific details, such as name of the Employer, address for bid submissions, qualification requirements, electronic procurement procedures, etc. should be provided in the spaces indicated by italicized notes in brackets.
- The italicized notes, giving guidance and instructions for the Employer (except those that apply to forms to be filled out by Bidders) should be deleted from the actual Bidding Document.
- Where alternative clauses or text are shown, the Employer shall select the most appropriate for the particular project and discard the unused alternative clauses or text.

The Employer shall allow Bidders sufficient time (generally, not less than 90 days from the issuance or publication date of the Invitation for Bids or the date of availability of Bidding Document, whichever is later), to study the Bidding Document, prepare complete and responsive Bids, and submit their Bids.

#### **Bid Preparation and Submission**

The Bidder is solely responsible for the preparation and submission of its Bid. During this stage, the Employer shall:

- promptly respond to requests for clarifications from Bidders and amend the Bidding Document if and as needed; and
- amend the Bidding Document only with prior approval of ADB.

#### **Bid Opening**

The Employer is responsible for the Bid Opening, which is a critical event in the bidding process. The Employer shall appoint experienced staff to conduct the Bid Opening, as inappropriate procedures at Bid Opening are usually irreversible and may lead to cancellation of the bidding process with consequential delays and waste of resources.

The Employer, in observance of best practices, shall perform the following checks:

- Conduct the Bid Opening following strictly the procedures as specified in the Instructions to Bidders for all
  Bids received not later than the date and time of the bid submission deadline. The term "Bid Opening" should
  be understood in the context of the ITB because, as provided in the ITB, a Bid for which a Bid Withdrawal or
  Bid Substitution envelope was received on time shall not be opened but returned unopened to the Bidder. The
  sequence in which Bids are handled, opened, and recorded is crucial.
- Ensure that all Bids that were received on time are accounted for, before starting the Bid Opening, as Bids that are not opened and read out at Bid Opening shall not be considered further.
- Not to reject any Bid at Bid Opening, except for late Bids received after the date and time of the bid submission
  deadline. Technically, late Bids should not reach the Bid Opening, but in certain cases a Bidder may attempt to
  submit its Bid at the Bid Opening place after the deadline. This late Bid shall also not be considered.
- Examine the Bids at Bid Opening in accordance with the provisions of the Instructions to Bidders. The Employer shall verify at Bid Opening the validity of the documentation, such as Power of Attorney or other acceptable equivalent document as specified in the Instructions to Bidders. The validity of a Bid modification, Bid withdrawal, or Bid substitution should be confirmed, because a withdrawn or substituted Bid shall not be opened or read out and, therefore, shall not be considered by the Employer. A valid Bid modification shall be opened, read out, and recorded to modify a Bid that was received on time.

#### **Bid Evaluation and Contract Award**

The Employer is responsible for Bid evaluation and Contract award. The Employer shall appoint experienced staff to conduct the evaluation of the Bids. Mistakes committed at Bid evaluation may later prompt complaints from Bidders, requiring reevaluation of the Bids, with consequent delays and waste of resources.

The Employer, in observance of best practices, shall

- keep the Bid evaluation process strictly confidential;
- · reject attempts or pressures to distort the outcome of the evaluation, including fraud and corruption; and
- strictly apply only and all of the evaluation and qualification criteria specified in the Bidding Document.

Further guidance as to Bid evaluation is provided in the following section.

#### **Use of Electronic Procurement System**

When an electronic procurement system is being used, the applicable procedures of the bidding process such as (i) advertisement and notification, (ii) preparing and issuing the Bidding Document, (iii) Bid preparation and submission, (iv) Bid opening, (v) Bid evaluation, and (vi) contract award, including the means of communication between the Employer and Bidders, shall be specified in Section 2 (Bid Data Sheet).

# How to Conduct the Bid Evaluation

1. The SBD gives the possibility to the users to consider using either a **Single-Stage: Two-Envelope or a Two-Stage procedure.** Table 3 provides comparative pros and cons to be considered by users when forming their choice.

Table 3: Comparison of Single-Stage: Two-Envelope and Two-Stage procedure

	Pros	Cons
Single-stage bidding procedure	Shorter bidding procedure  Regular practice in several countries, and of some financing institutions  Supported by construction industry practitioners	Does not allow for bids to be amended on substance or price/Only technical and administrative clarifications can be brought  Increased risk of disqualifying bidders and decreasing the competition range
Two-stage bidding procedure	Bids can be extensively discussed with bidders, and possibly amended through the issue of revised Bidding Document in between stage 1 and stage 2.  Bidders are given the opportunity to amend their first-stage technical proposal through the second stage, hence reducing the risk of misunderstanding of the Employer's Requirements leading to the premature rejection of what could otherwise be a responsive Bid.  Bidders can "test" the technical responsiveness of any innovation they wish to bring forward in their first-stage bid, without running the risk of seeing their bid rejected at that stage.	Longer bidding procedure, more complex to handle  May act as a deterrent to Bidders' innovation and engineering added values

 $Source: A sian\ Development\ Bank.$ 

- 2. The above matters are further explained as follows:
  - A two-stage bidding process can act as a deterrent to bidder's innovation and engineering added value. A bidder proposing innovations in stage one is deterred to do so if such proposals are taken on board by the Employer, reflected in an amended RFP and then imposed to all bidders. The Procurement Regulations for ADB Borrowers: Goods, Works, Nonconsulting and Consulting Services (2017, as amended from time to time),¹ however, clearly draws to the attention of the users that confidentiality and intellectual property rights of bidders should be respected when moving from stage one to stage two and issuing an amended Bidding Document. However, there is always a risk in practice that the ideas and added values of a bidder at stage one happen to benefit bidders at stage two.
  - Single-stage: two-envelope procedure is used in several countries, and by international institutions, for Design-Build or DBO contracts. Indeed, several countries have gone for such option, instead of a two-stage bidding approach, when realizing that the first stage of a two-stage bidding process was not providing the expected added value, where all bidders avoid revealing their innovation and engineering strengths and were keeping those for the second stage under the fear that such strengths would be transferred, hence would benefit, their competitors.
  - As per ADB procedures, a one-stage procedure only allows for clarifications to be requested during bid evaluation, but no substantial amendments can be made to bids. Article 69 of Appendix 3 of the Procurement Regulations for ADB Borrowers provides that "The borrower may ask bidders for any clarification needed to evaluate their bids but shall not ask or permit bidders to change the substance or price of their bids after the bid opening or to provide material documents required by the bidding documents". Accordingly, if clarifications are requested on a Bidder's technical proposal and if it is determined that the Bidder failed to perceive the full extent of the Employer's Requirements, the Bidder might end up being disqualified, while under a two-stage procedure he/she would have had the opportunity to amend his/her bid. This might be considered to a certain extent as a detrimental loss of competition against the Employer's interests.
  - As per the Procurement Regulations for ADB Borrowers, Article 5 of Appendix 3, a two-stage bidding may be used where it is undesirable or impractical to prepare complete technical specifications in advance, in which case unpriced technical proposals are invited on the basis of a conceptual design or performance specification. However, a DBO Contract is a performance-based contract where the Contractor is expected to deliver a design solution that meets the purpose defined by the Employer, and there is no requirement for the Employer to prepare detailed technical specifications. Only performance specifications are to be drawn up and reflected in the Employer's Requirements. Since no detailed technical specifications are to be prepared by the Employer under a DBO Contract, and while such preparation is the reason for the Procurement Regulations for ADB Borrowers to recommend a two-stage bidding process, the purpose of a two-stage bidding process for a DBO Contract is not fully obvious and a one-stage bidding process can then be line with the procurement regulations.
  - On a recent market survey launched by ADB toward the global construction industry, 65% of the respondents support a one-stage bidding process, and 30% support a two-stage bidding process.
- 3. The SBD systematically **recommends users not to be more prescriptive than necessary in laying down their requirements.** The Employer would not benefit from the engineering added value of contractors, hence from the best value for money, if a reference design is imposed with a wide range of imposed specific features. For example, the WTP and WWTP construction industry accounts for many players who have developed specific design, build, and operation skills and experience over the years and across the world, and sometimes patented processes which an Employer cannot benefit from if he/she comes up with overly prescriptive Employer's Requirements to be complied with by the Bidders. It is also expected

See footnote 2 in Appendix 3 of the procurement regulations.

that the breadth of skills and experience available with the Bidders are larger than what the Employer and his/her consultants can directly mobilize themselves. It might accordingly well be that there are other features of interest for the project that the Employer and his/her consultants have not perceived, and that the Bidders could propose for the best interest of the project, and for the benefit of the communities served by the project.

- 4. Again, **DBO Contracts are performance-based contracts**, and should be treated as such by the Employer. The Employer's primary concern shall then be to set the purpose of the facility (as per part 3 of the SBD Section 6—Employer's Requirements), his/her performance requirements (as per part 4 of the SBD Section 6—Employer's Requirements), and the various constraints to be complied with by the Contractor (see parts 5 and 6 of the SBD Section 6—Employer's Requirements), but to then leave a full innovation and engineering proposal area to the market within those boundaries.
- 5. The **evaluation of Technical Bids** shall typically focus on verifying that the Employer's Requirements are met by the Bid. This will include a systematic check that each item of the Employer's Requirements, whose structure is provided for under Section 6 of this SBD, is fulfilled in the Technical Bid. It will include, among other things:
  - identifying the merits and possible drawbacks, the pros and cons of the technology solution proposed by a bidder to assess whether it meets the Employer's Requirements; and
  - ascertaining whether the performance guarantees to which the bidder commits are realistic and achievable.
- It is normal that many queries would emerge, from the Employer's evaluation, regarding the features of the technology proposed by the Bidders, owing to the process complexities and frequent innovation in that field. Exchanges with the Bidders are consequently to be seen as normal, and should not be discouraged. It should be noted that certain countries organize **hearings of Bidders** during the evaluation process, where they are given the opportunity to orally present their Technical Bid and to answer any question from the Evaluation Committee. It is seen as a sound practice which has, when well prepared, a strong time and resource savings potential compared to the usual practice of sending requests for clarifications and receiving responses, owing to the usual difficulty which could emerge from:
  - the way a mind-set/an idea is, properly or not, converted into intelligible words which truly reflect the intended purpose of their originator; and
  - the way those words, whether reflecting or not the intended purpose, are understood by the recipient, in the expected manner or not.
- 7. **Evaluation of Price Bids** should be based on a **whole life cycle cost approach**, i.e., if the DBO Operation Service Period is lower than the life span of the facility, the Bid price should be increased, for evaluation purposes only, to cover the difference between the life span expectancy of the facility and the Operation Service Period duration. The process defined under Section 3 of the SBD provides all required details to perform such evaluation.
- 8. Ultimately, this methodology shall allow the Employer to be confident in that he/she selected the substantially responsive Bid which brings the lowest life cycle cost for the facility.
- 9. The above would of course require mobilizing a competent and experienced team to perform the bid evaluation, in support to the Employer, with the right blend of skills and experience to deal with the technical/engineering aspects of bids, as well as the economic and contractual aspects. A capacity assessment of the executing agency's resources should be made, which may recommend reinforcement accordingly in case the capacities in place are assessed as insufficient to meet the requirements.

- Capacities strengthening can be done through training of in-house personnel and/or recruitment of in-house personnel and/or reinforcement through a consulting engineering firm's dedicated personnel and/or individual consultants.
- 10. In case the Employer mobilizes Consultants to set up the bid evaluation team, assignments would be performed on time-based consultancy services contract, since the actual level of inputs required from the Consultant cannot be foreseen with sufficient accuracy to set a lump sum services contract, owing to matters which are beyond the reasonable control of the Consultant such as:
  - The magnitude of requests for clarification from Bidders, the magnitude of Bidding Document Addenda, if any, in relation with the Bidding Document quality and completeness, and with any new project circumstances to be accommodated and which might emerge during the bidding process.
  - The magnitude of Employer's requests for clarification on Bids, in relation with the quality and completeness of Bids submitted by Bidders.
  - The extent of compliance, by the Employer and the Bidders, with the requirements of the Bidding Document.
- 11. Sample Terms of Reference for a DBO Bid Evaluation Committee are appended to this section, for reference purposes.
- 12. Finally, a question is often raised by practitioners as to whether **Joint Ventures should be handled differently in the procurement process than Bidders bidding as a single entity**, in other words if Joint Venture should be factored in as an additional risk to the Employer. This is coming from the belief that, for instance, there might be a design-build contractor bidding with an Operator under a Joint Venture arrangement and that, during the Operation Service Period, the design-build contractor would be likely to walk away hence making it difficult for the Employer to have a recourse in case a design or build issue arises. Users should be warned against such erroneous belief, for the following reasons:
  - The General Conditions of Contract, in Section 7 of this Bidding Document, provides under their Subclause 1.15 that all members of a Joint Venture are **jointly and severally liable** to the Employer for the performance of the Contract.
  - This accordingly means that, in the aforementioned case, the design-build contractor cannot legally "walk away" from the Joint Venture once the design-build period is over. He/she remains liable to the Employer for any breach of Contract that he/she committed during the design-build period, but also that the Operator might commit during the Operation Service Period. The latter case would occur, for example, if and when the Operator becomes insolvent then liquidated—all liabilities of the Joint Venture as a whole, including those stemming from the past wrongdoings of the Operator, would be legally borne by the design-build partner under the Joint Venture.
  - It is often the case that a Joint Venture partner says to an Employer: "not my problem, discuss with the other Joint Venture partner" or "according to the Joint Venture agreement this is not my responsibility." Based on the above, Employers should not be misled by these kinds of statements. The internal arrangements of the Joint Venture members, through their Joint Venture agreement, and the delineation of responsibilities they choose among themselves are none of the Employer's concern and cannot be opposed to the Employer. Whenever there is a wrongdoing under the contract, the Joint Venture as a whole and each of its members are liable to the Employer regardless of whether a Joint Venture member is a minority partner, has completed his/her own duties under the Joint Venture Agreement, or limited his/her liability under the latter. Again, the Joint Venture Agreement is not a legal instrument which can be opposed to the Employer.

Based on the legal remedies which are already available to the Employer under the General Conditions of Contract, this Standard Bidding Document does not favor any particular arrangement (Joint Venture or single entity) and accordingly does not set any kind of negative adjustment in the bid evaluation process for a Joint Venture as opposed to a single entity bidding alone.

Notwithstanding the above, Employers may consider adopting procurement measures to favor the recruitment of single entities against Joint Venture, provided that solid justifications are given to support such decision. Such situations will be reviewed by ADB on a case-by-case basis.

# Terms of Reference for DBO Bid Evaluation Committee

All terms and expressions used below shall have the same meaning as assigned to them under the bidding document (hereinafter referred to as the "Bidding Document") for the [state name of DBO Contract for which Bids are invited]

#### 1. Objectives of the services of the DBO Bid Evaluation Committee

The DBO Bid Evaluation Committee shall:

- Assist the Employer in all pre-Bid steps laid down under ITB 7 and ITB 8
- Assist the Employer in all the Bids evaluation and comparison work process, as laid down under ITB 28 to ITB 42
- Upon completion of the Bids evaluation and comparison process, issue recommendations to the Employer for Contract award, based on the lowest substantially responsive evaluated Bid, and prepare a Bid evaluation report
- Assist the Employer in all dealings and communications with the Bidders, from the advertisement of the Invitation for Bids until the Contract Agreement execution as per ITB 45 and the supply by the awarded Bidder of the Performance Security and the parent company guarantee required under ITB 46
- Warrant his/her independence from and absence of any conflict of interest with any Bidder participating in the bidding process, and his/her neutrality when delivering his/her duties under this services agreement

#### 2. Detailed tasks to be performed by the DBO Bid Evaluation Committee

In order to fulfill the objectives of the services as stated above, the DBO Bid Evaluation Committee shall perform as a minimum the following tasks:

- · Assist the Employer in managing the Bid submission period, including but not necessarily being limited to:
  - » Prepare responses to Bidders' requests for clarifications, in accordance with ITB 7.1
  - » Prepare, and participate to, site visit and pre-Bid meeting, if any, in accordance with ITB 7. Prepare responses to Bidders' queries and minutes of the pre-Bid meeting.
  - » Suggest and prepare the issue of Bidding Document Addenda, as and when required, in accordance with ITB 8
- As part of the bid evaluation process, determine Bidders' eligibility and qualification based on ITB 33
- Perform the Technical Evaluation of Bids, including but not necessarily being limited to:
  - » Prepare requests for clarifications to Bidders in accordance with ITB 29, and assist the Employer in handling Bidders' responses
  - » Identify any deviation, reservation and/or omission in the Bids, and assess whether those are material or not, all in accordance with ITB 32 and ITB 34
  - » Determine the substantial responsiveness of Bids, as per ITB 33
  - » Perform a detailed Technical Evaluation of Bids as per ITB 35
- Evaluate Price Bids as per ITB 37
- Determine the lowest substantially responsive evaluated Bid in accordance with ITB 41, and submit an award recommendation to the Employer

- Prepare the Bid evaluation report, summarizing all tasks conducted for the evaluation process, setting out the detailed reasons substantiating the final award decision made by the Employer
- [state any additional task as required to meet the bidding process specific features—for example assistance for the preparation and delivery of Technical Bids hearings]
- Any other task deemed necessary for the Consultant to meet the services objectives detailed under Section 1 above

#### 3. Deliverables

The deliverables of the DBO Bid Evaluation Committee shall include, but not necessarily be limited to the following items as detailed under Section 2 above:

- Responses to Bidders' requests for clarification
- Minutes of pre-Bid meeting
- Requests for clarification to Bidders
- Bid award recommendation
- Final Bid evaluation report
- [state any additional deliverable required to meet the bidding process specific features]

#### 4. Timing of the Services

The DBO Bid Evaluation Committee shall commence its services upon the date of issue of the Invitation for Bids [or state any alternative subsequent timing] and they shall end when the Contract Agreement is executed as per ITB 45 and the Performance Security and the parent company guarantee have been submitted by the awarded Bidder as per ITB 46.

The estimated duration of the services shall be XX [amend] days from the date of issue of the Invitation for Bids [or state any alternative subsequent timing]

#### 5. Selection criteria for the composition of the DBO Bid Evaluation Committee

The DBO Bid Evaluation Committee should be composed of members, combining together skills on:

- WTP or WWTP processes [as the case may be]
- Water supply and/or wastewater networks design and construction
- Operation of WTP or WWTP, or water or wastewater networks [as the case may be]
- Financial and economic evaluation of infrastructure projects
- Asian Development Bank procurement procedures
- Construction contracts drafting, negotiations and management, in particular along FIDIC Conditions of Contract
- Long-term contractual arrangements (DBO, BOT, Concessions, etc.)

#### NOTE

Any Bid Evaluation Committee member should have at least one of the aforementioned skills.

# PART 2

Standard Bidding Document for Design-Build-Operate Contracts for Water and Wastewater Greenfield Infrastructure Projects

## **Invitation for Bids**

The Invitation for Bids (IFB) provides information that enables potential Bidders to decide whether to participate.

Apart from the essential items listed in the Standard Bidding Document, the IFB should also indicate any important bid evaluation criteria, such as the application of a margin of preference in bid evaluation, or qualification criteria (if no prequalification took place previously) such as a requirement for a minimum level of experience in contracts of a similar size and nature for which the IFB is issued.

The IFB is not a part of the Bidding Document and therefore it shall not be included in the Bidding Document.

Invitation for Bids (IFB) shall be advertised on the Asian Development Bank (ADB) website; on a freely and publicly accessible website in English; and in a newspaper of national circulation (at least in one English language newspaper, if available) or website in the borrower's country. A copy of the IFB shall be submitted to ADB for no-objection and for publication on the ADB website in accordance with the Procurement Regulations for ADB Borrowers: Goods, Works, Nonconsulting and Consulting Services (2017, as amended from time to time).

ADB may additionally require that the IFB be advertised in well-known technical magazines or trade publications, or in newspapers of wide international circulation, in sufficient time to enable prospective Bidders to prepare and submit Bids.

### **Standard Format for Invitation for Bids**

#### [Letterhead of the Employer]

	Date
	Loan/Grant No. and Title
	Contract No. and Title[insert closing date and time]
1.	The insert name of Borrower or recipient has received financing from the Asian Development Bank (ADB) toward the cost of insert name of project Part of this financing will be used for payments under the contract named above. Bidding is open to prequalified Bidders from eligible source countries of ADB.4
2.	The insert name of employer ("the Employer") invites sealed Bids from prequalified $^3$ eligible Bidders for the design, execution, completion and operation of insert description of Plant, Materials, and Services to be procured $^5$ .
3.	Open competitive bidding will be conducted in accordance with ADB's Single-Stage: Two-Envelope bidding procedure and is open to all prequalified <sup>6</sup> Bidders from eligible countries as described in the Bidding Document. <sup>7</sup>
1.	To obtain further information and inspect the Bidding Documents, Bidders should contact:
	insert Employer's office <sup>8</sup>
	insert name of officer
	postal address or street address, include zip code
	telephone number including country code
	e-mail address
	fax no
5.	To purchase the Bidding Documents in English, eligible Bidders should
	• write to the address above requesting the Bidding Documents for insert number and title of contract
	• pay a nonrefundable fee $^9$ of insert amount and currency by insert method of payment $^{10}$
5.	Deliver your Bid
	• to the address above
	• on or before the deadline: insert closing date and time
	• together with a Bid Security/Bid-Securing Declaration as described in the Bidding Document.

representatives who choose to attend.

Bids will be opened immediately after the deadline for Bid submission in the presence of Bidders'

7. When comparing Bids, Domestic Preference will be applied as stipulated in the Bidding Document. 11

#### **NOTE**

- <sup>1</sup> Substitute "has applied for" if appropriate.
- <sup>2</sup> Substitute "contracts" where bids are called concurrently for multiple contracts. Add a new para. 2 and renumber paras. 2–7 as follows: "Bidders may bid for one or several contracts, as further defined in the Bidding Document. Bidders wishing to offer discounts in case they are awarded more than one contract will be allowed to do so provided those discounts are included in the Letter of Bid."
- 3 Delete "prequalified" if the bidding is not preceded by a prequalification exercise. In which case, insert an additional paragraph indicating clear-cut, pass-fail qualification criteria to enable bidders to make an informed decision on whether to pursue a specific contract and, if so, either as a single entity or in Joint Venture.
- <sup>4</sup> Add if applicable: "This contract will be jointly financed by .. **insert name of cofinancing agency** .. The eligibility rules and procedures of ADB will govern the bidding process."
- <sup>5</sup> A brief description of the type(s) of Plant, Materials, and Services should be provided, including sizing/capacity and main purpose of the facility to be designed, built, and operated, the location of project, and other information necessary to enable potential bidders to decide whether to respond to the invitation.
- <sup>6</sup> Delete "prequalified" if the bidding is not preceded by a prequalification exercise.
- <sup>7</sup> The list of eligible countries will be specified in Section 5 of the Bidding Document.
- <sup>8</sup> The Borrower and the Employer may be the same or different entities. The text of the Invitation for Bids and the texts of the other associated documents must indicate which agency will act as the Employer.
- <sup>9</sup> The fee chargeable should only cover reproduction and mailing costs.
- <sup>10</sup> For example, cashier's check, direct deposit to specified account number., etc.
- Include para. 7 only if Domestic Preference has been expressly provided in the Procurement Plan and is included in the Bid Data Sheet.

# Standard Bidding Documents Design-Build-Operate Contracts for Water and Wastewater Greenfield Infrastructure Projects

#### **Documents Structure Flowchart**

	The Bidding Document	issued by Employer
	Section 1 – Instructions to Bidders (ITB)	
	Section 2 - Bid Data Sheet (BDS)	
	Section 3 - Evaluation and Qualification Criteria (EQC)	
1	Section 4 – Bidding Forms (BDF)	
	Section 5 – Eligible Countries (ELC)	
	Section 6 – Employer's Requirements (ERQ)	
	Section 7 - General Conditions of Contract (GCC)	
	Section 8 - Particular Conditions of Contract (PCC)	
	Section 9 - Contract Forms (COF)	

#### The Bid submitted by Bidder The **Technical Bid** comprising: (1) The Letter of Technical Bid; Bid Security or Bid-Securing Declaration, in accordance with ITB 21; (3) Written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with ITB 22.2; (4) Documentary evidence in accordance with ITB 14, the Bidder's eligibility and qualifications to perform the contract if its Bid is accepted; Documentary evidence establishing in accordance with ITB 15 that the Plant, Materials, and Services offered by the Bidder in its Bid are eligible (6) Documentary evidence in accordance with ITB 16, that the Plant, Materials, and Services offered by the Bidder conform to the Bidding Document: Technical Proposal in accordance with ITB 17, including the List of Subcontractors together with the Schedule of Performance Guarantees; Joint Venture agreement, or letter of intent to enter into a Joint Venture including a draft agreement, indicating at least the parts of the Plant to be executed by the respective partners, in the case of a bid submitted by a Joint Venture; and (9) Any other document required in the BDS. The Price Bid comprising: (1) The Letter of Price Bid; completed Schedules as required, including Price Schedules, in accordance with ITB 12 and ITB 18; and

any other document required in the BDS.

		The Contract	issued by Employer and submitted by Bidder
	(a)	The Contract Agreement	
	(b)	The Letter of Acceptance	
	(c)	Addenda to the Bidding Document	
	(d)	Particular Conditions of Contract—Part A	
3	(e)	Particular Conditions of Contract—Part B	
	(f)	General Conditions of Contract	
	(g)	Employer's Requirements	
	(h)	The Completed Schedules	
	(i)	The Operating License	
	(j)	The Contractor's Technical Bid	
	(k)	Any other document forming part of the C	Contract, if so specified

# **Section 1: Instructions to Bidders**

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#### A. General

#### 1. Scope of Bid

- 1.1 In connection with the Invitation for Bids (IFB) indicated in Section 2 (Bid Data Sheet (BDS)), the Employer, as indicated in the BDS, issues this Bidding Document for the procurement of Plant, Materials, and Services as specified in Section 6 (Employer's Requirements). The name, identification, and number of lot(s) or contract(s) of the Open Competitive Bidding (OCB) are provided in the BDS.
- 1.2 Unless otherwise stated, throughout this Bidding Document words and expressions using initial capital letters shall be defined and interpreted as prescribed in
  - (a) Section 7 (General Conditions of Contract or GCC) and Section 8 (Particular Conditions of Contract or PCC);
  - (b) ITB 1.1 above and ITB 1.3 below; or
  - (c) specifically, in the document where they are used, as the case may be (such as, for the purpose of illustration only but not limited to, under ITB 2.1 below).
- 1.3 The following words and expressions shall have the meaning stated:
  - (a) "Bidder" means a bidder, who acquires the Bidding Document from the source stated in the IFB, and
  - (b) "Addendum" or "Addenda" means any addendum or addenda to the Bidding Document which the Employer may issue from time to time.

#### 2. Source of Funds

- 2.1 The Borrower or Recipient (hereinafter called "Borrower") indicated in the BDS has applied for or received financing (hereinafter called "Funds") from the Asian Development Bank (hereinafter called "ADB") toward the cost of the project named in the BDS. The Borrower intends to apply a portion of the Funds to eligible payments under the Contract(s) for which this Bidding Document is issued.
- 2.2 Payments by ADB will be made only at the request of the Borrower and upon approval by ADB in accordance with the terms and conditions of the Financing Agreement between the Borrower and ADB (hereinafter called "Financing Agreement"), and will be subject in all respects to the terms and conditions of that Financing Agreement. No party other than the Borrower shall derive any rights from the Financing Agreement or have any claim to the Funds.

# 3. Fraud and Corruption

- 3.1 ADB's Anticorruption Policy (1998, as amended to date) requires Borrowers (including beneficiaries of ADB-financed activity), as well as Bidders, Suppliers, and Subcontractors under ADB-financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, ADB
  - (a) defines, for the purposes of this provision, the terms set forth below as follows:
    - (i) "corrupt practice" means the offering, giving, receiving, or soliciting, directly or indirectly, anything of value to influence improperly the actions of another party;
    - (ii) "fraudulent practice" means any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;
    - (iii) "coercive practice" means impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
    - (iv) "collusive practice" means an arrangement between two or more parties designed to achieve an improper purpose, including influencing improperly the actions of another party;
    - (v) "abuse" means theft, waste, or improper use of assets related to ADB-related activity, either committed intentionally or through reckless disregard;
    - (vi) "conflict of interest" means any situation in which a party has interests that could improperly influence that party's performance of official duties or responsibilities, contractual obligations, or compliance with applicable laws and regulations;
    - (vii) "obstructive practice" means: (a) deliberately destroying, falsifying, altering, or concealing of evidence material to an ADB investigation, or deliberately making false statements to investigators, with the intent to impede an ADB investigation; (b) threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to a Bank investigation or from pursuing the investigation; or (c) deliberate acts intended to impede the exercise of ADB's contractual rights of audit or inspection or access to information; and
    - (viii) "integrity violation" is any act, as defined under ADB's Integrity Principles and Guidelines (2015, as amended from time to time), which violates ADB's Anticorruption Policy, including (i) to (vii) above and the following: violations of ADB sanctions, retaliation against whistleblowers or witnesses, and other violations of ADB's Anticorruption Policy, including failure to adhere to the highest ethical standard.

- (b) will reject a Bid for award if it determines that the Bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices or other integrity violations in competing for the Contract;
- (c) will cancel the portion of the financing allocated to a Contract if it determines at any time that representatives of the Borrower or of a beneficiary of ADB-financing engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices or other integrity violations during the procurement or the execution of that contract, without the Borrower having taken timely and appropriate action satisfactory to ADB to remedy the situation;
- (d) will impose remedial actions on a firm or an individual, at any time, in accordance with ADB's Anticorruption Policy and Integrity Principles and Guidelines, including declaring ineligible, either indefinitely or for a stated period of time, to participate<sup>1</sup> in ADB-financed, -administered, or -supported activities or to benefit from an ADB-financed, -administered, or -supported contract, financially or otherwise, if it at any time determines that the firm or individual has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive or obstructive practices or other integrity violations; and
- (e) will have the right to require that a provision be included in the Bidding Document and in the Contract financed by ADB, requiring Bidders, Suppliers, and Subcontractors to permit ADB or its representative to inspect their accounts and records and other documents relating to the Bid submission and Contract performance and to have them audited by auditors appointed by ADB, as laid down under PCC Subclauses 1.16 and 6.22.
- 3.2 All Bidders, consultants, contractors, suppliers, and other third-parties engaged or involved in ADB-related activities have a duty to cooperate fully in any screening or investigation when requested by ADB to do so. Such cooperation includes, but is not limited to, the following:
  - (a) being available to be interviewed and replying fully and truthfully to all questions asked;
  - (b) providing ADB with any items requested that are within the party's control including, but not limited to, documents and other physical objects;
  - (c) upon written request by ADB, authorizing other related entities to release directly to ADB such information that is specifically and materially related, directly or indirectly, to the said entities or issues which are the subject of the investigation;
  - (d) cooperating with all reasonable requests to search or physically inspect their person and/or work areas, including files, electronic databases, and personal property used on ADB activities, or that utilizes ADB's Information and Communications Technology (ICT) resources or systems (including mobile phones, personal electronic devices, and electronic storage devices such as external disk drives);

Whether as a Contractor, Subcontractor, Consultant, Manufacturer, or Supplier, or Service Provider; or in any other capacity (different names are used depending on the particular Bidding Document).

- (e) cooperating in any testing requested by ADB, including but not limited to, fingerprint identification, handwriting analysis, and physical examination and analysis; and
- (f) preserving and protecting confidentiality of all information discussed with, and as required by, ADB.
- 3.3 All Bidders, consultants, contractors, and suppliers shall ensure that, in its contract with its sub-consultants, Subcontractors, and other third-parties engaged or involved in ADB-related activities, such sub-consultants, Subcontractors, and other third parties similarly undertake the foregoing duty to cooperate fully in any screening or investigation when requested by ADB to do so.
- 3.4 The Employer hereby puts the Bidder on notice that the Bidder or any Joint Venture partner of the Bidder (if any) may not be able to receive any payments under the Contract if the Bidder or any of its Joint Venture partners, as appropriate, is, or is owned (in whole or in part) by a person or entity subject to applicable sanctions.
- 3.5 Furthermore, Bidders shall be aware of the provisions stated in the PCC Subclause 1.16, as well as in PCC Subclause 15.8 regarding Employer's Contract termination in such cases as listed under ITB 3.1(a) above.

#### 4. Eligible Bidders

- 4.1 A Bidder may be a natural person, private entity, or government-owned enterprise subject to ITB 4.5 or any combination of them with a formal intent to enter into an agreement or under an existing agreement in the form of a Joint Venture. In the case of a Joint Venture, the Bidder should note that, in accordance with GCC Subclause 1.15:
  - (a) all partners shall be jointly and severally liable, and
  - (b) the Joint Venture shall nominate a leader who shall have the authority to bind the Bidder and then the Contractor, and conduct all business for and on behalf of any and all the partners of the Joint Venture during the bidding process and, in the event the Joint Venture is awarded the Contract, during Contract execution.
- 4.2 A Bidder, and all partners constituting the Bidder, shall have the nationality of an eligible country, in accordance with Section 5 (Eligible Countries). A Bidder shall be deemed to have the nationality of a country if the Bidder is a citizen or is constituted, incorporated, or registered, and operates in conformity with the provisions of the laws of that country. This criterion shall also apply to the determination of the nationality of proposed Subcontractors or Suppliers for any part of the Contract including related services.
- 4.3 A Bidder shall not have a conflict of interest. All Bidders found to have a conflict of interest shall be disqualified. A Bidder may be considered to be in a conflict of interest with one or more parties in this bidding process if any of, including but not limited to, the following apply:
  - (a) they have controlling shareholders in common; or
  - (b) they receive or have received any direct or indirect subsidy from any of them; or
  - (c) they have the same legal representative for purposes of this Bid; or

- (d) they have a relationship with each other, directly or through common third parties, that puts them in a position to have access to material information about or improperly influence the bid of another Bidder, or influence the decisions of the Employer regarding this bidding process; or
- (e) a Bidder participates in more than one Bid in this bidding process, either individually or as a partner in a Joint Venture. This will result in the disqualification of all Bids in which it is involved. However, subject to any finding of a conflict of interest in terms of ITB 4.3 (a) (d) above, this does not limit the participation of a Bidder as a Subcontractor in another Bid or of a firm as a Subcontractor in more than one Bid; or
- (f) a Bidder, Joint Venture partner, associates, parent company, or any affiliated entity, participated as a consultant in the preparation of the Employer's Requirements for the Plant, Materials, and Services that are the subject of the Bid; or
- a Bidder was affiliated with a firm or entity that has been hired (or is proposed to be hired) by the Employer or Borrower as Employer's Representative for the Contract; or
- (h) a Bidder would be providing Goods, Works, or nonconsulting services resulting from or directly related to consulting services for the preparation or implementation of the project specified in the BDS ITB 2.1 that it provided or were provided by any affiliate that directly or indirectly controls, is controlled by, or is under common control with that firm.
- A firm shall not be eligible to participate in any procurement activities under an ADB-financed, -administered, or -supported project while under temporary suspension or debarment by ADB pursuant to its Anticorruption Policy (see ITB 3), whether such debarment was directly imposed by ADB, or enforced by ADB pursuant to the Agreement for Mutual Enforcement of Debarment Decisions. A Bid from a temporary suspended or debarred firm will be rejected.
- 4.5 Government-owned enterprises in the Borrower's country shall be eligible only if they can establish that they (i) are legally and financially autonomous, (ii) operate under commercial law, and (iii) are not dependent agencies of the Employer.
- 4.6 A Bidder shall not be under suspension from Bidding by the Employer as the result of the execution of a Bid-Securing Declaration.
- 4.7 Bidders shall provide such evidence of their continued eligibility satisfactory to the Employer, as the Employer shall reasonably request.
- 4.8 Firms shall be excluded if by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, the Borrower's country prohibits any import of goods or contracting of works or services from that country or any payments to persons or entities in that country.
- 4.9 In case a prequalification process has been conducted prior to the bidding process, this bidding is open only to prequalified Bidders.

#### 5. Eligible Plant, Materials, and Services

- 5.1 The Plant, Materials, and Services to be supplied under the Contract shall have their origin in eligible source countries as defined in ITB 4.2 and all expenditures under the Contract will be limited to such Plant, Materials, and Services.
- 5.2 For purposes of ITB 5.1 above, "origin" means the place where the Plant, Materials, or component parts thereof are mined, grown, produced, or manufactured, and from where the services are provided. Plant components are produced when, through manufacturing, processing, or substantial or major assembling of components, a commercially- recognized product results that differ substantially in its basic characteristics or in purpose or utility from its components.

#### **B.** Contents of the Bidding Document

6. Sections of the Bidding Document

6.1 The Bidding Document consists of Parts I, II, and III, which include all the sections indicated below, and should be read in conjunction with any Addendum issued in accordance with ITB 8.

#### PART I Bidding Procedures

- Section 1 Instructions to Bidders (ITB)
- Section 2 Bid Data Sheet (BDS)
- Section 3 Evaluation and Qualification Criteria (EQC)
- Section 4 Bidding Forms (BDF)
- Section 5 Eligible Countries (ELC)

#### **PART II Requirements**

• Section 6 Employer's Requirements (ERQ)

#### **PART III Conditions of Contract and Contract Forms**

- Section 7 General Conditions of Contract (GCC)
- Section 8 Particular Conditions of Contract (PCC)
- Section 9 Contract Forms (COF)
- 6.2 The Invitation for Bids (IFB) issued by the Employer is not part of the Bidding Document.
- 6.3 The Employer is not responsible for the completeness of the Bidding Document or any of its Addenda, if they were not obtained directly from the source stated by the Employer in the IFB.
- 6.4 The Bidder is expected to examine all instructions, forms, terms, and requirements in the Bidding Document. Failure to furnish all information or documentation required by the Bidding Document may result in the rejection of the Bid.

- 7. Clarification of Bidding Document, Site Visit, Pre-Bid Meeting
- 7.1 A prospective Bidder requiring any clarification on the Bidding Document shall contact the Employer in writing at the Employer's address indicated in the BDS, or raise inquiries during the pre-Bid meeting if provided for in accordance with ITB 7.4. The Employer will respond to any request for clarification, provided that such request is received no later than 21 days prior to the deadline for submission of Bids. The Employer's response shall be in writing with copies to all Bidders who have acquired the Bidding Document in accordance with ITB 6.3, including a description of the inquiry but without identifying its source. Should the Employer deem it necessary to amend the Bidding Document as a result of a request for clarification, it shall do so following the procedure under ITB 8.
- 7.2 The Bidder is advised to visit and examine the Site, where the Permanent Works will be executed, and its surroundings and obtain for itself on its own responsibility all data and information that may be necessary for preparing the Bid and entering into a contract for the provision of Plant, Materials, and Services. The costs of visiting the Site shall be at the Bidder's own expense.
- 7.3 The Bidder and any of its personnel or agents will be granted permission by the Employer to enter its premises and lands for the purpose of such visit, but only upon the express condition that the Bidder, its personnel, and agents, will release and indemnify the Employer and its personnel and agents from and against all liability in respect thereof, and will be responsible for death or personal injury, loss of or damage to property, and any other loss, damage, costs, and expenses incurred as a result of the visit and inspection.
- 7.4 The Bidder's designated representative is invited to attend a pre-Bid meeting, if provided for in the BDS. The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.
- 7.5 The Bidder is requested to submit any questions in writing, to reach the Employer not later than 1 week before the pre-Bid meeting.
- 7.6 Minutes of the pre-Bid meeting, including the text of the questions raised, without identifying the source, and the responses given, together with any responses prepared after the meeting, will be transmitted promptly to all Bidders who have acquired the Bidding Document in accordance with ITB 6.3. Any modification to the Bidding Document that may become necessary as a result of the pre-Bid meeting shall be made by the Employer exclusively through the issue of Addendum or Addenda pursuant to ITB 8 and not through the minutes of the pre-Bid meeting.
- 7.7 Nonattendance at the pre-Bid meeting will not be a cause for disqualification of a Bidder.
- 8. Amendment of Bidding Document
- 8.1 At any time prior to the deadline for submission of Bids, the Employer may amend the Bidding Document by issuing an Addendum or several Addenda.
- 8.2 Any Addendum issued shall be part of the Bidding Document and shall be communicated in writing to all who have obtained the Bidding Document from the Employer in accordance with ITB 6.3.

8.3 To give prospective Bidders reasonable time in which to take an Addendum into account in preparing their Bids, the Employer may, at its discretion, extend the deadline for the submission of Bids, pursuant to ITB 24.2.

#### C. Preparation of Bids

- 9. Cost of Bidding
- 9.1 The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Employer shall in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.
- 10. Language of Bid
- 10.1 The Bid, as well as all correspondence and documents relating to the Bid exchanged by the Bidder and the Employer, shall be written in the language specified in the BDS. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages into the language specified in the BDS, in which case, for purposes of interpretation of the Bid, such translation shall govern.
- 11. Documents
  Comprising
  the Bid
- 11.1 The Bid shall comprise two envelopes submitted simultaneously, one containing the Technical Bid and the other the Price Bid, both envelopes enclosed together in an outer single envelope.
- 11.2 The Technical Bid submitted by the Bidder shall comprise the following:
  - (a) Letter of Technical Bid;
  - (b) Bid Security or Bid-Securing Declaration, in accordance with ITB 21;
  - (c) written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with ITB 22.2;
  - (d) documentary evidence, in accordance with ITB 14, establishing the Bidder's eligibility and qualifications to perform the contract if its Bid is accepted;
  - (e) documentary evidence, in accordance with ITB 15, that the Plant, Materials, and Services offered by the Bidder in its Bid are eligible;
  - (f) documentary evidence, in accordance with ITB 16, that the Plant, Materials, and Services offered by the Bidder conform to the Bidding Document:
  - (g) Technical Proposal in accordance with ITB 17, together with the Schedule of Performance Guarantees and the list of Subcontractors, in accordance with ITB 17.2;
  - (h) in the case of a bid submitted by a Joint Venture, the Bid shall include a copy of the Joint Venture agreement entered into by all partners. Alternatively, a letter of intent to execute a Joint Venture agreement in the event of a successful Bid shall be signed by all partners and submitted with the Bid, together with a copy of the proposed agreement; and
  - (i) any other document required in the BDS.

- 11.3 The Price Bid submitted by the Bidder shall comprise the following:
  - (a) Letter of Price Bid;
  - (b) completed Schedules as required, including Price Schedules, in accordance with ITB 12 and ITB 18; and
  - (c) any other document required in the BDS.

## 12. Letter of Bid and Schedules

12.1 The Letters of Technical Bid and Price Bid, and the Schedules, and all documents listed under ITB 11, shall be prepared using the relevant forms furnished in Section 4 (Bidding Forms). The forms must be completed without any alterations to the text, and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested, and as required in the BDS.

#### 13. Alternative Bids

- 13.1 Alternative Bids are not allowed.
- 13.2 For the avoidance of doubt, and with reference to ITB 33.2, Bidders' design solutions which deviate from any base design solution provided in the Bidding Document, but which
  - (a) comply with the quality and performance of Plant, Materials, and Services specified in the Employer's Requirements, and
  - (b) do not change the Employer's rights and Contractor's obligations under the proposed Contract,

are not considered as Alternative Bids and are then allowed.

# 14. Documents Establishing the Eligibility and Qualifications of the Bidder

- 14.1 To establish its eligibility and qualifications to perform the Contract in accordance with Section 3 (Evaluation and Qualification Criteria), the Bidder shall provide the information requested in the corresponding information sheets included in Section 4 (Bidding Forms).
- 14.2 Domestic Bidders, individually or in Joint Ventures, applying for eligibility for domestic preference shall supply all information required to satisfy the criteria for eligibility as described in ITB 41.
- 15. Documents
  Establishing the
  Eligibility of Plant,
  Materials, and
  Services
- 15.1 To establish the eligibility of the Plant, Materials, and Services in accordance with ITB 5, Bidders shall complete the Country of Origin Declaration Forms, included in Section 4 (Bidding Forms).
- 16. Documents
  Establishing
  Conformity of the
  Plant, Materials,
  and Services
- 16.1 The documentary evidence of the conformity of the Plant, Materials, and Services to the Bidding Document may be in the form of literature, drawings, data, or any other medium and shall furnish:
  - (a) a detailed description of the essential technical and performance characteristics of the Plant, Materials, and Services, including the performance guarantees of the proposed Plant, Materials, and Services, in response to the Employer's Requirements;

- (b) a list giving full particulars, including available sources, of all spare parts and special tools necessary for the proper and continuing operation of the Works for the period named in the BDS, following Contract Completion Date; and
- (c) a commentary on the Employer's Requirements and adequate evidence demonstrating the substantial responsiveness of the Plant, Materials, and Services to those Employer's Requirements. Bidders shall note that standards for workmanship, Materials, and equipment designated by the Employer in the Bidding Document are intended to be descriptive (establishing standards of quality and performance) only and not restrictive. The Bidder may substitute alternative standards, brand names and/or catalog numbers in its Bid, provided that it demonstrates to the Employer's satisfaction that the substitutions are substantially equivalent or superior to the standards designated in the Employer's Requirements.

## **17.** Technical Proposal, 17.1 Subcontractors

The Bidder shall furnish a Technical Proposal including method statements for the Design-Build Period, Operation and Maintenance Plan, work methods, Contractor's Equipment, Contractor's Personnel, Schedules, and any other information as stipulated in Section 4 (Bidding Forms), in sufficient detail to demonstrate the adequacy of the Bidders' Technical Proposal to meet the Contract requirements, including the Time for Completion of Design-Build.

- 17.2 For major items of Plant, Materials, and Services as listed by the Employer in Section 3 (Evaluation and Qualification Criteria), which the Bidder intends to purchase or subcontract, the Bidder shall give details of the name and nationality of the proposed Subcontractors, including Suppliers, for each of those items. In addition, the Bidder shall include in its Bid information establishing compliance with the requirements specified by the Employer for these items. Bidders are free to list more than one Subcontractor against each item of the Plant, Materials, and Services. Quoted Rates and Prices will be deemed to apply to whichever Subcontractor is appointed, and no adjustment of the Rates and Prices will be permitted in case of a change of a Subcontractor.
- 17.3 The Bidder shall be responsible for ensuring that any Subcontractor proposed complies with the requirements of ITB 4, and that any Plant, Materials, or services to be provided by the Subcontractor comply with the requirements of ITB 5.

## 18. Bid Prices and Discounts

.8.1 Unless otherwise specified in the BDS and/or Section 6 (Employer's Requirements), Bidders shall quote for the entire Plant, Materials, and Services on a "single responsibility" basis such that the total Bid Price covers, in accordance with GCC Subclause 4.11 [Sufficiency of the Accepted Contract Amount], all the Contractor's obligations mentioned in or to be reasonably inferred from the Bidding Document in respect of the design, manufacture, including procurement and subcontracting (if any), delivery, construction, installation, completion and operation of the Works under the Contract. Items against which no rate or price is entered by the Bidder will not be additionally paid for by the Employer when executed and shall be deemed to be covered by the Rates and Prices for other items.

- 18.2 Bidders are required to quote the price for all obligations outlined in the Bidding Document.
- 18.3 Bidders shall give a breakdown of the Rates and Prices in the manner and detail called for in the Price Schedules included in Section 4 (Bidding Forms). Where no different Price Schedules are included in the Bidding Document, Bidders shall present their Rates and Prices in the following manner: separately numbered Schedules included in Section 4 (Bidding Forms) shall be used for each of elements listed below. The total amount from each Schedule (Nos. 1 to 7) shall be summarized in a Grand Summary (Schedule No. 8) giving the total Bid amount to be entered in the Letter of Bid. Absence of the total Bid amount in the Letter of Bid may result in the rejection of the Bid.
  - Schedule No. 1: Plant and mandatory spare parts supplied from abroad
  - Schedule No. 2: Plant and mandatory spare parts supplied from within the Employer's country
  - Schedule No. 3: Design services
  - Schedule No. 4: Installation and other services during the Design Build Period
  - Schedule No. 5: Operation Service
  - Schedule No. 6: Other services during the Operation Service Period
  - Schedule No. 7: Asset Replacement Fund
  - Schedule No. 8 Grand Summary (Schedule Nos. 1 to 7)

Bidders shall note that the Plant and mandatory spare parts included in Schedule Nos. 1 and 2 above exclude Materials used for civil, building, and other construction works. All such Materials shall be included and priced under Schedule No. 4 (Installation and other services during the Design-Build Period).

- 18.4 In the Schedules, Bidders shall give the required details and a breakdown of their Rates and Prices as follows:
  - (a) Plant to be supplied from abroad (Price Schedule No. 1):
    - (i) the price of the Plant shall be quoted carriage and insurance paid (CIP)-named place of destination basis specified in the BDS;
    - (ii) all customs duties and other taxes paid or payable in the Employer's country on the Plant, at the Base Date, i.e., 28 days prior to the deadline for submission of Bids, if the Contract is awarded to the Bidder; and
    - (iii) the total price for the Plant.
  - (b) Plant supplied from within the Employer's country (Price Schedule No. 2):
    - the price of the Plant shall be quoted on an EXW Incoterm basis (ex works, ex factory, ex warehouse, ex showroom, as applicable), including all customs duties and sales and other taxes already paid or payable at the Base Date on the components and raw material used in the manufacture or assembly of Plant quoted ex works or ex factory, or on the previously imported Plant of foreign origin quoted ex warehouse, ex showroom;

- (ii) sales tax and other taxes payable in the Employer's country on the Plant at the Base Date if the contract is awarded to the Bidder, and
- (iii) the total price for the Plant.
- (c) Design services (Price Schedule No. 3). Rates and Prices shall include all taxes, duties, levies, and charges payable in the Employer's country at the Base Date.
- (d) Installation and other services during the Design-Build Period (Price Schedule No. 4) shall be quoted separately and shall include Rates and Prices for local transportation, insurance, and other services incidental to delivery of the Plant, all Contractor's Personnel, Contractor's Equipment, Temporary Works, Materials, consumables, and all matters and things of whatsoever nature related to the execution of the Works during the Design-Build Period, as and where identified in the Bidding Document, and as necessary for the proper execution of the installation and other services, including all taxes, duties, levies, and charges payable in the Employer's country at the Base Date.
- (e) Operation Service (Price Schedule No. 5), other services during the Operation Service Period (Price Schedule No. 6) and Asset Replacement Fund (Price Schedule No. 7). Rates and Prices shall include all taxes, duties, levies, and charges payable in the Employer's country at the Base Date.
- 18.5 The current edition of Incoterms, published by the International Chamber of Commerce shall govern.
- 18.6 Prices quoted by the Bidder shall be subject to adjustment during performance of the Contract to reflect changes in the cost elements such as labour, Materials, transport, and Contractor's Equipment, all in accordance with the procedures specified in the corresponding Schedule of cost indexation. A Bid submitted with a fixed price quotation will be treated as nonresponsive and be rejected. Bidders are required to indicate the source of labour and Materials indexes in the corresponding form for the Schedule of cost indexation in Section 4 (Bidding Forms). The Employer may require the Bidder to justify its proposed indexes and weightings. Any Bid that omits indexes and weightings shall be subject to clarification with the Bidder.
- 18.7 If so indicated in BDS 1.1, Bids are being invited for individual lots (contracts) or for any combination of lots (packages). Bidders wishing to offer any price reduction (discount) for the award of more than one contract shall specify in their Letter of Bid the price reductions applicable to each package, or alternatively, to individual contracts within the package, and the manner in which the price reductions will apply.

## 19. Currencies of Bid and Payment

- 19.1 The currency(ies) of the Bid shall be as follows:
  - (a) The Rates and Prices shall be quoted either in the currency of the Bidder's home country, or in any fully convertible currency(ies).
  - (b) A Bidder expecting to incur a portion of its expenditures in the performance of the Contract in more than one currency, and wishing to be paid accordingly, shall so indicate in the Schedule of Prices and the Letter of Bid.
  - (c) If some of the Contract expenditures are to be incurred in the Employer's country, such expenditures shall be quoted in either Foreign and/or Local Currency, depending upon the currency in which the costs are to be incurred.
  - (d) Bidders may be required by the Employer to clarify and justify their Local and Foreign Currency requirements, and to substantiate that the amounts included in the Price Schedules are reasonable and responsive to ITB 18.1 in which case a detailed breakdown of its Foreign Currency requirements shall be provided by the Bidder.
  - (e) During the performance of the Contract, the Foreign Currency portions of the outstanding balance of the Contract Price may be adjusted by agreement between the Employer and the Contractor to reflect any changes in Foreign Currency requirements for the Contract. Any such adjustment shall be effected by comparing the amounts quoted in the Bid with the amounts already used under the Contract and the Contractor's future needs for imported items.

## 20. Period of Validity of Bids

- 20.1 Bids shall remain valid for the period specified in the BDS after the Bid submission deadline date prescribed by the Employer. A Bid valid for a shorter period shall be rejected by the Employer as nonresponsive.
- 20.2 In exceptional circumstances, prior to the expiration of the Bid validity period, the Employer may request Bidders to extend the period of validity of their Bids. The request and the responses shall be made in writing. If a Bid Security is requested in accordance with ITB 21, it shall also be extended 28 days beyond the deadline of the extended Bid validity period. A Bidder may refuse the request without forfeiting its Bid Security. A Bidder granting the request shall not be required or permitted to modify its Bid.

#### 21. Bid Security/ Bid-Securing Declaration

- 21.1 The Bidder shall furnish as part of its Bid, in original form, either a bid-securing declaration (a "Bid-Securing Declaration") or a bid security (a "Bid Security") as specified in the BDS. In the case of a Bid Security, the amount and currency shall be as specified in the BDS.
- 21.2 If a Bid-Securing Declaration is required pursuant to ITB 21.1, it shall use the form included in Section 4 (Bidding Forms). The Employer will declare a Bidder ineligible to be awarded a contract for a specified period of time, as indicated in the BDS, if a Bid-Securing Declaration is executed.

- 21.3 If a Bid Security is specified pursuant to ITB 21.1, the Bid Security shall be, at the Bidder's option, in any of the following forms:
  - (a) an unconditional bank guarantee,
  - (b) an irrevocable letter of credit,
  - (c) a cashier's or certified check, or
  - (d) SWIFT message in the form of MT760.

all from a reputable source from an eligible country as described in Section 5 (Eligible Countries). In the case of a bank guarantee, the Bid Security shall be submitted using either the Bid Security Form included in Section 4 (Bidding Forms) or another form acceptable to the Employer. The form must include the complete name of the Bidder. The Bid Security shall be valid for 28 days beyond the original validity period of the Bid, or beyond any period of extension if requested under ITB 20.2.

- 21.4 Subject to the succeeding sentences, any Bid not accompanied by a substantially compliant Bid Security or Bid-Securing Declaration, as required in accordance with ITB 21.1, shall be rejected by the Employer as nonresponsive. If a Bidder submits a Bid Security that (i) deviates in form, amount, and/or period of validity, or (ii) does not provide sufficient identification of the Bidder (including, without limitation, failure to indicate the name of the Joint Venture or, where the Joint Venture has not yet been constituted, the names of all future Joint Venture partners), the Employer shall request the Bidder to submit a compliant Bid Security within the number of days, as specified in the BDS, of receiving such a request. Failure to provide a compliant Bid Security within the prescribed period of receiving such a request shall cause the rejection of the Bid.
- 21.5 If a Bid Security is specified pursuant to ITB 21.1, the Bid Security of the unsuccessful Bidder shall be returned promptly upon the successful Bidder's furnishing of the Performance Security pursuant to ITB 47.
- 21.6 If a bid security is specified pursuant to ITB 21.1, the bid security of successful Bidders shall be returned promptly once the successful Bidder has signed the Contract, and furnished the required performance security and the Parent Company Guarantee pursuant to ITB 47.
- 21.7 The Bid Security may be forfeited or the Bid-Securing Declaration executed, if
  - (a) notwithstanding ITB 26.3 a Bidder withdraws its Bid during the period of Bid validity specified by the Bidder on the Letter of Bid, except as provided in ITB 20.2 or
  - (b) the successful Bidder fails to
    - (i) sign the Contract Agreement in accordance with ITB 46;
    - (ii) furnish a performance security and a parent company guarantee in accordance with ITB 47; or
    - (iii) accept the arithmetical corrections of its Bid in accordance with ITB 38.

- 21.8 If the Bid Security is required as per ITB 21.1, the Bid Security of a Joint Venture shall be in the name of the Joint Venture that submits the Bid. If the Joint Venture has not been legally constituted at the time of bidding, the Bid Security shall be in the name of any or all of the Joint Venture partners. If the Bid-Securing Declaration is required as per ITB 21.1, the Bid-Securing Declaration of a Joint Venture shall be in the name of the Joint Venture that submits the Bid. If the Joint Venture has not been legally constituted at the time of bidding, the Bid-Securing Declaration shall be in the names of all future partners as named in the letter of intent referred to in ITB 4.1.
- **22.** Format and Signing 22.1 of Bid
- The Bidder shall prepare one original set of the Technical Bid and one original set of the Price Bid comprising the Bid as described in ITB 11 and clearly mark it "ORIGINAL–TECHNICAL BID" and "ORIGINAL–PRICE BID." In addition, the Bidder shall submit copies of the Bid, in the number specified in the BDS and clearly mark each of them "COPY." In the event of any discrepancy between the original and the copies, the original shall prevail.
- 22.2 The original and all copies of the Bid shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Bidder. This authorization shall consist of a written confirmation as specified in the BDS and shall be attached to the Bid. The name and position held by each person signing the authorization must be typed or printed below the signature. If a Bidder submits a deficient authorization, the Bid shall not be rejected in the first instance. The Employer shall request the Bidder to submit an acceptable authorization within the number of days as specified in the BDS. Failure to provide an acceptable authorization within the period stated in the Employer's request shall cause the rejection of the Bid. If either the Letter of Bid or the Bid-Securing Declaration (if applicable) is not signed, the Bid shall be rejected.
- 22.3 A Bid submitted by a Joint Venture shall be signed to be legally binding on all partners.
- Any amendments such as interlineations, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the Bid.

#### D. Submission and Opening of Bids

- 23. Submission, Sealing, and Marking of Bids
- 23.1 Bidders may submit their Bids by mail or by hand. When so specified in the BDS, Bidders shall have the option of submitting their Bids electronically. Procedures for submission, sealing, and marking are as follows:
  - (a) Bidders submitting Bids by mail or by hand shall enclose the original and each copy of the Bid in separate sealed envelopes, duly marking the envelopes as "ORIGINAL" and "COPY." These envelopes containing the original and the copies shall then be enclosed in one single envelope. The rest of the procedure shall be in accordance with ITB 23.2 to ITB 23.6.
  - (b) Bidders submitting Bids electronically shall follow the electronic bid submission procedures specified in the BDS.

- 23.2 The inner and outer envelopes shall
  - (a) bear the name and address of the Bidder,
  - (b) be addressed to the Employer in accordance with ITB 24.1, and
  - (c) bear the specific identification of this bidding process indicated in the BDS 1.1.
- 23.3 The outer envelopes, and the inner envelopes containing the Technical Bid, shall bear a warning not to open before the time and date for the opening of Technical Bid, in accordance with ITB 27.1.
- 23.4 The inner envelopes containing the Price Bid shall bear a warning not to open until advised by the Employer in accordance with ITB 36.1.
- 23.5 If all envelopes are not sealed and marked as required, the Employer will assume no responsibility for the misplacement or premature opening of the Bid.

## 24. Deadline for Submission of Bids

- 24.1 Bids must be received by the Employer at the address and no later than the date and time indicated in the BDS.
- 24.2 The Employer may, at its discretion, extend the deadline for the submission of bids by amending the Bidding Document in accordance with ITB 8, in which case all rights and obligations of the Employer and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.

#### 25. Late Bids

- 25.1 The Employer shall not consider any Bid that arrives after the deadline for submission of Bids, in accordance with ITB 24. Any Bid received by the Employer after the deadline for submission of Bids shall be declared late, rejected, and returned unopened to the Bidder.
- 26. Withdrawal, Substitution, and Modification of Bids
  - A Bidder may withdraw, substitute, or modify its Bid after it has been submitted by sending a written notice, duly signed by an authorized representative, and shall include a copy of the authorization in accordance with ITB 22.2 (except for withdrawal notices, which do not require copies). The corresponding substitution or modification of the Bid must accompany the respective written notice. All notices must be:
    - (a) prepared and submitted in accordance with ITB 22 and ITB 23 (except for withdrawal notices, which do not require copies), and in addition, the respective envelopes shall be clearly marked "WITHDRAWAL," "SUBSTITUTION," "MODIFICATION;" and
    - (b) received by the Employer prior to the deadline prescribed for submission of Bids, in accordance with ITB 24.
  - 26.2 Bids requested to be withdrawn in accordance with ITB 26.1 shall be returned unopened to the Bidders.
  - 26.3 No Bid may be withdrawn, substituted, or modified in the interval between the deadline for submission of Bids and the expiration of the period of bid validity specified by the Bidder on the Letter of Bid or any extension thereof.

## 27. Opening of Technical Bids

- 27.1 The Employer shall open the Technical Bids in public at the address, on the date, and time specified in the BDS in the presence of Bidder's designated representatives and anyone who choose to attend. Any specific electronic Bid opening procedures required, if electronic bidding is permitted in accordance with ITB 23.1, shall be as specified in the BDS. The Price Bids will remain unopened and will be held in custody of the Employer until the specified time of their opening. If the Technical Bid and the Price Bid are submitted together in one envelope, the Employer may reject the entire Bid. Alternatively, the Price Bid may be immediately resealed for later evaluation.
- 27.2 First, envelopes marked "WITHDRAWAL" shall be opened and read out and the envelope with the corresponding Bid shall not be opened, but returned to the Bidder. No Bid withdrawal shall be permitted unless the corresponding withdrawal notice contains a valid authorization to request the withdrawal and is read out at Bid opening.
- 27.3 Second, outer envelopes marked "SUBSTITUTION" shall be opened. The inner envelopes containing the substitution Technical Bid and/or substitution Price Bid shall be exchanged for the corresponding envelopes being substituted, which are to be returned to the Bidder unopened. Only the substitution Technical Bid, if any, shall be opened, read out, and recorded. Substitution Price Bid will remain unopened in accordance with ITB 27.1. No envelope shall be substituted unless the corresponding substitution notice contains a valid authorization to request the substitution and is read out and recorded at bid opening.
- 27.4 Next, outer envelopes marked "MODIFICATION" shall be opened. No Technical Bid and/or Price Bid shall be modified unless the corresponding modification notice contains a valid authorization to request the modification and is read out and recorded at the opening of Technical Bids. Only the Technical Bids, both original as well as modification, are to be opened, read out, and recorded at the opening. Price Bids, both original as well as modification, will remain unopened in accordance with ITB 27.1.
- 27.5 All other envelopes holding the Technical Bids shall be opened one at a time, and the following read out and recorded:
  - (a) the name of the Bidder;
  - (b) whether there is a modification or substitution;
  - (c) the presence of a Bid Security or a Bid-Securing Declaration, as required; and
  - (d) any other details as the Employer may consider appropriate.

Only Technical Bids read out and recorded at Bid opening shall be considered for evaluation. No Bid shall be rejected at the opening of Technical Bids except for late Bids, in accordance with ITB 25.1.

27.6 The Employer shall prepare a record of the opening of Technical Bids that shall include, as a minimum: the name of the Bidder and whether there is a withdrawal, substitution, or modification; and the presence or absence of a Bid Security or a Bid-Securing Declaration, as required. The Bidders' representatives who are present shall be requested to sign the record. The omission of a Bidder's signature on the record shall not invalidate the contents and effect of the record. A copy of the record shall be distributed to all Bidders who submitted Bids on time, and posted online when electronic bidding is permitted.

## E. Evaluation and Comparison of Bids

#### 28. Confidentiality

- 28.1 Information relating to the evaluation of Bids and recommendation of Contract award, shall not be disclosed to Bidders or any other persons not officially concerned with such process until the publication of Contract award.
- 28.2 Any attempt by a Bidder to influence the Employer in the evaluation of the Bids or Contract award decisions may result in the rejection of its Bid.
- 28.3 Notwithstanding ITB 28.2, from the time of Bid opening to the time of Contract award, if any Bidder wishes to contact the Employer on any matter related to the bidding process, it should do so in writing.

## 29. Clarification of Bids

- 29.1 To assist in the examination, evaluation, and comparison of the Technical and Price Bids, and qualification of the Bidders, the Employer may, at its discretion, ask any Bidder for a clarification of its Bid. Any clarification submitted by a Bidder that is not in response to a request by the Employer shall not be considered. The Employer's request for clarification and the response shall be in writing. No change in the substance of the Technical Bid or prices in the Price Bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the Bids, in accordance with ITB 38.
- 29.2 If a Bidder does not provide clarifications of its Bid by the date and time set by the Employer, acting reasonably, in the Employer's request for clarification, its Bid may be rejected.

## 30. Examination of Technical Bids

- 30.1 As a first step in the Technical Bids evaluation process, the Employer shall examine the Technical Bid to confirm that all documents and technical documentation requested in ITB 11.2 have been provided, and to determine the completeness of each document submitted. If any of these documents or information is missing, the Bid may be rejected.
- 30.2 The Employer shall confirm that the following documents and information have been provided in the Technical Bid. If any of these documents or information is missing, the offer shall be rejected.
  - (a) written confirmation of authorization to commit the Bidder;
  - (b) Bid Security or Bid-Securing Declaration, as required; and
  - (c) Technical Proposal in accordance with ITB 17.

## 31. Eligibility and Qualification of the Bidder

- 31.1 As a second step in the Technical Bids evaluation process, the Employer shall determine to its satisfaction whether a Bidder meets the eligibility and qualifying criteria specified in Section 3 (Evaluation and Qualification Criteria).
- 31.2 The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB 14. Unless permitted in the BDS, the determination shall not take into consideration the qualifications of other firms such as the Bidder's subsidiaries, parent entities, affiliates, Subcontractors (other than Specialist Subcontractors if permitted in the Bidding Document), or any other firm(s) different from the Bidder.
- 31.3 An affirmative determination shall be a prerequisite for proceeding with the next step of the evaluation process under ITB 33. The Employer reserves the right to reject the Bid of any Bidder found to be in circumstances described in GCC Subclause 15.2(f). A negative determination shall result into the disqualification of the Bid, in which event the Employer shall return the unopened Price Bid to the Bidder.
- 31.4 The capabilities of the Subcontractors and Suppliers proposed in its Bid, and to be included in its Technical Bid, for the major items of Plant, Materials, and Services to be used by the Bidder will also be evaluated for acceptability in accordance with Section 3 (Evaluation and Qualification Criteria). Their participation should be confirmed with a letter of intent between the parties, as needed. Should a Subcontractor or Supplier be determined to be unacceptable, the Bid will not be rejected, but the Bidder will be required to propose, without changing its Bid amount, an acceptable substitute Subcontractor or Supplier meeting the minimum criteria stated in Section 3 (Evaluation and Qualification Criteria). If a Bidder does not provide an acceptable substitute Subcontractor or Supplier by the date and time (which shall be reasonable) set in the Employer's request for substitution of Subcontractor or Supplier, its Bid may be rejected.

#### 32. Deviations, Reservations, and Omissions

- 32.1 During the evaluation of Bids, the following definitions apply:
  - (a) "Deviation" is a departure from the requirements specified in the Bidding Document;
  - (b) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the Bidding Document; and
  - (c) "Omission" is the failure to submit part or all of the information or documentation required in the Bidding Document.

## 33. Responsiveness of Technical Bid

33.1 As a third step in the Technical Bids evaluation process, the Employer's determination of a bid's responsiveness is to be based on the contents of the Bid itself, as defined in ITB 11.

- 33.2 A substantially responsive Technical Bid is one that meets the requirements of the Bidding Document without material Deviation, Reservation, or Omission. A material Deviation, Reservation, or Omission is one that,
  - (a) if accepted, would
    - (i) affect in any substantial way the scope, quality, or performance of the Plant, Materials, and Services specified in the Contract; or
    - (ii) limit in any substantial way, inconsistent with the Bidding Document, the Employer's rights or the Bidder's obligations under the proposed Contract; or
  - (b) if rectified, would unfairly affect the competitive position of other Bidders presenting substantially responsive Bids.

For the avoidance of doubt, Bidders are free to propose any design solution which deviates from any base design solution provided in the Bidding Document, and this will be considered substantially responsive as long as it does not affect the quality or performance of Plant, Materials, and Services specified in the Employer's Requirements and does not change the Employer's rights and Contractor's obligations under the proposed Contract.

- 33.3 The Employer shall examine the technical aspects of the Bid submitted in accordance with ITB 17, Technical Proposal, in particular to confirm that all requirements of Section 6 (Employer's Requirements) have been met without any material Deviation, Reservation, or Omission.
- 33.4 If a Bid is not substantially responsive to the requirements of the Bidding Document, it shall be rejected by the Employer and may not subsequently be made responsive by correction of the material Deviation, Reservation, or Omission.
- 34. Nonmaterial
  Deviation,
  Reservation, or
  Omission
- 34.1 Provided that a Bid is substantially responsive, the Employer may waive any nonconformities in the Bid that do not constitute a material Deviation, Reservation, or Omission.
- 34.2 Provided that a Bid is substantially responsive, the Employer may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial Deviation, Reservation, or Omission in the Bid related to documentation requirements. Requesting information or documentation on such nonconformities shall not be related to any aspect of the Price Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.
- 34.3 Provided that a Bid is substantially responsive, the Employer shall rectify quantifiable nonmaterial Deviation, Reservation, or Omission related to the Bid amount. To this effect, the Bid amount shall be adjusted, for comparison purposes only, to reflect the rate or price of a missing or nonconforming item or component. The adjustment shall be made using the method indicated in Section 3 (Evaluation and Qualification Criteria).

## **35.** Detailed Evaluation 35.1 of Technical Bids

- As a fourth step in the Technical Bids evaluation process, the Employer will carry out a detailed technical evaluation of the Bids not previously rejected as being substantially nonresponsive, to determine whether the technical aspects are in compliance with the Bidding Document. To reach such a determination, the Employer will examine and compare the technical aspects of the Bids based on the information supplied by the Bidders, taking into account the following:
- (a) overall completeness and compliance with the Employer's Requirements; Deviations from the Employer's Requirements; conformity of the Plant, Materials, and Services offered with specified performance criteria; suitability of the Plant, Materials, and Services offered in relation to the environmental and climatic conditions prevailing at the site; and quality, function and operation of any process control concept included in the Bid. The Bid that does not meet minimum and/or maximum acceptable standards of completeness, consistency, detail, and performance guarantees, will be rejected for nonresponsiveness; and
- (b) other relevant factors, if any, listed in Section 3 (Evaluation and Qualification Criteria).

## 36. Opening of Price Bids

- 36.1 At the end of the evaluation of the Technical Bids, the Employer will invite Bidders who have submitted substantially responsive Technical Bids and who have been determined as being qualified for award to attend the opening of the Price Bids. The date, time, and location of the opening of Price Bids will be advised in writing by the Employer. Bidders shall be given reasonable notice of the opening of Price Bids.
- 36.2 The Employer will notify Bidders in writing who have been rejected on the grounds of their Technical Bids being substantially nonresponsive to the requirements of the Bidding Document, and return their Price Bids unopened.
- 36.3 The Employer shall conduct the opening of Price Bids of all Bidders who submitted substantially responsive Technical Bids, in the presence of Bidders' representatives who choose to attend at the address, on the date, and time specified by the Employer. The Bidder's representatives who are present shall be requested to sign a register evidencing their attendance.
- 36.4 All envelopes containing Price Bids shall be opened one at a time and the following read out and recorded:
  - (a) the name of the Bidder;
  - (b) whether there is a modification or substitution;
  - (c) the Bid amounts, including any discounts; and
  - (d) any other details as the Employer may consider appropriate.

Only Price Bids and discounts read out and recorded during the opening of Price Bids shall be considered for evaluation. Unless otherwise specified in the BDS, all pages of the Letter of Bid and Price Schedules are to be initialed by at least three representatives of the Employer attending bid the opening. No Bid shall be rejected at the opening of Price Bids.

36.5 The Employer shall prepare a record of the opening of Price Bids that shall include, as a minimum: the name of the Bidder, the Bid amount (per lot if applicable), and any discounts. The Bidders' representatives who are present shall be requested to sign the record. The omission of a Bidder's signature on the record shall not invalidate the contents and effect of the record. A copy of the record shall be distributed to all Bidders who submitted Bids on time, and posted online when electronic bidding is permitted.

## 37. Evaluation of Price Bids

- 37.1 The Employer shall use the criteria and methodologies listed in this Clause. No other evaluation criteria or methodologies shall be permitted.
- 37.2 I. To evaluate a Price Bid, the Employer shall consider the following:
  - (a) the Bid amount, including Provisional Sums and the provision, if any, for contingencies in the Price Schedules;
  - (b) price adjustment for correction of arithmetical errors in accordance with ITB 38.1;
  - (c) price adjustment due to discounts offered in accordance with ITB 18.7;
  - (d) price adjustment due to quantifiable nonmaterial Deviations, Reservations, or Omissions in accordance with ITB 34.3;
  - (e) converting the amount resulting from applying (a) to (d) above, if relevant, to a single currency in accordance with ITB 39;
  - (f) assessment whether the bid is abnormally low in accordance with ITB 40;
     and
  - (g) the evaluation factors indicated in Section 3 (Evaluation and Qualification Criteria).
  - II. The Employer's evaluation of a Bid will exclude and not take into account,
  - (a) in the case of Plant and mandatory spare parts (Price Schedule No. 1) supplied from abroad, all taxes and duties, applicable in the Employer's country and payable on the Plant and mandatory spare parts if the Contract is awarded to the Bidder; and
  - (b) in the case of Plant and mandatory spare parts (Price Schedule No. 2) supplied from within the Employer's country, sales, and other taxes, applicable in the Employer's country and payable on the Plant and mandatory spare parts if the Contract is awarded to the Bidder.
- 37.3 If price adjustment is allowed in accordance with ITB 18.6, the estimated effect of the price adjustment provisions of Schedule of cost indexation, applied over the period of execution of the Contract, shall not be considered in Bid evaluation.
- 37.4 If this Bidding Document allows Bidders to quote separate prices for different lots (contracts), and the award to a single Bidder of multiple lots (contracts), the methodology to determine the lowest evaluated price of the lot (contract) combinations, including any discounts offered in the Letter of Bid, is specified in Section 3 (Evaluation and Qualification Criteria).

- 37.5 If the Bid, which results in the lowest Evaluated Bid amount, is seriously unbalanced or front loaded in the opinion of the Employer, the Employer may require the Bidder to produce detailed price analyses for any or all items of the Price Schedules, to demonstrate the internal consistency of those Rates and Prices with the methods and time schedule proposed. After evaluation of the price analyses, taking into consideration the terms of payments, the Employer may require that the amount of the performance security be increased at the expense of the Bidder to a level sufficient to protect the Employer against financial loss in the event of default of the successful Bidder under the Contract. If the Bidder does not increase its Performance Security in accordance with the requirements of the Employer, its Bid may be rejected.
- 37.6 The Employer shall compare all substantially responsive Bids to determine the lowest evaluated Bid amount, in accordance with ITB 37.2.

## 38. Correction of Arithmetical Errors

- 38.1 During the evaluation of Price Bids, the Employer shall correct arithmetical errors on the following basis:
  - (a) where there are errors between the total of the amounts given under the column for the price breakdown and the amount given under the total price, the amounts given under the column for the price breakdown shall prevail and the total price will be corrected accordingly;
  - (b) where there are errors between the total of the amounts of Price Schedules Nos. 1 to 7 and the amount given in Price Schedule No. 8 (Grand Summary), the total of the amounts of Price Schedules Nos. 1 to 7 shall prevail and the Price Schedule No. 8 (Grand Summary) will be corrected accordingly;
  - (c) if there is a discrepancy between the grand total amount given in Price Schedule No. 8 (Grand Summary) and the Bid amount in item (b) of the Letter of Bid, the grand total price given in Price Schedule No. 8 (Grand Summary) will prevail and the Bid amount in item (b) of the Letter of Bid will be corrected; and
  - (d) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetical error, in which case the amount in figures shall prevail subject to (a), (b), and (c) above.
- 38.2 If the Bidder that submitted the lowest evaluated Bid does not accept the correction of errors, its Bid shall be disqualified and its Bid Security may be forfeited or its Bid-Securing Declaration executed, as the case may be.
- 39. Conversion to Single Currency
- 39.1 For evaluation and comparison purposes, the currency(ies) of the Bid shall be converted into a single currency as specified in the BDS.

## 40. Abnormally Low Bids

- 40.1 An abnormally low Bid is one where the Bid amount, in combination with other elements of the Bid, appears to be so low that it raises concerns as to the capability of the Bidder to perform the Contract for the offered Bid amount.
- 40.2 When the offered Bid amount appears to be abnormally low, the Employer shall undertake a three-step review process as follows:
  - (a) identify abnormally low costs and unit rates by comparing them with the Employer's estimates, other substantially responsive Bids, or recently awarded similar contracts;
  - (b) clarify and analyze the Bidder's resource inputs and pricing, including overheads, contingencies, and profit margins; and
  - (c) decide whether to accept or reject the Bid.
- 40.3 Regarding ITB 40.2 (b) above, the Employer will seek a written explanation from the Bidder of the reasons for the offered Bid amount, including a detailed analysis of costs and unit prices, by reference to the scope, proposed methodology, schedule, and allocation of risks and responsibilities. This may also include information regarding the economy of the manufacturing process; the services to be provided, or the construction method to be used; the technical solutions to be adopted; and any exceptionally favorable conditions available to the Bidder for the Plant, Materials, or Services proposed.
- 40.4 After examining the explanation given and the detailed price analyses presented by the Bidder, the Employer may
  - (a) accept the Bid, if the evidence provided satisfactorily accounts for the low Bid amount and costs, in which case the Bid is not considered abnormally low;
  - (b) accept the Bid, but require that the amount of the performance security be increased at the expense of the Bidder to a level sufficient to protect the Employer against financial loss. The amount of the performance security shall generally be not more than 20% of the Contract Price; or
  - (c) reject the Bid if the evidence provided does not satisfactorily account for the low Bid amount, and make a similar determination for the next ranked bid, if required.

## 41. Domestic Preference

- 41.1 Unless otherwise specified in the BDS, domestic preference shall not apply.
- 42. Employer's Right to Accept Any Bid, and to Reject Any or All Bids
- 42.1 The Employer reserves the right to accept or reject any Bid, and to annul the bidding process and reject all Bids at any time prior to Contract award, without thereby incurring any liability to Bidders. In case of annulment, all Bids submitted and specifically, Bid Securities, shall be promptly returned to the Bidders.
- **43.** Notice of Intention 43.1 for Award of Contract
- If Standstill provisions apply as specified in the BDS, the standstill period shall be defined in the BDS to specify the duration subsequent to notification of intention for award of Contract (before making the actual Contract award) within which any unsuccessful Bidder can challenge the proposed award.

#### F. Award of Contract

#### 44. Award Criteria

44.1 The Employer shall award the Contract to the Bidder whose offer has been determined in line with ITB 37 and ITB 40 above to be the lowest evaluated Bid and is substantially responsive to the Bidding Document, provided further that the Bidder is determined to be eligible and qualified to perform the Contract satisfactorily.

## 45. Notification of Award

- 45.1 Prior to the expiration of the period of Bid validity, and upon expiry of the standstill period specified in ITB 43.1, or upon satisfactory resolution of a complaint filed within standstill period, if applicable, the Employer shall transmit the Notification of Award using the form included in Section 9 (Contract Forms) to the successful Bidder, in writing, that its Bid has been accepted. At the same time, the Employer shall also notify all other Bidders of the results of the bidding.
- 45.2 Unless standstill period applies, upon notification of award, unsuccessful Bidders may request in writing to the Employer for a debriefing seeking explanations on the grounds on which their Bids were not selected. The Employer shall promptly respond in writing and/or in a debriefing meeting to any unsuccessful Bidder who, after publication of Contract award, requests a debriefing.
- 45.3 Within 2 weeks of the award of Contract or expiry of the standstill period, where such period applies, or, if a complaint has been filed within the standstill period, upon receipt of ADB's confirmation of satisfactory resolution of the complaint, the Borrower shall publish in an English language newspaper or widely known and freely accessible website the results identifying the Bid and lot or package numbers, as applicable, and the following information:
  - (a) name of each Bidder who submitted a Bid;
  - (b) Bid amounts as read out at Bid opening;
  - (c) name and evaluated amounts of each Bid that was evaluated;
  - (d) name of Bidders whose Bids were rejected and the reasons for their rejection; and
  - (e) name of the winning Bidder, and the amount it offered, as well as the duration and summary scope of the Contract awarded.

## **46. Signing of Contract** 46.1 Agreement

Promptly after issue of the Letter of Acceptance, the Employer shall send the successful Bidder the Contract Agreement, as per the form given under Section 9 (Contract Forms) of the Bidding Document.

- 46.2 Within 28 days of receipt of the Contract Agreement, the successful Bidder shall sign, date, and return it to the Employer.
- 46.3 Failure of the successful Bidder to sign the Contract Agreement in accordance with GCC Subclause 1.6, shall constitute sufficient ground for the annulment of the award, the Contract termination in accordance with PCC Subclause 15.2, and forfeiture of the Bid Security or execution of the Bid-Securing Declaration. In that event, the Employer may award the Contract to the next lowest evaluated Bidder whose offer is substantially responsive and is determined by the Employer to be qualified to perform the Contract satisfactorily.

# 47. Performance Security and Parent Company Guarantee

- Within 28 days of the receipt of the Letter of Acceptance from the Employer, the successful Bidder shall provide the Performance Security in accordance with PCC Subclause 4.2, subject to ITB 37.5 and ITB 40.4(b), and the Parent Company Guarantee in accordance with PCC Subclause 4.2A, using for that purpose the Performance Security form and the Parent Company Guarantee form included in Section 9 (Contract Forms), or another form acceptable to the Employer. If the entity issuing the Performance Security is located outside the country of the Employer, it shall have a correspondent financial institution located in the country of the Employer to make it enforceable.
- 47.2 Failure of the successful Bidder to submit the abovementioned Performance Security or Parent Company Guarantee, shall constitute sufficient grounds for the annulment of the award, the Contract termination in accordance with PCC Subclause 15.2, and forfeiture of the Bid Security or execution of the Bid-Securing Declaration. In that event, the Employer may award the Contract to the next lowest evaluated Bidder whose offer is substantially responsive and is determined by the Employer to be qualified to perform the Contract satisfactorily.

## 48. Bidding-Related Complaints

48.1 The procedures for dealing with Bidding-Related Complaints arising out of this bidding process are specified in the BDS.

## **Section 2: Bid Data Sheet**

This section consists of provisions that are specific to each procurement and supplement the information or requirements included in Section 1 (Instructions to Bidders).

#### A. General

ITB 1.1	The number of the Invitation for Bids (IFB) is: [Insert IFB number]							
	The Employer is: [Insert name of the Employer]							
	The name of the open competitive bidding (OCB) is: [Insert name/title of the OCB]							
	The identification number of the OCB is: [Insert OCB number]							
	The number and identification of lots (contracts) comprising this OCB is: [if there are no lots, insert "None". If there are lots, insert list of lots, identifying each lot by indicating number and name/title of lots/contracts]							
ITB 2.1	The Borrower is: [Insert name of the Borrower]							
	The name of the project is: [Insert name of project]							

## **B.** Contents of Bidding Documents

ITB 7.1	For <u>clarification purposes</u> only, the Employer's address is:
	[Insert required details below] Attention: [insert full name of the person, if applicable]
	Street address: [insert street address and number]
	Floor/Room number: [insert floor and room number, if applicable]
	City: [insert name of the city or town]
	ZIP code: [insert postal (ZIP) code, if applicable]
	Country: [insert name of country]
	Telephone: [insert telephone number, including country and city codes]
	Fax: [insert fax number, with country and city codes]
	E-mail: [insert e-mail address, if applicable]

ITB 7.4	[Use one of the following options as appropriate. If a pre-Bid meeting will take place, insert the date, time, and place for the meeting]: $[Use one of the following options as appropriate. If a pre-Bid meeting will take place, insert the date, time, and place for the meeting]:$				
	No pre-Bid meeting will be held.				
	[or]				
	A pre-Bid meeting will take place as follows:				
	Date:				
	Time:				
	Place:				
	A site visit conducted by the Employer [insert "will" or "will not" as appropriate] will be organized.				

## **C. Preparation of Bids**

ITB 10.1	The language of the Bid is: [insert "English"]
ITB 11.2 (h)	The Bidder shall submit with its Technical Bid the following additional documents:  [insert a list of additional documents if so required]
ITB 11.3 (c)	The Bidder shall submit with its Price Bid the following additional documents:
ITB 12.1	The units and rates in figures entered into the Price Schedules should be typewritten or if written by hand, must be in print form. Price Schedules not presented accordingly may be considered nonresponsive.
ITB 16.1 (b)	The period following Contract Completion Date shall be [insert number of years, as appropriate]
ITB 18.1	The following components or services will be provided under the responsibility of the Employer: [insert list of components or services, if appropriate; otherwise state "not applicable"]
IT 18.4(a)(i)	The Incoterm for quoting plant to be supplied from abroad is: [insert CIP-named place of destination]
ITB 20.1	The Bid validity period shall be [insert number of days] days.
	[The period should be sufficient to permit completion of evaluation and comparison of Bids, review of the recommended selection by ADB (if so required), acquire all necessary approvals, and notify the successful Bidder of the Contract award. Normally, the bid validity period should not exceed 120 days.]

ITB 21.1	[Choose one of the following options as appropriate.]
	The Bidder shall furnish a Bid Security in the amount of: [state amount] [state currency] [The amount of the Bid Security should be stated as a fixed amount, normally computed as 1% to 2% of the estimated contract value. The amount may be reduced for very large contracts].
	[or]
	The Bidder shall furnish a Bid-Securing Declaration.
ITB 21.2	[remove the following, and replace it by "Not applicable", if a Bid Security is used instead of a Bid-Securing Declaration]
	The ineligibility period will be [insert number of years] years
ITB 21.4	Period within which the Bidder shall provide a compliant Bid Security: [insert number of days, generally 14 days] days from receipt of the request of the Employer.
ITB 22.1	In addition to the original Bid, the number of copies is: [insert number of copies]
ITB 22.2	The written confirmation of authorization to sign on behalf of the Bidder shall consist of [insert the name and description of the documentation required to demonstrate the authority of the signatory to sign the Bid. Employer may wish to consider the following language: "An organisational document, board resolution or its equivalent, or power of attorney specifying the representative's authority to sign the Bid on behalf of, and to legally bind the Bidder. If the Bidder is an intended or an existing Joint Venture, the power of attorney should be signed by all partners and specify the authority of the named representative of the Joint Venture to sign on behalf of, and legally bind the intended or existing Joint Venture. If the Joint Venture has not yet been formed, also include evidence from all proposed Joint Venture partners of their intent to enter into a Joint Venture in the event of a contract award in accordance with ITB 11.2."]
ITB 22.2	The Bidder shall submit an acceptable authorization within [insert number of days, generally 14 days] days from receipt of the request of the Employer.

## D. Submission and Opening of Bids

ITB 23.1	Bidders have/do not have [select one option and delete the other as appropriate] the option of submitting their bids electronically.
ITB 23.1 (b)	[remove the following, and replace it by "Not applicable", if there is no electronic submission allowed under BDS 23.1 above]
	If Bidders have the option of submitting their bids electronically, the electronic bidding submission procedures shall be: [state applicable procedures]

ITB 24.1	For bid submission purposes only, the Employer's address is  [Insert required details below]  Attention:
	Country:
	The deadline for bid submission is
	Date:
	Time:
ITB 27.1	The bid opening of Technical Bids shall take place at
	[Insert required details below]
	Street address:
	Floor/Room number:
	City:
	Country:
	Date:
	Time:
ITB 27.1	Electronic bid opening procedure shall be as follows: [bid opening procedures; otherwise, state "not applicable"]

## **E. Evaluation and Comparison of Bids**

ITB 31.2	The qualifications of other firms such as the Bidder's subsidiaries, parent entities, affiliates, Subcontractors [insert "shall" or "shall not"] be permitted.
	[If permitted, add "The Bidder shall fill out the Affiliate Company Guarantee Form included in Section 4 (Bidding Forms) for each subsidiary, parent entity, affiliate, subcontractor, etc. that the Bidder submits for consideration of the Employer in determining its qualifications."]
ITB 36.4	The Letter of Bid and Price Schedules shall be initialed by [state number] representatives of the Employer attending the Price Bid opening.

ITB 39.1	The currency that shall be used for Bid evaluation and comparison purposes to convert all Bid prices expressed in various currencies into a single currency is: [state currency]  The source of the selling exchange rate shall be: [insert the name of the source of the exchange rates, which should be the Central Bank in the employer's country or specify another institution that carries out the function of a central bank]  The date for the selling exchange rate shall be: [the Base Date, as defined under GCC Subclause 1.1.5]
ITB 41.1	Domestic preference [insert "shall" or "shall not"] apply.
	[If domestic preference applies, insert] "If domestic preference applies, the application methodology will be as specified in Section 3 (Evaluation and Qualification Criteria)."
ITB 43.1	[Choose one of the following options as appropriate.]
	Standstill provisions shall not apply.
	[or]
	Standstill provisions shall apply. The duration of standstill period will be [insert number of days, generally 14 days] days from the date of notice of intention for award of contract.
	The Employer shall, at the start of the standstill period, notify in writing each Bidder that submitted a Bid, of its intention to award a Contract to the successful Bidder at the end of standstill period. The notification using the form included in Section 9 (Contract Forms) shall include the following information:
	(a) the name of each Bidder who submitted a Bid;
	(b) the Bid amounts as read out at Bid opening;
	(c) the name and evaluated amounts of each Bid that was evaluated;
	(d) the name of Bidders whose Bids were rejected and the reasons for their rejection;
	(e) the name of the winning Bidder, and the amount it offered, as well as the duration and summary scope of the Contract awarded; and
	<ul><li>(f) a statement of the reason(s) the Bid of the unsuccessful Bidder to whom the notification is addressed was unsuccessful, unless the amount information under (e) of this paragraph already reveals the reason.</li></ul>

### F. Award of Contract

ITB 48.1

The procedures for Bidding-Related Complaints are referenced in the Procurement Regulations for ADB Borrowers (Appendix 7). The Bidder should submit its complaint following these procedures, in writing, to:

For the attention: [insert full name of person receiving complaints]

Title/position: [insert title/position]

Employer: [insert name of Employer]

E-mail address: [insert e-mail address]

Fax number: [insert fax number] delete if not used]

# Section 3: Evaluation and Qualification Criteria

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#### Note

This section contains the criteria that the Employer shall use to evaluate Bids and qualify Bidders if the bidding was not preceded by a prequalification exercise and post qualification is applied. If prequalification is undertaken by the Employer, the qualification criteria set out under that Section should be used.

ADB requires Bidders to be qualified by meeting predefined, precise minimum requirements. The method entails setting pass-fail criteria, which, if not met by the Bidder, results in disqualification.

It will therefore be necessary to ensure that a Bidder's risk of having its bid rejected on grounds of qualification is remote if due diligence is exercised by the Bidder during bid preparation. For that purpose, clear-cut, pass-fail qualification criteria need to be defined and indicated in the Invitation for Bids and the Bidding Document to enable Bidders to make an informed decision whether to pursue a specific Contract and, if so, whether to pursue it as a single entity or in Joint Venture. The criteria adopted must relate to characteristics that are essential to ensure satisfactory execution of the Contract, and must be stated in clear terms. In accordance with ITB 31, ITB 35, and ITB 37, no other methods, criteria, and factors shall be used.

The Bidder shall provide all the information requested in the forms included in Section 4 (Bidding Forms). In case the bidding was preceded by a prequalification process, updating of information pertaining to a Bidder's eligibility, historical contract nonperformance, and financial situation will be necessary during bidding.

## 1. Qualification

## 1.1 Eligibility

Criteria	Compliance Requirements			Documents	
		Joint Venture			
		All Partners	Each	One	Submission
Requirement	Single Entity	Combined	Partner	Partner	Requirements

## 1.1.1 Nationality

Nationality in accordance with ITB 4.2.	Must meet requirement	Must meet requirement	Must meet requirement	Not applicable	Forms ELI – 1; ELI – 2 with attachments	
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## 1.1.2 Conflict of Interest

No conflicts of interest in accordance	Must meet	Must meet	Must meet	Not	Letter of	ı
with ITB 4.3.	requirement	requirement	requirement	applicable	Technical Bid	

## 1.1.3 ADB Eligibility

Not having been declared ineligible by	Must meet	Must meet	Must meet	Not	Letter of	
ADB, as described in ITB 4.4.	requirement	requirement	requirement	applicable	Technical Bid	

## 1.1.4 Government-Owned Enterprise

Bidder required to meet conditions of ITB 4.5.	Must meet requirement	Must meet requirement	Must meet requirement	Not applicable	Forms ELI - 1; ELI - 2
					with attachments

## 1.1.5 United Nations Eligibility

Not having been excluded by an act of compliance with a United Nations Security Council resolution in accordance with ITB 4.8.	Must meet requirement	Must meet requirement	Must meet requirement	Not applicable	Letter of Technical Bid
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## 1.2 Historical Contract Nonperformance

#### 1.2.1 History of Nonperforming Contracts

Criteria		Documents			
Requirement	Single Entity	All Partners Combined	Each Partner	One Partner	Submission Requirements
Nonperformance of a contract <sup>a</sup> did not occur as a result of contractor default since 1 January [insert year].	Must meet requirement	Must meet requirement	Must meet requirement <sup>b</sup>	Not applicable	Form CON-1

<sup>&</sup>lt;sup>a</sup> Nonperformance, as decided by the Employer, shall include all contracts where (a) nonperformance was not challenged by the contractor, including through referral to the dispute resolution mechanism under the respective contract, and (b) contracts that were so challenged but fully settled against the contractor. Nonperformance shall not include contracts where Employers decision was overruled by the dispute resolution mechanism. Nonperformance must be based on all information on fully settled disputes or litigation, i.e., dispute or litigation that has been resolved in accordance with the dispute resolution mechanism under the respective contract and where all appeal instances available to the Bidder have been exhausted.

## 1.2.2 Suspension Based on Execution of Bid-Securing Declaration

Criteria		Documents			
Requirement	Single Entity	All Partners Combined	Each Partner	One Partner	Submission Requirements
Not under suspension based on execution of a Bid-Securing Declaration pursuant to ITB 4.6.	Must meet requirement	Must meet requirement	Must meet requirement	Not applicable	Letter of Technical Bid

<sup>&</sup>lt;sup>b</sup> This requirement also applies to contracts executed by the Bidder as Joint Venture member.

### 1.2.3 Pending Litigation and Arbitration

Pending litigation and arbitration criterion shall not apply.<sup>1</sup>

Criteria	C	Documents			
			Joint Venture		
Requirement	Single Entity	All Partners Combined	Each Partner	One Partner	Submission Requirements
All pending litigation and arbitration, if any, shall be treated as resolved against the Bidder and so shall in total not represent more than a percent of the Bidder's net worth calculated as the difference between total assets and total liabilities.	Must meet requirement	Not applicable	Must meet requirement	Not applicable	Form CON – 1

<sup>&</sup>lt;sup>a</sup> If the criterion is applied, the Employer should indicate a percentage within the range of 50%–100% of the Bidder's net worth.

The Employer may choose to apply this criterion on an exceptional basis. If the Employer chooses to apply this criterion, it should indicate "shall apply" and use the table in 1.2.3.

### 1.3 Financial Situation

#### 1.3.1 Historical Financial Performance

Criteria	C	Documents			
		Joint Venture			
Requirement	Single Entity	All Partners Combined	Each Partner	One Partner	Submission Requirements
Submission of audited financial statements or, if not required by the law of the Bidder's country, other financial statements acceptable to the Employer, for the last	Must meet requirement	Not applicable	Must meet requirement	Not applicable	Form FIN – 1 with attachments

<sup>&</sup>lt;sup>a</sup> Indicate time period between 3 and 5 years.

### NOTE

The financial information provided by the Bidder should be reviewed in its entirety to allow a truly informed judgment, and the pass-fail decision on the financial position of the Bidder should be given on this basis. Any abnormal feature that may lead to financial problems should alert the Employer to seek expert professional advice for further review and interpretation.

#### 1.3.2 Average Annual Turnover

Criteria	Compliance Requirements				Documents
Requirement	Single Entity	All Partners Combined	Each Partner	One Partner	Submission Requirements
Minimum average annual turnover of \$	Must meet requirement	Must meet requirement	Must meet of the requirement	Must meetd of the requirement	Form FIN-2

<sup>&</sup>lt;sup>a</sup> The amount stated should normally not be less than three times the value of the subject Contract divided by its Design-Build Period, expressed as 3 x V/T; where V is the Employer's estimated value of the Contract (for the avoidance of doubt: including the Design-Build, the Operation Service and the Asset Replacement costs under the Contract as well as contingencies), and where T is the Time for Completion of the Design-Build duration under the Contract, in years.

<sup>&</sup>lt;sup>b</sup> Insert number of years in words and figures and indicate time period between 3 to 5 years.

<sup>&</sup>lt;sup>c</sup> The Employer is to define this value based on the minimum amount required that all partners of the Joint Venture must meet taking joint and several liabilities into account, usually at least 25%.

<sup>&</sup>lt;sup>d</sup> The Employer is to define this value based on the minimum amount required that one partner of the Joint Venture must meet, usually at least 40%.

## 1.3.3 Financial Resources<sup>2</sup>

If the Bid evaluation process and the decision for the award of the Contract takes more than 1 year from the date of Bid submission, Bidders may be asked to resubmit their current contract commitments and latest information on financial resources supported by latest audited accounts or audited financial statements, or if not required by the law of the Bidder's country, other financial statements acceptable to the Employer, and the Bidders' financial capacity will be reassessed on this basis.

Criteria		Documents			
			Joint Venture		
Requirement	Single Entity	All Partners Combined	Each Partner	One Partner	Submission Requirements
For Single Entities:  The Bidder must demonstrate that its financial resources defined in Form FIN – 3, less its financial obligations for its current contract commitments defined in Form FIN – 4, meet or exceed the total requirement for the Subject Contract of	Must meet requirement	Not applicable	Not applicable	Not applicable	Form FIN – 3 and Form FIN – 4
For Joint Ventures:  (1) One partner must demonstrate that its financial resources defined in Form FIN – 3, less its financial obligations for its own current contract commitments defined in Form FIN – 4, meet or exceed its required share of	Not applicable	Not applicable	Not applicable	Must meet requirement	Form FIN – 3 and Form FIN – 4
AND					

The Employer has the option to move this criterion from Section 3 (Evaluation and Qualification Criteria) to Section 6 (Employer's Requirements), in which case

<sup>(</sup>a) the Employer shall confirm compliance with the financial resources prior to award of contract in accordance with ITB 44.1 Award Criteria; and

<sup>(</sup>b) in place of the Financial Resources criterion, the Employer shall require the Bidder to submit together with its Bid, and for confirmation during Bid evaluation, a Letter of Undertaking to comply with the financial resources given in Section 6 prior to award of Contract.

Criteria		Compliance	Requirements		Documents
			Joint Venture		
Requirement	Single Entity	All Partners Combined	Each Partner	One Partner	Submission Requirements
(2) Each partner must demonstrate that its financial resources defined in Form FIN – 3, less its financial obligations for its own current contract commitments defined in Form FIN – 4, meet or exceed its required share of	Not applicable	Not applicable	Must meet requirement	Not applicable	Form FIN – 3 and Form FIN – 4
(3) The Joint Venture must demonstrate that the combined financial resources of all partners defined in Form FIN – 3, less all the partners' total financial obligations for the current contract commitments defined in Form FIN – 4, meet or exceed the total requirement for the Subject Contract of	Not applicable	Must meet requirement	Not applicable	Not applicable	Form FIN – 3 and Form FIN – 4

<sup>&</sup>lt;sup>a</sup> The Employer to specify financial resources for the subject contract based on the following calculation:

3 (or 4) x Estimated Design-Build component of the Contract value (inclusive of taxes and duties)

Time for Completion for the Design-Build, in months

- b The Employer is to define this value based on the minimum amount one partner of the Joint Venture must meet, usually at least 40% of the total requirement for the Subject Contract. This value is to be carried forward to Form FIN 5B when it is used
- <sup>c</sup> The Employer is to define this value based on the minimum amount each partner of the Joint Venture must meet, usually at least 25% of the total requirement for the Subject Contract. This value is to be carried forward to Form FIN 5B when it is used.

# NOTE

Form FIN -5 is made available for use by the Bidder as a self-assessment tool, and by the Employer as an evaluation work sheet, to determine compliance with the financial resources requirement as stated in 1.3.3. Failure to submit Form FIN -5 by the Bidder shall not lead to bid rejection.

# 1.4 Bidder's Experience

# 1.4.1 Contracts of Similar Size and Nature<sup>3</sup>

Criteria		Compliance Requirements				
		Jo	int Venture			
Requirement	Single Entity	All Partners Combined	Each Partner	One Partner	Submission Requirements	
Participation, as a contractor, Joint Venture partner, or Subcontractor, in at least one contract that has been successfully or substantially completed within the last a years and that is similar to the proposed contract, where the value of the Bidder's participation exceeds \$ b. The similarity of the Bidder's participation shall be based on: c 2 3	Must meet requirement	Not applicable	Not applicable <sup>d</sup>	Must meet requirement	Form EXP – 1	

Or

Participation in at least two contracts	Must meet	Must meet	Not	Not	Form EXP – 1
that have been successfully or	requirement	requirement	applicable <sup>d</sup>	applicable	
substantially completed within the		as follows:			
last a years and that are		(i) Either one			
similar to the proposed contract,		partner must			
where the value of the Bidder's		meet requirement			
participation exceeds		Or			
\$ b.The similarity of the		(ii) any two			
Bidder's participation shall be based		partners must			
on:c		each demonstrate			
1		one successfully			
2		or substantially			
3		completed			
		contract of similar			
		size and nature			

<sup>&</sup>lt;sup>a</sup> Insert number of years in words and figures. The range is normally 5-10 years.

b Usually 80% of the estimated value of the subject contract. In case of repetitive and contiguous works (e.g., transmission lines, water pipeline), the Employer has the option of specifying a value that is between 50% and 80% of the subject contract value. If the contract value is not in the specific currency, the exchange rate to be used to calculate the value of the contract shall be the selling rate of the Borrower's national bank on the date of the contract.

<sup>&</sup>lt;sup>c</sup> Specify major requirements in terms of any of the following: physical size, nature of works, complexity, methods, technology, or other characteristics.

<sup>&</sup>lt;sup>d</sup> In case of complex works, the Employer may require each partner to demonstrate one successfully or substantially completed contract of similar nature where such partner's value of participation exceeds 25% of the subject contract value.

The Employer has the option of requiring either one or two contracts of similar size and nature and should choose the appropriate language below.

# 1.4.2 Experience in Key Activities<sup>4</sup>

1.4.2(a) Must be complied with by the Bidder. In case of a Joint Venture Bidder, at least one of the partners must meet the requirement in the key activity.

Table A

Criteria	Compliance I	Documents	
Requirement	Single Entity	Joint Venture	Submission Requirements
For the above or other contracts executed during the period stipulated in 1.4.1, a minimum experience in the following key activities:	Must meet requirement	Must meet requirement	Form EXP – 2
1			
2			
3 etc			

1.4.2(b) The Employer accepts any of the following activities to be subcontracted. They may be complied with by the Bidder or by its proposed Specialist Subcontractor.

Table B

Criteria	Compliance l	Documents	
Requirement	Single Entity or its Specialist Subcontractors	Joint Venture or its Specialist Subcontractors	Submission Requirements
For the above or other contracts executed during the period stipulated in 1.4.1, a minimum experience in the following key activities:	One must meet requirement	One must meet requirement	Form EXP – 2
4			
5			
6 etc			

Key activities criterion should confirm Bidder's experience in performing highly specialized activities such as design, installation, testing, commissioning, etc. There shall not be any inconsistency or repetition of requirements between 1.4.1 and 1.4.2.

# 1.5 Subcontractors

Subcontractors or Suppliers for the following major items of Plant, Materials, and Services must meet the following minimum qualification criteria, herein listed for a Subcontractor for that item. Failure to comply with this requirement will result in rejection of the Subcontractor but not the Bidder.

Item No.	Description of Item	Minimum Criteria to be met <sup>a</sup>	Documents Submission Requirements
1			Form EXP – 3
2			
3			
4			
5			

<sup>&</sup>lt;sup>a</sup> Subcontractor must have the experience of having completed at least one contract of size and complexity similar to the proposed subcontract within the last 3 to 5 years.

In the case of a Bidder who offers to supply and install major items of plant under the contract, which the Bidder did not manufacture or otherwise produce, the Bidder shall provide the Manufacturer's authorization, using the form provided in Section 4 (Bidding Forms), showing that the Bidder has been duly authorized by the Manufacturer or producer of the related plant and equipment or component to supply and install that item in the Employer's country. Failure to submit the Manufacturer's authorization at the first instance is considered a minor, nonmaterial omission and shall be subject to clarification. However, failure of the Bidder to submit the omitted authorization shall lead to rejection of the Subcontractor or Manufacturer of the item under evaluation in accordance with ITB 31.4.

# 2. Evaluation

# 2.1 Technical Evaluation

In addition to the criteria listed in ITB 35.1 (a), other relevant factors are as follows:

• [State additional criteria, if any]

Evaluation of the Bidder's Technical Proposal will include an assessment of the Bidder's technical capacity to mobilize key Contractor's Equipment and Contractor's Personnel for the Contract consistent with its proposal regarding work methods, scheduling, and material sourcing in sufficient detail and fully in accordance with the requirements stipulated in Section 6 (Employer's Requirements).

However, noncompliance with Contractor's Equipment and Contractor's Personnel requirements described in Section 6 (Employer's Requirements) shall not normally be a ground for Bid rejection and such noncompliance will be subject to clarification during Bid evaluation and rectification prior to Contract award.

# 2.2 Economic Evaluation

In addition to the criteria listed in ITB 37.2 I (a)–(f), the other relevant evaluation factors are developed below.

The following evaluation factors shall be taken into account for determining the lowest evaluated Bid. Adjustments in price that result from the procedures outlined below shall be added, for purposes of comparative evaluation only, to arrive at an "Evaluated Bid Price." Bid prices quoted by Bidders shall remain unaltered.

### NOTE

Those factors are provided for the purpose of evaluation only, and shall not affect the Bid amount as stated under the Letter of Bid. They purport to assist the Employer in determining what will be the life cycle cost, to the Employer, of the facility as proposed by the Bidder.

The substantially responsive Bid showing the lowest life cycle cost to the Employer shall be determined as the lowest evaluated Bid for the purpose of ITB 42.

### 2.2.1 Quantifiable Nonmaterial Deviations, Reservations, and Omissions

The evaluation shall be based on the evaluated cost of fulfilling all of the Contract obligations as laid down under this Bidding Document. Accordingly, the Employer shall proceed with a Bid price adjustment whenever there are quantifiable nonmaterial Deviations, Reservations, and Omissions item(s) or component(s) in a Bid, to correct the effect of those in order to be able to compare all Bids on an equal basis, i.e., on the basis of the same set of Contract obligations.

The price adjustment shall be

- based on a reasonable estimate of the cost of removing any nonmaterial Deviation, Reservation and/or Omission for any item or component of the Bid, where such cost shall be added to the Bid amount, with all reasonable supporting means (such as, for the sake of illustration but not necessarily limited to, a market price study for the said item or component) and/or
- where applicable, made by taking into consideration the corresponding quoted prices from other conforming bids. The price adjustment should be based on the highest price quoted for the same item or component by the other responsive Bidders.

# 2.2.2 Whole Life Cycle Costs of the Facility to Be Designed, Built, and Operated under the Contract

# **NOTE**

Those factors are provided for evaluation purposes only, and shall not affect the Bid amount as stated under the Letter of Bid. They purport to assist the Employer in determining what will be the life cycle cost, to the Employer, of the facility as proposed by the Bidder.

The substantially responsive Bid showing the lowest life cycle cost to the Employer shall be determined as the lowest evaluated Bid for the purpose of ITB 42.

In case the life span expectancy of the facility to be designed, built, and operated by the Contractor under the Contract, as stated by the Employer under the Schedule of Performance Guarantees, is higher than the Contract Operation Service Period, then the provisions below shall apply. Otherwise, there shall be no Bid price adjustment on the account of the life cycle costs of the facility.

For Bid evaluation purposes only, the Operation Service Period hereby taken into account is the one defined under PCC Part A—Contract Data—Subclause 8.2.

The following methodology shall be used to calculate the residual life cost of the facility, beyond the Operation Service Period:

- 1. Calculate the **residual life of the facility**, which is the difference in between:
  - (a) The life span expectancy of the facility to be designed, built, and operated by the Contractor under the Contract, as stated by the Employer under the Schedule of Performance Guarantees, and
  - (b) The Operation Service Period as defined above.
- 2. Determine the **fixed operation fees over the residual life** of the facility by multiplying:
  - (a) The Contractor's Annual Fixed Fee, as stated by the Contractor under the Price Schedule No. 5.1, by
  - (b) The residual life of the facility, as calculated under item 1 above.
- 3. Determine the variable operation fees over the residual life of the facility by multiplying:
  - (a) The Contractor's Variable Fee Bid price for the last year of the Contract Period, as stated by the Contractor under the Price Schedule No. 5.2, by
  - (b) The residual life of the facility, as calculated under item 1 above.
- 4. Determine the **electricity costs over the residual life** of the facility by multiplying:
  - (a) The Annual Contractor's Electricity Payment as stated by the Contractor under the Price Schedule No. 5.3, by
  - (b) The residual life of the facility, as calculated under item 1 above.

- 5. Determine the asset replacement costs over the residual life of the facility by multiplying:
  - (a) The total Asset Replacement Fund stated by the Contractor under the Price Schedule No. 7, by
  - (b) The ratio in between the residual life of the facility, as calculated under item 1 above, and the Operation Service Period as defined above.
- 6. Use a rate of [state percentage] to be used to discount to present value all annual future costs calculated under items 2 to 5 above for the period specified in item 1.

Sum all costs, through items 2 to 6 above, in order to determine the adjustment to be made to the Bid amount.

# NOTE 1 - EFFECT OF OPERATION SERVICE PERIOD DURATION ON THE CONTRACT FEATURES

It might be that the DBO Contract Period envisaged will be lower than the life expectancy of the facility to be designed, built, and operated by the Contractor, in which case this methodology developed above will assist the Employer in determining what are likely to be his/her operation and maintenance costs over the residual life of the facility beyond the Contract Period, i.e., after the Contractor has completed his/her obligations under the Contract and left the Site.

Generally, the life span of a treatment plant is considered to be in the range of 25 to 30 years, and the Employer should accordingly set such expected life span at the end of the Schedule of Performance Guarantees under Section 4 (Bidding Forms) of this Bidding Document. Obviously, if the Contract Period equates such expected life span, there shall be no adjustment under this part since the Contractor will bear the operation and maintenance cost risk of the facility over its entire expected life span, and the Bid price shall then be considered as a fair reflection of the Employer's whole life cycle cost for the said facility.

If the period for Operation Service is less than 5 years, then:

- Either the Employer may wish to maintain the Asset Replacement Fund and Schedule mechanism foreseen under the Contract, in which case he/she shall:
  - » Amend the terms of GCC Subclause 14.18, by means of the PCC, to lower the 5-year threshold to the targeted threshold, and
  - » Amend Price Schedule 7 under Section 4 of this Bidding Document to make the Schedule applicable as of 1 year after the threshold, instead of Year 6 which is the default position under the Contract.
- Or the Employer may prefer to remove all references to the Asset Replacement Fund and Schedule mechanism. In which case, the Employer shall remove any reference in this respect in the Bidding Document such as under:
  - » Section 3—item 5 above
  - » Section 4—Letter of Bid, Preamble to the Price Schedules, Price Schedule 7, and Price Schedule 8
  - » Section 6—Appendix 1—TOR Auditing Body, ad hoc duties item b)
  - » Section 8
    - the provisions related to the Asset Replacement Fund and Schedule which are currently found in the PCC shall be removed.
       PCC Subclause 8.6 shall be removed, as well as Subclause 14.18 and the Price Schedule 7 portion of Appendix to PCC
       Part B.
    - ◆ Likewise, the GCC provisions which relate to the Asset Replacement Fund and Schedule shall then be removed and such removal shall be stated in the PCC. This applies to the following GCC Subclause: 1.1.1 to 1.1.3, 1.1.68, 2.4, 11.8, 14.1, 14.3, 14.5, 14.13, 14.18.

Once again, the attention of the Employer is drawn to the fact that the shorter the Operation Service Period under the Contract, the less benefits the Employer will draw from the DBO contractual arrangement (in particular from the Asset Replacement Fund and Schedule), and the closer the Employer will come to a Design-Build contractual arrangement.

# NOTE 2—EFFECT OF A SHORT OPERATION SERVICE PERIOD DURATION ON THE WHOLE LIFE CYCLE COSTS EVALUATION

If setting a short Operation Service Period duration, the Employer should be aware of a risk of bias in the whole life cycle costs evaluation. Indeed, a Bidder could be tempted to artificially come up with a low Operation Service price in his/her bid, which would make that, when this low Operation Service is extrapolated over the life span of the facility (for the sake of bid evaluation only), it would give him/her an undue competitive advantage.

As an example, assume that:

- the DB component of the facility is meant to be worth 50, and
- the O component is meant to be worth 50 over 25 years, hence 2 per year,

then a prudent Bidder for a 5-year operation DBO Contract would bid for  $50 (DB) + 2 \times 5 (2 \text{ of Operation Service per year multiplied by 5 years)} = 60.$ 

A Bidder trying to take advantage of the whole life cycle cost formula for bid evaluation could come up with an O&M price of say 0.5 instead of 2.

This would make that:

CAREV

• his/her Contract Price is  $50 (DB) + 0.5 \times 5 (O&M) = 52.5$ , and

Bidder 1

(normal)

the whole life cycle cost evaluation of his/her bid, over 25 years (life span of the facility) is 50 (DB) + 0.5x25 (O&M) = 62.5 where a prudent Bidder would come up with 100.

One may argue that the DBO Contractor would then have to suffer from the consequences of having a low Operation Service price, possibly lower than the actual cost, hence why would he/she do this? Or, taking it the other way around, why not leave him/her to be held to his/her bargain and to suffer from the financial consequences of an Operation Service bid price being below the actual cost?

Bidder 2

**Employer** 

(artificially low Actual life cycle cost to the

Bidder 2

OPEX)

CAPEX	50,00		57,50	57,50		DF% 10%
OPEX/year	2,00		0,50	0,5 then 2		Inf% 5%
Year	Nominal	Present Value	Nominal	Nominal	Present Value	
1-3	50,00	50,00	57,50	57,50	57,50	Design-Build Period
4	2,00	1,74	0,50	0,50	0,43	
5	2,00	1,66	0,50	0,50	0,42	
6	2,00	1,58	0,50	0,50	0,40	Operation Service Period
7	2,00	1,51	0,50	0,50	0,38	
8	2,00	1,44	0,50	0,50	0,36	
9	2,00	1,38	0,50	2,00	1,38	
10	2,00	1,32	0,50	2,00	1,32	
11	2,00	1,26	0,50	2,00	1,26	
12	2,00	1,20	0,50	2,00	1,20	
13	2,00	1,14	0,50	2,00	1,14	
14	2,00	1,09	0,50	2,00	1,09	
15	2,00	1,04	0,50	2,00	1,04	
16	2,00	1,00	0,50	2,00	1,00	
17	2,00	0,95	0,50	2,00	0,95	20 years of operation
18	2,00	0,91	0,50	2,00	0,91	beyond the DBO Contract
19	2,00	0,87	0,50	2,00	0,87	completion
20	2,00	0,83	0,50	2,00	0,83	completion
21	2,00	0,79	0,50	2,00	0,79	
22	2,00	0,75	0,50	2,00	0,75	
23	2,00	0,72	0,50	2,00	0,72	
24	2,00	0,69	0,50	2,00	0,69	
25	2,00	0,65	0,50	2,00	0,65	
26	2,00	0,63	0,50	2,00	0,63	
27	2,00	0,60	0,50	2,00	0,60	
28	2,00	0,57	0,50	2,00	0,57	
Bid Price	60,00		60,00	60,00		Bidder 2 wins based on
Whole-life	100,00	76,31	70,00	100,00	77,85	artificial life cycle cost
cycle cost	,					

Source: Asian Development Bank.

The difficulty with this line of thinking is that the Bidder can also artificially increase the DB component of his/her bid price to compensate the loss he/she would make on the Operation Service side of the job. In the example above, the Bidder could bring his/her DB price from 50 to 57.5 to compensate the loss of 7.5 on the 5-years of O&M period under the Contract. The whole life cycle cost evaluation of his/her bid would give, as a result: 57.5 (DB) + 0.5x25 (O&M) = 70, which is still more competitive than the prudent Bidder coming up at 100, and without any financial loss for the clever Bidder.

By applying this approach, the clever Bidder would indeed take advantage of the whole life cycle cost evaluation formula for getting an undue competitive advantage since, all things being equal, i.e., assuming the hypothetical case where 2 bids are exactly the same and coming from 2 equally competent and experienced Bidders, that clever Bidder would get such competitive advantage (70 instead of 100—hence 30 artificially "cheaper" than the prudent Bidder) just by spreading his/her Bid price in such a way which allows him/her to take full advantage of the formula. However, once the DBO Contract is completed, this is the Employer who will have to bear the real O&M cost of 2 per year. The table above illustrates this issue, showing that:

- despite the same nominal Bid Price between Bid 1 and Bid 2;
- Bid 2 wins based on the whole life cycle cost approach, as abused by Bidder 2 since it misrepresents to the Employer that it
  will nominally amount to 70 while it should actually be 100 i.e., same as for Bid 1; and
- while Bid 2 actually ends up being a most expensive solution than Bid 1, on a present value comparison basis.

	Bide	der 1	Bido		
	(nor	mal) (Low CAPEX-High OPEX)			DF% 10%
CAPEX	50,00	40,00			Inf% 5%
OPEX/year	2,00		3,00		
Year	Nominal	Present Value	Nominal	Present Value	
1-3	50,00	50,00	40,00	40,00	Design-Build Period
4	2,00	1,74	3,00	2,61	
5	2,00	1,66	3,00	2,49	
6	2,00	1,58	3,00	2,38	Operation Service Period
7	2,00	1,51	3,00	2,27	
8	2,00	1,44	3,00	2,17	
9	2,00	1,38	3,00	2,07	
10	2,00	1,32	3,00	1,97	
11	2,00	1,26	3,00	1,88	
12	2,00	1,20	3,00	1,80	
13	2,00	1,14	3,00	1,72	
14	2,00	1,09	3,00	1,64	
15	2,00	1,04	3,00	1,56	
16	2,00	1,00	3,00	1,49	
17	2,00	0,95	3,00	1,43	30
18	2,00	0,91	3,00	1,36	20 years of operation
19	2,00	0,87	3,00	1,30	beyond the DBO Contract
20	2,00	0,83	3,00	1,24	completion
21	2,00	0,79	3,00	1,18	
22	2,00	0,75	3,00	1,13	
23	2,00	0,72	3,00	1,08	
24	2,00	0,69	3,00	1,03	
25	2,00	0,65	3,00	0,98	
26	2,00	0,63	3,00	0,94	
27	2,00	0,60	3,00	0,90	
28	2,00	0,57	3,00	0,85	
Bid Price	60,00	57,94	55,00		Bidder 2 wins
Whole-life	100,00	76,31	115,00	79,46	Bidder 2 = highest life-cycle
cycle cost					cost

Source: Asian Development Bank.

One remedy for this situation could be to define a threshold (such as when the Operation Service period is less than 5 years for example) below which the whole life cycle cost evaluation would not apply. However, this would bring the Employer back to the usual problem of DB contracts: having a Bidder coming in with an aggressive/low Bid price for the DB component, and not being bothered by the possible high Operation Service costs in the long run since those would be financially borne by the Employer. This is illustrated under the table above, where the low CAPEX/high OPEX Bid gets selected although it proves to cost more to the Employer over the life cycle of the facility.

All in all, the Employer could find itself trapped in between the two following adverse situations for short Operation Service Periods:

1) Applying the whole life cycle cost approach, and having the risk of a Bidder artificially increasing the Design-Build component of his/her Bid price, and artificially decreasing the Operation Service component of his/her Bid price, to take an undue advantage of the Bid evaluation methodology.

2) Not applying the whole life cycle cost approach, and having the usual Design-Build Contracts risk of a Bidder going for a cheap Design-Build option, which would prove to be expensive on the Operation Service side. He/she would be more competitive, hence would be selected against a higher CAPEX/lower OPEX alternative Bid, hence depriving the Employer of the benefit of such latter Bid which brings higher economic benefits for the Employer over the life span of the facility.

The whole life cycle costs evaluation is the method which makes the utmost economic sense for the Employer in the long run, hence it is recommended to the Employer to keep using it even with short Operation Service Periods but, in such cases, to strengthen the performance damages associated to the Operation Service expenditure to avoid the said bias.

Indeed, as an example, the Operation Service Price on WTP and WWTP is prominently determined by two factors as follows:

- the payment the Employer will make to the Contractor for the electricity consumption, which derives from the Guaranteed Maximum Energy Consumption Rate which the Contractor commits to with his/her Bid, and
- the chemical consumption costs incurred.

The Contract already provides for severe consequences to the Contractor in case he/she breaches his/her obligation as to the Guaranteed Maximum Energy Consumption Rate:

- during the Operation Service Period, the Contractor will not be reimbursed of any electricity paid for in excess to that guaranteed maximum consumption—see Appendix 1 of the PCC Part B and
- the Contractor will be liable to pay the additional cost that breach will generate to the Employer over the residual life span of the facility beyond the Contract completion, as per the performance damages mechanism laid down under GCC Subclause 11.11 [Failure to Pass Tests Prior to Contract Completion] and under Appendix 2 to the PCC Part B.

It is recommended to the Employer to apply the same mechanism for chemicals, hence:

- requiring the Contractor to commit on Guaranteed Maximum Chemical Consumption Rates—this will require amending the Schedule of Performance Guarantees and setting up a new Price Schedule (5.4) under Price Schedule 5—see the guidance note to that effect under Section 4 of this Bidding Document, Preamble to the Price Schedules.
- developing the same payment mechanism (under Appendix 1 to the PCC Part B) and the same performance damages mechanism (under Appendix 2 to the PCC Part B) as applied for electricity.

As a corollary to the above, in case of short Operation Service Periods, and in order to avoid any distortion of/bias to the whole life cycle costs Bid evaluation methodology, the Employer should require guarantees from the Contractor as to electricity and chemicals consumption rates, which are the two highest cost items in the operation of a WTP or WWTP, and should develop in the Contract the relevant payment deductions during the Operation Service Period, and performance damages upon its completion. This would in effect act as a deterrent to the Contractor to propose artificially low Operation Service Prices, as this would make him/her otherwise suffer from severe financial consequences.

# 2.2.3 Contractor's Overhead and Profit for Compensation Events

Multiply the Bidder's proposed percentages in the Schedule of overhead and profit to the Bid amount for the Design-Build of Works (which is the sum of Price Schedules Nos. 1 to 4), and add this to the Bid price for evaluation.

### NOTE

Defining such overhead and profit components under the Contract is found to be a positive measure, which will contribute to avoid practical difficulties in contract administration when it comes to valuating claims and Variations.

Owing to the long-term contractual arrangement at stake, and the risk profile borne by the Contractor under this DBO Contract for the benefit of the Employer, it is found preferable to leave it to the Contractor to set such percentages.

This will furthermore enable the Employer to benefit from competitive overhead and profit percentage proposal from the Bidder, since the percentages selected will have an impact on the economic evaluation of the Bid.

# 2.2.4 Work, Services, Facilities, etc., to Be Provided by the Employer

Where Bids include the undertaking of work or the provision of services or facilities by the Employer in excess of the provisions allowed for in the Bidding Document, the Employer shall assess the costs of such additional work, services and/or facilities during the duration of the Contract, and factor for those when calculating the whole life cycle costs under the preceding part. Such costs shall be added to the Bid price for evaluation.

### 2.2.5 Domestic Preference

If domestic preference applies as per BDS 41.1, then the following shall apply. Otherwise, there shall be no Bid price adjustment on the account of domestic preference.

A domestic preference will be granted to eligible domestically produced Plant and Materials in accordance with the following provisions:

- (a) The preference margin shall not be applied to the whole facility but only to the eligible domestically produced Plant and Materials within the Contract.
- (b) Plant and mandatory spare parts supplied from abroad shall be quoted CIP (Section 4, Bidding Forms, Price Schedule No. 1) and Plant and mandatory spare parts supplied from within the Employer's country shall be quoted EXW (ex works, ex factory, ex warehouse, ex showroom, or off-the-shelf, as applicable) free of sales and similar taxes (Section 4, Bidding Forms, Price Schedule No. 2).
- (c) All other cost components for services and works such as costs for design, local handling, transportation, storage, installation, commissioning, operation, and asset replacement shall be quoted separately (Section 4, Bidding Forms, Schedule No. 3 to No. 7).
- (d) In the comparison of Bids, only the CIP price component of each Bid for the Plant and Materials offered from outside the Employer's country shall be increased by 15%.
- (e) No domestic preference shall be applied to any of the services or works included in the Contract.
- (f) Bidders shall not be permitted or required to modify the mix of local and foreign Plant and Materials after Bid opening.

# 2.2.6 Specific Additional Criteria

The following additional criteria will be used in the evaluation: [detail those as need be]

# 2.3 Multiple Contracts

If Works are grouped in multiple contracts and pursuant to ITB 37.4, the Employer will evaluate and compare Bids on the basis of a Contract, or a combination of Contracts, or as a total of Contracts to arrive at the least cost combination for the Employer by taking into account discounts offered by Bidders in case of award of multiple contracts.

If a Bidder, as defined in ITB 1.3 and in ITB 4.1, submits several successful (lowest evaluated substantially responsive) Bids, the evaluation will also include an assessment of the Bidder's capacity to meet the following aggregated requirements as presented in the bid:

- Average annual turnover,
- Financial resources,
- Contractor's Equipment to be allocated, and
- Contractor's Personnel to be fielded.

# **NOTE**

The Employer shall refer to the applicable qualification requirement(s) for each contract in Part 2 of this section.

# **Section 4: Bidding Forms**

This section contains the forms to be completed by the Bidder and submitted as part of its Bid.

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# **Letter of Technical Bid**

# NOTE

The Bidder must accomplish the Letter of Technical Bid on its letterhead showing clearly the Bidder's complete name and address.

Date:
OCB No.:
Invitation for Bid No.:
Name of Contract:

To: [insert complete name of the Employer]

We, the undersigned, declare that:

- (a) We have examined the Conditions of Contract, Employer's Requirements, Schedules, Contract Data, including Addenda Nos [insert number] issued in accordance with Instructions to Bidders (ITB) 8, for the above-named Contract.
- (b) We have understood and checked these documents and have ascertained that they contain no errors or other defects except as identified in our Bid. We accordingly offer to design, execute, and complete the Works and remedy any defects therein so that they are fit for the purposes defined in the Contract, and to operate and maintain the facility under license from the Employer for the period and in conformity with the terms and conditions contained in the Contract.
- (c) Our Bid consisting of the Technical Bid and the Price Bid shall be valid for a period of [...insert bid validity period as specified in ITB 20.1 of the BDS...] days from the date fixed for the submission deadline in accordance with the Bidding Documents, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
- (d) We are fully aware of the onus given in this Contract to performance compliance, of our obligations accordingly, and of our liability to the Employer in case we breach such obligations. We are, in particular, fully aware of the implication of the performance damages regime set out under the Particular Conditions of Contract Part B Appendix 2. We understand that, when entering to the Contract, the Employer relies on our representation that we have the necessary skills and experience for complying with those obligations.
- (e) We, including any Subcontractors or Suppliers for any part of the Contract, have or will have nationalities from eligible countries, in accordance with ITB 4.2.
- (f) We, including any Subcontractors or Suppliers for any part of the Contract, do not have any conflict of interest in accordance with ITB 4.3.
- (g) We are not participating, as a Bidder, either individually or as partner in a Joint Venture, in more than one Bid in this bidding process in accordance with ITB 4.3(e).

- (h) Our firm, Joint Venture partners, associates, parent company, its affiliates or subsidiaries, including any Subcontractors or Suppliers for any part of the contract, are not subject to, or not controlled by any entity or individual that is subject to, a temporary suspension or a debarment imposed by the Asian Development Bank or a debarment imposed by the Asian Development Bank in accordance with the Agreement for Mutual Enforcement of Debarment Decisions between the Asian Development Bank and other development banks.<sup>1</sup>
- (i) Our firm, Joint Venture partners, associates, parent company, affiliates, or subsidiaries, including any Subcontractors or Suppliers for any part of the Contract, are not, or have never been, temporarily suspended, debarred, declared ineligible, or blacklisted by the Employer's country, any international organisation, or any other donor agency.

If so debarred, declared ineligible, temporarily suspended, or blacklisted, please state details (as applicable to each Joint Venture partner, associate, parent company, affiliate, subsidiaries, Subcontractors, or Suppliers):

(i)	Name of Institution:
(ii)	Period of debarment, ineligibility, or blacklisting [start and end date]:
(iii)	Reason for the debarment, ineligibility, or blacklisting:

(j) Our firm's, Joint Venture partners, associates, parent company's affiliates or subsidiaries, including any Subcontractors or Suppliers key officers and directors have not been [charged or convicted] of any criminal offense (including felonies and misdemeanors) or infractions and/or violations of ordinance which carry the penalty of imprisonment.

If so	charged or convicted, please state details:
(i)	Nature of the offense/violation:
(ii)	Court and/or area of jurisdiction:
(iii)	Resolution [i.e., dismissed; settled; convicted/duration of penalty]:
(iv)	Other relevant details [please specify]:

- (k) We understand that it is our obligation to notify ADB should our firm, Joint Venture partners, associates, parent company, affiliates or subsidiaries, including any Subcontractors or Suppliers, be temporarily suspended, debarred or become ineligible to work with ADB or any other MDBs, the Employer's country, international organisations, or any other donor agencies, or any of our key officers and directors be charged or convicted of any criminal offense or infractions/violations of ordinance which carry the penalty of imprisonment.
- (I) Our firm, Joint Venture partners, associates, parent company, affiliates, or subsidiaries, including any Subcontractors or Suppliers, are not from a country which is prohibited to export goods to or receive any payments from the Employer's country by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations.

These institutions include African Development Bank, European Bank for Reconstruction and Development (EBRD), Inter-American Development Bank (IADB), and the World Bank Group. According to para. 9 of the Agreement, other international financial institutions may join upon the consent of all Participating Institutions and signature of a Letter of Adherence by the international financial institution substantially in the form provided (Annex B to the Agreement). Upon adherence, such international financial institution shall become a Participating Institution for purposes of the Agreement. Bidders are advised to check www.adb.org/integrity for updates.

- (m) [We are not a government-owned enterprise] / [We are a government-owned enterprise but meet the requirements of ITB 4.5].<sup>2</sup>
- (n) We have not been suspended nor declared ineligible by the Employer based on execution of a Bid-Securing Declaration in accordance with ITB 4.6.
- (o) We agree to permit ADB or its representative to inspect our accounts and records and other documents relating to the Bid submission and to have them audited by auditors appointed by ADB.
- (p) If our Bid is accepted, we commit to mobilizing key equipment and personnel in accordance with the requirements set forth in Section 6 (Employer's Requirements) and our technical proposal, or as otherwise agreed with the Employer.
- (q) We understand that any misrepresentation that knowingly or recklessly misleads, or attempts to mislead may lead to the automatic rejection of the Bid or cancellation of the Contract, if awarded, and may result in remedial actions, in accordance with ADB's Anticorruption Policy (1998, as amended to date) and Integrity Principles and Guidelines (2015, as amended from time to time).

Name: [insert complete name of person signing the Bid]

In the capacity of [insert legal capacity of person signing the Bid]

Signed: [insert signature of person whose name and capacity are shown above]

Duly authorized to sign the Bid for and on behalf of [insert complete name of the Bidder]

Date [insert date of signing]

<sup>&</sup>lt;sup>2</sup> Use one of the two options as appropriate.

# **Country of Origin Declaration Form**

Name of Bidder	IFB Number		Page o	f
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ltem	Description	Country of Origin

# **Letter of Price Bid**

# **NOTE**

The Bidder must accomplish the Letter of Bid on its letterhead clearly showing the Bidder's complete name and address.

Date:	
OCB No.:	
Invitation for Bid No.:	
Name of Contract:	

To:

We, the undersigned, declare that:

- (a) We have examined the Conditions of Contract, Employer's Requirements, Schedules, Contract Data, including Addenda Nos [insert number] issued in accordance with Instructions to Bidders (ITB) 8, for the above-named Contract.
- (b) We have understood and checked these documents and have ascertained that they contain no errors or other defects except as identified in our Bid. We accordingly offer to design, execute and complete the Works and remedy any defects therein so that they are fit for the purposes defined in the Contract, and to operate and maintain the facility under license from the Employer for the period and in conformity with the terms and conditions contained in the Contract for the amount of [currency and amount in words] [currency and amount in figures], or such other amount as may be determined in accordance with the Contract.
- (c) This amount is made up of the following components:

For the Design–Build of the Works, the lump sum amount of [currency and amount in words] [currency and amount in figures]

For the Operation Service, the amount of [currency and amount in words] [currency and amount in figures]

For the Asset Replacement Fund, the lump sum amount of [currency and amount in words] [currency and amount in figures]

# **NOTE**

The Bidder must enter amounts, in words and figures and words, for each Foreign Currency, and for the Local Currency, under items (b) and (c) above, based on the Price Schedule No.8: Grand Summary. Absence of the total Bid price in the Letter of Price Bid may result in the rejection of the bid.

- (d) The discounts offered and the methodology for their application are as follows: [insert discounts and methodology for their application, if any]
- (e) Our Bid shall be valid for a period of [insert bid validity period as specified in ITB 20.1 of the BDS] days from the date fixed for the submission deadline in accordance with the Bidding Documents, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

- (f) We are fully aware of the onus given in this Contract to performance compliance, of our obligations accordingly, and of our liability to the Employer in case we breach such obligations. We are fully aware of the implication of the performance damages regime set out under the Particular Conditions of Contract Part B Appendix 2. We understand that, when entering to the Contract, the Employer relies on our representation that we have the necessary skills and experience for complying with those obligations.
- (g) We have paid, or will pay the following commissions, gratuities, or fees with respect to the bidding process or execution of the Contract:<sup>1</sup>

Name of Recipient Address		Reason	Amount	
	<del></del>			

- (h) If our Bid is accepted, we will provide the required Performance Security and parent company guarantee, and commence and complete the Works, and provide the Operation Service, in accordance with the requirements of the Contract.
- (i) We further undertake, together with the Employer, to jointly appoint the Dispute Adjudication Board (DAB) and the Auditing Body in accordance with the requirements of the Contract.
- (j) We understand that, until a formal Contract Agreement is prepared and executed, this Bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding Contract between us.
- (k) We understand that you are not bound to accept the lowest evaluated Bid or any other Bid that you may receive.
- (I) We agree to permit ADB or its representative to inspect our accounts and records and other documents relating to the Bid submission and to have them audited by auditors appointed by ADB.

Name: [insert complete name of person signing the Bid]

In the capacity of [insert legal capacity of person signing the Bid]

Signed: [insert signature of person whose name and capacity are shown above]

Duly authorized to sign the Bid for and on behalf of [insert complete name of the Bidder]

Date [insert date of signing]

<sup>&</sup>lt;sup>1</sup> If none has been paid or is to be paid, indicate "None."

# **Price Schedules**

### **NOTES**

To receive consistent and responsive Bids, it is recommended that Employers include a Preamble to the Price Schedules, indicating exactly what is required of Bidders when completing and pricing their Bids.

The following Preamble is given as an example only. Employers are responsible for ensuring that the Preamble included in the Bidding Document is complete and appropriate for the contract in question.

# **PREAMBLE**

# General

1. The Price Schedules are divided into separate Schedules as follows:

Schedule No. 1: Plant and Mandatory Spare Parts Supplied from Abroad

Schedule No. 2: Plant and Mandatory Spare Parts Supplied from Within the Employer's Country

Schedule No. 3: Design Services

Schedule No. 4: Installation and Other Services During the Design-Build Period

Schedule No. 5: Operation Service

Schedule No. 6: Other Services During the Operation Service Period

Schedule No. 7: Asset Replacement Fund and Schedule

Schedule No. 8: Grand Summary

- 2. The Schedules do not generally give a full description of the plant to be supplied and the services to be performed under each item. Bidders shall be deemed to have read the Employer's Requirements and other sections of the Bidding Document to ascertain the full scope of the requirements included in each item prior to filling in the Rates and Prices. The entered Rates and Prices shall be deemed to cover the full scope as aforesaid, including overheads and profit.
- 3. If Bidders are unclear or uncertain as to the scope of any item, they shall seek clarification in accordance with ITB 7 prior to submitting their bid.

# **Pricing**

4. The units and rates in figures entered into the Price Schedules should be typewritten, or if written by hand must be in print form. Price Schedules not presented accordingly may be considered nonresponsive. Any alterations necessary due to errors, etc., shall be initialed by the Bidder.

As specified in the Bid Data Sheet and Particular Conditions of Contract, prices shall be subject to adjustment in accordance with the corresponding Schedule of cost indexation, which is to be filled in by the Bidder below and which will be included in the Schedule of Payments.

- 5. Bid prices shall be quoted in the manner indicated and in the currencies specified in the Instructions to Bidders in the Bidding Document.
  - For each item, Bidders shall complete each appropriate column in the respective Schedules, giving the price breakdown as indicated in the Schedules.
  - Prices given in the Schedules against each item shall be for the scope covered by that item as detailed in Section 6 (Employer's Requirements) or elsewhere in the Bidding Document.
- 6. Payments will be made to the Contractor in the currency or currencies indicated under each respective item.
- 7. When requested by the Employer for the purposes of making payments or part payments, valuing variations, or evaluating claims, or for such other purposes as the Employer may reasonably require, the Contractor shall provide the Employer with a breakdown of any composite or lump sum items included in the Schedules.
- 8. Warning: the attention of Bidders is brought to the fact that compliance with the performance requirements set out under the Contract is an essential obligation which goes to the root of the Contract. The Employer will rely on the skills and experience of the Contractor in designing, building, and operating a facility which is fit-for-purpose and fully meets the requirements set out under the Contract, in particular with due regard to performance of the facility. Bidders will be asked, through the Price Schedules and the Schedule of Performance Guarantees, to guarantee performance values for the facility. By preparing their Bid, the Bidders shall then be fully aware that:
  - (a) Those guaranteed values will be used for the determination of the Bid Price based on the forms developed in this Section of the Bidding Document, and for the determination of the lowest evaluated substantially responsive Bid as per the evaluation methodology defined in Section 3 of the Bidding Document, and
  - (b) those guaranteed values will be used for the determination of payments under the Contract, as per the provisions of Appendix 1 [Schedule of Payment] to the Particular Conditions of Contract Part B.
  - (c) Failure to reach those values, during the Contract implementation, will also make the Contractor liable to pay damages to the Employer in accordance with the provisions of Appendix 2 [Performance Damages] to the Particular Conditions of Contract Part B, GCC Subclause 10.7 [Failure to Reach Production Outputs] and GCC Subclause 11.11 [Failure to Pass Tests Prior to Contract Completion].

# **Price Schedules Structure**

- 9. Schedules 1 to 4 include Rates and Price to be paid to the Contractor for the Design-Build Period under the Contract. The total amount of these Schedules will constitute the lump sum amount for the Design-Build of the Works.
- 10. Schedule 5 and 6 include Rates and Prices to be paid to the Contractor for the Operation Service Period under the Contract. The total amount of this Schedule will constitute the amount for the Operation Service, which is composed of fixed and variable fees, as detailed below.
- 11. Schedule 7 include Rates and Prices to be paid to the Contractor for the Asset Replacement under the Contract. The total amount of this Schedule will constitute the lump sum amount for the Asset Replacement Fund.

# **Operation Service Period**

- 12. Schedule 5 is composed of fixed and variable fees, as follows.
- 13. Schedule 5.1 reflects annual fixed fees which are deemed to cover the expenses incurred by the Contractor for providing the Operation Service, regardless of and whatever the actual production output of the treatment plant is. Typically, this will cover the following, without necessarily being limited to, Contractor's cost items:
  - (a) Maintenance and replacement, for all aspects not covered by the Asset Replacement Fund according to the provisions of GCC Subclause 14.18;
  - (b) Personnel (administration, management, etc.);
  - (c) Facilities (offices, warehouses, accommodation, workshops, etc.);
  - (d) Equipment;
  - (e) Insurances, guarantees, financial services, support services; and
  - (f) Overheads and profit.
- 14. Schedule 5.2 reflects variable fees which are deemed to cover the expenses incurred by the Contractor for providing the Operation Service and which vary depending on the actual production output of the treatment plant. Typically, this will cover the following, without necessarily being limited to, Contractor's cost items:
  - (a) Maintenance and replacement, for all aspects not covered by the Asset Replacement Fund according to the provisions of GCC Subclause 14.18;
  - (b) Chemicals;
  - (c) Personnel (management, operation, etc.); and
  - (d) Facilities.
- 15. Schedule 5.3 reflects prices to be paid to the Contractor for the electricity he/she will use for the Operation Service Period and which he/she will pay to the local grid/power supplier. This is based on
  - (a) the average energy tariff prior to bidding stage, which will be filled in by the Employer;
  - (b) the forecast production of the plant, in m³, over the years of the Operation Service Period, also filled in by the Employer; and
  - (c) the Guaranteed Maximum Energy Consumption Rate, which is the maximum consumption of energy per m<sup>3</sup> of production as committed by the Bidder through the Schedule of Performance Guarantees.
- 16. As per the Schedule of Payments, appended to the Particular Conditions of Contract, the Employer bears the risk of the electricity tariff fluctuation but only up to the Guaranteed Maximum Energy Consumption. If the facility designed, built, and operated by the Contractor proves to consume more energy per m³ of production than the Guaranteed Maximum Energy Consumption Rate, the cost of electricity in excess of that Rate shall be borne by the Contractor. However, if the Contractor manages to achieve lower consumption rates than guaranteed under the Contract, the annual electricity cost savings this will generate to the Employer will be equally shared in between the Parties.

# NOTE

Splitting the Operation Service payment in between fixed and variable fees brings the required flexibility to deal with all production situations which may occur due to, for example, different water supply demands or wastewater inflows than anticipated by the Employer based on the Feasibility Study, since under DBO Contracts the Contractor does not bear the commercial risk of the facility. If the facility produces less than anticipated for reasons beyond the control of the Contractor, a fair and reasonable mechanism must be in place to make sure he/she is paid for his/her fixed fees.

International experience shows that it is preferable for the Employer to bear the risk of electricity tariff fluctuations in DBO Contracts for water and wastewater treatment plants. The same principle can be extrapolated to other kind of water and wastewater infrastructure. This would otherwise lead to adverse risk premiums which would negatively impact the Contract Price. The Contractor is on the other hand required to contractually commit to what he/she can reasonably control—the maximum energy consumption rate per m³ of production.

An incentive is also provided to the Contractor for endeavouring to do better than contracted in term of energy consumption rate. A lower rate will bring savings to the Employer as he/she will pay less electricity costs than he/she would have had to if the electricity consumption was at the level of the Guaranteed Maximum Energy Consumption Rate. Such savings are shared with the Contractor, to align the Employer and the Contractor's objectives through such win-win arrangement.

It should be noted that the Employer may wish to apply the same principles for chemicals consumption, since it is another major cost item within the operating expenditure of a facility. Indeed, the Employer may then wish to:

- bear the risk of the relevant chemical tariff fluctuation but only up to the Guaranteed Maximum Energy Consumption;
- make the Contractor liable for cost overrun in case the actual chemical consumption exceeds the Guaranteed Maximum Chemical Consumption defined by the Contractor in his/her bid; and
- share the savings made by the Employer in case the relevant chemical consumption falls below the relevant Guaranteed
  Maximum Consumption Rate, as an incentive for the Contractor to do better than committed in his/her Bid and in Contract.

In such case, the Employer should:

- Introduce a Schedule 5.4, in similar terms as those used under Schedule 5.3 for electricity.
- Amend Schedule 5 to accommodate for an additional column reflecting the Contractor's Chemicals Payment, which will
  capture price data flowing from Schedule 5.4.
- Insert Key Performance Indicators related to chemicals, if and as need be under the Employer's Requirements (section 4 thereunder) and the Schedule of Performance Guarantees.
- Amend the PCC Part B Appendix 1 and 2 to introduce similar terms for chemicals payment and performance damages as the ones used for electricity payment and performance damages.

The attention of the Employer is drawn to the fact that introducing too many constraints to the Bidders on Guaranteed Maximum Chemical Consumption Rates can lead to the adverse result that the design and engineering added values of the Bidders are undermined. The more maximum consumption rates are defined by the Employer (for example with a WTP: on aluminium sulphate, organic polymers, chlorine, ozone, etc.), the less flexibility Bidders will have to propose their most fit for purpose design solution meeting the Employer's Requirements. As much as possible, the Employer should resist the temptation of becoming too prescriptive on such matters, as otherwise the Employer will progressively lose the full strength of the DBO procurement process and contracting arrangement. It might indeed well be that one design and engineering solution would, for example, exceed a Key Performance Indicator maximum value introduced for chemicals, and would then have to be discarded, despite being a more attractive solution on capital expenditure and on energy expenditure under a whole life cycle costs approach than a solution being fully compliant with over-prescriptive Employer's Requirements.

Under the latter approach, matters such as capital and operating expenditure should not be considered in isolation, but always under an integrated manner. Accordingly, Key Performance Indicators can be introduced for energy and/or chemical consumptions, but care should be given before setting a KPI maximum value. Nothing indeed prevents the Employer to introduce a KPI with no imposed maximum value, hence for which full flexibility is given to the Bidder to set in his/her Bid the guaranteed value he/she deems suitable. That is the guaranteed value which will be monitored during the Contract implementation, and any excess to that value will make the Contractor subject to nonpayment under Appendix 1 of the PCC Part B, and/or performance damages under Appendix 2 of the PCC Part B.

# **Asset Replacement Fund and Schedule**

17. The Contractor will be responsible to proceed with Asset Replacement during the Operation Service Period, based on the Asset Replacement Schedule inserted in the Price Schedule 7.1 and through the financing of the Asset Replacement Fund inserted in the Price Schedule 7, all in accordance with the provisions of the GCC Subclause 14.5 [Asset Replacement Schedule] and 14.18 [Asset Replacement Fund].

# **NOTE**

The Contractor will be liable for any Asset Replacement occurring earlier than anticipated in the Asset Replacement Schedule, since payment will not be made to the Contractor before the date stated in such Schedule, in accordance with the provisions of GCC Subclause 14.5.

Savings against the Asset Replacement Fund, at the end of the Operation Service Period, will be determined and shared in between the Parties as per the procedure defined in the GCC Subclause 14.18. This is provided as an incentive for the Contractor to optimize his/her operation and maintenance practices to increase the asset life span.

Note that the replacement of:

- any asset not identified in the Asset Replacement Schedule, and/or
- any asset of a life expectancy of less than 5 years

is to be done at the cost of the Contractor, hence will not entitle him/her to any payment under the Asset Replacement Fund, in accordance with the provisions of GCC Subclause 14.5 and GCC Subclause 14.18.

# **Schedules of Rates and Prices**

Schedule No. 1: Plant and Mandatory Spare Parts Supplied from Abroad

				Unit Price <sup>a</sup>		Total Price <sup>a</sup>	Taxes and Duties
Item	Description	Country of Origin	Quantity	Foreign Currency	CIP	Foreign Currency	Local Currency
1	2	3	4	5	6	7 = 4 x 6	8
-	TOTAL Column 7 to be	carried forw	ard to Schedul	e No. 8: Gran	ıd Summary		

<sup>a</sup> Specify currencies in accordance with ITB 19.1 of the BDS. Create additional columns for foreign currencies if so required.
Name of Bidder
Signature of Bidder

# Country of Origin Declaration Form (as per ITB 15)

ltem	Description	Country

Schedule No. 2: Plant and Mandatory Spare Parts Supplied from Within the Employer's Country

			Unit Price <sup>a</sup>			
ltem	Description	Quantity	Local Currency	EXW Price	Total EXW Price <sup>a</sup>	Sales and other taxes
1	2	3	4	5	6 = 3 x 5	7
Т	OTAL Column 6 to be carried for	ward to Sched	ule No. 8: Gra	and Summary		

<sup>&</sup>lt;sup>a</sup> Specify currency in accordance with ITB 19.1 of the BDS.

Name of Bidder	
Signature of Ridder	

<sup>&</sup>lt;sup>b</sup> Column 5 Price shall include all customs duties and sales and other taxes already paid or payable on the components and raw materials used in the manufacture or assembly of the item or the customs duties and sales and other taxes already paid on previously imported items.

# Schedule No. 3: Design Services

			Unit Priceª		Unit Price <sup>a</sup>	Total	Price <sup>a</sup>
ltem	Description	Quantity	Local Currency Portion	Foreign Currency Portion	Local Currency Portion	Foreign Currency Portion	
1	2	3	4	5	6 = 3 x 4	7 = 3 x 5	
TOTAL	Columns 6 and 7 to be carried forwa	nd Summary					

Name of Bidder	
Signature of Bidder	

<sup>a</sup> Specify currency in accordance with ITB 19.1 of the BDS.

# Schedule No. 4: Installation and Other Services During the Design-Build Period

			Unit	Price <sup>a</sup>	Total I	Pricea
Item	Description	Quantity	Local Currency Portion	Foreign Currency Portion	Local Currency Portion	Foreign Currency Portion
1	2	3	4	5	6 = 3 x 4	7 = 3 x 5
1						
2						
3						
4						
5						
6	Health, Safety, Environmental (HSE) and Social requirements <sup>b</sup>					
7	Provisional Sum for STI/STD and HIV/AIDS alleviation programme <sup>c</sup>	1				
8	Percentage of item 6 for Contractor's overhead charges and profit <sup>d</sup>	% of item				
9	Provisional Sum for the Employer's share of the Dispute Adjudication Boarde	1				
Etc.						
ТОТ	AL Columns 6 and 7 to be carried forwa	rd to Schedu	ule No. 8: Gra	nd Summary		

a	pecity	currency	in accord	lance w	ith IIE	3 19.1 of	the	RDS	
---	--------	----------	-----------	---------	---------	-----------	-----	-----	--

Name of Bidder	
Signature of Ridder	

<sup>&</sup>lt;sup>b</sup> The Employer could consider requiring the Bidders to specifically detail the amount they priced for the Health, Safety, Environmental and Social obligations under the Contract to better ascertain whether the Bidders correctly appraised the extent of these obligations as laid down under the Employer's Requirements. The Employer may also consider setting a Provisional Sum to set the same financial basis for all Bidders, and avoid the Bidders generating undue savings under that key account.

<sup>&</sup>lt;sup>c</sup> As described in PCC Subclause 6.7. Sum filled in by the Employer in the Bidding Document, and to be inserted by the Contractor in this Schedule without any alteration.

<sup>&</sup>lt;sup>d</sup> As described in GCC Subclause 13.5, subparagraph (b)(ii)

<sup>&</sup>lt;sup>e</sup> As described in PCC Subclause 13.5. Sum filled in by the Employer in the Bidding Document, and to be inserted by the Contractor in this Schedule without any alteration. No Contractor's overhead charges and profit percentage applies.

# **NOTES**

The Employer should calculate those Provisional Sums and insert those here before finalizing and releasing the Bidding Document.

Detailed guidance on how estimating the Dispute Adjudication Board's cost has been provided by the Japan International Cooperation Agency (JICA) in its Dispute Board Manual available at http://www.jica.go.jp/activities/schemes/finance\_co/procedure/guideline/pdf/DisputeBoardManual\_201203\_e.pdf.

Schedule No. 5: Operation Service

		Contractor's Fixed Fee	Contractor's Variable Fee	Contractor's Electricity Payment	
		(From Price Schedule 5.1)	(From Price Schedule 5.1) (From Price Schedule 5.2) (From Price Schedule 5.3)	(From Price Schedule 5.3)	Total Operation Service Bid Price
	Currency	(1)	(2)	(3)	(1)+(2)+(3)
<ol> <li>Bid Price in foreign currency</li> </ol>					
1.1 Foreign currency 1 (if any)	[state currency]				
1.2 Foreign currency 2 (if any)	[state currency]				
1.3 Foreign currency 3 (if any)	[state currency]				
2. Bid price in local currency	[state currency]				

Totals carried forward to the Schedule 8 (Grand Summary)

Name of Bidder \_\_\_\_\_\_\_Signature of Bidder \_\_\_\_\_\_\_Signature of Bidder \_\_\_\_\_\_\_\_

Schedule 5.1: Contractor's Annual Fixed Fee

Fixed Fee Item	Currency	Annual Fixed Fee (1)	No. of Years (2)	Total fixed fees for the Operation Service Period (1) x (2)
1. Fixed Price in foreign currency				
1.1 Foreign currency 1 [if any]	[state currency]	[enter amount]	Ya	[calculated value]
1.2 Foreign currency 2 [if any]	[state currency]	[enter amount]	Ya	[calculated value]
1.3 Foreign currency 3 [if any]	[state currency]	[enter amount]	Ya	[calculated value]
2. Fixed price in local currency				
2.1 Fixed fee	[state currency]	[enter amount]	Ya	[calculated value]
			Totals car	Totals carried forward to the Schedule 5

(Operation Service)

Signature of Bidder \_

Name of Bidder\_

a Insert number of years of the Operation Service Period

# Schedule 5.2: Contractor's Variable Fee

parameter within which this Schedule applies. Insert as many sets of this Schedule as are required to cover the various production ranges/parameters of the facility. The value to carry forward to Schedule Applicability range of this Schedule: [In case the variable fee fluctuates depending on the production range of the facility, or another parameter, specify the production rate of the facility/ 5 shall then be the sum of the values in each individual Schedule 5.2].

# Part A: Contractor's Variable Fee Unit Rate

	unit	CVF by currency (values carried to Part B below)
1. Contractor's Variable Fee (CVF) in foreign currency (FC)		
1.1 CVF – Foreign currency 1 [state currency]	$FC1/m^3$	
1.2 CVF – Foreign currency 2 [state currency]	$FC2/m^3$	
1.3 CVF – Foreign currency 3 [state currency]	$FC3/m^3$	
2. Contractor's Variable Fee in local currency (LC)		
2.1 CVF – Local currency	LC/m³	

Part B: Contractor's Variable Fee (CVF) Bid Price

Interpretation         Vear 1         Year 2         Year 3         Year 4         Year 5         Etc.         Year 7           2         CVF Bid price in foreign currency 2         [state currency]         [state currency]							CVF Bid Price	0	2 		Total
Unit         Year 1         Year 3         Year 4         Year 5         Etc.           be detailed         m³         Pear 3         Year 4         Year 5         Etc.           currency         currency         currency]         Pear 5         Etc.         Etc.           cy 2         [state currency]         Pear 5         Etc.         Pear 5         Etc.           cy 3         [state currency]         Pear 6         Pear 7         Pear 9         Pear 9         Pear 9           cy 3         [state currency]         Pear 9         Pear 9         Pear 9         Pear 9         Pear 9         Pear 9           rency         [state currency]         Pear 9         Pear 9         Pear 9         Pear 9         Pear 9         Pear 9					כמוכתומים אי	1 ( ) ( ) T	וומורייאוו	וממו ו וסממכנ		-	Years
currency  y 1  y 2  y 3  ry 3  ry 3			Unit	Year 1	Year 2	Year 3	Year 4	Year 5	Etc.	Year Ya	1 to Y
currency :y 1 :y 2 :y 3 :y 3	н	Annual production [to be detailed]	m <sup>3</sup>								
currency :y 1 :y 2 :y 3 :y 3											
:y1 :y2 :y3 :rency	2										
2.2 CVF – Foreign currency 2 2.3 CVF – Foreign currency 3  CVF Bid price in local currency 3.1 CVF – Local currency	2.1	2.1 CVF – Foreign currency 1	[state currency]								
:y3	2.2	2.2 CVF – Foreign currency 2	[state currency]								
rrency	2.3	2.3 CVF – Foreign currency 3	[state currency]								
rrency											
	3	CVF Bid price in local currency									
	3.1	3.1 CVF – Local currency	[state currency]								

Totals carried forward to the Schedule 5 (Operation Service)

dame of Bidder	Signature of Bidder
Name	Signatur

<sup>a</sup> Insert as many columns as the number of years of the Operation Service Period

# **NOTES**

The Variable Fee is expressed in currency per m³ of production in Part A above. Typically, this would represent, as well as in the annual production line under Part B above:

- For a Water Treatment Plant—the output production of the plant, measured at a defined point
- For a Wastewater Treatment Plant—the influent wastewater to the plant, measured at a defined point
- For a water supply or wastewater network—the actual flow in the network, measured at defined points

This is indicative only and should be amended, and further developed as need be, depending on the type of facility at stake.

Measurement point methodology should be detailed in Section 6 (Employer's Requirements) and should aim at defining measurement point(s) which is(are) easily verifiable, regularly checked and calibrated, and tamper-proof to mitigate as much as possible any dispute stemming from measurement readings, owing to their critical impact on payment under the Contract.

This Schedule 5.2, as well as Schedule 5.3 below (and Schedule 5.4, if inserted for dealing with chemicals) is based on an applicability range which is to be filled in. Indeed, various production conditions can lead to different cost structures. Consequently, there can be several sets of Schedules 5.2 and 5.3 (and 5.4, if any) that can be used by the Bidder to reflect the specificities of this process. As an example, for a WTP producing  $50,000 \, \text{m}^3/\text{day}$ , there can be:

- One set of Variable Fees per m³/produced, and of Guaranteed Maximum Energy Consumption Rate to be applied to the plant when it produces in between 0 and 10,000 m³/day.
- Then another set in between 10,000 m<sup>3</sup>/day and 30,000 m<sup>3</sup>/day, etc.

# Schedule 5.3 Contractor's Electricity Payment

Applicability range of this Schedule: [In case the electricity consumption rate varies depending on the production range of the plant, or another factor, specify the production rate of the plant/factor within which this Schedule applies. Insert as many sets of this Schedule as are required to cover the various production ranges/parameters of the plant. The value to carry forward to Schedule 5 shall then be the sum of the values in each individual Schedule 5.3].

Part A: Contractor's Guaranteed Electricity Consumption

	Bid Value
Guaranteed Maximum Energy Consumption Rate for the plant in kWh per m³ production	
Nominal Average Tariff in local currency per kWh from the local grid	[tariff in local currency to be stated]

Part B: Contractor's Electricity Payment by Employer

			ı	ı	Electric	Electricity Annual Amount	mount	ı		Total
		Unit	Year 1	Year 2	Year 3	Year 4	Year 5	Etc.	Year Ya	Years 1 to Y
Н	Annual water production (forecast) [to be detailed]	m³								
7	Annual electricity consumption (kWh)									
	(Line 1 x Bidder's Guaranteed Maximum Energy Consumption Rate in Part A)	kWh								
M	Annual Contractor's Electricity Payment in local currency	[state								Value carried forward to
	(Line 2 x Nominal Average Tariff in Part A)	currency]								(Operation Service)

<sup>&</sup>lt;sup>a</sup> Insert as many columns as the number of years of the Operation Service Period

The Contractor will fill in his/her Guaranteed Maximum Energy Consumption Rate (in kWh per m³ of production), which is the value committed to by the Contractor in the Schedule of Performance Guarantees, and the Employer will fill in the nominal average electricity tariff applied by the local grid (in local currency per kWh) for bidding purposes.

The Employer should also fill in the annual water production forecast in line 1 above, over the years of the Operation Service Period.

A similar approach, as the one developed here for electricity, could be used for chemicals. In which case, a Schedule 5.4 should be created—see the guidance note above under the Preamble to the Price Schedules.

Schedule No. 6: Other Services During the Operation Service Period

			Unit	Price <sup>a</sup>	Total I	Price <sup>a</sup>
ltem	Description	Quantity	Local Currency Portion	Foreign Currency Portion	Local Currency Portion	Foreign Currency Portion
1	2	3	4	5	6 = 3 x 4	7 = 3 x 5
1						
2						
3						
4						
5	Health, Safety, Environmental (HSE), and Social requirements <sup>b</sup>					
6	Provisional Sum for the Auditing Body <sup>c</sup>	1				
7	Percentage of item 6 for Contractor's overhead charges and profit <sup>d</sup>	% of item				
8	Provisional Sum for the Employer's share of the Dispute Adjudication Boarde	1				
ТОТ	Lack Columns 6 and 7 to be carried forwa	rd to Schedu	ıle No. 8: Gra	nd Summary		

Name of Bidder	
Signature of Bidder	

<sup>&</sup>lt;sup>a</sup> Specify currency in accordance with ITB 19.1 of the BDS.

The Employer could consider requiring the Bidders to specifically detail the amount they priced for the Health, Safety, Environmental and Social obligations under the Contract to better ascertain whether the Bidders correctly appraised the extent of these obligations as laid down under the Employer's Requirements. The Employer may also consider setting a Provisional Sum to set the same financial basis for all Bidders, and avoid the Bidders generating undue savings under that key account.

<sup>&</sup>lt;sup>c</sup> As described in GCC Subclause 10.3. Sum filled in by the Employer in the Bidding Document, and to be inserted by the Contractor in this Schedule without any alteration.

<sup>&</sup>lt;sup>d</sup> As described in GCC Subclause 13.5, subparagraph (b)(ii)

<sup>&</sup>lt;sup>e</sup> As described in PCC Subclause 13.5. Sum filled in by the Employer in the Bidding Document, and to be inserted by the Contractor in this Schedule without any alteration. No Contractor's overhead charges and profit percentage applies.

The Auditing Body costs are to be estimated against the Terms of Reference of the Auditing Body which are to be included in the Employer's Requirements. The Contractor will pay the Auditing Body's invoices, and will then seek reimbursement of those toward the Employer though this Provisional Sum.

During the Operation Service Period, the Dispute Adjudication Board (DAB) is composed of one sole member mobilized on ad hoc basis. It means the DAB will only be mobilized if and when a Dispute occurs and is referred to the DAB.

The Provisional Sum would accordingly be tentatively lower than during the Design-Build Period under Schedule 4 where the DAB is a standing DAB, i.e., mobilized from the outset of the Contract execution and carrying out routine duties even if no Dispute is referred to it. Tentatively only, since the Operation Service Period may be much longer than the Design-Build Period.

Schedule 7: Asset Replacement Fund

The table below reflects the Asset Replacement Fund, as defined under GCC Subclause 1.1.2, from the start of year 6 into the Operation Service Period.

	Currency	Year 6	Year 7	Etc.	Year Ya	Total
1. Foreign currency						
1.1 Foreign currency 1	[state currency]	[values from price schedule 7.1]				
1.2 Foreign currency 2	[state currency]	[values from price schedule 7.1]				
1.3 Foreign currency 3	[state currency]	[values from price schedule 7.1]				
2. Local currency	[state currency]	[values from price schedule 7.1]				

Totals carried forward to the Schedule 8: Grand Summary

a Insert as many columns as the number of years of the Operation Service Period

GCC Subclause 14.18 provides that the Asset Replacement Fund will finance the Contractor's planned Asset Replacement, which is reflected in the Asset Replacement Schedule—Schedule 7.1 below.

Note that the Asset Replacement Fund does not cover the costs of:

- (i) routine maintenance items associated with the correction of defects;
- (ii) replacement of Plant and Material which have a life expectancy of less than 5 years, which explains why the Asset Replacement Fund and Schedule start at Year 6 into the Operation Service Period;
- (iii) providing spares between scheduled dates for major plant replacement; and
- (iv) the replacement of Plant and Materials which are not identified in the Asset Replacement Schedule.

All such costs are deemed to be covered by the Price Schedule 5—Operation Service.

#### Schedule 7.1: Asset Replacement Schedule

The table below reflects the time at which the Contractor plans to proceed with Asset Replacement under the Contract, and the associated prices for doing so, in accordance with the provisions of GCC Subclause 14.5 [Asset Replacement Schedule] and Subclause 14.18 [Asset Replacement Fund].

The totals in each year shall be carried to Price Schedule 7 above.

	Local	Foreig	n Currenc	y Price	
ltem	Currency Price	FC1	FC2	FC3	Description/Specification
Year 6: Asset Replacement					
Item 1					
Item 2					
Item 3					
Etc.					
Total year 6	[sum of above]	[sum of above]	[sum of above]	[sum of above]	Totals carried to Price Schedule 7
Year 7: Asset Replacement					
Item 1					
Item 2					
Item 3					
Etc.					
Total year 7	[sum of above]	[sum of above]	[sum of above]	[sum of above]	Totals carried to Price Schedule 7
Etc.					
Year Ya: Asset Replacement					
Item 1					
Item 2					
Item 3					
Etc.					
Total year Y	[sum of above]	[sum of above]	[sum of above]	[sum of above]	Totals carried to Price Schedule 7

Name of Bidder
Signature of Bidder

 $<sup>^{\</sup>mathrm{a}}$  Extend the number of lines to fit the number of years of the Operation Service Period

The Asset Replacement Fund and Schedule is a specific creature of the FIDIC Gold Book Conditions of Contract. Its operation is governed by the terms of GCC Subclause 14.5 and Subclause 14.18 and further explained as follows:

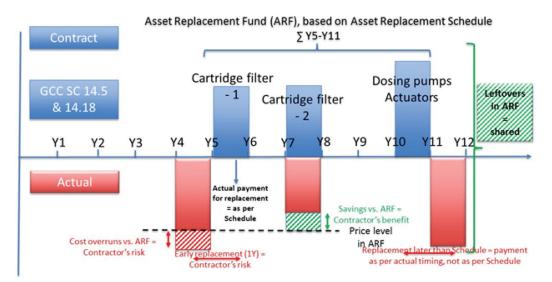
- At bidding stage, the Bidder will define an Asset Replacement Schedule, which is reflected under the Price Schedule 7.1
  above. This Asset Replacement Schedule sets, for each major asset within the facility, when its replacement is scheduled
  over the Operation Service Period. A price is reflected in the Bid for that replacement at that scheduled date. In effect,
  this means the Bidder represents to the Employer that that asset will not have to be replaced before the replacement date
  inserted by the Bidder under the Asset Replacement Schedule, and, when it is to be replaced, the Employer will have to
  pay the price stated in the Bid for that replacement.
- Accordingly, from the Employer's perspective, the asset replacement is set in time and price from the outset of the Contract implementation, as follows:
  - o the Bidder who becomes Contractor will be paid the price he/she filled in his/her Bid (and which now forms part of the Contract), whatever the actual cost of the replacement is when replacement is to be made, i.e., whether the actual cost is higher or lower than the price in the Bid does not make any difference—the Contractor remains paid that price;
  - o the Bidder who becomes Contractor will be paid the price he/she filled in his/her Bid (and which now forms part of the Contract) if the replacement date scheduled in the Asset Replacement Schedule is met, and when the replacement is actually made. Consequently, if an asset is to be replaced earlier than scheduled (for whatever reason, such as a defect in the manufacturing of the asset, or improper operation and maintenance practices), then no payment is made to the Contractor until such time the scheduled replacement date occurs. The Contractor therefore suffers from the cash flow consequences of having to replace an asset earlier than what he/she declared in the Contract, for the period ranging from the actual date of replacement until the date set in the Asset Replacement Schedule.
  - o On the other hand, if a replacement turns out to be required later than the date set in the Asset Replacement Schedule (for various reasons, such as a better life expectancy than envisaged caused by design or operation and maintenance practices optimization), then replacement payment is only done when the replacement is actually made, and not at the date set in the Asset Replacement Schedule.
- All sums to be paid, as per the Asset Replacement Schedule, are then consolidated on a yearly basis in the Asset
  Replacement Fund (Price Schedule 7) which summarizes payment the Employer is planned to make on a yearly basis for
  all asset replacement under the Contract.
- Note that the Asset Replacement Fund does not cover the costs of:
  - o routine maintenance items associated with the correction of defects;
  - o replacement of Plant and Materials, which have a life expectancy of less than five years, which explains why the Asset Replacement Fund and Schedule start at Year 6 into the Operation Service Period;
  - o providing spares between scheduled dates for major plant replacement; and/or
  - o the replacement of Plant and Materials which are not identified in the Asset Replacement Schedule.

All such costs are deemed to be covered by the Price Schedule 5—Operation Service.

As can be seen from the above, this mechanism provides the Employer with an early price certainty as to the cost of asset replacement over the Operation Service Period under the Contract.

An example to further illustrate this mechanism is as follows:

- Assume a treatment plant based on membrane processes, with a 12-year Operation Service Period.
- The Contractor, through the Asset Replacement Schedule, declared the planned replacement of:
  - o a first set of cartridge filters in the 6th year into the Operation Service Period,
  - o a second set in the 8th year, and
  - o a set of dosing pumps and actuators in the 11th year.
- During the Operation Service Period, the following occurs:
  - o The first set of cartridge filters is to be replaced in the 5th year, hence earlier than in Contract, and for a higher cost to the Contractor than the price set in the Asset Replacement Schedule and Fund. The Contractor will only get paid in the 6th year, and only of the price set in the Asset Replacement Schedule and Fund. Accordingly, the Contractor suffers from a cost overrun (the difference in between the actual replacement cost, and the replacement price in Contract), and from a payment 1 year later than when the replacement costs are actually incurred.
  - o The second set of cartridge filters is to be replaced in the 8th year, right as per what was planned in the Asset Replacement Schedule. Replacement cost is lower than the replacement price set in Contract. Nevertheless, the Contractor gets paid of that price and benefits from the savings, i.e., from the difference in between price set in Contract and the actual replacement cost.
  - o Dosing pumps and actuators are to be replaced in the 12th year, hence a year later than set in the Asset Replacement Schedule, and for a cost corresponding to the price set in Contract. The Contractor does not get paid as per the date set in the Asset Replacement Schedule, i.e., in the 11th year, but when the replacement is actually done, i.e., in the 12th year.



Source: Asian Development Bank.

Prior to issuance of the Contract Completion Certificate, a comparison is made between the actual depreciation of
the assets listed in the Asset Replacement Schedule, against the depreciation which was initially expected under the
Schedule. Assets which had to be replaced later than planned generate a gain for the Employer since asset depreciation
is lower than expected, while those which had to be replaced earlier generate a loss owing to a higher depreciation
mechanism. Corresponding payment liabilities and incentives are defined under Appendix 1 to the PCC Part B—please
refer to the guidance note thereunder for further explanation.

#### Schedule No. 8: Grand Summary

Schedule	Tial	Total	Priceª
No.	Title	Foreign	Local
1	Plant and Mandatory Spare Parts Supplied from Abroad <sup>b</sup>		
2	Plant and Mandatory Spare Parts Supplied from Within the Employer's Country <sup>b</sup>		
3	Design Services		
4	Installation and other services during the Design–Build Period		
Sum of (1) to (4)	Subtotal for the Design-Build of the Works, to be carried forward to the Letter of Bid		
5	Operation Service		
6	Other Services During the Operation Service Period		
(5)+(6)	Subtotal for the Operation Service, to be carried forward to the Letter of Bid		
7	Asset Replacement Fund to be carried forward to Letter of Bid		
	Grand Total to be carried forward to Letter of Bid		

Name of Bidder
Signature of Bidder

<sup>&</sup>lt;sup>a</sup> Specify currency in accordance with ITB 19.1 of the BDS. Create additional columns for foreign currencies if so required.

Taxes and/or duties from Schedules 1 and 2 may be added to the Contract Price in accordance with GCC Clause 14 but excluded from Bid evaluation in accordance with ITB 37.2.

## **Schedule of Cost Indexation**

Prices payable to the Contractor, in accordance with the Contract, shall be subject to adjustment during performance of the Contract to reflect rises and falls in the cost of labour, goods and other inputs to the design and the execution of the Works, and to the Operation Service.

To the extent that full compensation for any rise or fall in Costs is not covered by the provisions of this Schedule of cost indexation, the Accepted Contract Amount shall be deemed to have included amounts to cover the contingency of other rises and falls in Costs.

The adjustment to be applied to the amount otherwise payable to the Contractor, as valued in accordance with the appropriate Schedule and certified in Payment Certificates, shall be determined from formulas for each of the currencies in which the Contract Price is payable, as laid down below. No adjustment is to be applied to work valued on the basis of Cost or current prices.

The cost indices or reference prices stated in the tables of adjustment data below shall be used.

If their source is in doubt, it shall be determined by the Employer's Representative. For this purpose, reference shall be made to the values of the indices at stated dates for the purposes of clarification of the source; although these dates (and thus these values) may not correspond to the base cost indices.

In cases where the "currency of index" is not the relevant currency of payment, each index shall be converted into the relevant currency of payment at the selling rate, established by the central bank of the Country, of this relevant currency on the above date for which the index is required to be applicable.

Until such time as each current cost index is available, the Employer's Representative shall determine a provisional index for the issue of Interim Payment Certificates. When a current cost index is available, the adjustment shall be recalculated accordingly.

If the Contractor fails to complete the Works within the Time for Completion, adjustment of prices thereafter shall be made using either (i) each index or price applicable on the date 49 days prior to the expiry of the Time for Completion of the Works, or (ii) the current index or price, whichever is more favorable to the Employer.

The weightings (coefficients) for each of the factors of cost stated in the table(s) of adjustment data shall only be adjusted if they have been rendered unreasonable, unbalanced, or inapplicable, as a result of Variations.

[The Employer shall specify below which Price Schedule(s) is(are) subject to adjustment, and, where price adjustment is applicable, insert the relevant formulas for the relevant Schedule(s). The Bidder will then fill in the tables of adjustment data.]

#### Price Schedule X

[The Employer should choose one of the 2 options below for each of the Price Schedules No. 1 to 4. Price adjustment shall always apply for Schedules No. 5 to 7].

No price adjustment shall apply for this Price Schedule.

Or

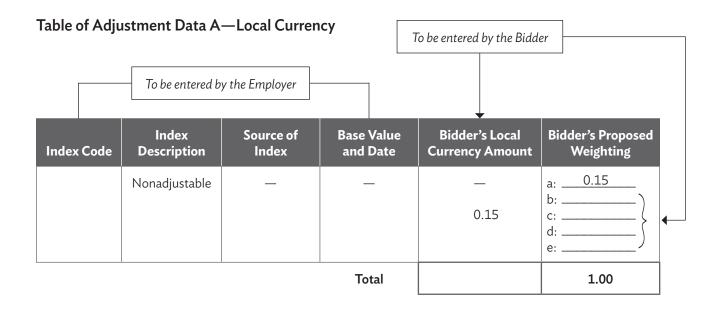
The price adjustment formulas for this Price Schedule shall be as follows: Pn = a + b Ln/Lo + c En/Eo + d Mn/Mo + .....(Employer to complete and amend as necessary) where: "Pn" is the adjustment multiplier to be applied to the estimated contract value in the relevant currency of the work carried out in period "n", this period being a month unless otherwise stated in the Contract Data;

"a" is a fixed coefficient, stated in the relevant table of adjustment data, representing the nonadjustable portion in contractual payments;

"b", "c", "d", .. are coefficients representing the estimated proportion of each cost element related to the execution of the Works, as stated in the relevant table of adjustment data; such tabulated cost elements may be indicative of resources such as labour, equipment, and materials;

"Ln", "En", "Mn", .. are the current cost indices or reference prices for period "n", expressed in the relevant currency of payment, each of which is applicable to the relevant tabulated cost element on the date 49 days prior to the last day of the period (to which the particular Payment Certificate relates); and

"Lo", "Eo", "Mo", .. are the base cost indices or reference prices, expressed in the relevant currency of payment, each of which is applicable to the relevant tabulated cost element on the Base Date.



**Table of Adjustment Data B—Foreign Currency** (table to be repeated if there is more than one foreign currency)

Name of Currency: \_\_\_\_\_\_

		To be entered	by the Bidder			
Index Code	Index Description	Source of Index	Base Value and Date	Bidder's Currency in Type/Amount	Equivalent in FC1	Bidder's Proposed Weighting
	Nonadjustable	_	_	_		a:
				Total		1.00

#### **NOTES**

The Base Date stated above means the date 28 days prior to the latest date for submission of the Bid, as per the definition in GCC Subclause 1.1.5.

The Employer can group Schedules in case he/she wishes to apply the same formulas across different Schedules, to avoid repeating the same under different Schedules as listed above.

## Schedule of Overhead and Profit

Applicable only for the valuation claims or Variations under the Contract. This is not meant to represent the overhead and profit in Rates and Prices filled in elsewhere in the Schedules, which might be different.

Description	Bidder's Proposed Percentage
Overhead—When agreeing or determining Cost under the Contract (as defined under GCC Subclause 1.1.23), the following percentage shall be considered to be the proportion of Cost representing the Contractor's overhead. Overhead represents all Contractor's indirect costs in performing an obligation.	%
Profit—Applicable percentage of Cost for the purpose of:  calculating Cost Plus Profit, as defined under GCC Subclause 1.1.24  calculating reasonable profit in Variations under GCC Subclause 13.3	%

Name of Bidder
Signature of Bidder

The Contract entitles the Contractor to be compensated of his/her Cost (as defined under GCC Subclause 1.1.23) incurred for risk events under the Contract which are borne by the Employer.

The overhead percentage defined above will allow to predetermine the overhead component of the Cost, without any further justification/substantiation to be provided by the Contractor. This will simplify contract administration processes.

The Contractor is also sometimes entitled to be paid of a profit component, in addition to his/her Cost, for those risk events which are caused by the Employer as follows:

- Failure to give right of access to, or possession of, the Site to the Contractor in accordance with GCC Subclause 2.1
- Errors in the items of reference used for setting-out the site in accordance with GCC Subclause 4.7
- Changes to the testing regime under GCC Subclause 7.4
- Failure to deliver to the Contractor the raw material foreseen under the Contract during the Operation Service Period, in accordance with GCC Subclause 10.4
- Delays and interruptions caused by the Employer to the Operation Service in accordance with GCC Subclause 10.6
- Failure by the Contractor to reach production outputs, when caused by the Employer, in accordance with GCC Subclause 10.7
- Failure by the Contractor to pass Tests Prior to Contract Completion, when caused by the Employer, in accordance with GCC Subclause 11.11
- Contractor searching for the cause of any defect attributable to the Employer under GCC Subclause 12.6
- Suspension, or reduction of the rate, of work by the Contractor under GCC Subclause 16.1
- Work instructed by the Employer under a Contract termination for Employer's cause under Subclause 16.3
- Employer's Risk of Damage under Subclause 17.6

He/she is also entitled to be paid of his/her profit in case of Variations, under GCC Subclause 13.3.

The profit percentage defined above will allow to predetermine the profit to be added to the Cost calculated, without any further justification/substantiation to be provided by the Contractor. This will simplify contract administration processes.

The Bidder's proposed percentages will be taken into account in the evaluation of Bid Prices, although they will not form part of the Contract Price as such.

This will enable the Employer to benefit from competitive overhead and profit percentages proposed from Bidders.

As an example, during Contract implementation, whenever agreeing or determining the valuation of a Variation which is to be based on Cost and reasonable profit, the following steps will be observed:

- 1. Assessment of all Contractor's direct cost incurred under the Contract for the implementation of the Variation. That is the cost of, though not necessarily limited to, the following kinds of item:
  - a. Contractor's Personnel
  - b. Plant and Materials
  - c. Contractor's Equipment
  - d. Subcontractors

For the purpose of that example, the direct cost shall be referred to below as "DC".

2. The total Cost (as defined under GCC Subclause 1.1.23) of implementing the Variation under the Contract shall then be as follows:

$$Cost = \frac{(DC)}{(1 - Overhead Percentage in this Schedule)}$$

- 3. The profit shall be calculated as follows: profit = (Profit Percentage in this Schedule) x Cost
- 4. The Contractor is then entitled to be paid of Cost and profit as respectively calculated under items 2 and 3 above.

## Schedule of Performance Guarantees

As per the provisions of GCC Subclause 4.1 [Contractor's General Obligations], the Contractor is to design, execute, and complete Works which shall be fit for the purposes for which the Works are intended as defined in the Contract, and as per GCC Subclause 10.1 [General Requirements] the Contractor shall be responsible for ensuring that the Works remain fit for such purposes during the Operation Service Period.

The Employer has accordingly defined the following Key Performance Indicators (KPI) which reflect the main performance standards to be achieved by the facility designed, executed, and operated by the Contractor. Those are split in between two categories as follows:

- Inputs-based KPI, i.e., indicators which will measure the facility consumption of inputs, and
- Outputs-based KPI, i.e., indicators which will measure the outputs of the facility.

#### **NOTES**

Inputs-based KPI assist in determining how efficient is the facility in its operation and in reaching the contracted outputs. In other words, these measure how many inputs are necessary for the facility to deliver its contracted outputs, since the global performance of the plant is not only measured by what it delivers (m³ of water or treated wastewater, water of quality compliant with local laws and regulations, etc.), but also how it delivers the same.

Outputs-based KPI assist in determining whether what the facility produces/delivers complies with the Employer's Requirements (minimum production of water per day to be achieved, maximum level of noise or odor, etc.).

The two tables below reflect these two categories of KPIs, and define for each of them:

- KPI Name
- KPI Description
- The KPI maximum or minimum value to be achieved by the Contractor, as the case may be
- Any tolerance on KPI achievement
- The KPI measurement/testing methodology

The first table below reflect inputs-based KPIs which have the greatest impact on the operating expenditure of the facility, and for which the Contractor guarantees values through his/her Bid as follows:

Inputs-Based Key Performance Indicator

°Z	KPI Name	KPI Description	KPI Minimum Value (if any)	KPI Maximum Value (if any)	KPI Measurement/ Testing Methodology	Contractor's Guaranteed KPI Value
Н	Guaranteed Maximum Energy Consumption Rate	In kWh per m³ of plant output production	N/A		Measurement point and methodology as defined in the Employer's Requirements	
7	Guaranteed Maximum Energy Consumption Rate	In kWh per kg of COD at the Wastewater Treatment Plant inlet	∀/Z		Measurement point and methodology as defined in the Employer's Requirements	
m	Guaranteed Maximum Chemicals Consumption Rate	In kg per m³ of plant output production	N/A		Measurement point and methodology as defined in the Employer's Requirements	
Etc.						

This table reflects major KPI for the life cycle costs of the plant.

Examples are given in italic in the table and are to be replaced by the Employer by actual KPI when preparing the Bidding Document.

The Guaranteed Maximum Energy Consumption Rate shall be used in all instances as energy is a major operating expenditure. This Rate is used under the Price Schedule 5.3 for determining the maximum electricity cost payment from the Employer to the Contractor, as well as any electricity cost saving split in between the Parties. This is also used under the Appendix 2 [Performance Damages] of the PCC Part B, where any remaining failure by the Contractor to meet this KPI will expose him/her to pay to the Employer, in case of failure to pass the Tests Prior to Contract Completion, the additional electricity cost which will be suffered by the Employer over the remaining life span of the facility after completion of the Operation Service Period and of the Contract.

The Guaranteed Maximum Chemical Consumption Rate reflects another major operating expenditure, which should be considered for use by the Employer. Key Performance Indicators can be introduced for chemical consumptions, but care should be given before setting a KPI maximum value for the reasons laid down in the Guidance Note under the Preamble of the Price Schedules. Nothing indeed prevents the Employer to introduce a KPI with no imposed maximum value, hence for which full flexibility is given to the Bidder to set in his/her Bid the guaranteed value he/she deems suitable.

The Employer can also leave the Bidders free to propose their own KPI for Chemicals consumption, since different processes mean different chemicals, and not all design solutions use the same range of chemicals.

Other major inputs-based KPI can be added by the Employer in the table above, based on the project specific features.

The second table below reflect other KPIs which will apply throughout the Contract execution, and with which the Contractor shall comply.

#### **Outputs-based KPI**

No	KPI name	KPI description	KPI [minimum of maximum] value	KPI measurement/ testing methodology	Comment if any

#### **NOTES**

The following example KPI can be selected by the Employer.

For a Water Treatment Plant:

- Plant production in m³/day or, with possible fluctuations depending on time (peak output to be reached during peak demand period in a day) and seasons (hot season, seasonal population increase, etc.)
- Output water quality (compliance with standards defined in the Employer's Requirements such as bacteriological contents, pH, chlorine, etc.)
- Management of by-products—sludge production quantity and/or dryness
- Noise levels
- Compliance with specific local environmental laws and regulations

For a Wastewater Treatment Plant:

- Plant capacity in m³/day or, with possible fluctuations depending on time (peak output to be reached during peak demand period in a day) and seasons (hot season, rainy season, seasonal population increase, etc.)
- Effluent quality (compliance with standards defined in the Employer's Requirements such as BOD., COD, SS, etc.)
- Noise levels
- · Odor levels
- Management of byproducts—sludge dry solids contents, sludge quantity, etc.
- Compliance with specific local environmental laws and regulations

It is for instance common practice to reflect KPI on sludge production quantity and/or dryness for WWTP, since sludge management is also a significant operating expenditure over the life span of a WWTP. Noncompliant sludge can lead the Employer to suffer from significant additional costs after the DBO Contract completion – for instance when the defaulting dryness contents do not allow the Employer to make use any more of a sludge disposal/valorization process locally available.

For Water supply / Wastewater networks

- Continuity of water supply (24x7)
- Flow and pressure at designated points in the water supply network
- · Silt levels at designated point in the wastewater network
- Accessibility of manholes for maintenance works
- Decrease of Nonrevenue Water
- Residual chlorine contents in the water supply network
- Water quality at delivery points of the water supply network (at customer meters, or customer taps, etc.)
- Etc.

The Bidder hereby guarantees that his/her Bid ensures compliance with these KPI values. Failure to reach those will impact the Contractor's payment under Appendix 1 [Schedule of Payments] to the Particular Conditions of Contract Part B, and will make the Contractor liable to pay damages to the Employer in accordance with the provisions of Appendix 2 [Performance Damages] to the Particular Conditions of Contract Part B, GCC Subclause 10.7 [Failure to Reach Production Outputs] and GCC Subclause 11.11 [Failure to Pass Tests Prior to Contract Completion].

For the purpose of calculating performance damages, the Contractor is fully aware that the life span expectancy of the facility is as follows:

Life span expectancy of the facility to be designed, built, and operated by the Contractor under the Contract

(data to be filled in by the Employer) years

#### **NOTES**

The Employer should fill in above the life span expectancy sought for the facility.

For example, it is common practice to refer to a 20 to 30-year expected life span for a Water Treatment Plant or a Wastewater Treatment Plant. Civil works (basins, tanks, etc.) have generally a life span expectancy of 50 years, while electrical and mechanical equipment are more in the range of 10 to 20 years, and it is recommended to set the life span expectancy of the facility as being a period going over the life span expectancy of most of the electrical and mechanical equipment.

Overall, 25 years for a plant is considered reasonable and in line with international practice since over that period the necessary technology upgrades made (to cope with science, technology, practices, legal and regulatory environment evolutions) are likely to make it that the resulting plant has little to be compared to the initial plant as designed and built by the Contractor.

The life span expectancy filled in by the Employer will serve the purpose of calculating the whole life cycle cost of the facility based on the Contractor's Price Bid, as per Section 3 of this Bidding Document, as well as performance damages under Appendix 2 of the Particular Conditions of Contract Part B.

Name of Bidder
Signature of Bidder

# **Bid Security**

#### **Bank Guarantee**

[insert bank's name, and address of issuing branch or office] $^1$ 

Nam	ne of Contract/Contract No.
Nam	ne and address of Beneficiary ("the Employer"):
the a	nave been informed that [name of the Contractor] (hereinafter called the "Principal") is submitting a Bid for above-named Contract in response to your invitation, and the instructions to Bidders (hereinafter "the ) require that this Bid is supported by a Bid Security.
Emp	ne request of the Principal, we [name of bank] hereby irrevocably undertake to pay you, the Beneficiary/loyer, any sum or sums not exceeding in total the amount of [amount in words] [amount in figures] upon ipt by us of your demand in writing with your written statement (in the demand) stating that:
(a)	the Principal has, without your agreement, withdrawn his/her Bid after the latest time specified for its submission and before the expiry of its period of validity, or
(b)	the Principal has refused to accept the correction of errors in his/her Bid in accordance with the ITB, or
(c)	you awarded the Contract to the Principal and he/she has failed to comply with Subclause 1.6 [ $Contract$ Agreement] of the Conditions of Contract, or
(d)	you awarded the Contract to the Principal and he/she has failed to comply with Subclause 4.2 [Performance Security] or Subclause 4.2A [Parent Company Guarantee] of the Conditions of Contract.
a no	demand for payment must contain your signature(s) which must be authenticated by your bankers or by tary public. The authenticated demand and statement must be received by us at this office on or before late 35 days after the expiry of the validity of the Letter of Bid], when this guarantee shall expire and shall be returned is.
the l	guarantee shall be governed by the laws of and shall be subject to Jniform Rules for Demand Guarantees, published as number 758 by the International Chamber of Comce, except as stated above.
Signe	ed by:[name]
Signa	ature and seal:
Date	::

<sup>&</sup>lt;sup>1</sup> All italicized text is for use in preparing this form and shall be deleted from the final document.

# **Bid-Securing Declaration**

	insert date (as day, month and year] .: [insert number of bidding process]
To: [inso	ert complete name of Employer]
We, the	e undersigned, declare that:
We und	derstand that, according to your conditions, Bids must be supported by a Bid-Securing Declaration.
Borrow	cept that we will automatically be suspended from being eligible for bidding in any contract with the ver for the period of time of [insert number of years as indicated in ITB 21.2 of the BDS] starting on the date that eive a notification from the Employer, if we are in breach of our obligation(s) under the Bid conditions, se we:
(a) h	nave withdrawn our Bid during the period of bid validity specified in the Letter of Bid; or
	do not accept the correction of errors in accordance with the Instruction to Bidders (hereinafter "the $TB$ "); or
	nave failed, after you awarded the Contract to us, to comply with Subclause 1.6 [Contract Agreement] of the Conditions of Contract; or
	nave failed, after you awarded the Contract to us, to comply with Subclause 4.2 [Performance Security] or Subclause 4.2A [Parent Company Guarantee] of the Conditions of Contract.
earlier o	derstand that this Bid-Securing Declaration shall expire if we are not the successful Bidder, upon the of (i) our receipt of your notification to us of the name of the successful Bidder; or (ii) 28 days after biration of our Bid.
Signed:	: [insert signature of person whose name and capacity are shown]
In the c	capacity of [insert legal capacity of person signing the Bid-Securing Declaration]
Name:	[insert complete name of person signing the Bid-Securing Declaration]
Duly au	uthorized to sign the bid for and on behalf of: [insert complete name of Bidder]
Dated o	on day of, [insert date of signing]
Corpor	rate Seal (where appropriate)

## **Technical Proposal**

#### **NOTES**

The Bidder's Technical Proposal shall address the matters covered by the Employer's Requirements.

It shall include the Bidder's proposed preliminary design with the description of the technology solution proposed to meet the Employer's Requirements. The FIDIC Gold Book operates on the basis of three main levels of design, as defined in the FIDIC DBO Contract Guide, 2011 Edition:

- 1. Conceptual design (if any) which might be included in the Employer's Requirements, and which consists of a simple layout with possibly basic dimensions and defined criteria to identify the Works sufficiently for tenderers to be able to understand and develop the requirements in order to prepare a responsive tender. Note that setting a conceptual design, and possibly imposing a base solution to be complied with by Bidders, is not mandatory and the Employer may only specify requirements to be complied with by Bidders (performance of the plant, etc.) and leave full flexibility to Bidders to freely propose their best fit-for-purpose design engineering solution.
- 2. **Preliminary design of the technological solution proposed by the Bidders**, and to be inserted in their Bid. The level of detail required in the preliminary design should be stated in the Bidding Document but it should be that necessary for the Employer to be able to understand the Bid from the Bidder. Bidders should not be asked for an elaborate detailed design at this stage, since this would be expensive to produce and a corresponding excessive economic burden for all except the successful Bidder.
- 3. **Detailed/final design** stage is that made by the Contractor as part of his/her obligations under the Contract. Unless any changes have been agreed prior to the Contract award this will usually be a development of his/her preliminary design and will become a part of the Contractor's Documents (as defined under GCC Subclause 1.1.19).

It is fully recognized that different countries use different terminology and procedures for design, and it is down to the Employer to adapt the wording used above, and the various design stages, to fit the prevailing situation for the project, based on applicable laws, regulations, and practices.

No specific format and structure is imposed for the Technical Proposal, however it is suggested, for ease of evaluation of the conformity of the Technical Proposal with the Employer's Requirements, that a similar structure to the latter is adopted by the Bidder.

The Technical Proposal is expected to include as a minimum, though not being limited to, the following contractual warranties, representations and statements of information:

- the details of the Contractor's proposed design engineering solution for the plant;
- the Operation and Maintenance Plan proposed by the Bidder which fulfils the Operation Management Requirements contained in the Employer's Requirements;
- the Contractor's method statements for the Design-Build Period;
- the Bidder's proposed Site organisation;
- the list of proposed Subcontractors and Suppliers of Plant under the Contract, in furtherance to the Conditions of Contract Subclause 4.4 and which have their origin in eligible source countries as defined under Section 5 of this Bidding Document. The Bidder shall use the specific form for that purpose which is included in the following pages;
- the programme the Contractor intends to observe when executing its obligations under the Contract, complying with the level of details described in the Employer's Requirements, and demonstrating the Contractor's ability to meet the Time for Completion and his/her other time-related obligations;
- the proposed Contractor's Equipment and Personnel to deliver the Contractor's obligations under the Contract, and meeting the Employer's Requirements—specific forms shall be used by the Bidders in this respect, and are included in the following pages; and
- the necessary evidences demonstrating the Bidder's compliance with the Qualification criteria set out under Section 3 of this Bidding Document. The Bidder shall use the specific forms for that purpose which are included in the following pages.

#### Proposed Subcontractors and/or Suppliers of Major Items of Plant, Materials, and Services

The following Subcontractors and/or Suppliers are proposed for carrying out the item of the Works indicated based on Criterion 1.5 of Section 3 (Evaluation and Qualification Criteria). Bidders are free to propose more than one for each item.

Major Items of Plant, Materials, and Services	Proposed Subcontractors or Suppliers	Nationality

#### **NOTES**

The list of proposed Subcontractors and Suppliers of Plant, Materials, and Services under the Contract, in furtherance to the Conditions of Contract Subclause 4.4 and which have their origin in eligible source countries as defined under Section 5 of this Bidding Document. The Contractor shall summarize those in a tabulated form, describing:

- The item of services to be Subcontracted, or item of Plant supply
- The identity of the proposed Subcontractor or Supplier
- The nationality of the proposed Subcontractor or Supplier

### **Contractor's Personnel**

#### Form PER-1: Proposed Personnel

Bidders should provide the details of proposed personnel and their experience record in the relevant Information Forms below for each of the candidate.

1.	Title of position
	Name
2.	Title of position
	Name
3.	Title of position
	Name
4.	Title of position
	Name
etc.	Title of position
	Name

## NOTE

All titles of positions will be as listed in Section 6 (Employer's Requirements).

#### Form PER-2: Resume of Proposed Personnel

The Bidder shall provide all the information requested below. Use one form for each position.

Position				
Personnel information	Name	Date of birth		
	Professional qualifications			
Present employment	Name of employer			
	Address of employer			
	Telephone	Contact (manager/personnel officer)		
	Fax	E-mail		
	Job title	Years with present employer		

Summarize professional experience in reverse chronological order. Indicate particular technical and managerial experience relevant to the project.

From	То	Company/Project/Position/Relevant Technical and Management Experience

## Contractor's Equipment

### Form EQU: Equipment

The Bidder shall provide adequate information and details to demonstrate clearly that it has the capability to meet the equipment requirements indicated in Section 6 (Employer's Requirements), using the Forms below. A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.

Item of Contractor's Equipment					
Contractor's Equipment Information	Name of manufacturer			Model and power rating	
mormation	Capacity			Year of manufacture	
Current Status	Current location				
	Details of current commitments				
Source	Indicate source of the equipment				
	□ Owned	□ Rented	□ Leased	☐ Specially manufactured	

Omit the following information for equipment owned by the Bidder.

Owner	Name of owner		
	Address of owner		
	Telephone	Contact name and title	
	Fax	Telex	
Agreements	Details of rental/lease/manufacture agreem	al/lease/manufacture agreements specific to the project	

# **Affiliate Company Guarantee**

Name of Contract/Contract No.:		
Name and address of Employer:		
We have been informed that [name of Contractor] (hereinafter called the "Contractor") is submitting an of or the above-referenced Contract in response to your invitation, and that the conditions of your invitation its offer to be supported by an affiliate company guarantee.		
n consideration of you, the Employer, awarding the Contract to the Contractor, we [name of affiliated comprevocably and unconditionally guarantee to you, as a primary obligation, that (i) throughout the durant the Contract, we will make available to the Contractor our financial, technical capacity, expertise resources required for the Contractor's satisfactory performance of the Contract; and (ii) we are committed, along with the Contractor, to ensuring a satisfactory performance of the Contract.	ation and	
f the Contractor fails to so perform its obligations and liabilities and comply with the Contract, we ndemnify the Employer against and from all damages, losses and expenses (including legal fees and expenwhich arise from any such failure for which the Contractor is liable to the Employer under the Contract.		
This guarantee shall come into full force and effect when the Contract comes into full force and effect he Contract does not come into full force and effect within a year of the date of this guarantee, or if demonstrate that you do not intend to enter into the Contract with the Contractor, this guarantee shavoid and ineffective. This guarantee shall continue in full force and effect until all the Contractor's obligated and liabilities under the Contract have been discharged, when this guarantee shall expire and shall be return our, and our liability hereunder shall be discharged absolutely.	you all be tions	
This guarantee shall apply and be supplemental to the Contract as amended or varied by the Employer and Contractor from time to time. We hereby authorize them to agree on any such amendment or variation due performance of which and compliance with which by the Contractor are likewise guaranteed hereur Dur obligations and liabilities under this guarantee shall not be discharged by any allowance of time or on an additional contractor is the Employer to the Contractor, or by any variation or suspension of the way to be executed under the Contract, or by any amendments to the Contract or to the constitution of Contractor or the Employer, or by any other matters, whether with or without our knowledge or consent	, the nder other orks f the	
This guarantee shall be governed by the law of the same country (or other jurisdiction) that governs Contract and any dispute under this guarantee shall be finally settled under the [Rules or Arbitration provide the Contract]. We confirm that the benefit of this guarantee may be assigned subject only to the provision assignment of the Contract.	ded in	
Signed by:		
(name) (name)		
(position in parent/subsidiary company) (position in parent/subsidiary company)		
Date:		

## NOTE

If permitted in accordance with ITB 31.2 of the BDS, the Bidder shall fill out the Affiliate Company Guarantee Form for each subsidiary, parent entity, affiliate, Subcontractor, etc. that the Bidder submits for consideration of the Employer in determining its qualifications.

# **Bidder's Qualification**

To establish its qualifications to perform the Contract in accordance with Section 3 (Evaluation and Qualification Criteria) the Bidder shall provide the following information requested in the corresponding forms.

## Form ELI-1: Bidder's Information Sheet

	Bidder's Information		
Bidder's legal name			
In case of Joint Venture, legal name of each partner			
Bidder's country of constitution			
Bidder's year of constitution			
Bidder's legal address in country of constitution			
Bidder's authorized representative (name, address, telephone number(s), fax number(s), e-mail address)			
Attached are copies of the following docu	uments:		
☐ 1. In case of single entity, articles of in accordance with ITB 4.1 and ITB 4.	corporation or constitution of the legal entity named above, in .2.		
$\ \square$ 2. Authorization to represent the firm	$2. \   \text{Authorization to represent the firm or Joint Venture named above, in accordance with ITB~22.2~and~22.3.}$		
$\ \square$ 3. In case of Joint Venture, letter of in with ITB 11.2(g).	tent to form Joint Venture or Joint Venture agreement, in accordance		
☐ 4. In case of a government-owned enterprise to comply with ITB 4.5.	terprise, any additional documents not covered under 1 above required		

#### Form ELI-2: Joint Venture Information Sheet

Each member of the Joint Venture must fill out this form separately. Subcontractor must fill out this form.

Joint	Joint Venture/Subcontractor Information					
Bidder's legal name						
Joint Venture partner's or Subcontractor's legal name						
Joint Venture partner's or Subcontractor's country of constitution						
Joint Venture partner's or Subcontractor's year of constitution						
Joint Venture partner's or Subcontractor's legal address in country of constitution						
Joint Venture partner's or Subcontractor's authorized representative information (name, address, telephone number(s), fax number(s), e-mail address)						
Attached are copies of the following do	ocuments:					
1. Articles of incorporation or constitution of the legal entity named above, in accordance with ITB 4.1 and ITB 4.2.						
☐ 2. Authorization to represent the fi	rm named above, in accordance with ITB 22.2.					
3. In the case of government-owned enterprise, documents establishing legal and financial autonomy and compliance with commercial law, in accordance with ITB 4.5.						

Subcontractors are those listed in Technical Proposal—Proposed Subcontractors and/or Manufacturers for Major Items of Plant and Services.

#### Form CON-1: Historical Contract Nonperformance

Each Bidder must fill out this form in accordance with Criteria 1.2.1 and 1.2.3 of Section 3 (Evaluation and Qualification Criteria) to describe any history of nonperforming contracts and pending litigation or arbitration formally commenced against it.

In case of Joint Ventures, each Joint Venture partner must fill out this form separately, and provide the Joint Venture partner name:

Joint '	Venture	partner: _	
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Table 1: History of Nonperforming Contracts				
<ul> <li>Choose one of the following:</li> <li>□ No nonperforming contracts.</li> <li>□ Below is a description of nonperforming contracts involving the Bidder (or each Joint Venture member if Bidder is a Joint Venture).</li> </ul>				
Year	Description	Amount of Nonperformed Portion of Contract (\$ equivalent)	Total Contract Amount (\$ equivalent)	
[insert year]	Contract Identification: [indicate complete contract name/ number, and any other identification]  Name of Employer: [insert full name]  Address of Employer: [insert street/city/country]  Reason(s) for nonperformance: [indicate main reason(s)]	[insert amount]	[insert amount]	

### Table 2: Pending Litigation and Arbitration

#### Choose one of the following:

- ☐ No pending litigation and arbitration.
- ☐ Below is a description of all pending litigation and arbitration against the Bidder (or each Joint Venture member if Bidder is a Joint Venture).

Year	Matter in Dispute	Value of Pending Claim in US\$ Equivalent	Value of Pending Claim as a Percentage of Net Worth
[insert year]	Contract Identification: [indicate complete contract name/ number, and any other identification]	[insert amount]	[insert amount]
	Name of Employer: [insert full name] Address of Employer: [insert street/city/country]		
	Matter of Dispute: [indicate full description of dispute]  Party who initiated the dispute: [indicate		
	"Employer" or "Contractor"]  Status: [indicate status of dispute]		
	Status: [maleute status of dispate]		

### NOTE

Table 2 of this form shall only be included if Criterion 1.2.3 of Section 3 (Evaluation and Qualification Criteria) is applicable.

#### Form FIN-1: Historical Financial Performance

Each Bidder must fill out this form.

In case of Joint Ventures, each Joint Venture partner must fill out this form separately, and provide the Joint Venture partner name:

ı	loint	Venture	partner:		
J	JUILL	venture	Daither.	 	 

Joint Venture partier				
	Financial Data for Previous [state a figure in between 3 to 5 as per Criterion 1.3.1 under Section 3]a Years [US\$ Equivalent]			
	Year 1:	Year 2:	Year:	
	Information	from Balance Sheet		
Total Assets (TA)				
Total Liabilities (TL)				
Net Worth = TA – TL				
Current Assets (CA)				
Current Liabilities (CL)				
Working Capital = CA - CL				
Most Recent Working Capital		forward to FIN-3 I	To be obtained for most recent year and carried forward to FIN-3 Line 1; in case of Joint Ventures, to the corresponding Joint Venture partner's FIN-3	
	Information fro	om Income Statement		
Total Revenues				
Profits Before Taxes				
Profits After Taxes				
☐ Attached are copies of financial	statements (baland	ce sheets including all related	d notes, and income	

- statements) for the last [state a figure in between 3 to 5, as per criterion 1.3.1 under Section 3] years, as indicated above, complying with the following conditions;
  - Unless otherwise required by Section 3 of the Bidding Documents, all such documents reflect the financial situation of the legal entity or entities comprising the Bidder and not the Bidder's parent companies, subsidiaries, or affiliates.
  - Historical financial statements must be audited by a certified accountant.
  - Historical financial statements must be complete, including all notes to the financial statements.
  - Historical financial statements must correspond to accounting periods already completed and audited (no statements for partial periods shall be requested or accepted).

<sup>&</sup>lt;sup>a</sup> If the time period indicated under Criterion 1.3.1 under Section 3 (Evaluation and Qualification Criteria) is either 4 or 5 years, then the table columns above should be expanded accordingly.

#### Form FIN-2: Average Annual Turnover

Each Bidder must fill out this form.

The information supplied should be the annual turnover of the Bidder or each member of a Joint Venture in terms of the amounts billed to clients for each year for work in progress or completed, converted to US dollars at the rate of exchange at the end of the period reported.

In case of Joint Ventures, each Joint Venture partner must fill out this form separately, and provide the Joint Venture partner name:

J	oint	V	'enture parti	tner:	
---	------	---	---------------	-------	--

Annual Turnover Data for the Last [state a figure in between 3 to 5 as per Criterion 1.3.2 under Section 3] Years			
Year	Amount Currency	Exchange Rate	US\$ Equivalent
		Average Annual Turnover	

#### Form FIN-3: Availability of Financial Resources

Bidders must demonstrate sufficient financial resources, usually comprising of Working Capital supplemented by credit line statements or overdraft facilities and others to meet the Bidder's financial requirements for

- (a) its current contract commitments, and
- (b) the subject Contract.

In case of Joint Ventures, each Joint Venture partner must fill out this form separately and provide the Joint Venture partner name:

Joint Venture partner: \_\_\_\_\_\_

	Financial Resources	
No.	Source of financing	Amount (US\$ equivalent)
1	Working Capital (to be taken from FIN – 1)	
2	Credit Line <sup>a</sup>	
3	Other Financial Resources <sup>b</sup>	
	Total Available Financial Resources	

<sup>&</sup>lt;sup>a</sup> To be substantiated by a letter from the bank issuing the line of credit.

<sup>&</sup>lt;sup>b</sup> Bidder to substantiate this amount by relevant evidence.

#### Form FIN-4: Financial Requirements for Current Contract Commitments

Bidders (or each Joint Venture partner) should provide information on their current commitments on all contracts that have been awarded, or for which a letter of intent or acceptance has been received, or for contracts approaching completion, but for which an unqualified, full substantial/practical completion or taking-over certificate (for build only or design-build contracts), or contract completion certificate (for design-build-operate contracts) has yet to be issued.

In case of Joint Ventures, each Joint Venture partner must fill out this form separately and provide the Joint Venture partner name:

Join	t \	/enture	partner:	
------	-----	---------	----------	--

	Current Contract Commitments					
No.	Name of Contract	Employer's Contact (Address, Tel, Fax)	Contract Completion Date <sup>a</sup>	Outstanding Contract Value (X) <sup>b</sup>	Remaining Contract Period in Months (Y)°	Monthly Financial Resources Requirement (X/Y)
1						
2						
3						
4						
	Total Monthly	US\$				

- <sup>a</sup> Contract completion date means here:
- the expected date of the substantial/practical completion or taking-over of the works (as the case may be) for a build only or a design-build contract, or
- the expected contract completion date for a design-build-operate contract.
- <sup>b</sup> Remaining outstanding contract values, being the remaining portion of the contract price yet to be paid to the Bidder or Joint Venture partner, as the case may be, to be calculated at the Base Date (\$ equivalent based on the foreign exchange rate as of the same date).
- <sup>c</sup> Remaining contract period, until either of the dates as stated under item a above, to be calculated from the Base Date.

## Form FIN-5: Self-Assessment Tool for Bidder's Compliance to Financial Resources (Criterion 1.3.3 of Section 3)

This form requires the same information submitted in Forms FIN-3 and FIN-4. All conditions of "Available Financial Resources Net of  $CCC \ge Requirement$  for the Subject Contract" must be satisfied to qualify.

#### Form FIN - 5A: For Single Entities

For Single Entities: (A)	Total Monthly Financial Requirement for Current Contract Commitments (CCC) from FIN - 4 (C)		Results: Yes or No [D must be greater than or equal to E] (F)
(Name of Bidder)		a	

#### Form FIN - 5B: For Joint Ventures

For Joint Ventures: (A)	Total Available Financial Resources from FIN – 3 (B)	Total Monthly Financial Requirement for Current Contract Commitments (CCC) from FIN - 4 (C)	Available Financial Resources Net of CCC D = (B - C)		Results: Yes or No [D must be greater than or equal to E] (F)
One Partner:					
(Name of Partner)				b	
Each (Other) Partner:					
(Name of Partner 1)				c	
(Name of Partner 2)				c	
(Name of Partner 3)				c	
All partners combined		ailable financial resources ontract commitments	ΣD =	a	

<sup>&</sup>lt;sup>a</sup> The Employer should insert here the total requirement for the Subject Contract (for both, single entity and all partners combined) as defined in Criterion 1.3.3 of Section 3.

#### NOTE

Form FIN-5 is made available for use by the Bidder as a self-assessment tool, and by the Employer as evaluation work sheet, to determine compliance with financial resources requirement as stated in Criterion 1.3.3 of Section 3. Failure to submit Form FIN-5 by the Bidder shall not lead to bid rejection.

<sup>&</sup>lt;sup>b</sup> The Employer should insert here the required share for one partner as defined in Criterion 1.3.3 of Section 3.

<sup>&</sup>lt;sup>c</sup> The Employer should insert here the required share for each partner as defined in Criterion 1.3.3 of Section 3.

#### Form EXP-1: Contracts of Similar Size and Nature

Fill out one (1) form per contract.

The exchange rate to be used to calculate the value of the contract for conversion to a specific currency shall be the selling rate of the Borrower's national bank on the date of the contract.

Contract of Similar Size and Nature			
Contract No of	Contract Identification		
Award Date		Completion Date	
Role in Contract	□ Contractor	☐ Management ☐ Subcontractor Contractor	
Total Contract Amount	\$		
If partner in a Joint Venture or Subcontractor, specify participation of total contract amount	Percent of Total	Amount	
Employer's name Address Telephone number Fax number E-mail			
Description of the	similarity in accordance	with Criterion 1.4.1 of Section 3	
NOTE  The Employer should insert here contract size, complexity, methods, technology, or other characteristics as described in Criterion 1.4.1 of Section 3 against which the Bidder demonstrates similarity in the box on the right-hand side.			

#### Form EXP-2: Experience in Key Activities

Fill out one (1) form per contract. Each Bidder must fill out this form.

If complied by Specialist Subcontractor, each Specialist Subcontractor must fill out this form and provide the Specialist Subcontractor's name:

Specialist Subcontractor: \_\_\_\_\_

	Contract with Similar Ke	ev Activities		
Contract No of	Contract Identification			
Award Date		Completion Date		
Role in Contract	□ Contractor	☐ Management ☐ Subcontractor Contractor		
Total Contract Amount	\$			
If partner in a Joint Venture or Subcontractor, specify participation of total contract amount	Percent of Total	Amount		
Employer's name Address Telephone number Fax number E-mail				
Description of the ke	y activities in accordance	e with Criterion 1.4.2 of Section 3		
The Employer should insert here the highly specialized construction activities listed under Criterion 1.4.2 of Section 3 against which the Bidder demonstrates similarity in the box on the right-hand side.				

#### Form EXP-3: Subcontractors

Fill out one (1) form per contract.

Contract for the Major Items			
Contract No of	Contract Identification		
Award Date		Completion Date	
Role in Contract	□ Contractor	☐ Management ☐ Subcontractor Contractor	
Total Contract Amount	\$		
If partner in a Joint Venture or Subcontractor, specify participation of total contract amount	Percent of Total	Amount	
Employer's name Address Telephone number Fax number E-mail			
Description of the M	Najor Items in Accordance	with Criterion 1.5 of Section 3	
The Employer should insert here the major items of Plant, Materials and services listed under Criterion 1.5 of Section 3 against which the Bidder demonstrates similarity in the box on the right-hand side.			

## **Section 5: Eligible Countries**

This section contains the list of eligible source countries.

#### **NOTES**

For Contracts to be financed by loans/grants from

#### 1. OCR without cofinancing resources:

Unless a waiver of ADB member country procurement eligibility restrictions was approved by the ADB Board of Directors, please insert the most recent list of ADB member countries obtainable from www.adb.org/about/members

EXCEPTION: If any other contract under the project is financed by cofinancing resources that are administered by ADB (other than those listed in para. 2 below), then please state "No nationality restrictions apply, other than any restrictions arising from ITB 4.8."

#### 2. Regular loan from OCR with cofinancing resources from any one of the following funds:

- (i) Asian Clean Energy Fund,
- (ii) Japan Fund for Poverty Reduction,
- (iii) Investment Climate Facilitation Fund,
- (iv) Japan Fund for the Joint Credit Mechanism, and
- (v) e-Asia and Knowledge Partnership Fund,

Unless a waiver of ADB member country procurement eligibility restrictions was approved by the ADB Board of Directors, please insert the most recent list of ADB member countries obtainable from www.adb.org/about/members

#### 3. Concessional loan from OCR with cofinancing resources from any one of the following funds:

- (i) Asian Clean Energy Fund,
- (ii) Japan Fund for Poverty Reduction,
- (iii) Japan Fund for Public Policy Training,
- (iv) Japan Fund for Information and Communication Technology,
- (v) Investment Climate Facilitation Fund, and
- (vi) e-Asia and Knowledge Partnership Fund,

Unless a waiver of ADB member country procurement eligibility restrictions was approved by the ADB Board of Directors, please insert the most recent list of ADB member countries obtainable from www.adb.org/about/members

#### 4. Regular loan from OCR with cofinancing resources other than those listed in para. 2 above:

Please state "No nationality restrictions apply, other than any restrictions arising from ITB 4.8."

#### 5. Concessional loan from OCR with cofinancing resources other than those listed in para. 3 above:

Please state "No nationality restrictions apply, other than any restrictions arising from ITB 4.8."

#### 6. ADF without cofinancing resources:

Unless a waiver of ADB member country procurement eligibility restrictions was approved by the ADB Board of Directors, please insert the most recent list of ADB developed member countries that have contributed to ADF resources, and all ADB developing member countries.

EXCEPTION: If any other contract under the project is financed by cofinancing resources that are administered by ADB (other than those listed in para. 7 below), then please state "No nationality restrictions apply, other than any restrictions arising from ITB 4.8."

#### 7. ADF with cofinancing resources from any one of the following funds:

- (i) Asian Clean Energy Fund,
- (ii) Japan Fund for Poverty Reduction,
- (iii) Japan Fund for Public Policy Training,
- (iv) Japan Fund for Information and Communication Technology,
- (v) Investment Climate Facilitation Fund, and
- (vi) e-Asia and Knowledge Partnership Fund,

Unless a waiver of ADB member country procurement eligibility restrictions was approved by the ADB Board of Directors, please insert the most recent list of ADB developed member countries that have contributed to ADF resources, and all ADB developing member countries.

#### 8. ADF with cofinancing resources other than those listed in para. 6 above:

Please state "No nationality restrictions apply, other than any restrictions arising from ITB 4.8."

## Section 6: Employer's Requirements

#### **NOTES**

In a design, build, and operate approach, the design is to be done by the Contractor who is liable to deliver a facility which is fit for the purposes intended under the Contract, and defined in these Employer's Requirements. Hence, this section called Employer's Requirements replaces the usual Technical Specifications section of a more traditional "build-only" approach, such as under the ADB SBD for Works where it is the Employer, not the Contractor, who bears the design risk to the widest extent.

To enable Bidders to submit responsive bids and, subsequently, for the bids received to be evaluated in an equitable manner, the Employer must make its requirements clear and precise. The Employer's requirements must therefore specify the exact requirements of the completed facility. Beware that no extensive detailed technical specifications as to the way the facility is to be designed, built, and operated shall be given, but only requirements to be met by the Contractor, using his/her own design, workmanship and materials innovation, and added values.

This section should not contain commercial or Contract Conditions that are stipulated in other parts of the Bidding Document.

For an ADB-financed project to be procured through open competitive bidding (OCB) procedures, the Employer's Requirements must be drawn up to permit the widest possible competition and, at the same time, present a clear statement of the required standards of design, workmanship, materials, and performance of the facility.

Only if this is done will the objectives of economy and efficiency, fairness, and transparency in procurement be realized, responsiveness of bids be ensured, and the subsequent task of bid evaluation facilitated.

The Employer's Requirements should stipulate that all Goods to be incorporated in the Works are new, unused, of the most recent or current models, and should incorporate the latest improvements in design and materials.

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#### **NOTES**

The essence of a Design-Build (DB) or Design-Build-Operate (DBO) Contract is that the Contractor designs a solution that meets the Employer's Requirements and delivers Works which are fit for purpose. The Employer wants warranties on outputs and performance, and shall not be bothered by detailing the means/inputs for reaching those.

Employer's Requirements under a DB or DBO Contract shall answer the question "what are the outputs/performance expected from the facility to be designed, built, and operated by the Contractor under the Contract?" However, drafters of Employer's Requirements should be careful and slow in attempting to answer the question "how to reach those specified outputs and performance levels?" That is for the Contractor to answer by means of his/her Bid and then throughout the Contract implementation.

Accordingly, the Employer shall resist the practice of being too prescriptive/specifying too extensively what is to be done by the Contractor under the Contract. The more prescriptive the Employer's Requirements:

- The less room for the Contractor to develop his/her own engineering added values, and to propose his/her own engineering solutions (including patented processes, as the case may be). That is a waste of what would otherwise be valuable resources for the benefit of the Employer, the project, and the communities served by the project.
- The less recourse for the Employer if the facility is ultimately not fit for purpose, as the Contractor can argue and find contractual relief in stating that over-prescriptive Employer's Requirements make it that those are no longer Employer's Requirements, but are in effect detailed Technical Specifications for which the Employers assumes responsibility and liability, including the fitness for purpose liability. If the facility does not operate as intended, then this might well be due to improper Employer's specifications.

Employer's Requirements shall define outputs and performance for the Works to be designed, built, and operated under the Contract, and the various constraints to be considered and limits within which the Contractor shall freely operate and bring his/her own design and workmanship added values. Those typically are:

- Laws and regulations;
- Design and workmanship standards—technical, health, safety, environmental, social, etc.
- Testing requirements;
- · Project management and progress monitoring;
- Site data and information—site delineation and any access restrictions, interfaces with the work of others, items of reference for setting-out the Works, physical and climatic conditions prevailing at Site, management of construction waste and debris and use of designated disposal areas, if any, etc.;
- Employer's scope of work and supply to the Contractor;
- Etc.

Employer's Requirements shall as a minimum be comprised of the sections developed below. They can be supplemented as needed, to meet project specific requirements.

## 1. Introduction and Background

#### **NOTES**

This part shall introduce the Works to be designed, built, and operated under the DBO Contract by stating in which context the Contract sits—policy decisions (such as master planning and corresponding investment phases therein defined), issues and problems that the Works under the project and under the DBO Contract are made to remedy, history of project preparation stages, project overall rational and objectives, relevant local political, social, economic, environmental parameters and contextual data, etc.

It shall also summarize the financing arrangements (ADB financing, etc.) of the Employer for the Contract. Details of those shall be given in a Financing Memorandum which is to be attached as Appendix to the Employer's Requirements.

## 2. Purpose of the Works

#### NOTES

The purpose of the Works shall be defined here through a few generic lines which summarize the main functional expectations of the Employer. Definition of the purpose of the Works must be performance-based. The essence, and strength from an Employer's perspective, of DB or DBO arrangements is that the Contractor is giving a contractual warranty that the Works, when delivered, will be fit for purpose, and that they will continue to remain so during the Operation Service Period as per GCC Subclause 4.1 [Contractor's General Obligations].

For the sake of illustration only, the purpose could be defined as follows:

"A Water Treatment Plant, which is able to:

- Deliver XX m<sup>3</sup>/day of drinking water in accordance with the Contract and with applicable health, safety, and environmental laws and regulations
- Operate on a continuous basis—24 hours per day, 7 days per week—without production interruptions
- Comply with the key performance requirements defined in the Employer's Requirements and in the Schedule of Performance Guarantees
- Etc."

Or as follows:

"A water supply network which:

- Delivers to end users a continuous (i.e., 24 hours per day, 7 days a week) supply of water
- Delivers water of drinking quality, in accordance with the Contract and with applicable health, safety, and environmental laws and regulations
- Has a minimum service pressure of X bar at any point in the network
- Has a Nonrevenue Water of less than XX%
- Etc."

Fitness for purpose liability is a strict liability under most jurisdictions—it means that, in case the Works are found not to be in accordance with their purpose, the Contractor will be presumed liable for that dysfunction. This is the Contractor who will have the burden to prove that he/she is not liable (in case the Contractor believes that there are contractually valid reasons for excusing him/her of his/her fitness for purpose obligation—such as if the raw water to a Water Treatment Plant is of quality which differs from what was expected in the Employer's Requirements—GCC Subclause 10.4 [Delivery of Raw Materials] would then relieve the Contractor of his/her liability for the period during which raw water is not compliant with the Contract).

Defining the purpose of the Works is at the root of a DB or DBO contractual arrangement, and there shall be no reasons for not defining it in the Employer's Requirements.

## 3. Scope of the Design, Build, and Operate Contract

#### **NOTES**

The Employer shall summarize here the scope of the DBO Contract, by defining:

- The generic sequence of activities under the Contract—design, build, and operation phases with associated main features such
  as timing and physical components of the Works. Once again, beware that the essence of a DB or DBO Contract is that the
  Contractor designs a solution that meets the Employer's Requirements and is accordingly committed to outputs/performance.
  The Employer shall resist the practice of being too prescriptive/specifying too extensively what is to be done by the Contractor,
  as this may inadvertently exclude what could otherwise be a suitable design engineering solution from the market.
- The objectives and outcomes to be achieved through the Contract, in relation with the Introduction and Background and with the purpose of the Works as defined above (e.g., continuous and safe water supply to local population and businesses to contribute to the socioeconomic development of the area, etc.).
- The consequences of the nonachievement of the objectives and outcomes expected under the Contract—fines to the Employer for breach of statutory duties, claims from consumers (for example, a business consumer claiming for a direct loss of factory production caused by an inadequate water supply), loss of reputation, etc. It is important to describe and represent to the Contractor all the likely losses which may be suffered by the Employer in case the Contractor breaches the Contract, as this would accordingly support, and be the basis for, loss and damages claims from the Employer under the Contract.

This section shall also define the design basis of the Works, and indicate if any base solution has been defined by the Employer and for which the Contractor shall comply with in his/her Bid. In which case, a specific section shall be developed under section 5 below. Once again, the Employer should be slow in imposing an over-prescriptive design basis, since there are generally several design solutions to meet a set of performance requirements and those may then become excluded from the procurement process if the design basis imposed is too prescriptive. It is not in the public interest of the project to deprive itself, without just cause, from market innovations and added values.

## 4. Performance Requirements

#### **NOTES**

This section shall describe the outputs/performance which is to be achieved by the Works/facility once completed.

It shall be developed as a supporting and explanatory basis for the Schedule of Performance Guarantees, which is found under Section 4 of this Bidding Document and which will be filled in by the Contractor at bidding stage.

The Employer should accordingly define and develop here the key performance requirements to be set for the Works/facility—for example, the minimum water production to be delivered by the Water Treatment Plant in  $m^3$ /day, the maximum energy consumption rate in  $kWh/m^3$  of water produced by the plant, the maximum chemicals consumption rate (chlorine, aluminium sulphate, etc.) in  $kg/m^3$  of water produced, etc.

Key performance requirements are typically those which have the greatest impact on the operating expenditure of the facility and/or which are critical to verify that the facility is operating as per its intended purpose. They shall be measured by Key Performance Indicators (KPI) for which the Employer should define:

- Limit values (minimum, maximum) to be complied with by the Contractor, and against which the Contractor will commit to a value through his/her Bid, and then under the Contract;
- Performance damages if a KPI measured value shows that there is a Contractor's non-excusable breach of performance guarantee. Those shall then be developed under commercial terms in Appendix 2 to the PCC; and
- Measurement methodology, which shall be developed in great detail in this section, typically by specifying:
  - o The measurement points under the Contract for the set KPI
  - o The regular calibration methodology to be complied with
  - o The measurement process

Owing to the severe contractual consequences of failure by the Contractor to meet performance requirements, since those are at the root of such contracts, great care should be given to ensure that measures are both reliable (tamper-proof, regularly calibration) and easily verifiable. If need be, the Employer may consider the use of an independent third party, selected by both Parties, for the setting-up and calibration of measurement points.

Examples of KPI are given in the Schedule of Performance Guarantees under Section 4 of the Bidding Document.

The attention of the Employer is drawn to the fact that introducing too many constraints to the Bidders on Guaranteed Maximum Chemical Consumption Rates can lead to the adverse result which is that the design and engineering added values of the Bidders are undermined. The more maximum consumption rates are defined by the Employer (for example with a WTP: on aluminium sulphate, organic polymers, chlorine, ozone, etc.), the less flexibility bidders will have to propose their most fit for purpose design solution meeting the Employer's Requirements. As much as possible, the Employer should resist the temptation of becoming too prescriptive on such matters, as otherwise the Employer will progressively lose the full strength of the DBO procurement process and contracting arrangement. It might indeed well be that one design and engineering solution would, for example, exceed a KPI maximum value introduced for chemicals, and would then have to be discarded although being an attractive solution on capital expenditure and energy expenditure grounds under a whole life cycle costs approach.

Under the latter approach, matters such as capital and operating expenditure should not be considered in isolation, but always under an integrated manner. Accordingly, KPI can be introduced for energy and/or chemical consumptions, but care should be given before setting a KPI maximum value. Nothing indeed prevents the Employer to introduce a KPI with no imposed maximum value, hence for which full flexibility is given to the Bidder to set in his/her Bid the guaranteed value he/she deems suitable. That is then that guaranteed value which will be monitored during the Contract implementation, and any excess to that value will make the Contractor subject to non-payment under Appendix 1 of the PCC Part B, and/or to performance damages under Appendix 2 of the PCC Part B.

## 5. Design-Build Period

#### 5.1 Site Delineation, Use, Access, and Possession Details

#### **NOTES**

The following contents can be envisaged for this section:

- a general description of the location and boundaries of the project Site and a detailed description of the location of the parts of the Site that the Contractor will be granted possession of under Subclause 2.1 [Right of Access to the Site]. A plan or plans should be attached, clearly showing these details for ease of identifying what is (and what is not) the Site
- a description of all access restrictions which may affect the Site. For example:
- o any phased access to or possession of the Sections or to parts of the Site-for example, areas that are dependent on Works being completed by other contractors such as piling or other ground improvement works;
- o a part of the Site which is only available during certain periods of time which are to be specified;
- o a part of the Site which is under a specific security regime and where access will be limited to those within the Contractor's Personnel who will have gone through a specific safety training organized by the Employer as detailed in the Contract,
- o Etc.
- If any, a description of all approved access routes (indicating those which are shared or exclusive use routes) to the Site. A plan or plans clearly showing the access routes to the Site and dates of access should be attached. Note that such item of access routes is only to be added if the Employer wishes to impose certain access routes to the Site, as otherwise the responsibility and liability of access route lies with the Contractor as per GCC Subclause 4.15 [Access Route]
- a description of approved locations for the Contractor's Site facilities (offices, warehouses, etc.), if the Contractor is authorized to have those on-Site. A plan clearly showing the locations should be attached
- a list of the Site arrangements, equipment, and/or facilities to be provided by the Contractor to the Employer (for example Site
  offices). This should include the standard and terms on which the facilities are to be provided and clarify who is responsible for
  the payment of consumptions charges and connection fee for utilities etc.
- any other details relating to the Site, such as Site-wide policies and procedures, that the Contractor should be aware of (security arrangements to be complied with and implemented by the Contractor, as per GCC Subclause 4.8 and 4.22 in particular, transportation of personnel, handling and transportation of Goods on Site, disposal of construction waste, rubbish, and debris, etc.).
- the description of any natural Materials which the Contractor is authorized to extract on and off the Site, and, if applicable, at what price and to be paid to whom.

#### 5.2 Site Data

#### **NOTES**

This section shall list the relevant Site data to be taken into account by the Contractor when designing and building the Works.

This shall typically detail the following:

- Subsurface conditions, based on geotechnical surveys carried out during project preparation, for identification of unstable ground or rocky ground
- Subsurface conditions shall also include any underground artificial obstructions such as utilities, culverts, drainage systems, etc.
- Hydrological conditions at Site (history of hydrological regime, flood records and magnitude for any body of water on or nearby the Site, etc.)
- Meteorological records
- Topographical levels, benchmarks of reference required for the setting-out of the Works

Those data will typically be used in conjunction with:

- GCC Subclause 4.7 [Setting Out],
- GCC Subclause 4.10 [Site Data], and
- GCC Subclause 9.3, subparagraph (c)-exceptionally adverse climatic conditions,

and will assist the Contractor in drawing up the design options, as well as construction methods, stages, and expected progress which are relevant to such Site data.

It is recommended to define what will be considered as exceptionally adverse climatic conditions, in order to give a more objective reference, as otherwise this item, under GCC Subclause 9.3, remains vague and subject to contradictory points of view. In order to establish whether such climatic conditions occurred, it may be appropriate to compare the adverse climatic conditions with the frequency with which events of similar adversity have previously occurred at or near the Site. An exceptional degree of adversity might, for example, be regarded as one which has a probability of occurrence of four or five times the Time for Completion of Design-Build, which is the time within which the Contractor is to complete the Design-Build activities under the DBO Contract.

The Employer shall then insert climatic conditions considered as adverse on the Site, such as intensity and duration of rainfall, wind speed, temperature, etc. as appropriate.

Legally speaking, the data and information provided under this section is a representation made by the Employer as to the status of and conditions prevailing at Site. The Contractor is preparing a Bid, and will then be entering into the Contract, based on such representation.

Accordingly, in case the Contractor incurs Cost and/or suffers from delay because of errors in those, he/she will be entitled to claim under the Contract for additional time and/or payment. This should however not refrain the Employer to provide such data and information, under the erroneous belief that the more data and information given, the more the Employer will be exposed to errors hence claims. On the contrary:

- The less data and information, the higher uncertainty for the Contractor, the higher Contractor's risk premiums in his/her Bid, and the higher the Accepted Contract Amount
- If it can be proven that the Employer has deliberately withheld relevant data and information in his/her possession, this would amount to a fraudulent misrepresentation. In such cases, the liability of the Employer toward the Contractor is much more severe than for other breaches of Contract, since, as per GCC Subclause 17.8, the Contract does not limit the liability of a Party to the other in case of, inter alia, fraud or deliberate default.

It is accordingly in the best interest of the Employer and of the project that the Employer:

- provides relevant data and information in his/her possession, and
- acquires, at project preparation stage and through relevant means (geotechnical surveys, topographical surveys, etc.) any data deemed missing for the purpose of designing and executing the Works.

#### 5.3 Interfaces

#### **NOTES**

Describe to the widest and deepest possible extent all work of others than the Contractor (Employer's other contractors and consultants, Employer's Personnel, etc.) which will interface with the activities of the Contractor under the Contract.

The more detailed this is, the less likely is the Contractor to claim for Unforeseeable Cost caused by interfaces under GCC Subclause 4.6 [Co-operation].

#### **5.4 Sections and Phasing Requirements**

#### **NOTES**

This section shall describe:

- Any Section which the Employer may consider using, and its associated Time for Completion. A Section is a physical part of the Works (for instance, a sludge treatment line in a WWTP, a raw water pumping station at the inlet of a WTP, a DMA within a water supply network, a water transmission main, etc.) for which the Employer wishes to set a different Time for Completion of Design-Build than for the rest of the Works
- Any sequence/phasing of the design and build of the Works which the Contractor shall comply with
- Any intermediary progress milestones (in between Commencement Date and the Time for Completion of Design-Build for the whole of the Works—for example a milestone for the production of an approved detailed design, of approved construction drawings, for the completion of a particular structure on Site, etc.) to be complied with by the Contractor

Design and build progress milestones might be deemed relevant, typically in cases where phasing of the Design-Build of the Works, or a Section, is required.

Use of those is very widely spread in the construction industry, with specific delay damages which can be attached to key progress milestones to act as a deterrent for the Contractor to miss those, in addition to the main milestone, which is to complete the whole of the Works within the Time for Completion set in the Contract. However, for water and wastewater treatment plants, this is not necessarily required since an Employer would typically look at having a plant running as per the Contract, and would not necessarily be interested by any intermediary progress stage until such time the plant can operate as per its intended purpose. Again, if this is deemed required for specific project purposes, then the use of such progress milestones could be introduced here and their associated delay damages, if any, reflected in the PCC. Legal expert advice is recommended to provide for PCC provisions which are relevant and enforceable.

#### 5.5 Law, Regulations, Codes, and Standards

#### NOTE

Describe those to be complied with by the Contractor during the Design-Build Period under the Contract, in furtherance to the provisions contained under GCC Subclause 1.14 [Compliance with Laws], GCC Subclause 5.4 [Technical Standards and Regulations].

#### 5.6 Health, Safety, Environmental (HSE) and Social Requirements

#### **NOTES**

Describe those to be complied with by the Contractor during the Design–Build Period under the Contract, typically in conjunction with, but not limited to:

- GCC Subclause 4.8 [Safety Procedures]
- PCC Subclause 4.18 [Protection of the Environment]
- PCC Subclause 4.26 [Compliance with ADB Safeguard Policy Statement]
- PCC Subclause 6.1 [Engagement of Staff and Labour]
- GCC Subclause 6.6 [Facilities for Staff and Labour]
- PCC Subclause 6.7 [Health and Safety]
- PCC Subclause 6.13 [Supply of Foodstuff]

Attach compliance documents such as environmental management plan, resettlement action plan, safeguards monitoring report, etc.

#### 5.7 Permits and Licenses to Be Obtained by the Parties

#### **NOTES**

Describe those to be obtained:

- by the Employer, and
- by the Contractor.

Ideally in a tabulated format to make clear who is to obtain what under the Contract, how and under which sequence/timing, in particular in conjunction with, but not limited to, GCC Subclause 1.14 [Compliance with Laws], GCC Subclause 2.2 [Permits, Licenses, or Approvals] or Clause 5 [Design].

#### 5.8 Base Design Solution and Drawings

#### **NOTES**

In case the Employer wishes to define a base design solution against which all Bidders shall bid, then this section shall be used to detail to the Bidders the requirements they must comply with in their bids. Any outline/conceptual design drawing prepared by the Employer shall then be attached to this section.

Otherwise it shall be removed from the Employer's Requirements.

Again, the base solution shall be defined in such a way that allows Bidders to propose their design and engineering added values for the benefit of the project, hence of the Employer.

The Contract is performance-based, and one its key strengths lies with the possibility it gives to Bidders to propose their own design and engineering solutions to meet the Employer's Requirements. This is for instance the only way for the Employer to attract patented processes from the private sector, as those cannot be specified in a Bidding Document. The Employer should accordingly be mindful to resist the temptation to become over-prescriptive with any base solution he/she wishes to impose on Bidders. It is a well-known fact that, for example, various design and engineering solutions exist in the market to deliver the expected treatment performance for a WTP or WWTP. It is in the interest of the project and the communities it serves, hence of the Employer, to take full advantage of the available market options, and that may not be achieved if the Employer becomes over-prescriptive on any base solution it wishes to impose. For example, specifying an activated sludge process for a WWTP, and imposing location and size of aeration tanks and clarifiers would inevitably restrict the design flexibility of the Contractor, and the Employer must carefully consider what can be its own benefit in doing so.

Employers should also be wary of the natural tendency of some Consultants who, under the influence of their own experience in their respective domestic market, are used to projects where Consultants design facilities to a wide extent, and Contractors are merely builders of such design. In such instances, Contractors are not liable for the design hence are not contractually committed to the performance of the facility and do not give fitness for purpose warranties. Beware that such "business as usual" practices are contrary to the spirit and objectives of a DBO Contract, and should be avoided.

#### **5.9 Contractor's Documents and Samples Submissions**

#### **NOTES**

This section shall describe:

- What are the Contractor's Documents to be submitted to the Employer's Representative, and for what: either consent or approval, as per GCC Subclause 5.2. These will typically include the design drawings, as well as the as-built documents under GCC Subclause 5.5 and the operation and maintenance manuals under GCC Subclause 5.6
- The same applies for samples under GCC Subclause 7.2

For ease of reference, it is recommended to summarize those Contractor's Documents and samples in a tabulated list, using the following columns:

- Column 1 Item No.
- Column 2 Item type (Contractor's Documents, samples)
- Column 3 Item description (e.g., Process and Instrumentation Diagram of the Pumping Station, Detailed Design of the Chlorine Dosing Room, etc.)
- Column 4 Submission for: approval or consent
- Column 5 Submission format (electronic and/or hard copies)
- Column 6 Number of submissions originals and copies
- Column 5 Review period in days, by the Employer's Representative (default position is 21 days under GCC Subclause 5.2)

This section shall also indicate any design review by, and then consent and/or approval process from local authorities as might be imposed by the applicable Laws and regulations. These shall then duly be taken into account when planning his/her activities.

#### 5.10 Inspection and Testing Requirements

#### **NOTES**

Describe the testing regime to be applied to the Works during the Design-Build Period:

- Factory testing of Plants and Materials as per GCC Subclause 7.3 [Inspection],
- Testing of the Works during construction as per GCC Subclause 7.4 [Testing], and
- Tests on Completion of Design-Build as per GCC Subclause 11.1 and GCC Subclause 7.4

Testing details, frequency, criteria, and methodology shall be here defined.

The Employer shall review the aforementioned Subclauses under the Conditions of Contract and assess whether alternative or further details and arrangements are required.

For example, the Employer may wish to define here what Notice shall be given by the Contractor to the Employer's Representative, under GCC Subclause 7.3, before any work is ready for inspection.

Any testing requirements imposed by applicable Laws and regulations shall also be developed here, to be duly taken into account by the Contractor.

In certain jurisdictions and certain sectors, independent third parties accredited by local authorities, or civil servants (as the case may be) are required to witness Tests on Completion to assess, for instance, whether electrical fittings or pressure devices (antisurge vessels for example) can operate safely. Public health authorities are also frequently involved in the assessment of the water quality produced by a Water Treatment Plant before it is put in operation and water is distributed to the local population.

Any of these requirements, as imposed in the Country where the project is carried out, shall be reflected in this section of the Employer's Requirements.

#### **5.11** Quality Assurance and Control Requirements

#### **NOTES**

Describe those to be complied with by the Contractor during the Design–Build Period under the Contract, in relation with GCC Subclause 4.9 [Quality Assurance].

This may, for example, introduce a system of Nonconformities to be managed by the Parties under the Contract, in conjunction with GCC Subclauses 7.5 [Rejection] and 7.6 [Remedial Work] for instance.

#### 5.12 Progress Monitoring and Reporting

#### (i) Programme Requirements

#### **NOTES**

This section can be used to describe all Employer's additional requirements to those listed under GCC Subclause 8.3 [Programme].

The following are examples of areas which can be covered by such additional requirements:

- Programme to be made using a detailed CPM (Critical Path Method) logic link network with activity/task duration and resource allocations
- Programme to be made through several levels of details—Level 0—High level with maximum 50 to 100 tasks/activities, Level 1 with maximum 1,000 tasks/activities, etc.
- Use of a specific software (used by the Employer) for submission of electronic versions of the programme
- All activities/tasks under the programme shall have predecessor and successor logic links, except for the start and finish activities/tasks
- Identification of float in the programme
- Etc.

#### (ii) Reporting Requirements

#### **NOTES**

Frequency, contents and format of reporting expected from the Contractor is to be developed here, in particular for matters covered under the Conditions of Contract.

Details (such as the number of original(s) and copy(ies) to be provided by the Contractor for each report submission, and submission format—electronic and/or hard copy versions), amendments and/or additions might be here developed here for:

- GCC Subclause 4.21 Monthly progress reports
- GCC Subclause 4.25 Changes in the Contractor's Financial Situation
- PCC Subclause 4.27 On-site Log Book
- GCC Subclause 6.10 Records of Contractor's Personnel and Equipment and PCC Subclause 6.22 [Employment Records of Workers]

Additional reporting requirements to the above, if any, shall be set out here, including expected contents, format and frequency of submission by the Contractor to the Employer.

#### (iii) Meetings

#### **NOTES**

This section shall detail what is expected with regards to the Management meetings foreseen under the Contract in furtherance to PCC Subclause 3.6.

Typically, this can incorporate, as a minimum:

- monthly progress meetings to be held upon release of the monthly progress report under Subclause 4.21, and
- weekly technical Site meetings.

Consideration can also be given to add other specific meetings, such as:

- quarterly progress meetings in the presence of senior/high level representatives of the Parties, who are typically not present on Site on a regular basis (e.g., the line manager of the Contractor's Representative, sitting at Headquarter (HQ) level, etc.)
- claim meetings,
- risk management meetings,
- etc.

#### **5.13 Technical Specifications**

#### **NOTES**

This section shall be used for any particular technical specifications which are to be observed by the Contractor when designing and building the facility.

For example, the Employer may wish to specify that certain matters are complied with by the Contractor, such as, for example:

- Imposing a certain type of Supervisory Control And Data Acquisition (SCADA) system which ensures inter-operability with other systems used by the Employer on other components of the water supply or wastewater systems
- · Level of automation to be complied with
- Quality for some Plant and Materials: stainless steel, IP code, etc.
- · Availability of standby pump for each duty pump
- Etc.

#### **5.14** Any Other Project-Specific Requirements

#### **NOTES**

This section shall be used for any other project-specific requirements, not already laid down above, to be met by the Contractor under the Contract.

This can include for instance:

- any requirements in relation with Provisional Sums such as the one for the STI/STD and HIV/AIDS alleviation programme as
  referred to GCC Subclause 6.7 [Health and Safety], or
- any nominated Subcontractor imposed by the Employer on the Contractor, as per GCC Subclause 4.5
- Ftc

## 6. Operation Service Period

#### **NOTES**

This section of the Employer's Requirements shall basically reflect the same structure as under section 5 above—Design-Build Period, with all necessary amendments required to reflect the fact that this section 6 relates to the Operation Service Period, which, as per GCC Subclause 1.1.58 starts from the date stated in the Commissioning Certificate, which is the date on which the Contractor has substantially completed his/her Design-Build obligations.

The Operation Service Period starts when the Design-Build Period ends.

Obviously, some parts of section 5, i.e., those which are strictly Design-Build Period related, are not to be repeated here. These are:

- site data,
- sections and phasing requirements, and
- base design solution and drawings.

All other parts of section 5 are to be reflected below, and adapted to lay down the Employer's specific requirements for the Operation Service Period in relation to each of the headings.

There are however Employer's requirements which are strictly related to the Operation Service Period—they are detailed below, and shall then be added to the other ones mentioned above.

#### **6.1 Operation Management Requirements**

#### **NOTES**

This section shall describe the Operation Service to be carried out by the Contractor during the Operation Service Period.

This shall consist in a set of procedures and requirements for the proper implementation of the Operation Service.

The Bidder will provide, in response to these requirements, an Operation and Maintenance Plan as part of his/her Bid.

#### 6.2 Auditing Body

#### **NOTES**

GCC Subclause 10.3 [Independent Compliance Audit] states that an independent and impartial Auditing Body shall be jointly appointed by the Parties at least 182 days prior to the commencement of the Operation Service. Its main purpose will be to audit and monitor the performance of both the Employer and the Contractor during the Operation Service in compliance with the Operation Management Requirements defined above.

The Auditing Body will be paid by the Contractor, using the Provisional Sum defined by the Employer under Price Schedule No.6 in Section 4 of this Bidding Document.

A template of terms of appointment of the Auditing Body are provided for reference in Appendix 1 to this Section.

#### 6.3 Site Delineation, Use, Access, and Possession Details

#### **NOTES**

The Contractor remains responsible and liable for the care of the Permanent Works during the Operation Service Period, as per GCC Subclause 17.5.

He/she accordingly must keep possession of, and right of access to those hence to the Site.

This section shall detail any changes in terms of use, access, and possession details of the Site which may be applicable during the Operation Service Period, against the Design-Build Period.

#### 6.4 Interfaces

#### **NOTES**

Describe to the widest and deepest possible extent all work of others than the Contractor (Employer's other contractors and consultants, Employer's Personnel, etc.) which will interface with the activities of the Contractor under the Contract.

The more detailed this is, the less likely is the Contractor to claim for Unforeseeable Cost caused by interfaces under GCC Subclause 4.6 [Co-operation].

#### 6.5 Law, Regulations, Codes, and Standards

#### **NOTE**

Describe those to be complied with by the Contractor during the Operation Service Period, and which might be also reflected under the Operating License.

#### 6.6 Health, Safety, Environmental (HSE) and Social Requirements

#### **NOTES**

Describe those to be complied with by the Contractor during the Operation Service Period under the Contract, typically in conjunction with, but not limited to:

- GCC Subclause 4.8 [Safety Procedures]
- PCC Subclause 4.18 [Protection of the Environment]
- PCC Subclause 4.26 [Compliance with ADB Safeguard Policy Statement]
- PCC Subclause 6.1 [Engagement of Staff and Labour]
- GCC Subclause 6.6 [Facilities for Staff and Labour]
- PCC Subclause 6.7 [Health and Safety]
- PCC Subclause 6.13 [Supply of Foodstuff]

Attach any compliance such as safeguards monitoring report, etc.

Note that this Bidding Document does not foresee, during the Operation Service Period, the application of the STI/STD and HIV/AIDS alleviation programme as referred to PCC Subclause 6.7 [Health and Safety] which would typically be effected during the Design-Build Period only.

In case it is found required, for the project purposes, to maintain this alleviation programme during the Operation Service Period,

- It shall be clearly stated in these Employer's Requirements
- A Provisional Sum item shall be added accordingly under Price Schedule No.6 in Section 4 of the Bidding Document

#### 6.7 Permits and Licenses to Be Obtained by the Parties

#### **NOTES**

Describe those to be obtained:

- by the Employer, and
- by the Contractor

Ideally in a tabulated format to make clear who is to obtain what under the Contract, how and under which sequence/timing, in particular in conjunction with, but not limited to, GCC Subclause 1.7 [Operating License], 1.14 [Compliance with Laws], GCC Subclause 2.2 [Permits, Licences or Approvals].

#### **6.8 Inspection and Testing Requirements**

#### **NOTES**

Describe the testing regime to be applied to the Works during the Operation Service Period:

- Joint inspection prior to Contract Completion as per GCC Subclause 11.8, and
- Tests Prior to Contract Completion as per GCC Subclause 11.9 to 11.12.

Testing details, frequency, criteria and methodology shall be here defined.

The Employer shall review the aforementioned Subclauses under the Conditions of Contract and assess whether alternative or further details and arrangements are required.

It should be noted that the joint inspection is a prerequisite step for Tests Prior to Contract Completion to occur. Such inspection is meant to occur not less than 2 years prior to the expiry date of the Operation Service Period as per GCC Subclause 11.8, since the standard Operation Service Period under the FIDIC Gold Book, which forms the GCC, is 20 years.

Accordingly, if the Operation Service Period is significantly lower than this, the time by which such joint inspection is to be carried out shall be adapted accordingly, especially if the Operation Service Period is only meant to last 2 or 3 years.

Any testing requirements imposed by applicable Laws and regulations shall also be developed here, to be duly taken into account by the Contractor.

#### **6.9 Training Requirements**

#### NOTE

Describe the training of the Employer's Personnel, to be undertaken by the Contractor, regarding the operation and maintenance of the Works during the Operation Service Period, in relation with GCC Subclause 10.5 [Training].

This section shall also list the training materials to be provided by the Contractor.

Note that as per GCC Subclause 10.5, this is the Employer which is responsible for providing the training facilities. If the Employer wishes to change this, he/she shall state his/her alternative requirements here and amend GCC Subclause 10.5 by means of the PCC Part B.

#### 6.10 Quality Assurance and Control Requirements

#### **NOTE**

Describe those to be complied with by the Contractor during the Operation Service Period under the Contract, in relation with GCC Subclause 4.9 [Quality Assurance].

#### 6.11 Progress Monitoring and Reporting

#### (i) Programme Requirements

#### **NOTES**

- Programme requirements are mainly applicable and relevant for the Design-Build Period. Accordingly, the Employer may
  decide that no programme update would be required during the Operation Service Period. If so, this should be specified here.
- As an alternative, if the Employer wishes to maintain programme requirements to apply during the Operation Service Period, but under different terms than under the Design-Build Period, then such amendments shall be specified here.

#### (ii) Reporting Requirements

#### **NOTES**

Frequency, contents and format of reporting expected from the Contractor is to be developed here, in particular for matters covered under the Conditions of Contract.

Details (such as the number of original(s) and copy(ies) to be provided by the Contractor for each report submission, and submission format—electronic and/or hard copy versions), amendments, and/or additions might be here developed here for:

- GCC Subclause 4.21 Monthly progress reports. The expected contents given under that Subclause is applicable under a
  Design-Build Period perspective, hence the Employer shall define here the contents to be applied during the Operation Service
  Period.
- GCC Subclause 4.25 Changes in the Contractor's Financial Situation
- PCC Subclause 4.27 On-site Log Book
- GCC Subclause 6.10 Records of Contractor's Personnel and Equipment and PCC Subclause 6.22 [Employment Records of Workers]. Note that under the Operation Service Period those are not to be submitted on a monthly routine basis—only changes to Contractor's Personnel and Equipment are to be monthly notified. If no changes, then no reporting obligation.

Additional reporting requirements, if any, to the above shall be set out here, including expected contents, format, and frequency of submission by the Contractor to the Employer.

#### (iii) Meetings

#### **NOTES**

This section shall detail what is expected with regards to the Management meetings foreseen under the Contract in furtherance to PCC Subclause 3.6.

Typically, this can incorporate, as a minimum:

- monthly progress meetings to be held upon release of the monthly progress report under Subclause 4.21, and
- weekly technical Site meetings.

Consideration can also be given to add other specific meetings, such as:

- quarterly progress meetings in the presence of senior/high level representatives of the Parties, who are typically not present on Site on a regular basis (e.g., the line manager of the Contractor's Representative, sitting at HQ level, etc.),
- claim meetings,
- risk management meetings,
- etc.

#### **6.12 Handback Requirements**

#### **NOTES**

In conjunction with GCC Subclause 8.7 [Handback Requirements], describe the requirements to be complied with by the Contractor when handing back the Works to the Employer prior to the issue of the Contract Completion Certificate.

This shall typically include what the Employer expects in term:

- conditions of the assets and of the Site
- cleanliness and tidiness of the Works
- documentation status,
- etc.

#### **6.13 Technical Specifications**

#### **NOTE**

This section shall be used for any particular technical specifications which are to be observed by the Contractor when operating the facility.

#### **6.14** Any Other Project-Specific Requirements

#### **NOTES**

This section shall be used for any other project specific requirements, not already laid down above, to be met by the Contractor under the Contract.

This can include for instance:

- any nominated Subcontractor imposed by the Employer on the Contractor, as per GCC Subclause 4.5,
- etc.

## 7. Employer's Supplies Under the Contract

#### **NOTES**

The Employer shall list here the details of any supply he/she will provide to the Contractor under the Contract, and the corresponding rates and prices, if applicable.

This is in furtherance to the following provisions:

- GCC Subclause 4.19 Electricity, Water, and Gas
- GCC Subclause 4.20 Employer's Equipment and Free-issue Materials
- GCC Subclause 10.4 Delivery of Raw Materials

Raw materials are to be made available free of charge to the Contractor as per the provisions of GCC Subclause 10.4. These are materials which are inputs to be used by the Contractor when delivering the Operation Service.

The Employer should detail here the quality, purpose, and function of these materials as these are items on which the Contractor has no control, but which can be critical for the Contractor to achieve the Operation Service in accordance with the Contract, and in particular to achieve his/her performance guarantees.

Typically, raw water coming from a water source (river, dam, underground water) would qualify as raw material for a Water Treatment Plant, and wastewater coming from a municipal sewerage network would qualify as raw material for a Wastewater Treatment Plant.

Their quality and availability should be detailed by the Employer as they will form the basis on which the Contractor will build up his/her design to ensure that the delivered facility will be fit for the purposes intended under the Contract.

## 8. Contractor's Personnel Requirements

Using Form PER-1 and PER-2 in Section 4 (Bidding Forms), the Bidder must demonstrate that it has personnel who meet the following requirements:

#### **NOTE**

Criteria/requirements for Contractor's key personnel shall be detailed here, such as for the Contractor's Representative under GCC Subclause 4.3, or the Contractor's designers under GCC Subclause 5.1.

No.	Position	Total Work Experience [years]	Experience In Similar Work [years]
1			
2			
3			
4			
5			

#### **NOTES**

The managerial and technical competence of a Contractor is largely related to key personnel on site. The extent to which the Bidder should demonstrate having staff with extensive experience should be limited to those requiring critical operational or technical skills. The Contractor's Personnel requirements should therefore refer to a limited number of such key personnel, such as, for instance and without necessarily be limited to:

- The Contractor's Representative as per GCC Subclause 4.3.
- Those superintendents working under the Contractor's Representative management and who will be responsible for major components of the Works (e.g., the Commissioning Manager supervising the Tests on Completion sequence—precommissioning, commissioning, and trial run of the Works under GCC Subclause 11.1, the Supervisor of welding works, etc. as required for each particular project).
- Those fulfilling key horizontal activities:
  - o a Quality Assurance/Quality Control Manager,
  - o a Compliance Manager or HSES (Health, Safety, Environment, and Social Manager) Manager, who would ensure Contractor's compliance with the HSES requirements under the Contract, and in particular the ADB Safeguard Policy Statement (2009) requirements as laid down under GCC Subclause 4.26 and the Employer's Requirements,
  - o Etc.
- Etc.

Requirements should specify:

- (a) the minimum number of years of experience in a similar position; and
- (b) the minimum number of years of experience and/or number of comparable projects carried out in a specified number of preceding years.

The requirement of education and academic qualification is normally unnecessary for such positions, as contractors often employ competent staff who have learned their profession "on the job" rather than through academic training. It is appropriate to specify that certain positions are filled by individuals who have held posts of comparable authority for, say, 3 years with the Bidder, so that key staff in executive site positions have sufficient knowledge of the Bidder's management, policy, procedures, and practices to act with confidence and authority within that framework.

## 9. Contractor's Equipment Requirements

Using Form EQU in Section 4 (Bidding Forms), the Bidder must demonstrate that it has the key equipment listed below:

No.	Equipment Type and Characteristics	Minimum Number Required
1		
2		
3		
4		
5		

#### **NOTES**

The Employer should only specify bulky or specialized items that are critical for the type of project to be implemented, and which may be difficult for the Contractor to obtain quickly.

Examples may include items such as heavy lift cranes and piling barges.

Holding and maintaining construction equipment represents a high capital cost overhead to a Contractor. Consequently, not all competent potential Bidders will keep and maintain such high-value items that are in suitable condition for major contracts. This is particularly so with management contractors, who undertake construction projects mainly by subcontracting.

In most cases, Bidders can readily purchase, lease, or hire equipment.

The availability of such Subcontractors and of the specified equipment should be subject to verification prior to Contract award.

## 10. Appendix 1: Auditing Body Terms of Reference

#### NOTE

The Terms of Reference set out below reflect the main services expected from the Auditing Body. Services can be increased if this is felt required for specific project purposes.

The Employer and the Contractor shall agree as to the conditions of services contract to be used to mobilize the Auditing Body, and obtain the prior approval of the ADB before using those. These terms of reference shall form part of the Auditing Body services contract.

All terms and expressions used below shall have the same meaning as assigned to them under the [state name of the Contract] (hereinafter referred to as the "Contract")

#### 1. Objectives of the Services of the Auditing Body

The Auditing Body shall:

- act as the Auditing Body as defined under the Contract;
- audit and monitor the performance of both the Employer and the Contractor during the Operation Service;
- assist the Parties in avoiding and resolving any difference or Dispute which may occur in relation with the Operation service; and
- act independently and impartially between the Employer and the Contractor.

#### 2. Detailed Tasks to Be Performed By the Auditing Body

In order to fulfill the objectives of its assignment as stated above, the Auditing Body shall perform as a minimum the following tasks (hereinafter referred to as "the Services"):

#### Routine duties

- a) Assess the Contractor's performance of his/her obligations under the Operation Service as defined under the Contract, including but not limited to the following matters:
  - a. Operation of the facility as provided for under the Contract, and in particular achievement of guaranteed performance under the Contract through compliance with Key Performance Indicators set values under the Schedule of Performance Guarantees
  - b. Compliance with Operation Management Requirements
  - c. Compliance with Laws, regulations, codes, standards, and recognized good practices
  - d. Testing
  - e. Health, Safety and Environmental (HSE) and Social matters
  - f. Training of Employer's Personnel
  - g. Quality assurance and control
  - h. Recording and reporting
- b) Assess the Employer's performance of his/her obligations under the Operation Service as defined under the Contract, including but not limited to the following matters:
  - a. Compliance with Operation Management Requirements
  - b. Supply of matters stated under the Contract, such as raw materials, Employer's Equipment, etc.
  - c. Mobilization of required Employer's Personnel for the Contractor to perform his/her training activities
  - d. Payment to the Contractor

- c) Assess the relevance of the Key Performance Indicators readings and recordings, and of the corresponding measurement points setting-up, running and calibration
- d) Assess the relevance of any application of performance damages
- e) Based on items a) to d) above, make improvement recommendations to the Parties in the view of their full compliance with the Contract provisions
- f) Identify any disagreement in between the Parties which has the potential of becoming a Dispute under the Contract, and propose a remediation solution to the Parties

#### Ad hoc duties

- a) Advise and give its opinion to the Parties as to the application of payment deductions and performance damages under the Contract, taking due regard of all relevant circumstances
- b) Advise and give its opinion to the Parties on any matter pertaining to the operation of the Asset Replacement Fund under the Contract
- c) Assist the Parties in the resolution of any disagreement in the view of avoiding that it escalates into a claim then Dispute under the Contract
- d) Act as expert witness in the frame of any Dispute resolution process defined under the Contract, i.e., whether in adjudication or in arbitration

The Auditing Body shall only perform ad hoc duties at the joint request of the Parties, and, for the avoidance of doubt, shall not act upon the request of a Party alone.

#### 3. Deliverables

#### Routine duties

The Auditing Body shall prepare, after the end of each year from the commencement of the Operation Service:

- a draft annual Operation Service performance report, submitted for review by and discussion with the Parties, followed by
- a final annual Operation Service performance report, integrating all comments from the Parties which the Auditing Body may find relevant.

#### Ad hoc duties

The Auditing Body shall issue a report for each ad hoc duty performed under section 2 above, in a format to be agreed with the Parties, or, in case agreement is not reached, in a format determined by the Auditing Body.

Any deliverable of the Auditing Body under the Contract shall be admissible in evidence in Dispute adjudication under GCC Subclauses 20.6 and 20.10, and in arbitration under GCC Subclause 20.8.

#### 4. Timing of the Services

The Auditing Body shall commence its activities at the date of commencement of the Operation Service under the Contract, and shall end those upon completion of the Operation Service Period.

The estimated duration of the Services shall be XX [amend] years from the date of commencement of the Operation Service.

#### 5. Inputs and Expenses for the Services

XX [complete] person-days of work are allocated per year for the Auditing Body Routine duties detailed in section 2 above. Over the total duration of the Services, a total of XX [complete] person-days of work are allocated on Routine duties of the Auditing Body.

The above forms the basis of the lump sum payment to be made by the Contractor to the Auditing Body as per [complete with reference to the relevant Clause/Subclause in the conditions of contract selected by the Parties]

A provision of YY [complete] person-days of work is allocated for the duration of the Services for the execution of Ad hoc duties as detailed in section 2. Payment for these person-days shall be time-based—the actual person-days spent by the Auditing Body, at the joint request of the Employer and the Contractor, shall be multiplied by the rate as defined under [complete with reference to the relevant Clause/Subclause in the conditions of contract selected by the Parties] in order to determine payment to be made to the Auditing Body as per [complete with reference to the relevant Clause/Subclause in the conditions of contract selected by the Parties]

For Routine duties, the Auditing Body shall visit the Site once [complete: a year, or every 6 months]. For Ad hoc duties, Site visits may be held in agreement with the Parties.

Travel, accommodation, and miscellaneous expenses necessarily incurred by the Auditing Body in the execution of its Services shall be paid as per the provisions defined in [complete with reference to the relevant Clause/Subclause in the conditions of contract selected by the Parties].

#### 6. Selection Criteria for the Composition of the Auditing Body

The Auditing Body should be composed of [select either 1 member or 3 members] having relevant skills on:

• [List as appropriate]

#### **NOTE**

Several types of skills could be considered, depending on the project nature, as follows:

- Management experience on a WTP or WWTP, or on a water supply or wastewater network (capacity, type to be indicated)
  as either Plant Manager, Technical Manager, Network Manager, or at another relevant Management position within a Water
  Utility
- Experience in defining and monitoring Key Performance Indicators on a WTP/WWTP
- Experience in managing long-term contractual arrangements—DBO, BOT, Concession, long (i.e., > XX years) Operation and Maintenance contracts
- Experience in implementing contract remedies in performance-based contracts (performance damages, interim payment deductions, calling upon bonds and financial securities, etc.)
- Experience with membrane-based treatment processes
- Experience with sludge digestion and power generation facilities
- Etc.

## 11. Appendix 2: Financial Memorandum

#### **NOTE**

This Appendix shall set out the details of the financial arrangements taken by the Employer for the Contract. Detailed terms of the Financing Agreement in between the Employer and financiers such as the ADB should not be disclosed here to the Contractor, but the structure of the financing can be developed (percentage of ADB funds, percentage of national funds, etc.). The objective of this Appendix is to represent to the Contractor that there is sound and reliable financing secured for the implementation of the Contract.

# Section 7: General Conditions of Contract

The Conditions of Contract comprise two parts, this Section 7—General Conditions of Contract (GCC) and the following Section 8—Particular Conditions of Contract (PCC).

The General Conditions shall be the Conditions of Contract for Design, Build, and Operate Projects, also known as "the Gold Book", 2008 edition, prepared by the *Fédération Internationale des Ingénieurs-Conseil* (FIDIC). They are not reproduced here, and Bidders who do not have a set of the Gold Book can purchase it at the FIDIC Bookshop: www.fidic.org.

The standard text of the General Conditions chosen shall remain intact as it is under the copyright of FIDIC. Any amendments and additions sought to the GCC should be introduced in Section 8 (Particular Conditions of Contract), Part A (Contract Data) and Part B (Special Provisions). Clause numbers in the PCC correspond to those in the GCC.

As per GCC Subclause 1.5 (Priority of Documents), the PCC takes precedence over the GCC. Accordingly, owing to the potentially severe legal consequences of improper changes brought to the Conditions of Contract by means of the PCC, they shall be drafted by those familiar with the project and its requirements, and they shall be legally reviewed by qualified lawyers experienced and familiar with the FIDIC forms of Contract, as well as with the law governing the Contract.

Part A (Contract Data) of the PCC includes data to complement the GCC in a manner similar to the way in which the Bid Data Sheet (BDS) complements the Instructions to Bidders (ITB).

Part B (Specific Provisions) is to be used to introduce country or project-specific provisions, if so required.

# Section 8: Particular Conditions of Contract

The conditions of a Contract comprise the:

- "General Conditions" of Contract (GCC), which form part of the "Conditions of Contract for Design, Build, and Operate Projects" (1st edition, 2008) published by the Fédération Internationale des Ingénieurs-Conseils (FIDIC); and
- The "Particular Conditions" of Contract (PCC) which comprise:
  - The "Particular Conditions Part A Contract Data", which include main data pertaining to the Contract, and
  - "Particular Conditions Part B Special Provisions", which include amendments and additions to such General Conditions, as well as the following Appendixes:
    - Appendix 1: Schedule of Payments,
    - Appendix 2: Performance Damages, and
    - Appendix 3: Insurance Requirements.

The provisions to be found in the Particular Conditions Part B – Special Provisions take precedence over the equivalent provisions found under the same Subclause number(s) in the General Conditions, and the provisions of the Particular Conditions Part A – Contract Data take precedence over the Particular Conditions Part B – Special Provisions.

Any reference to Clauses and Subclauses provided in the Particular Conditions shall be construed as reference to the same Clauses and Subclauses in the General Conditions.

# **Particular Conditions Part A: Contract Data**

#### NOTE

All text italicized and bracketed below is provided to assist those drafting this document and shall be removed before the Bidding Document is finalized.

Subclause	Data to Be Given	Data	
1.1.24	Where the Contract allows for Cost Plus Profit, percentage profit to be added to the Cost:	% [insert the percentage stated in the Contractor's Bid – Schedule of overhead and profit]	
1.1.26	Cut-Off Date (number of days after the Time for Completion of Design-Build):	days [insert the number of days after which the Employer can, at his own election, either terminate the Contract or permit the Contractor to continue the Design-Build for a further period]	
1.1.32	Employer's name and address	[insert Employer's name and address]	
1.1.35	Employer's Representative's name and address:	[insert Employer's Representative name and address]	
1.1.70	Parts of the Works that shall be designated a Section for the purposes of the Contract:	[insert details of each Section under the Contract, if any]	
1.1.78	Time for Completion of Design-Build:	days [insert the number of days within which the Contractor is to complete the Design–Build of the whole of the Works]	
1.1.78	Time for Completion of each Section:	[if any, otherwise remove this and the related lines below, in which case only the Time for Completion of Design-Build for the whole of the Works, as stated above, will apply]	
	Section 1	[insert the description of the Section]	
	Time for Completion	days [insert the number of days within which the Contractor is to complete the Design–Build of the Section]	
		[repeat the above for each Section until the last]	
	Section S	[insert the description of the Section]	
	Time for Completion	days [insert the number of days within which the Contractor is to complete the Design–Build of the Section]	
1.3	Agreed methods of electronic transmission:	[insert electronic transmission systems authorized under the Contract, such as e-mails, or any Electronic Document Management system]	

Subclause	Data to Be Given	Data	
1.3	Address of Employer for communications:	[insert Employer's address for communications under the Contract]	
1.3	Address of Employer's Representative for communications:	[insert Employer's Representative address for communications under the Contract]	
1.3	Address of Contractor for communications:	[insert Contractor's address for communications under the Contract]	
1.4	Contract shall be governed by the law of:	[insert the name of the country in which the Site (or most of it) is located, where the Permanent Works are to be executed]	
1.4	Ruling language:	English	
1.4	Language for communications:	English	
2.1	After receiving the Letter of Acceptance, the Contractor shall be given right of access to all or part of the Site within:	days after Commencement Date [if there are parts of the Site for which different rights of access times are applicable, indicate, for each of those parts, the number of days after Commencement Date within which such rights will be given]	
4.2	Performance Security (as percentages of the Accepted Contract Amount in Currencies):		
	Percent and currency	% of the Accepted Contract Amount in[state currency] [The amount should normally not exceed 10% of the Contract Price in a currency. However, a higher Performance Security may be required due to a seriously unbalanced or front-loaded bid in accordance with ITB 37.5, or due to an abnormally low bid in accordance with ITB 40.4(b)] [Repeat the above for each currency used under the Contract]	
5.1	Period for notification of errors, faults, and other defects are:	days [The Employer should give a reasonable time for the Contractor to be able to properly scrutinize the Employer's Requirements and the items of reference, and should consider no less than 90 days for this period]	
6.5	Locally recognized days of rest		
	Normal working hours on the Site:		
8.2	Period of the Operation Service:	years [note that the FIDIC Gold Book default position is 20 years – shorter periods are possible, but ideally this duration should be longer than the majority of the facility equipment expected life-span]	
9.2	Time for Completion of Design— As defined above under Subclause 1 Build:		

Subclause	Data to Be Given	Data	
9.2	Time for Completion of Design-Build for each Section:	As defined above under Subclause 1.1.78	
9.6	Delay damages (percent of the Accepted Contract Amount per day of delay):	% [The delay damages are usually set between 0.05% and 0.1% per day]	
9.6	Maximum amount of delay damages (percent of the Accepted Contract Amount):	10% [The maximum amount of delay damages generally does not exceed 10% of the Accepted Contract Amount]	
10.6(a)	Maximum compensation payable by Contractor:	_	
10.6(b)	Maximum compensation payable by Employer:	% of the Accepted Contract Amount for Operation Service.  [Ideally this should mirror the cap defined under SC 10.6(a) above]	
13.5	Percentage rate to be applied to Provisional Sums:	As defined in the Price Schedules.	
14.2	Amount of Advance Payment (percent of Accepted Contract Amount):	As stated in Appendix 1 (Schedule of Payments) to the PCC Part B	
14.2	Currencies of payment if different to the currencies quoted in the Contract	As stated in Appendix 1 (Schedule of Payments) to the PCC Part B	
14.3	Percentage of Retention:	%	
14.3	Limit of Retention Money:	% of the Accepted Contract Amount [The limit of retention money should generally not exceed 10% of the Accepted Contract Amount]	
14.7	Minimum Amount of Interim Payment Certificate	% of the Accepted Contract Amount [This threshold applies to avoid implementing the contractual machinery for certification and payment for too small amounts. A threshold of 1 or 2% is generally found suitable].	

Subclause	Data to Be Given	Data	
14.9	Financing charges for delayed payment (annual rate expressed in percentage)	% [State a percentage only if different than under GCC SC 14.9 / otherwise state "As per GCC Subclause 14.9]	
14.17	Currencies for payment of Contract Price:	As specified for the Accepted Contract Amount in the Letter of Acceptance	
14.17	Proportions of Local and Foreign Currencies are:	As specified for the Accepted Contract Amount in the Letter of Acceptance	
14.17	Payment of damages shall be:	As stated in Subclause 9.6 above and in Appendix 2 (Performance Damages) to the PCC Part B	
14.17	Rate of Exchange		
14.19	Maximum amount of Maintenance Retention Fund:	% of the Accepted Contract Amount [The default position is 5%]	
17.1 b (iii)	Operation of forces of nature allocated to the Contractor:	[See the comments made under Appendix 3 to the PCC Part B]	
17.8	Total liability of the Contractor shall not exceed:	% of the Accepted Contract Amount [The default position is 100%]	
19	Insurance	As stated in Appendix 3 (Insurance Requirements)	
20.3	Date of appointment of DAB:	28 days from the Commencement Date.	
20.3	The DAB shall comprise	Member(s) [State either 1 or 3. 3 members are recommended on large complex projects, and on projects of value greater than 50 MUSD. Detailed guidance for selection of the right number can be found at <a href="http://www.jica.go.jp/activities/schemes/finance_co/procedure/guideline/pdf/DisputeBoardManual_201203_e.pdf">http://www.jica.go.jp/activities/schemes/finance_co/procedure/guideline/pdf/DisputeBoardManual_201203_e.pdf</a> ]	
20.4	Appointing entity (official) for DAB members, if not agreed between Parties  The President of FIDIC, or a person a him/her.		
20.8(a)(i)	Arbitration institution	[If any - State ICC or SIAC, or any other institution of international standing and reputation – otherwise state "None"]	
20.8(a)(ii)	International arbitration in accordance with the arbitration rules of the UNCITRAL  [Yes/No - state Yes if it is not to institutional arbitration under Subclause 20.8(a)(i option]		
20.8	Language used for arbitration proceedings	Language for communications defined under Subclause 1.4 [Law and Language]	

## **Particular Conditions Part B: Special Provisions**

#### **NOTES**

Provisions in the General Conditions of Contract may have to be amended to suit the needs of the project and/or the specific requirements of the Employer to accommodate any project specific legal, regulatory, financial, administrative, and/or procedural matters which are to be observed by the Parties when executing the Contract.

Before incorporating any new or changed clauses through these Particular Conditions Part B, the wording must be carefully checked to ensure that it is wholly suitable for the particular circumstances and that it does not unintentionally alter the meaning or operation of other clauses in the Contract, and does not inadvertently change the obligations assigned to the Parties or the allocation of risks as in between them. Furthermore, it is important that new clauses do not create and ambiguity or misunderstanding in the rest of the document.

Errors, ambiguities, and discrepancies within Contract documents are the most frequent causes of construction disputes worldwide.

As per GCC Subclause 1.5, these Particular Conditions Part B have a high order of precedence within the Contract documents when it comes to interpretation purposes.

Accordingly, owing to the potentially severe legal consequences of improper changes brought to these Particular Conditions Part B, they should be drafted by those familiar with the project and its requirements, and they should be legally reviewed by qualified lawyers experienced and familiar with the FIDIC forms of Contract, as well as with the law governing the Contract.

#### **NOTES**

All text in italic below detail and explain the changes brought to the terms of the General Conditions of Contract. The non-italicized text in quotation marks reflects the existing, amended, or supplemented terms of the General Conditions of Contract, as the context requires. Guidance notes are inserted for the attention of the drafters and are to be removed before finalizing this document.

Those changes detailed below shall be systematically used without amendments on all ADB financed DBO Contracts, unless specific prior approval from the ADB is obtained.

However, these are not the only changes to be brought to the General Conditions, since, as highlighted above, project specific requirements are to be reflected under these Particular Conditions Part B—those are under the responsibility of the Employer.

#### **NOTES**

This note aims to summarize and explain the changes brought by the ADB to the GCC provisions through this PCC Part B.

Provisions have been added to the GCC, or have amended the GCC, to:

- comply with ADB's specific requirements, such as:
- o Right of inspections and audit from the ADB under Subclause 1.16
- o Make express reference to eligible source countries for entities issuing securities (Subclause 4.2), Subcontractors (Subclause 4.4), Goods (Subclause 7.9), and insurances (Subclause 19.1) through a specific Appendix (4) which reflects the list given under Section 5 of the Bidding Document. This was necessary since otherwise Section 5 is not, strictly speaking, a Contract document.
- o Use of local Subcontractors (Subclause 4.4) and local workforce (Subclause 6.1) as much as practicable, in the view that the ADB financing contributes to local employment
- o ADB Safeguard policy under Subclause 4.26, and ADB specific social, environmental, labour and HIV-AIDS prevention requirements under Subclause 4.18, Clause 6, Subclause 8.3, Subclause 9.7
- o Termination for corrupt and fraudulent practices, as per the definitions of those as given under Subclause 15.8
- o Possible recourse to domestic arbitration if the Contract is with domestic contractors. International arbitration where with international contractors, and under several possible methodologies—institutional arbitration (such as with Singapore International Arbitration Centre, or with International Chamber of Commerce) or ad hoc arbitration (with UNCITRAL Rules), i.e., not administered by an institution
- Harmonize the terminology between the bidding procedures and the contract wordings:
  - o Subclause 1.1 introduces the concept of Price Schedules and Schedule of Performance Guarantees which are developed in Sections 1 to 4 of the Bidding Document
  - o Subclause 1.2 defines that "bid" and "tender" are synonymous terms
  - o Payment of reasonable profit, for certain events such as claims or Variations, is now defined under the Contract through the Schedule of overhead and profit, to avoid possible disputes in between the Parties as to what reasonable profit is
- Reflect additional project management measures which are found relevant in accordance with current construction management practices
  - o Holding of management meetings under Subclause 3.6, which are to be detailed by the Employer in the Employer's Requirements. Typically, this can incorporate, as a minimum:
    - monthly progress meetings to be held upon release of the monthly progress report under Subclause 4.21, and
    - weekly technical Site meetings.

Consideration can also be given to other specific meetings, such as claim meetings, risk management meetings, etc.

- o Use of on-site log book under Subclause 4.27.
- o No work on site authorized under Subclause 9.1 until such time the Contractor's insurances for the Design-Build Period as per Clause 19 have been taken by the Contractor. There is a similar provision for the start of the Operation Service, in relation with the insurances to be taken by the Contractor during that Period. This is a safe provision for the Employer, in particular with due regard to the possible personal injury, physical damage, or economic loss which the Contractor's activities may cause to the Employer and/or third parties.
- Adapt the Performance Security requirements under Subclause 4.2 to a more limited period than under the Gold Book, where
  the latter foresees that it is to remain valid over the Contract life. International practices cast a doubt as to whether such
  long-term financial security (running possibly over decades) requirement is achievable and recommendable in practice, since
  operation services contract are generally not subject to this, and such requirement would bring long-term financial constraints
  to the Contractor which would inevitably be reflected into the Contract Price, hence to the expense of the Employer. The
  Performance Security duration has then been made to last until the end of the Retention Period, which is one year after the
  date stated in the Commissioning Certificate (which goes for the acceptance of the Design-Build of the Works as per Subclause
  11.7). This was made under the rationale that:

- o There is a Maintenance Retention of 5% which is constituted out of the value of each interim payment to the Contractor over the Operation Service Period, as per Subclause 14.19
- o The first half of the Retention Money, which is progressively built up over the Design-Build Period under the Contract, is now (through PCC) released at the end of the Retention Period (1 year after the date stated in the Commissioning Certificate), and the second part is released at the end of the Operation Service Period, while initially under the GCC the Retention Money was fully released at the end of the Retention Period. It is consequently now only released in half at that stage.
- o An additional Subclause (4.2A) now requires the Contractor to obtain a parent company guarantee

It was found that the above provides for a reasonable amount of security to the Employer already.

- Introduce a detailed performance damages mechanism, further expanding on the provisions of the Gold Book through a dedicated Appendix 2. Performance damages apply in case of failure to pass the Tests on Completion of Design-Build under Subclause 11.4, during the Operation Service Period under Subclause 10.7, as well as at the end of it (at Tests Prior to Contract Completion stage under Subclause 11.11) for any damages the Employer may suffer from in future (after Contract completion) caused by the Contractor's failure to meet his/her performance guarantees.
- Introduce a payment regime, through Appendix 1: Schedule of Payments, which:
  - o reflects ADB practices when paying for the supply, delivery, and installation of Plant and Materials (Price Schedules 1 to 4); and
  - o cover the specificities of such DBO Contracts (Operation Service, Asset Replacement Fund and Schedule Price Schedules 5 to 7).
- Reflect the payment of DAB services through Provisional Sums under Subclause 13.5, in line with current practices adopted by other International Financing Institutions such as JICA.
- Further stress the dispute prevention capacities of the DAB under Subclause 20.5, since international practices increasingly recognize the positive use of a standing DAB not only to resolve/decide on disputes, but also to prevent disputes from arising in the first place. Such use of the DAB is found to be a sound value for money measure for the Parties hence for the project. While delivering dispute prevention duties, Subclause 20.5 makes it clear that the DAB shall not meet any of the Parties alone ("in caucus"), but always meet the Parties jointly. This is to avoid any potential subsequent challenge to a DAB decision for breach of natural justice (where it can be argued that private discussions with a Party, without the other Party being present and being given an opportunity to comment/object, could convey material impressions to the DAB which subsequently influence any decision it issues), as has been experienced in some jurisdictions.
- Give to the Parties the possibility to refer any Dispute to the DAB under Subclause 20.6, as otherwise the Gold Book imposes that such referral is only made upon a dissatisfaction expressed on a claim for time and/or money under Subclause 20.1 or 20.2. Indeed, there are certain matters of potential Dispute between the Parties where it is found beneficial to leave an option for early Dispute referral to the DAB (issue of a Commissioning Certificate under Clause 11, an Employer's Representative's instruction to remove personnel under Subclause 6.9, a payment certification under Subclause 14.7, etc.), without entering into the time and costs of a formal claim process under either Subclause 20.1 and Subclause 20.2. Subclause 20.6 now allows for such early referrals, as provided under the FIDIC 1999 Suite of Contracts and in the FIDIC MDB 2010 Harmonized Edition used in the ADB SBD for Works.
- The DAB under the Operation Service Period is made to be on ad hoc basis under Subclause 20.10, i.e., mobilized only if and when a dispute arises between the Parties. The Gold Book foresees a standing 1-member DAB, i.e., delivering routine duties (Site visits, review of documentation) even when there is no Dispute referred to it, but owing to the role of the Auditing Body under Subclause 10.3, and to the varying Operation Service Periods which will be encountered in practice (from 1-2 years up to 20 years or more), it was not found suitable to impose such standing mechanism.

Note that the Employer shall only amend those standard amendments and additions to the GCC in case:

- those standard amendments set out in this document are not found suitable for his/her project specific needs, and
- upon specific prior approval of the ADB.

Reasons for amendments and additions can for instance be as follows:

• For Operation Service Periods of less than 5 years, there is no Asset Replacement Schedule and Fund and all required replacement is at the cost of the Contractor and meant to be included in the Contract Price. Subclause 14.5 will not apply

anymore, Subclause 14.18 should be amended, and there shall be no Price Schedule 7. The following Subclauses shall also be amended accordingly: 1.1.1; 1.1.2; 1.1.3; 1.1.68; 2.4; 11.8; 14.1; 14.3; 14.13; as well as Appendix 1: Schedule of Payments.

- If it is wished to revert to a standing DAB for the Operation Service Period. Subclause 20.10 should then be amended
  accordingly.
- If it is found preferable to impose a Performance Security as foreseen in the Gold Book, i.e., being maintained in effect until Contract completion. Or to impose minimum standard ratings (Moody, S&P, etc.) for the issuing bank. Subclause 4.2 should then be amended accordingly.
- If design and build progress milestones are deemed relevant, typically in cases where phasing of the Design-Build of the Works, or a Section, is required. Use of those is very widely spread in the construction industry, with specific delay damages which can be attached to key progress milestones to act as a deterrent for the Contractor to miss those, in addition to the main milestone which is to complete the whole of the Works within the Time for Completion of Design-Build set in the Contract. If this is deemed required for specific project purposes, then the use of such progress milestones could be introduced, in which case specific amendments should be made, such as: Definitions under Subclause 1.1 (for introducing Milestone and Milestone Completion Certificate), Time for Completion of Design-Build under Subclause 9.2 (for the whole of the Works, for Section(s) if any, and now for Milestones as well), obtaining of Milestone Completion Certificates to be reflected under Subclause 11.5, etc.
- If found required to better control the possible adverse effects of Employer's Representative's instructions, by putting restrictions to the Contractor's obligations to comply with an Employer's Representative instructions under Subclause 3.3. This can be made by inserting an obligation for the Contractor to give an early warning to the Employer in case the Contractor believes that complying with such instructions would lead to an increase of the Contract Price, would entitle the Contractor to an extension of the Time for Completion of Design-Build and/or would have an adverse effect on any of his/her obligations under the Contract. Failure by the Contractor to give such early warning would then make the Contractor subject to the risk and cost of proceeding with the instruction. Such amendments are often made to construction contracts, especially when the Employer's Representative is an independent entity from the Employer. This would require amending Subclause 3.3, with clear references, for the avoidance of doubt, to the Variation process under Clause 13.
- If the insurance due diligence process, at project preparation stage, reveals that the Employer would be better off taking directly some insurances, instead of the Contractor doing so, then Clause 19 and Appendix 3 to the PCC Part B ought to be amended accordingly by the Employer.

Subclause No.	Subclause Title	Subclause Contents	
CLAUSE 1 - GEN	CLAUSE 1 – GENERAL PROVISIONS		
		Replace this Subclause in its entirety by the following:	
1.1.66	Retention Period	"Retention Period" means the period of 1 year after the date stated in the Commissioning Certificate."	
		Add new Subclause as follows:	
1.1.84	ADB	"'ADB' means the Asian Development Bank, the institution financing the Contract."	
		Add new Subclause as follows:	
1.1.85	Price Schedules	"'Price Schedules' means those Schedules incorporated in the Contract showing the manner in which the Contract Price is broken down into Rates and Prices."	
		Add new Subclause as follows:	
1.1.86	Schedule of Performance Guarantees	"'Schedule of Performance Guarantees' means the Schedule incorporated in the Contract detailing the performance standards to be achieved by the Contractor under the Contract."	
		Add the following subparagraphs, after subparagraph (f):	
1.2	Interpretation	"(g) The word 'Tender' or 'tender' is synonymous with 'Bid' or 'bid', and the words 'Letter of Tender' are synonymous with 'Letter of Bid', and 'tender documents' with 'Bidding Documents'; and (h) The words 'Contractor's Proposal' are synonymous with 'Contractor's Technical Proposal'."	
		Replace the entire third paragraph with the following	
1.9	Care and Supply of Documents	"If a Party becomes aware of an error or defect in a document which was prepared for use in executing the Works, the Party shall promptly give notice to the other Party of such error or defect."	
		Add new Subclause as follows:	
1.16	Inspections and audit by the ADB	"The Contractor shall permit the ADB and/or persons appointed by the ADB to inspect the Site and/or the Contractor's accounts and records relating to the performance of the Contract and to have such accounts and records audited by auditors appointed by the ADB if required by the ADB.	

The Contractor shall deliver the Performance Security to the Employer within 28 days after receiving the Letter of Acceptance, and shall send a copy to the Employer's Representative. The Performance Security shall be issued by an entity and from within a country (or other jurisdiction) approved by the Employer, and shall be based on the sample form included in the tender documents, or in another form approved by the Employer. The entity shall have its origin in any eligible source country listed in Appendix 4 to these Particular Conditions Part B. If the entity issuing the Performance Security is located outside the country of the Employer, it shall have a correspondent financial institution located in the country of the Employer to make it enforceable.

Without limitation to the provisions of the rest of this Subclause, whenever any portion of the Contract Price payable in a specific currency increases by more than 25 percent, because of one increase or multiple increases as a result of Variations, the Contractor shall, at the Employer's Representative's request, promptly increase the value of the Performance Security in that currency by an equal percentage.

The Contractor shall ensure that the Performance Security is valid and enforceable until the end of the Retention Period. If the terms of the Performance Security specify its expiry date, and the Retention Period has not come to an end by the date 28 days prior to the expiry date, the Contractor shall extend the validity of the Performance Security until the end of the Retention Period. Failure by the Contractor to maintain the validity of the Performance Security shall be grounds for termination in accordance with Subclause 15.2 [Termination for Contractor's Default].

The Employer shall not make a claim under the Performance Security except for amounts to which the Employer is entitled under the Contract in the event of:

- (a) failure by the Contractor to extend the validity of the Performance Security as described in the preceding paragraph, in which event the Employer may claim the full amount of the Performance Security;
- (b) failure by the Contractor to pay the Employer an amount due, as either agreed by the Contractor or determined under Subclause 3.5 [Determinations] or Clause 20 [Claims, Disputes and Arbitration], within 42 days after this agreement or determination;
- (c) failure by the Contractor to remedy a default within 42 days after receiving the Employer's Notice requiring the default to be remedied; or
- (d) circumstances which entitle the Employer to terminate under Subclause 15.2 [*Termination for Contractor's Default*], irrespective of whether Notice of termination has been given.

The Employer shall indemnify and hold the Contractor harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from a claim under the Performance Security which the Employer was not entitled to make.

The Employer shall return the Performance Security to the Contractor within 21 days after the end of the Retention Period."

4.2 Performance Security

		Add new Subclause as follows:
		Add new Subclause as Jollows:
		"The Contractor shall arrange for his/her ultimate parent company (or any other parent company as the Employer may approve in his/her absolute discretion, acting reasonably) to provide to the Employer a parent company guarantee in the sample form set out in the tender documents, or in another form approved by the Employer, within 28 days after receiving the Letter of Acceptance, and shall send a copy to the Employer's Representative.
4.2A	Parent Company Guarantee	Where the Contractor comprises a consortium of two or more entities, they shall all cause their respective ultimate parent companies (or other parent company or parent companies approved by the Employer in his/her absolute discretion, acting reasonably) to provide a joint and several parent company guarantee in accordance with this Subclause.
		The Contractor shall, if requested by the Employer in his/her absolute discretion, provide to the Employer financial or other information the Employer may require to satisfy himself/herself that the parent company is an appropriate entity with sufficient means to satisfy the parent company guarantee."
		Add the following at the end of this Subclause:
4.3	Contractor's Representative	"If the Contractor's Representative or such persons are not fluent in the said language, the Contractor shall make competent interpreters available during all working hours in a number deemed sufficient by the Employer's Representative, acting reasonably."
		Add the following at the end of this Subclause:
		"The Contractor shall ensure that the requirements imposed on the Contractor by Subclause 1.12 [Confidential Details] apply equally to each Subcontractor.
		Where practicable, the Contractor shall give fair and reasonable opportunity for contractors from the Country to be appointed as Subcontractors.
		The Contractor shall only employ person from any eligible source country as listed under Appendix 4 to these Particular Conditions Part B.
4.4	Subcontractors	The Contractor shall not employ any person which is listed either on:  • The United Nations Security Council Sanctions Lists, or  • The Asian Development Bank Anticorruption Sanctions List both accessible on the related organisation Internet Web sites, and as amended from time to time.
		In case of failure by the Contractor to comply with this requirement, and, for the avoidance of doubt, irrespective of whether the Employer's Representative has given prior consent under this Subclause, the Contractor shall forthwith cease any business dealing with any ineligible Subcontractor and replace such Subcontractor by one having its origin in an eligible source country, all at the Contractor's risk and cost. Additionally, the Employer, at his/her own election, shall be entitled to terminate the Contract in accordance with Subclause 15.2 [Termination by Employer]."

		Add the following as first contained of this Cultural	
		Add the following as first sentence of this Subclause:  "Without prejudice to any other obligation under or in connection with the	
4.18	Protection of the Environment	Contract, the Contractor shall comply with all environmental requirements stated in the Employer's Requirements, and in particular with those which may be set forth in an initial environmental examination and/or an environmental impact assessment and an environmental management plan, as well as in any safeguards monitoring report which may be included in the Employer's Requirements."	
		Add new Subclause as follows:	
		"The Contractor shall comply with:	
4.26	Compliance with ADB Safeguard Policy Statement	<ul> <li>(i) the measures and requirements set forth in any environmental management plan and/or resettlement action plan that may be included in the Employer's Requirements; and</li> <li>(ii) any corrective or preventive actions set out in safeguards monitoring reports that the Employer will prepare from time to time."</li> </ul>	
		Add new Subclause as follows:	
4.27	On-Site Log Book	"The Contractor shall maintain on Site a log book, in a form approved by the Employer's Representative and which shall integrate the fields required in the Employer's Requirements. It will be used to record the Contractor's activities on a daily basis, and any instruction from the Employer's Representative given on Site. The Employer's Personnel shall have the right of access to this document at all times, and one copy of each daily record shall be promptly provided by the Contractor to the Employer's Representative."	
CLAUSE 5 - DESIGN			
		In the third paragraph of this Subclause, replace:	
5.2	Contractor's Documents	"The Contractor's Documents which require approval from the Employer's Representative shall be as listed in the Contract Data."  by	
		"The Contractor's Documents which require approval from the Employer's Representative shall be as listed in the Employer's Requirements."	
CLAUSE 6 – STAI	CLAUSE 6 - STAFF AND LABOUR		
		Add the following at the end of this Subclause:	
6.1	Engagement of Staff and Labour	"The Contractor shall, to the extent practicable and reasonable, employ staff and labour with appropriate qualifications and experience from sources within the Country."	

	1	
		Add the following at the end of this Subclause:
6.2	Rates of Wages and Conditions of Employment	"The Contractor shall inform the Contractor's Personnel about their liability to pay personal income taxes in the Country in respect of such of their salaries, wages, allowances and any benefits as are subject to tax under the Laws of the Country for the time being in force, and the Contractor shall perform such duties in regard to such deductions thereof as may be imposed on him/her by such Laws."
		Add the following as first sentence of this Subclause:
		"Without prejudice to any other obligation under or in connection with the Contract, the Contractor shall comply with all health and safety requirements stated in the Employer's Requirements."
		Add the following at the end of this Subclause:
6.7	Health and Safety	"HIV-AIDS Prevention. The Contractor shall conduct an HIV-AIDS awareness programme via an approved service provider, and shall undertake such other measures as are specified in this Contract to reduce the risk of the transfer of the HIV virus between and among the Contractor's Personnel and the local community, to promote early diagnosis and to assist affected individuals.
		The Contractor shall throughout the Design–Build Period: (i) conduct information, education and consultation communication campaigns, at least every other month, addressed to all the Site staff and labour (including all the Contractor's Personnel and Employer's Personnel) and to the immediate local communities, concerning the risks, dangers and impact, and appropriate avoidance behaviour with respect to, of Sexually Transmitted Diseases (STD) – or Sexually Transmitted Infections (STI) in general and HIV/AIDS in particular; (ii) provide male or female condoms for all Site staff and labour as appropriate; and (iii) provide for STI and HIV/AIDS screening, diagnosis, counselling and referral to a dedicated national STI and HIV/AIDS programme, (unless otherwise agreed) of all Site staff and labour.
		The Contractor shall include in the programme to be submitted under Subclause 8.3 [Programme] an alleviation programme for Site staff and labour and their families in respect of Sexually Transmitted Infections (STI) and Sexually Transmitted Diseases (STD) including HIV/AIDS. The STI, STD and HIV/AIDS alleviation programme shall indicate when, how and at what cost the Contractor plans to satisfy the requirements of this Subclause and the Employer's Requirements. For each component, the programme shall detail the resources to be provided or utilized and any related subcontracting proposed. The programme shall also include provision of a detailed cost estimate with supporting documentation. Payment to the Contractor for the preparation and implementation of this programme shall be made through the Provisional Sum dedicated for this purpose, in accordance with the Employer's Representative instructions under Subclause 13.5 [Provisional Sums]."

Add the following Subclauses 6.12 to 6.25		
6.12	Foreign Personnel	"The Contractor may bring into the Country any foreign personnel who are necessary for the design, the execution of the Works and/or the provision of the Operation Service to the extent allowed by the applicable Laws. The Contractor shall ensure that these personnel are provided with the required residence visas and work permits. The Employer will, if requested by the Contractor, use his/her best endeavours in a timely and expeditious manner to assist the Contractor in obtaining any local, state, national or government permission required for bringing in the Contractor's personnel.
		The Contractor shall be responsible for the return of these personnel to the place where they were recruited or to their domicile. In the event of the death in the Country of any of these personnel or members of their families, the Contractor shall similarly be responsible for making the appropriate arrangements for their return or burial."
6.13	Supply of Foodstuffs	"The Contractor shall arrange for the provision of a sufficient supply of suitable food as may be stated in the Employer's Requirements at reasonable prices for the Contractor's Personnel for the purposes of or in connection with the Contract."
6.14	Supply of Water	"The Contractor shall, having regard to local conditions, provide on the Site an adequate supply of drinking and other water for the use of the Contractor's Personnel."
6.15	Measures against Insect and Pest Nuisance	"The Contractor shall at all times take the necessary precautions to protect the Contractor's Personnel employed on the Site from insect and pest nuisance, and to reduce the danger to their health. The Contractor shall comply with all the regulations of the local health authorities, including use of appropriate insecticide."
6.16	Alcoholic Liquor or Drugs	"The Contractor shall not, otherwise than in accordance with the Laws of the Country, import, sell, give, barter or otherwise dispose of any alcoholic liquor or drugs, or permit or allow importation, sale, gift, barter or disposal thereof by Contractor's Personnel."
6.17	Arms and Ammunition	"The Contractor shall not give, barter, or otherwise dispose of, to any person, any arms or ammunition of any kind, or allow Contractor's Personnel to do so."
6.18	Festivals and Religious Customs	"The Contractor shall respect the Country's recognized festivals, days of rest and religious or other customs."
6.19	Funeral Arrangements	"The Contractor shall be responsible, to the extent required by local regulations, for making any funeral arrangements for any of his/her local employees who may die while engaged upon the Works."
6.20	Forced Labour	"The Contractor shall not employ forced labour, which consists of any work or service, not voluntarily performed, that is exacted from an individual under threat of force or penalty, and includes any kind of involuntary or compulsory labour, such as indentured labour, bonded labour or similar labour-contracting arrangements."

6.21	Child Labour	"The Contractor shall not employ children in a manner that is economically exploitative, or is likely to be hazardous, or to interfere with, the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral, or social development. Where the relevant labour laws of the Country have provisions for employment of minors, the Contractor shall follow those laws applicable to the Contractor. Children below the age of 18 years shall not be employed in dangerous work."
6.22	Employment Records of Workers	"The Contractor shall keep complete and accurate records of the employment of labour at the Site. The records shall include the names, ages, genders, hours worked and wages paid to all workers.  During the Design–Build Period, these records shall be summarized on a monthly basis and submitted to the Employer's Representative, and these records shall be available for inspection by the ADB's auditors during normal working hours. These records shall be included in the details to be submitted by the Contractor under Subclause 6.10 [Records of Contractor's Personnel and Equipment]."
6.23	Workers' Organisations	"In countries where the relevant labour laws recognize workers' rights to form and to join workers' organisations of their choosing without interference and to bargain collectively, the Contractor shall comply with such laws. Where the relevant labour laws substantially restrict workers' organisations, the Contractor shall enable alternative means for the Contractor's Personnel to express their grievances and protect their rights regarding working conditions and terms of employment. In either case described above, and where the relevant labour laws are silent, the Contractor shall not discourage the Contractor's Personnel from forming or joining workers' organisations of their choosing or from bargaining collectively, and shall not discriminate or retaliate against the Contractor's Personnel who participate, or seek to participate, in such organisations and bargain collectively. The Contractor shall engage with such workers' representatives. Workers' organisations are expected to fairly represent the workers in the workforce."
6.24	Nondiscrimination and Equal Opportunity	"The Contractor shall not make employment decisions based on personal characteristics unrelated to inherent job requirements. The Contractor shall base the employment relationship on the principle of equal opportunity and fair treatment, and shall not discriminate with respect to aspects of the employment relationship, including recruitment and hiring, compensation (including wages and benefits), working conditions and terms of employment, access to training, promotion, termination of employment or retirement, and discipline. In countries where the relevant labour laws provide for nondiscrimination in employment, the Contractor shall comply with such laws. When the relevant labour laws are silent on nondiscrimination in employment, the Contractor shall meet this Subclause's requirements. Special measures of protection or assistance to remedy past discrimination or selection for a particular job based on the inherent requirements of the job shall not be deemed discrimination."

6.25	Respectful Work Environment	"The Contractor shall ensure that its employees and Subcontractors observe the highest ethical standards and refrain from any form of bullying, discrimination, misconduct and harassment, including sexual harassment and shall, at all times, behave in a manner that creates an environment free of unethical behavior, bullying, misconduct and harassment, including sexual harassment. The Contractor shall take appropriate action against any employees or Subcontractors, including suspension or termination of employment or sub-contract, if any form of unethical or inappropriate behavior is identified.  The Contractor shall conduct training programmes for its employees and Subcontractors to raise awareness on and prevent any form of bullying, discrimination, misconduct and harassment including sexual harassment, and to promote a respectful work environment. The Contractor shall keep an up to date record of its employees and Subcontractors who have attended and completed such training programmes and provide such records to the Employer at its first written request.		
CLAUSE 7 - PLAN	CLAUSE 7 – PLANT, MATERIALS AND WORKMANSHIP			
		Add the following new Subclause		
7.9	Origin of Goods	"Goods shall have their origin in any eligible source country listed in Appendix 4 to these Particular Conditions Part B. In case of failure by the Contractor to comply with this requirement, he/she shall forthwith remove the ineligible Goods from the Site and replace those with Goods having their origin in an eligible source country, all at the Contractor's risk and cost. For the avoidance of doubt, the Employer's Representative shall be entitled to withhold corresponding payment certification in accordance with Subclause 14.7 [Issue of Advance and Interim Payment Certificates] until such time replacement Goods are provided in accordance with the Contract."		
CLAUSE 8 – COM	MENCEMENT DAT	E, COMPLETION AND PROGRAMME		
8.3	Programme	Add the following subparagraph after subparagraph (e):  "(f) the STI/STD and HIV/AIDS alleviation programme in accordance with Subclause 6.7 [Health and Safety]"		
8.6	Contract Completion Certificate	Replace in its entirety the 1 <sup>st</sup> sentence in the 2 <sup>nd</sup> paragraph by the following:  "The Employer's Representative shall, subject to Subclause 11.8 [Joint Inspection Prior to Contract Completion], Subclause 10.8 [Completion of Operation Service], Subclause 14.18 [Asset Replacement Fund] and Subclause 4.23 [Contractor's Operations on Site], issue the Contract Completion Certificate to the Contractor, with a copy to the Employer, within 21 days after the last day of the Contract Period."		

CLAUSE 9 - DESIGN-BUILD		
		Add the following after the last sentence of this Subclause:
9.1	Commencement of Design–Build	"There shall be no work authorized to proceed on Site until such time the Contractor has effected the insurances defined under Subclause 19.2 [Insurances to be provided by the Contractor during the Design-Build Period] in accordance with the provisions under Subclause 19.1 [General Requirements]."
9.3	Extension of Time for Completion of Design-Build	After "exceptionally adverse climatic conditions", add the following: "as defined in the Employer's Requirements"
9.7	Suspension of Work	<ul> <li>Add the following after the last sentence of this Subclause:</li> <li>"As an example, and without limitation to other possible causes, any suspension of work caused by any failure from the Contractor to comply with the obligations stated:</li> <li>under Subclause 4.8 as to safety procedures,</li> <li>under Subclause 4.9 as to the quality assurance,</li> <li>under Subclause 4.18 as to the protection of the environment, or</li> <li>under Subclause 6.7 as to health and safety,</li> <li>shall be considered as cause of suspension which is the responsibility of</li> </ul>
CLAUSE 10 OD	EDATION SERVICE	the Contractor".
CLAUSE 10 – OPERATION SERVICE  Add the following after		Add the following after the second paragraph:
10.2	Commencement of Operation Service	"The Operation Service shall not commence until such time the Contractor has effected the insurances defined under Subclause 19.3 [Insurances to be provided by the Contractor during the Operation Service Period] in accordance with the provisions under Subclause 19.1 [General Requirements]."
		Replace this Subclause in its entirety by the following:
10.7	Failure to Reach Production Outputs	"In the event that the Contractor fails to achieve any of the performance standards defined in the Schedule of Performance Guarantees, the Parties shall jointly establish the cause of such failure.  (a) If the cause of the failure lies with the Employer or any of his/her servants or agents, then, after consultation with the Contractor, the Employer shall give written instruction to the Contractor of the measures which the Employer requires the Contractor to take. If the Contractor suffers any additional cost as a result of the failure or the measures instructed by the Employer, the Employer, subject to Subclause 3.5 [Determinations] and Subclause 20.1 [Contractor's Claims], shall pay the Contractor his/her Cost Plus Profit.  (b) If the cause of the failure lies with the Contractor then, after due consultation with the Employer, the Contractor shall take all steps necessary to restore the output to the levels required under the Contract.

10.7	Failure to Reach Production Outputs	The Contractor, subject to Subclause 3.5 [Determinations], shall pay the Employer the performance damages specified in Appendix 2 to these Particular Conditions Part B for this failure.  These performance damages shall be the only damages due from the Contractor for such failure, other than in the event of termination under Clause 15 [Termination by Employer] and of failure to pass Tests Prior to Contract Completion under Subclause 11.11 [Failure to Pass Tests Prior to Contract Completion].  The payment of such performance damages shall not relieve the Contractor of any duties, obligations or responsibilities he/she has under the Contract, including, for the avoidance of doubt, the obligation to ensure that the Works remain in accordance with the Contract during the Operation Service Period.  If the failure continues for a period of more than 84 days and the Contractor is unable to achieve the required production output, the Employer may either:  (i) continue with the Operation Service at a reduced level of compensation determined in accordance with Subclause 3.5 [Determinations], in lieu of applying the performance damages defined above; or,  (ii) if the production outputs fail to reach the minimum values required in the Schedule of Performance Guarantees, give Notice to the Contractor not less than 56 days prior to terminating the Contractor, in accordance with Subclause 15.2 [Termination for Contractor's Default]. In such an event, the Employer shall be free to continue the Operation Service himself/herself or by others."
CLAUSE 11 - TES	STING	
11.1	Testing of the Works	Replace "Schedule of Guarantees" by "Schedule of Performance Guarantees".
11.4	Failure to Pass Tests on Completion of Design–Build	<ul> <li>Replace this Subclause in its entirety by the following:</li> <li>"If the Works, or a Section, fail to pass the Tests on Completion of Design-Build repeated under Subclause 11.3 [Retesting of the Works] the Employer's Representative shall be entitled to: <ul> <li>(a) order further repetition of Tests on Completion of Design-Build under Subclause 11.3 [Retesting of the Works];</li> <li>(b) issue a Notice under Subclause 15.1 [Notice to Correct]; or</li> <li>(c) issue the Commissioning Certificate to the Contractor subject to the payment of performance damages as per the provisions of Subclause 10.7 [Failure to Reach Production Outputs], in which case the Employer shall also be entitled to forthwith apply the provisions found under Subclause 10.7(b)(ii) without waiting for the prescribed period expiry."</li> </ul> </li> </ul>

11.11	Failure to Pass Tests Prior to Contract Completion	<ul> <li>(c) issue a Contract Completion Certificate, if the Employer so requires. The Contractor, subject to Subclause 3.5 [Determinations] and to Contractor's adjustments or modifications as laid down below, shall pay the Employer the performance damages specified in Appendix 2 to these Particular Conditions Part B for this failure. These performance damages shall be the only damages due from the Contractor for such failure."</li> </ul>
CLAUSE 13 - VAI	RIATIONS AND AD.	JUSTMENTS
13.1	Right to Vary	Replace "Schedule of guarantees" by "Schedule of Performance Guarantees".
13.3	Variation Procedure	Replace "reasonable profit" by: "reasonable profit which shall be the percentage profit applicable to the Cost as stated in the Contract Data for Cost Plus Profit under Subclause 1.1.24"
13.5	Provisional Sums	"As an exception to the above, the Provisional Sum for the cost of the DAB, shall be used to pay the Contractor of the Employer's one-half share of the invoices of the DAB for its fees and expenses, in accordance with Clause 20 [Claims, Disputes and Arbitration]. No prior instruction of the Employer's Representative shall be required with respect to the work of the DAB. The Contractor shall produce the DAB invoices and satisfactory evidence of having paid the entirety of such invoices as part of the substantiation of those Statements submitted under Subclause 14.3 [Application for Interim Payment Certificates]. The Employer's Representative certification of such Statements shall be based upon such invoices and such evidence of their payment by the Contractor. No sum for Contractor's overhead charges and profit shall apply in addition to the DAB invoices amounts."
CLAUSE 14 - CO	NTRACT PRICE AN	D PAYMENT
14.1	The Contract Price	Add the following at the end of this Subclause:  "Notwithstanding the above, the Contractor's Equipment, including essential spare parts therefor, imported by the Contractor for the sole purpose of executing the Contract shall be exempt from the payment of import duties and taxes upon importation."
14.2	Advance Payment	Replace the entirety of this Subclause by the following:  "The Employer shall make an advance payment, as an interest-free loan for the Design-Build Period, when the Contractor submits an advance payment guarantee in accordance with this Subclause. The amount of the advance payment and the applicable currencies shall be as stated in the Schedule of Payments. The advance payment is paid as one-off installment.

and from all damages, expenses) resulting from which the Employer was a The Employer shall ret Contractor within 21 day Certificate for the whole Application for Replace the subparagraph
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14.6	Payment for Plant and Materials Intended for the Works	This Subclause is deleted as not applicable under the Contract.
14.10	Payment of Retention Money	Replace this Subclause in its entirety with the following:  "The Contractor shall be entitled to include the first half of the Retention Money in the Final Statement Design-Build.  The Contractor shall be entitled to include the second half of the Retention Money in the Final Statement Operation Service."
14.18	Asset Replacement Fund	Replace the 3 <sup>rd</sup> paragraph in its entirety by the following:  "As a condition precedent to the issue of the Contract Completion Certificate, the Parties shall proceed as per the provisions under Appendix 1 to these Particular Conditions Part B for assessing the final amount due to or by the Contractor under the Asset Replacement Fund. Following this assessment, the Contractor shall include such amount to be added or deducted, as the case may be, in his/her Final Statement Operation Service when proceeding in accordance with Subclause 14.13 [Application for Final Payment Certificate Operation Service]."
CLAUSE 15 - TEI	RMINATION BY EM	PLOYER
15.2	Termination for Contractor's Default	Replace subparagraph (a) in its entirety by the following:  "(a) fails to comply with Subclause 4.2 [Performance Security] or with Subclause 4.2A [Parent Company Guarantee] or with a Notice under Subclause 15.1 [Notice to Correct],"  Add the following subparagraph, after subparagraph (h):  "(i) subcontracts any work to any person sanctioned by the United Nations or debarred by the ADB, in breach of Subclause 4.4 [Subcontractors]"  Replace the paragraph, after subparagraph (i), in its entirety with the following:  "In any of these events or circumstances, the Employer may, not less than 14 days after giving Notice to the Contractor, terminate the Contract and expel the Contractor from the Site unless the Contractor cures the event or circumstance within the said 14 days. However, in the case of subparagraph (f) or (g) or (i), the Employer may by Notice terminate the Contract immediately."

#### Add new Subclause as follows: "If the Employer determines, based on reasonable evidence, that the Contractor has engaged in prohibited practices, in competing for or in executing the Contract, then the Employer may, after giving 14 days' notice to the Contractor, terminate the Contract and expel him/her from the Site, and the provisions of Clause 15 shall apply as if such termination had been made under Subclause 15.2 [Termination for Contractor's Default]. Should any employee or Subcontractor of the Contractor be determined, based on reasonable evidence, to have engaged in a prohibited practice during the execution of the Contract then that employee shall be removed in accordance with Subclause 6.9 [Contractor's Personnel]. The prohibited practices referred to above include any of the following practices, defined as follows: (i) "corrupt practice" means the offering, giving, receiving, or soliciting, directly or indirectly, anything of value to influence improperly the actions of another party; (ii) "fraudulent practice" means any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts Corrupt or to mislead, a party to obtain a financial or other benefit or to avoid an 15.8 Fraudulent obligation; **Practices** (iii) "coercive practice" means impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party; (iv) "collusive practice" means an arrangement between two or more parties designed to achieve an improper purpose, including influencing improperly the actions of another party; (v) "abuse" means theft, waste, or improper use of assets related to ADBrelated activity, either committed intentionally or through reckless disregard; (vi) "conflict of interest" means any situation in which a party has interests that could improperly influence that party's performance of official duties or responsibilities, contractual obligations, or compliance with applicable laws and regulations; (vii) "obstructive practice" means (a) deliberately destroying, falsifying, altering, or concealing of evidence material to an ADB investigation, or deliberately making false statements to investigators, with the intent to impede an ADB investigation; (b) threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to a Bank investigation or from pursuing the investigation; or (c) deliberate acts intended to impede the exercise of ADB's contractual rights of audit or inspection or access to

information; and

		<ul> <li>(viii) "integrity violation" is any act, as defined under ADB's Integrity Principles and Guidelines (2015, as amended from time to time), which violates ADB's Anticorruption Policy, including (i) to (vii) above and the following: violations of ADB sanctions, retaliation against whistleblowers or witnesses, and other violations of ADB's Anticorruption Policy, including failure to adhere to the highest ethical standard.</li> <li>In this context, "party" refers to a participant in the Contract procurement process or execution."</li> </ul>
CLAUSE 18 – EXC	CEPTIONAL RISKS	
18.2	Notice of an Exceptional Event	Replace the first sentence of this Subclause by the following:  "If a Party is or will be substantially prevented from performing his/her obligations under the Contract due to an Exceptional Event, then it shall give Notice to the other Party of such event or circumstance and shall specify the obligations, the performance of which is or will be prevented"
18.4	Consequences of an Exceptional Event	Replace  "If the Contractor is prevented from performing any of his/her obligations under the Contract"  by  "If the Contractor is substantially prevented from performing his/her obligations under the Contract"
CLAUSE 19 – INS	URANCE	
19.1	General Requirements	"The Contractor shall take out any insurance under or in connection with the Contract with insurers from any eligible source country listed in Appendix 4 to these Particular Conditions Part B. In case of failure by the Contractor to comply with this requirement, and irrespective of any former approval from the Employer, he/she shall forthwith take replacement insurance(s) from insurers having their origin in an eligible source country and in terms both subject to approval by the Employer, all at the Contractor's risk and cost. For the avoidance of doubt, the Employer's Representative shall be entitled to withhold corresponding payment certification in accordance with Subclause 14.7 [Issue of Advance and Interim Payment Certificates] until such time replacement insurance(s) are provided in accordance with the Contract."
CLAUSE 20 - CLA	AIMS, DISPUTES AN	ID ARBITRATION
20.3	Appointment of the Dispute Adjudication Board	"The agreement between the Parties and either the sole member ("adjudicator") or each of the three members shall be based on the sample form included in the tender documents, and incorporate by reference the General Conditions of Dispute Adjudication Agreement in these General Conditions, with such amendments as are agreed between them."

20.5	Avoidance of Disputes	Insert the text below after the first paragraph and before the second paragraph of this Subclause:  "The DAB shall act, as far as reasonable and practicable, in the spirit of preventing potential problems or claims in between the Parties from becoming Disputes. The DAB shall take reasonable and relevant initiatives in this respect, including, but not necessarily limited to, suggesting the Parties to refer a matter to the DAB in accordance with this Subclause. The DAB shall, however, not act in a way which may be inconsistent with its obligations under the agreement referred to in Subclause 20.3 [Appointment of the Dispute Adjudication Board] and under Subclause 20.6 [Obtaining Dispute Adjudication Board's Decision], and which may render any of its decision unenforceable for breach of natural justice or any other procedural shortcoming or matter. In particular, when acting under this Subclause 20.5, the Dispute Board shall accordingly always meet the Parties jointly, and shall not meet a Party in the absence of the other Party."
20.6	Obtaining Dispute Adjudication Board's Decision	Replace the first paragraph of this Subclause by the following:  "If a Dispute (of any kind whatsoever) arises between the Parties in connection with, or arising out of, the Contract or the execution of the Works during the Design-Build Period, including any Dispute as to any certificate, determination, instruction, opinion or valuation of the Employer's Representative, either Party may refer the Dispute in writing to the DAB for its decision, with copies to the other Party and the Employer's Representative. Such reference shall state that it is given under this Subclause. The other Party shall then have 21 days to send a response to the DAB with copies to the referring Party and the Employer's Representative."

Replace the Subclause in its entirety by the following:

"Unless settled amicably, and subject to Subclause 20.9 [Failure to Comply with Dispute Adjudication Board's Decision], any Dispute in respect of which the DAB's decision (if any) has not become final and binding shall be finally settled by arbitration.

Arbitration shall be conducted as follows:

- (a) if the Contract is with foreign contractors, international arbitration
  - (i) with proceedings administered by the arbitration institution designated in the Contract Data, and conducted under the rules of arbitration of such institution; or, if so specified in the Contract Data;
  - (ii) international arbitration in accordance with the arbitration rules of the United Nations Commission on International Trade Law (UNCITRAL); or
  - (iii) if neither an arbitration institution nor UNCITRAL arbitration rules be specified in the Contract Data, with proceedings administered by the Singapore International Arbitration Centre (SIAC) and conducted under the SIAC Rules of Arbitration; in all cases by three arbitrators appointed in accordance with the said arbitration rules.
- (b) if the Contract is with domestic contractors, arbitration with proceedings conducted in accordance with the laws of the Country.

The arbitration shall be conducted in the language for communications defined in Subclause 1.4 [Law and Language] unless otherwise stated in the Contract Data.

The arbitrator(s) shall have full power to open, review, and revise any certificate, determination, instruction, opinion or valuation of the Employer's Representative, and any decision of the DAB, relevant to the Dispute. Nothing shall disqualify representatives of the Parties, including the Employer's Representative, from being called as a witness and giving evidence before the arbitrator(s) on any matter whatsoever relevant to the Dispute.

Neither Party shall be limited in the proceedings before the arbitrator(s) to the evidence or arguments previously put before the DAB to obtain its decision, or to the reasons for dissatisfaction given in its Notice of Dissatisfaction. Any decision of the DAB shall be admissible in evidence in the arbitration.

Arbitration may be commenced prior to or after completion of the Works. The obligations of the Parties, the Employer's Representative and the DAB shall not be altered by reason of any arbitration being conducted during the progress of the Works."

**20.8** Arbitration

Replace the Subclause in its entirety by the following: "Disputes arising during the Operation Service Period which cannot be resolved between the Parties shall be settled by a one-person DAB ("Operation Service DAB"). Such person shall be jointly agreed and appointed by the Parties by the date 28 days after one Party has given Notice to the other Party of its intention to refer a Dispute to the DAB in accordance with this Subclause. If the Parties cannot agree on the person who shall be the Operation Service DAB, then the person shall be appointed according to the provisions of Subclause 20.4 [Failure to Agree Dispute Adjudication Board]. The agreement between the Parties and the Operation Service DAB shall be based on the sample form included in the tender documents, and incorporate by reference the General Conditions of Dispute Adjudication Agreement in these General Conditions, with such amendments as are Disputes Arising agreed between them. during the 20.10 Operation Service The terms of remuneration of the Operation Service DAB shall be mutually Period agreed upon by the Parties when agreeing the terms of appointment. Each Party shall be responsible for paying one-half of this remuneration. The procedure for obtaining a decision from the Operation Service DAB shall be in accordance with the provisions of Subclause 20.6 [Obtaining Dispute Adjudication Board's Decision, and the DAB shall give its decision no later than 84 days after receiving the other Party's response or, if no such response is received, within 105 days after receiving the reference and the supporting documentation from the Party referring the Dispute. The appointment of the Operation Service DAB shall expire 28 days after it has given its decision in writing to both Parties. If either Party is dissatisfied with the decision of the Operation Service DAB, the provisions of Subclauses 20.6 [Obtaining Dispute Adjudication Board's Decision], 20.7 [Amicable Settlement], 20.8 [Arbitration] and 20.9

[Failure to Comply with Dispute Adjudication Board's Decision] shall apply."

# **Appendixes to the Particular Conditions**of Contract Part B

The Particular Conditions of Contract Part B include the following Appendixes:

- Appendix 1: Schedule of Payments, which include:
  - o Payment installments
  - o Payment procedures
  - Schedule of cost indexation
- Appendix 2: Performance Damages
- Appendix 3: Insurance Requirements
- Appendix 4: Eligible Source Countries

## **Appendix 1: Schedule of Payments**

#### NOTE

The following terms and procedures of payment are given as guidance.

Whenever the Employer wishes to introduce different terms of payment to the following, it shall first obtain the written approval of ADB for the terms it intends to use. If additional price schedules are introduced, suitable terms of payment in respect of such additional schedules must be added.

In accordance with the provisions of:

- GCC Subclause 14.3 [Application for Advance and Interim Payment Certificates], 14.4 [Schedule of Payments], the Contractor shall apply for payment;
- GCC Subclause 14.7 [Issue of Advance and Interim Payment Certificates], the Employer's Representative shall certify for payment; and
- GCC Subclause 14.8 [Payment];

the Employer shall pay the Contractor as per the following installments, based on the Contract Price breakdown given, and the currencies stated, in the Price Schedules.

The installments provided below for Schedules No.1 to No.4 serve the purpose of providing values according to subparagraphs (a) and (d) (as the case may be) of GCC Subclause 14.3.

The installments provided below for Schedules No.5 and 6 serve the purpose of providing values according to subparagraph (g), Operation Service, of GCC Subclause 14.3.

The installments provided below for Schedule No.7 serve the purpose of providing values according to subparagraph (h), Asset Replacement Fund, of GCC Subclause 14.3.

For the avoidance of doubt, other items of GCC Subclause 14.3 shall also apply and be used by the Contractor when preparing his/her Statements, and by the Employer's Representative when preparing his/her Payment Certificates.

For example, Retention Money under subparagraph (c), or adjustments for the Maintenance Retention Fund under subparagraph (i) of GCC Subclause 14.3, shall accordingly apply to these installments.

### (A) Payment installments

#### Payments During the Design-Build Period

#### Price Schedule No. 1: Plant and Mandatory Spare Parts Supplied from Abroad

In respect of plant and mandatory spare parts supplied from abroad, the following payments shall be made:

Ten percent (10%) of the total CIP<sup>1</sup> amount as an advance payment made in accordance with the provisions of Subclause 14.2 [Advance Payment].

Eighty percent (80%) of the total or pro rata CIP amount upon delivery to the Site.

Ten percent (10%) of the total or pro rata CIP amount upon issue of the Commissioning Certificate.

#### Price Schedule No. 2: Plant and Mandatory Spare Parts Supplied from Within the Employer's Country

In respect of plant and mandatory spare parts supplied from within the Employer's country, the following payments shall be made:

Ten percent (10%) of the total EXW<sup>2</sup> amount as an advance payment made in accordance with the provisions of Subclause 14.2 [Advance Payment].

Eighty percent (80%) of the total or pro rata EXW upon delivery to the Site.

Ten percent (10%) of the total or pro rata EXW amount upon issue of the Commissioning Certificate.

#### Price Schedule No. 3: Design Services

In respect of design services for both the foreign currency and the local currency portions, the following payments shall be made:

Ten percent (10%) of the total design services amount as an advance payment made in accordance with the provisions of Subclause 14.2 [Advance Payment].

Ninety percent (90%) of the total or pro rata design services amount upon consent and/or approval of design by the Employer's Representative in accordance with the provisions of Subclause 5.2 [Contractor's Documents].

<sup>&</sup>lt;sup>1</sup> Incoterm CIP: «Carriage and Insurance Paid to ».

Incoterm EXW: «Ex Works ».

#### Price Schedule No. 4: Installation and Other Services during the Design-Build Period

In respect of installation and other services during the Design-Build Period for both the foreign and local currency portions, the following payments shall be made:

Ten percent (10%) of the total installation and other services amount, except for Provisional Sums, during the Design–Build Period as an advance payment made in accordance with the provisions of Subclause 14.2 [Advance Payment].

Eighty percent (80%) of the measured value of work performed by the Contractor as certified by the Employer's Representative in accordance with the provisions of GCC Subclause 14.7 [Issue of Advance and Interim Payment Certificates].

Ten percent (10%) of the total installation and other services amount, except for Provisional Sums, during the Design-Build Period upon issue of the Commissioning Certificate.

Provisional Sums shall be certified and paid as and when used in accordance with Subclause 13.5 [Provisional Sums]

#### Payments During the Operation Service Period

#### Price Schedule No. 5: Operation Service

In respect of the Operation Service, for both the foreign and local currency portions, the following payments shall be made:

No advance payment applies.

Each monthly installment is the sum of:

- 1/12<sup>th</sup> of the Annual Fixed Fee per month introduced under Price Schedule 5.1,
- Contractor's Variable Fee (CVF) introduced under Price Schedule 5.2 multiplied by the monthly volume of production recorded as per the measurement methodology defined in the Employer's Requirements, and
- The amount of the monthly electricity consumption paid by the Contractor to the local power Supplier, but only up to a maximum amount which is the price which would be paid for the Guaranteed Maximum Energy Consumption.

The monthly Guaranteed Maximum Energy Consumption introduced above is defined as the multiplication of:

- The Contractor's Guaranteed Maximum Energy Consumption Rate, in kWh per m<sup>3</sup> of production, as stated in Price Schedule 5.3 and in the Schedule of Performance Guarantees, by
- The monthly volume of production recorded as per the measurement methodology defined in the Employer's Requirements.

In furtherance to the above, there shall be no payment to the Contractor for any electricity consumption in excess of the monthly Guaranteed Maximum Energy Consumption, and the Contractor shall solely bear the risk of such excess.

At the end of every year after the commencement of the Operation Service Period, if the annual electricity consumption of the plant over the elapsed year is lower than the annual Guaranteed Maximum Energy Consumption, calculated under the same mechanism as above but over a year and not over a month, the Employer's Representative shall fairly determine the savings generated to the Employer due to this lower consumption than anticipated. Savings shall be the additional amount that the Employer would have had to pay to the Contractor, in case the annual electricity consumption had equated the annual Guaranteed Maximum Energy Consumption.

The savings shall be equally split in between the Parties, and the Contractor's share be included by the Contractor in the next Contractor's Statement in accordance with Subclause 14.3 [Application for Advance and Interim Payment Certificates].

#### NOTE

The Employer may wish to apply the same payment principles, as the ones applied for electricity, to chemicals. In such case this Appendix 2 should be amended accordingly. For further information, refer to the Guidance Note under the Preamble of the Price Schedules in Section 4 of this Standard Bidding Document.

#### Price Schedule No. 6: Other Services during the Operation Service Period

In respect of installation and other services during the Operation Service Period for both the foreign and local currency portions, the following payments shall be made:

No advance payment applies.

One hundred percent (100%) of the measured value of work performed by the Contractor as certified by the Employer's Representative in accordance with the provisions of GCC Subclause 14.7 [Issue of Advance and Interim Payment Certificates].

Provisional Sums shall be certified and paid as and when used in accordance with Subclause 13.5 [Provisional Sums].

#### Price Schedule No. 7: Asset Replacement Fund

In respect of the asset replacement under the Contract, for both the foreign and local currency portions, the following payments shall be made:

No advance payment applies.

Payment will be made in accordance with the provisions under GCC Subclause 14.5 [Asset Replacement Schedule] and 14.18 [Asset Replacement Fund].

#### NOTE

Please refer to the guidance note under Section 4 – Price Schedule 7 – of this Standard Bidding Document for a detailed explanation as to the operation of the Asset Replacement Fund under the Contract.

Prior to the issue of the Contract Completion Certificate, the Employer's Representative shall proceed in accordance with Subclause 3.5 [Determinations] to agree or determine the residual life expectancy of each of the assets under the Asset Replacement Schedule. The Parties may seek the assistance of the Auditing Body when attempting to reach agreement on that matter, and/or on any other matter pertaining to payments due under the Asset Replacement Fund.

A comparison shall then be made, for each asset under the Asset Replacement Schedule, in between:

- the actual asset replacement cost (hereinafter referred to as "ACT") incurred by the Employer over the Operation Service Period, and
- the expected asset replacement cost (hereinafter referred to as "EXP") the Employer was meant to incur over the Operation Service Period, based on the Asset Replacement Schedule.

ACT shall be calculated as follows:

$$ACT = \frac{OSPx (ARVactual + ARVfuture)}{(OSP + RLactual)}$$

Where:

OSP is the Operation Service Period duration in years.

 $RL_{actual}$  is the actual Residual Life expectancy of the asset considered, as agreed or determined by the Employer's Representative.

 $\mathsf{ARV}_{\mathsf{actual}}$  is the actual total replacement value paid by the Employer to the Contractor under the Contract for the asset considered, up to Contract completion,

 $\mathsf{ARV}_\mathsf{future}$  is the value the Employer would have paid to the Contractor, had the Contract not reached completion, for the next replacement of the asset considered once the Residual Life has expired, based on the replacement value set in the Asset Replacement Schedule.

EXP shall be calculated as follows:

$$EXP = \frac{OSP \times (ARVactual + ARVfuture)}{(OSP + RLEXP)}$$

Where:

 $RL_{EXP}$  is the Residual Life expectancy of the asset considered, as it would have been expected to be had the asset always been replaced in accordance with the Asset Replacement Schedule.

As a result of these calculations for each asset under the Asset Replacement Schedule:

- ullet the sum of each individual ACT shall be calculated and give the global ACT (hereinafter referred to as "ACT<sub>global</sub>") under the Asset Replacement Fund, and
- the sum of each individual EXP shall be calculated and give the global EXP (hereinafter referred to as "EXP $_{\text{global}}$ ") under the Asset Replacement Fund.

#### Finally:

- If ACT<sub>global</sub> is greater than EXP<sub>global</sub>, the Contractor shall be liable to pay the difference in between ACT<sub>global</sub> and EXP<sub>global</sub> to the Employer, and that difference shall be showed by the Contractor as an amount to be deducted in the Final Statement Operation Service, or
- If  $\mathsf{EXP}_{\mathsf{global}}$  is greater than  $\mathsf{ACT}_{\mathsf{global}}$ , the Employer shall be liable to pay half (50%) of the difference in between  $\mathsf{EXP}_{\mathsf{global}}$  and  $\mathsf{ACT}_{\mathsf{global}}$  to the Employer, and that difference shall be showed by the Contractor as an amount to be added in the Final Statement Operation Service.

#### **NOTES**

This final assessment, prior to Contract completion, is meant to assess whether assets have been replaced in accordance with the Asset Replacement Schedule, or whether:

- earlier replacements than anticipated in Contract had to be made overall, in which case this generates a loss to the Employer since assets depreciation is higher than what the Employer expected when entering into the Contract, or
- later replacements than anticipated in Contract had to be made overall, in which case this generates a gain to the Employer since assets depreciation is lower than what the Employer expected when entering into the Contract.

In the former case, the Contractor is liable to pay higher assets depreciation to the Employer.

In the latter case, the Parties will share the gain stemming from this lower depreciation of assets.

As an example, assume a 12-year Operation Service Period with only 2 assets (A1 and A2) in the Asset Replacement Schedule, with the following features:

- Asset A1:
  - o Replacement value: 100
  - o Date of replacement: After 5 years of operation => 2 replacements are scheduled during the Operation Service Period at end of year 5 and at end of year 10
- Asset A2
  - o Replacement value: 400
  - o Date of replacement: After 10 years of operation => 1 replacement is scheduled during the Operation Service Period at end of year 10

The Contract comes to completion, and:

- Asset A1 had to be first replaced at end of year 4, then at end of year 8. It is agreed in between the Parties that the residual life expectancy of the last replacement done is 1 year beyond the Contract completion.
- Asset A2 did not have to be replaced at all under the Operation Service Period, and it is agreed in between the Parties that its
  residual life expectancy is 3 years beyond the Contract completion.

Now calculate ACT for Asset A1, as per the formula introduced above:

```
ACT = OSP \times (ARV_{actual} + ARV_{future}) / (OSP + RL_{actual})
Where:
```

OSP = 12 ARVactual = 200 (100 paid twice) ARVfuture = 100 RLactual = 1

This gives ACT=  $12 \times (200 + 100) / (12 + 1) = 276.92$ 

Now calculate EXP for Asset A1, as per the formula introduced above:

$$EXP = OSPx (ARV_{actual} + ARV_{future}) / (OSP + RL_{ARS})$$

Where:

RLARS=3.

Indeed, if Asset A1 had been replaced every 5 years as per the Asset Replacement Schedule, the next asset replacement would have occurred at the end of year 15, i.e., 3 years after the Contract completion.

This gives EXP =  $12 \times (200 + 100) / (12 + 3) = 240$ 

Had the Contractor complied with its warranties under the Contract:

- a first replacement of the asset would have occurred at end of year 5 for a price of 100;
- a second at end of year 10 again for a price of 100; and
- at the end of the 12-year Operation Service Period, the asset would still have 3 years to run, and the Employer would have,
  as a total, paid 200 to the Contractor for asset replacement, for then a total cost of 240 over the 12-year Operation Service
  Period. Indeed, beyond the 200 paid to the Contractor, the Employer should set aside a provision of 20 (100/5) per year for
  asset depreciation, after the last replacement was made, to be able to financially face the next replacement beyond the Contract
  Period

However, since the asset had in effect to be replaced earlier than expected under the Operation Service Period, the residual life of the asset, at Contract completion, is less than it should have been had the Contractor complied with its warranties under the Contract. Accordingly, the actual replacement cost to the Employer increases, and reaches the value of 276,92 over the Operation Service Period.

There is then 276.92 – 240 = 36.92 of economic loss suffered by the Employer, which is flowing from the Contractor's breach of warranties given under the Contract and for which the Contractor is then liable toward the Employer.

Turning to Asset A2, let's now calculate ACT,

Where:

OSP = 12

ARVactual = 0 (nothing was paid to the Contractor)

ARVfuture = 400

RLactual = 3

This gives  $ACT = 12 \times 400 / (12 + 3) = 320$ 

Let's now calculate EXP for Asset A2, where RL<sub>ARS</sub>=8.

Indeed, if Asset A2 had been replaced after 10 years as per the Asset Replacement Schedule, the next asset replacement would have occurred at the end of year 20, i.e., 8 years after the Contract completion.

This gives EXP =  $12 \times (400+400) / (12+8) = 480$ 

The Contractor did better than what he/she warrantied, resulting in the actual replacement costs being lower than what was anticipated had the Contractor strictly complied with his/her warranty.

There is then 480 - 320 = 160 of economic gain for the Employer.

As a summary:

- ACT<sub>global</sub> = ACT Asset A1 + ACT Asset A2 = 276.92 + 320 = 596.92
- EXP<sub>global</sub> = EXP Asset A1 + EXP Asset A2 = 240 + 480 = 720
- $EXP_{global}$  is higher than the  $ACT_{global}$ , which means that overall the Contractor did better than committed under the Contract, and succeeded in optimizing the operation of the assets, increasing their life span and decreasing their expected depreciation against what was expected when the Contract was formed. The gain so generated for the benefit of the Employer amounts to  $EXP_{global} ACT_{global} = 720 596.92 = 123.08$
- The Employer shall then pay half of that gain, i.e., 61.54, to the Contractor.

## **(B) Payment Procedures**

When applying for certification and making payments, the procedures shall be as follows:

#### NOTE

Insert appropriate procedures, usually letters of credit, but also evidences required (such as, among other things, the copy of the electricity bill paid to the local grid/power supplier under Schedule 5.3) including forms and certificates annexed as appropriate by the Employer in the Bidding Document.

# (C) Schedule of Cost Indexation

# NOTE

Insert here the Schedule of cost indexation, as included in the Bidding Document and completed by the Contractor.

# **Appendix 2: Performance Damages**

# 1. Introduction and Scope of Application of Performance Damages

This Appendix defines the performance damages which are to be paid by the Contractor in case the Contractor does not comply, during the Operation Service Period, with the Key Performance Indicators (KPI) values defined under the Schedule of Performance Guarantees.

Such performance damages apply in furtherance to the provisions contained in:

- a) GCC Subclause 10.7 [Failure to Reach Production Outputs], and
- b) GCC Subclause 11.11 [Failure to Pass Tests Prior to Contract Completion].

These performance damages shall be the only damages due from the Contractor for such default, other than in the event of termination under Clause 15 [Termination by Employer].

The payment of such performance damages shall not relieve the Contractor of any duties, obligations, or responsibilities he/she has under the Contract, including, for the avoidance of doubt, the obligation to ensure that the Works remain in accordance with the Contract during the Operation Service Period.

### **NOTES**

As a general comment, it should be noted that the interest, contract administration wise, of defining performance damages is that these are damages pre-set in Contract which do not require the Employer to prove its actual loss when applying those. This does greatly simplify contract administration processes.

However, care should be given by the Employer to define performance damages which, as much as practicable, are genuine pre-estimates of losses likely to be incurred by the Employer because of a Contractor's breach of a KPI value.

Otherwise, by defining damages in an arbitrary manner without any attempt to relate those to actual Employer's loss, the Employer runs the risk that such damages will be re-characterized as strict penalties rather than as a compensation for losses.

Should this occur, performance damages could then be challenged at law in some jurisdictions (in particular common law jurisdictions) which do not authorize the application of penal remedies for civil liability matters.

It should be noted that, while civil law jurisdictions recognize the possibility to apply penalties in commercial contracts, such jurisdictions nevertheless also sometimes empower the judiciary to adjust penalties, in case those are found unreasonably high or low versus the actual loss suffered by the Employer.

As a corollary of the above, the more performance damages are connected to the foreseeable loss of the Employer in case of a Contractor's breach of KPI values, the better.

# 2. Failure to Reach Production Outputs

The performance damages referred to under GCC Subclause 10.7, due by the Contractor to the Employer, shall be as follows.

No	KPI Description	KPI Breach	Performance Damages
1	Compliance with the drinking water quality standards defined in the Employer's Requirements	Noncompliance	USD X per m³ of noncompliant water,  Or
			USD X per 1% in excess of (or below) the KPI value
			Or
			% reduction in the Operation Service payment for the noncompliant water produced
			Or
			No Operation Service payment for the noncompliant water produced
2	Compliance with the effluent wastewater quality standards defined in the Employer's	Noncompliance	USD X per m³ of noncompliant water,
	Requirements		or No Operation Service payment for the noncompliant water produced
3	Production of a minimum of XX m³/day at the outlet of the Water Treatment Plant at any time of the year	Lower production than the minimum set	USD X per m³ of production below the minimum production set in KPI
4	Continuous water supply (24x7) to end users of the water supply network	Noncompliance exceeds A% Noncompliance is calculated as being the ratio of the number of non- supply hours, divided by hours in the month	USD X per%age of noncompliance  Operation Service payment over the month is reduced by the A%age of noncompliance
5	Nonrevenue Water below YY%	Noncompliance	USD X per %age of noncompliance above YY%
			Operation Service payment over the month is reduced by the %age of noncompliance above YY%
Etc.			

# **NOTES**

The above are only examples given for guidance purposes, and it is for the Employer to select performance damages which are suitable for each project.

As mentioned in the introduction above, the Employer shall define performance damages which represent a genuine preestimate of the Employer's foreseeable losses in case the Contractor breaches a KPI value, so that the performance damages set herein are meant to cover such loss.

Loss for the Employer can be of different kinds, with non-exhaustive examples being given as follows:

- Fines for breach of statutory duties,
- Loss of revenue,
- Loss of reputation,
- Etc.

There is no need to define here performance damages for input-based KPIs, such as energy or chemicals consumption, since the breach of such kind of KPIs is directly covered by payment deductions during the Operation Service Period – see Appendix 1 to these PCC Part B.

For example, for energy consumption, any consumption in excess of the Guaranteed Maximum Energy Consumption during the Operation Service Period is already at the sole cost of the Contractor as defined in the Schedule of Payments for Price Schedule 5. Similarly, any excess of the guaranteed consumption in the consumption of chemicals is a risk of the Contractor since this does not generate additional payment under Price Schedule 5. Those input-related KPIs are consequently not reflected in this table above, but instead are covered in the one below: when the Contract is coming to an end.

# 3. Failure to Pass Tests Prior to Contract Completion

The performance damages below correspond to the amount to be paid by the Contractor to the Employer for failure to pass the Tests Prior to Contract Completion, as laid down under subparagraph (c) of GCC Subclause 11.11.

No	KPI description	KPI Breach	Performance damages
1	Guaranteed Maximum Energy Consumption Rate	Failure to meet the rate by less than 5%	No damages apply
2		Failure to meet the rate by more than 5%	Calculated as per formula below
3	Guaranteed Minimum Sludge Dry Solids Contents	Failure to meet the rate by less than 5%	No damages apply
4		Failure to meet the rate by more than 5%	Calculated as per formula below
5	Guaranteed Maximum Chemicals Consumption Rate	Failure to meet the rate by less than 5%	No damages apply
6		Failure to meet the rate by more than 5%	Calculated as per formula below
7	Nonrevenue Water below YY%	Failure to meet the rate by less than 5%	No damages apply
8		Failure to meet the rate by more than 5%	Calculated as per formula below

9	Compliance with the drinking water quality standards defined in the Employer's Requirements	Noncompliance	Calculated as being the cost for the Employer to remedy this failure or any other method deemed relevant and reasonable to assess the Employer's foreseeable losses flowing from that breach of Contract
10	Production of a minimum of XX m³/day at the outlet of the Water Treatment Plant at any time of the year	Lower production than the minimum set	Calculated as being the cost for the Employer to remedy this failure, or its loss of revenue, or any other method deemed relevant and reasonable to assess the Employer's foreseeable losses flowing from that breach of Contract
Etc.			

Formula for performance damages under item 2:

$$PD = (AECR - (GMECRx1,05)) \times V \times RLE \times CE \times I$$

### Where:

- PD = Performance Damages in currency
- AECR = Actual Energy Consumption Rate (in kWh per m<sup>3</sup> of water production)
- GMECR = Guaranteed Maximum Energy Consumption Rate (in kWh per m³ of water production) as defined in the Schedule of Performance Guarantees
- V = Production Volume (in m<sup>3</sup>/year)
- RLE = Residual Life Expectancy of the facility, being the difference in between the life span expectancy of the facility, as defined in the Schedule of Performance Guarantees, and the Operation Service Period
- CE = Cost of Electricity, in currency per kWh
- I = Inflation rate over the RLE, in percentage

Formula for performance damages under item 4:

$$PD = [((GMDSCxo,95) - SDSC)) / SDSC] \times AR \times ACOD \times RLE \times CSD \times I$$

### Where:

- PD = Performance Damages in currency
- SDSC = Actual Sludge Dry Solids Contents (in percentage)
- GMDSC = Guaranteed Minimum Dry Solids Contents (in percentage) as defined in the Schedule of Performance Guarantees
- AR = Average sludge production Ratio (in kilogram (kg) of Dry Solids per kg of COD at the inlet of the Wastewater Treatment Plant)
- COD = Cumulated COD per year (in kg)
- RLE = Residual Life Expectancy of the facility, being the difference in between the life span expectancy of the facility, as defined in the Schedule of Performance Guarantees, and the Operation Service Period
- CSD = Cost of Sludge Disposal, in currency per kg of Dry Solids
- I = Inflation rate over the RLE, in percentage

Formula for performance damages under item 6:

### Where:

- PD = Performance Damages in currency
- ACCR = Actual Chemical Consumption Rate (in kg per m<sup>3</sup> of water production)
- GMCCR = Guaranteed Maximum Energy Consumption Rate (in kWh per m³ of water production) as defined in the Schedule of Performance Guarantees
- V = Production Volume (in m³/year)
- RLE = Residual Life Expectancy of the facility, being the difference in between the life span expectancy of the facility, as defined in the Schedule of Performance Guarantees, and the Operation Service Period
- CC = Cost of Chemical, in currency per kg
- I = Inflation rate over the RLE, in percentage

Formula for performance damages under item 8:

$$PD = (ANRW - (GMNRWx1,05)) \times V \times RLE \times CW \times I$$

### Where:

- PD = Performance Damages in currency
- ANRW = Actual Nonrevenue Water in percentage
- GMNRW = Guaranteed Maximum Nonrevenue Water (in percentage) as defined in the Schedule of Performance Guarantees
- V = Input water into the supply network (in m³/year)
- RLE = Residual Life Expectancy of the facility, being the difference in between the life span expectancy of the facility, as defined in the Schedule of Performance Guarantees, and the Operation Service Period
- CW = Cost of Water put into the water supply network (in currency per m<sup>3</sup>)
- I = Inflation rate over the RLE, in percentage

# **NOTES**

The KPIs used here are both input and output-based.

This is because the performance damages used in conjunction with Subclause 11.11 are meant to cover the likely losses of the Employer, over the remaining life span of the facility beyond the Contract completion, and therefore beyond the Operation Service completion.

Accordingly, if the Tests Prior to Contract Completion reveal that, for example, the consumption of energy or of chemicals is still higher than the Contractor's guaranteed values in the Schedule of Performance Guarantees, this means that the Employer will suffer from the consequences of such breach of Contract once the Employer takes over the facility from the Contractor and until the end of the life span of the facility; it was the Contractor who suffered from the consequences of such breach during the Operation Service Period.

The performance damages shall be set to remedy such breach, by providing adequate compensation to the Employer.

# **Appendix 3: Insurance Requirements**

### **NOTES**

The Employer should review, and amend and/or supplement as necessary, the insurance provisions of the Contract under GCC Clause 19 and this Appendix 3, to reflect:

- Any mandatory insurance requirements under the laws of the Country. For example, certain jurisdictions impose insurances to be taken for the so-called decennial liability, being the liability of the Contractor, within 10 years from substantial completion of the Works, for any defect which may affect the stability of the Works and/or their fitness for purpose, and/or
- Any insurance locally available at commercially reasonable rates in relation with the facility to be designed, built and
  operated under the Contract. For example, Business Interruption insurances may be available and cover losses in case the
  facility is to be shut down for a certain period.

Insurance due diligence should be carried out by the Employer at project preparation stage, in consultation with insurance specialists (lawyers, brokers, and/or consultants) familiar with the insurance practices in the Country, to determine what insurances can/must be maintained under the Contract, and on what terms. The insurance due diligence should also highlight whether, owing to the project features, it might be in the better interest of the Employer to directly take some of the insurances which are to be provided by the Contractor under Subclauses 19.2 and 19.3. If this is the case, Clause 19 should be amended accordingly by the Employer under the Particular Conditions Part B.

Note that the FIDIC Gold Book has accordingly provided for a split in between the DBO contract risks as follows, i.e., in essence a split between generally insurable and generally non-insurable risks:

- Under GCC Subclause 1.1.7: "Commercial Risk" means a risk which results in financial loss and/or time loss for either of the Parties, where insurance is not generally or commercially available.
- Under GCC Subclause 1.1.67: "Risk of Damage" means a risk which results in physical loss or damage to the Works or other property belonging to either Party, other than a Commercial Risk.

The elements below reflect the data which are referred to under Clause 19, and to be completed by the Employer prior to finalizing the Bidding Document.

# 1. Insurances to be Taken Out by the Contractor During the Design-Build Period

The data referred to under GCC Subclause 19.2 [Insurances to be provided by the Contractor during the Design-Build Period], are as follows.

### Insurance for the Works

Permitted deductible limit as per GCC Subclause 19.2(a)(i)	Additional sum to replacement value as per GCC Subclause 19.2(a)(ii)
[State percentage] of full replacement value	[State percentage] of full replacement value

Employer's Risks under GCC Subclause 17.1(b)(iii) to form part of the insurance cover:

- [List those operation of the forces of nature which are to be covered by the Contractor's insurance for the Works; otherwise state "None"]

Exceptional Event under GCC Subclause 18.1(f) to form part of the insurance cover:

- [List those natural catastrophes which are to be covered by the Contractor's insurance for the Works; otherwise state "None"]

# **NOTES**

The FIDIC Gold Book generally contemplates that non-insurable risks are borne by the Employer, except for all Contractor's design, materials, and workmanship, and those risks also directly attributable to acts or omissions of the Contractor or of the Contractor's Personnel.

The FIDIC Gold Book has accordingly defined that the Risk of Damage caused by:

- operation of the forces of nature, against which an experienced contractor could not have reasonably been expected to have taken adequate preventative precautions; or
- Exceptional Risks, as defined under GCC Clause 18 (which are risks caused by Exceptional Events, those corresponding to the Force Majeure events as referred to in the FIDIC 1999 Suite of Contracts);

is borne by the Employer, under the assumption that such risk events would generally not be insurable at reasonable commercial terms.

However, the FIDIC Gold Book recognizes that such risk events might actually be insurable at reasonable commercial terms, depending on the project nature and location, which explains why the Contract leaves the opportunity to the Employer to define which, if any, of those risk events are to be insured by the Contractor. The insurance due diligence carried out at project preparation stage would assist the Employer in deciding which option to choose under this Subclause.

# Insurance for the Contractor's Equipment

Amount of insurance cover required under GCC Subclause 19.2(b)

[State amount]

# **NOTE**

Some items within the definition of Contractor's Equipment, such as vehicles, may in any event be required to be insured by law, and it is the Contractor's responsibility to see that such items are properly insured before being used.

It might consequently well be that, based on the insurance due diligence aforementioned, two distinct insurances would be required from the Contractor—one covering motor vehicles, on one hand, and one covering the rest of the Contractor's Equipment, on the other hand.

# **Professional Liability Insurance**

Minimum amount of insurance cover required under GCC Subclause 19.2(c)	Period for which professional liability insurance is required
[State amount]	[State period]

# **NOTES**

It should be noted that this subparagraph (c) under GCC Subclause 19.2 requires the Contractor to take out professional liability insurance which provides for cover in case an act or omission of the Contractor results in the Works not being fit for purpose as specified in the Contract.

However, these insurances generally only cover professionals for their negligence, i.e., for their failure to act with reasonable skill and care, but not necessarily for their failure to reach set results, such as when they warrant that the facility will be fit-for-purpose as specified in the Contract.

The Contractor's obligations under Subclause 4.1 make him/her strictly liable if, at any time after the completion of the Design-Build Period, the facility is no longer fit-for-purpose. Unfitness for purpose in the case of water or wastewater infrastructure could typically be:

- A water treatment plant not producing water being suitable for supply to consumers
- A water treatment plant not producing enough water, against minimum production levels as defined under the Contract
- A wastewater treatment plant not discharging treated wastewater to recipient water bodies in accordance with applicable laws and regulations
- A water supply network not supplying drinking water in a continuous manner, and/or not providing for a minimum service
  pressure
- A wastewater network not conveying wastewater to a specified discharge point (such as a WWTP)
- Etc

These further stresses the importance for the Employer to accurately define the purpose of the Works in the Employer's Requirements.

This strict liability will also continue to be borne by the Contractor after Contract Completion, during a number of years as defined by the governing law of the Contract (typically by any statute of limitations).

In case the aforementioned insurance due diligence reveals that insuring a fitness-for-purpose obligation would not be locally possible, the Employer should amend this subparagraph (c) by removing the following terms from the Contract: "Such insurance shall contain an extension indemnifying the Contractor for his/her liability arising out of negligent fault, defect, error or omission in the carrying out his/her professional duties which result in the Works not being fit for the purpose specified in the Contract and resulting in any loss and/or damage to the Employer" by means of the Particular Conditions of Contract

In case the due diligence reveals that such insurance can only be obtained on onerous terms, the Employer should consider two options. Either:

- maintaining such Contractor's insurance obligation, knowing however that the cost of this would be reflected by Bidders in their Bids, which may prove economically adverse against the project budget.
- removing such Contractor's insurance obligation, to waive its negative financial impact on the Contract Price, though knowing that in such case the fitness-for-purpose liability of the Contractor would be borne by the Contractor's own financial resources, which further stresses the Contractor's insolvency risk.

Note that duration of the professional liability insurance should be as long as the duration of contractual liabilities post contract completion, as defined by the governing law of the Contract (typically under a statute of limitations or equivalent legal instrument).

# Public Liability Insurance—Insurance for Injury to Persons and Damage to Property

Minimum amount of insurance cover required under GCC Subclause 19.2(d)

[State amount]

# Other Insurances Required by Law and by Local Practice

- [List such insurances to be taken by the Contractor, otherwise state "None"]

# 2. Insurances to be taken out by the Contractor during the Operation Service Period

### Fire Extended Cover for the Works

Amount of insurance cover required under GCC Subclause 19.3(a)

[State amount]

# NOTE

Since the Works insurance provided under Subclause 19.2(a) is only valid until the issue of the Commissioning Certificate, it is necessary to insure the facility against all risks of damage, fire, and loss during the Operation Service Period. This is called "Fire Extended Cover" insurance and must be in place before the Operation Service commences.

# Public Liability Insurance—Insurance for Injury to Persons and Damage to Property

Minimum amount of insurance cover required under GCC Subclause 19.2(b)

[State amount]

Specific terms for this insurance, if any

- [List such terms, otherwise state "None"]

# Other Insurances Required by Law and by Local Practice

- [List such insurances to be taken by the Contractor, otherwise state "None"]

### Other Operational Insurances

- [List such insurances to be taken by the Contractor, otherwise state "None"]

# NOTE

Examples of insurance cover of that kind which might be required are: Machinery Breakdown; Loss of Profits; and Loss of Profits following Machinery Breakdown.

Again, these are to be identified (if any) through an insurance due diligence at contract preparation stage.

# **Section 9: Contract Forms**

# NOTE

All text in italic below is provided to assist those drafting these documents and shall be removed before they are finalized.

All blank fields shall be filled in before these documents are finalized.

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# **Notice of Intention for Award of Contract**

[on letterhead of Employer]

[date of notification]

To:	Iname o	f Bidder ī	l
10.	mume o	Diddel	

Attention: [insert name of the Bidder's authorized representative]

Address: [insert address of the Bidder's authorized representative]

Telephone/Fax numbers: [insert telephone/fax numbers of the Bidder's authorized representative]

E-mail Address: [insert e-mail address of the Bidder's authorized representative]

This is to notify you of our intention to award the contract [insert name of the contract and identification number, as given in the Bid Data Sheet]. You have [insert number of days as specified in ITB 43.1 (or ITB 56.1 under two stage bidding) of the BDS] days from the date of this notification to (i) request for a debriefing in relation to the evaluation of your Bid; and/or (ii) submit a bidding-related complaint in relation to the intention for award of contract, in accordance with the procedures specified in ITB 48.1 [or ITB 61.1 under two stage bidding].

The summary of the evaluation are as follows:

**1. List of Bidders** [insert names of all Bidders that submitted a bid together with the corresponding bid price at opening and evaluated bid price (if applicable)]

Name of Bidder	Bid Price as Read Out at Opening	Evaluated Bid Price

# 2. Reason(s) Why Your Bid Was Unsuccessful

[provide reasons separately to each unsuccessful Bidder why its bid was unsuccessful]

## 3. The Successful Bidder

Name of Bidder:	
Address:	
Contract Price:	
Duration of Contract:	
Scope of the Contract Awarded:	
Amount Performance Security Required:	

Authorized Signature:
Name and Title of Signatory:
Name of Agency:

# **NOTE**

The Employer should send this notification to each Bidder that submitted a bid simultaneously. Notice of Intention for Award of Contract shall only be included if standstill provision is applicable in accordance with ITB 43.1 Single-Stage Bidding or ITB 56.1 Two-Stage Bidding. Also, for bidding-related complaint, follow the procedure in accordance with ITB 48.1 Single-Stage Bidding or ITB 61.1 Two-Stage Bidding.

# **Notification of Award**

[on Employer's letterhead]

# **Letter of Acceptance**

date
To: [insert name and address of the contractor]
Subject:[Notification of Award Contract No.]
This is to notify you that your Bid dated [insert date] for execution of the [insert name of the contract and identification number, as given in the Bid Data Sheet] for the Contract Price in the aggregate of [insert amount in words and figures] [insert name of currency], as corrected and modified in accordance with the Instructions to Bidders is hereby accepted by our Agency.
You are requested to furnish the Performance Security and the parent company guarantee within 28 days from your receipt of this letter, in accordance with the Conditions of Contract and any additional security required as a result of the evaluation of your bid, using for that purpose the Performance Security Form included in Section 9 (Contract Forms) of the Bidding Document.
Authorized Signature:
Name and Title of Signatory:
Name of Agency:
Attachment: Contract Agreement

# **Contract Agreement**

THIS AGREEMENT made on the [insert number] day of [insert month], [insert year] Between [name of Employer] of [address of Employer] (hereinafter called "the Employer"), of the one part, and [name of Contractor] of [address of Contractor] (hereinafter called "the Contractor"), of the other part:

Whereas the Employer desires that the Works known as [name of Contract] should be designed, executed and operated by the Contractor, and has accepted a Bid by the Contractor for the design, execution, completion and operation and maintenance of these Works, and the remedying of any defects therein.

	. and operation and maintenance of those violes, and the formedying of any defects therein,
Γh	e Employer and the Contractor agree as follows:
2.	In this Agreement, the words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to.  The following documents shall be deemed to form and be read and construed as part of this Agreement.
	(a) Letter of Acceptance dated,
	(b) Letters of Technical Bid and Price Bid, and the completed schedules,
	(c) Addenda No to the Bidding Document (if any, remove if there are none)
	(d) Particular Conditions of Contract – Part A,
	(e) Particular Conditions of Contract - Part B, and their Appendixes 1 to 3
	(f) General Conditions of Contract,
	(g) Employer's Requirements,
	(h) Parent Company Guarantee,
	(i) Operating License, and
	(j) Contractor's Technical Bid
3.	In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to design, execute, complete, operate, and maintain the Works and remedy any defects therein in conformity with the provisions of the Contract, including the Operating License granted by the Employer.
1	The Employer hereby covenants to pay the Contractor in consideration of the design execution

- The Employer hereby covenants to pay the Contractor in consideration of the design, execution, completion, operation, and maintenance of the Works and the remedying of defects therein, the Contract Price at the times and in the manner prescribed by the Contract, and to grant the Contractor a royaltyfree license to enable him/her to operate and maintain the Works during the Operation Service Period.

Τŀ	ne parties	hereto	have caused	this $\lambda$	Agreement to	be executed	on the	dav and	l vear first a	bove written.

Signed by	Signed by
for and on behalf of the Employer	for and on behalf the Contractor

# **Operating License**

### **NOTES**

The Operating License is a document which is issued by the Employer to the Contractor at the time of issuing the Letter of Acceptance in accordance with Subclause 1.7 [Operating License] of the Conditions of Contract, although it will not come into effect until the issue of the Commissioning Certificate.

The purpose of the Operating License is to give the Contractor unhindered legal access to the Works and the facility, and the legal right to operate the facility during the Operation Service Period in compliance with his/her obligations under his/her Contract with the Employer.

The terms of the License must ensure that it is royalty-free and is issued without cost to the Contractor. It will automatically come into full force and effect upon the issue of the Commissioning Certificate, and it shall remain in full force and effect until the issue of the Contract Completion Certificate.

The proposed format and wording should be included in the Bidding Document so that bidders know how it will function during the Operation Service Period.

The nature and format of the Operating License must clearly define the requirements of the Employer and must be a legally secure commitment from the Employer to allow the Contractor unhindered access to the facility for the duration of the Operation Service Period. Whatever the name or status of the document which the Employer provides for this purpose, all references in the Contract to Operating License shall be deemed to refer to that document.

No sample form is hereby provided since the format and wording of the Operating License will typically vary from one country to another, and the Employer shall obtain appropriate legal advice before drawing up this Operating License and including it in the Bidding Document.

In case it is found that no such Operating License is required for the project hence in the Contract, then the Employer shall remove any reference to Operating License under the Contract, i.e.,

- under the Contract Agreement form above, and remove this page
- GCC Subclauses 1.1.10, 1.1.54, 1.7, and 17.5, by means of the PCC Part B

# **Performance Security**

# **Demand Guarantee**

Name of Contract/Contract No.

Name and address of Beneficiary ("the Employer"):
We have been informed that [name of the Contractor] (hereinafter called the "Principal") is your contractor under such Contract, which requires him/her to obtain a performance security.
At the request of the Principal, we [name of bank] hereby irrevocably undertake to pay you, the Beneficiary/ Employer, any sum not exceeding in total the amount of [amount in words] [amount in figures]:) (the "guaranteed amount") upon receipt by us of your demand in writing with your written statement stating:
(a) that the Principal is in breach of his/her obligation(s) under the Contract, and
(b) the respect in which the Principal is in breach.
Any demand for payment must contain your signature(s) which must be authenticated by your bankers or by a notary public. The authenticated demand and statement must be received by us at this office on or pefore [the date 70 days after the expected expiry of the Retention Period under the Contract] (the "expiry date"), when this guarantee shall expire and shall be returned to us.  We have been informed that the Beneficiary may require the Principal to extend this guarantee if the Retention Period under the Contract has not come to an end by the date 28 days prior to such expiry date. We undertake
o pay you such guaranteed amount upon receipt by us, within such period of 28 days, of your demand in writing and your written statement that the Retention Period has not come to an end, for reasons attributable to the Principal, and that this guarantee has not been extended.
This guarantee shall be governed by the laws of and shall be subject to the Uniform Rules for Demand Guarantees, published as number 758 by the International Chamber of Commerce, except as stated above.
Signed by:[name]
Signature and seal:
Date:
NOTE TO BIDDER

If the institution issuing the performance security is located outside the country of the Employer, it shall have a correspondent financial institution located in the country of the Employer to make it enforceable.

Date:

# **Parent Company Guarantee**

Name of Contract/Contract No.  Name and address of Employer:  together with successors and assigns
We have been informed that [name of the Contractor] (hereinafter called the "Contractor") is your contractor under such Contract, which requires him/her to obtain a parent company guarantee.
In consideration of you, the Employer, awarding the Contract to the Contractor, we [name of parent company] irrevocably and unconditionally guarantee to you, as a primary obligation, the due performance of all the Contractor's obligations and liabilities under the Contract, including the Contractor's compliance with all its terms and conditions according to their true intent and meaning.
If the Contractor fails to so perform his/her obligations and liabilities and to so comply with the Contract, we will indemnify the Employer against and from all damages, losses and expenses (including legal fees and expenses) which arise from any such failure for which the Contractor is liable to the Employer under the Contract.
This guarantee shall continue in full force and effect until all the Contractor's obligations and liabilities under the Contract have been discharged, when this guarantee shall expire and shall be returned to us, and our liability hereunder shall be discharged absolutely.
This guarantee shall apply and be supplemental to the Contract as amended or varied by the Employer and the Contractor from time to time. We hereby authorize them to agree any such amendment or variation, the due performance of which and compliance with which by the Contractor are likewise guaranteed hereunder. Our obligations and liabilities under this guarantee shall not be discharged by any allowance of time or other indulgence whatsoever by the Employer to the Contractor, or by any variation or suspension of the works to be executed under the Contract, or by any amendments to the Contract or to the constitution of the Contractor or the Employer, or by any other matters, whether with or without our knowledge or consent.
This guarantee shall be governed by the law of the same country (or other jurisdiction) as that which governs the Contract and any dispute under this guarantee shall be finally settled under the Rules of Arbitration of the International Chamber of Commerce by one or more arbitrators appointed in accordance with such Rules. We confirm that the benefit of this guarantee may be assigned subject only to provisions for assignment of the Contract.
Signed by:

# **Advance Payment Security**

B	ank's name, and address	of issuing branch or office <sup>1</sup>
Beneficiary:	Name and address	of the employer
Date:		
Wa haya baan informed that	name of the contractor	(horoinafter called "the Contractor") has entered into

We have been informed that . . . . name of the contractor . . . . (hereinafter called "the Contractor") has entered into Contract No. . . . . reference number of the contract . . . . dated . . . . with you, for the execution of . . . . . name of contract and brief description of the works . . . . (hereinafter called "the Contract").

Furthermore, we understand that, according to the Conditions of the Contract, an advance payment in the sum  $\dots$  name of the currency and amount in words<sup>2</sup> $\dots$  ( $\dots$  amount in figures $\dots$ ) is to be made against an advance payment guarantee.

At the request of the Contractor, we . . . . . name of the bank. . . . . hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of . . . . . name of the currency and amount in words . . . . . ( . . . . amount in figures. . . .) upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation under the Contract because the Contractor:

- (a) used the advance payment for purposes other than the costs of mobilization and cash flow support in respect of the Works; or
- (b) has failed to repay the advance payment when it has become due and payable in accordance with the conditions of the Contract, specifying the amount payable by the Contractor.

It is a condition for any claim and payment under this guarantee to be made that the advance payment referred to above must have been received by the Contractor on its account number . . . . . contractor's account number . . . . . at . . . . . name and address of the bank . . . . .

The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Contractor as indicated in copies of interim statements or payment certificates, which shall be presented to us. This guarantee shall expire, at the latest, upon our receipt of a copy of the interim payment certificate, indicating that 80% of the Contract Price has been certified for payment, or on the  $\dots$  day of  $\dots, \dots, 3$  whichever is earlier. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

<sup>&</sup>lt;sup>1</sup> All italicized text serves as a guide for preparing this demand guarantee and shall be deleted from the final document.

The guarantor shall insert an amount representing the amount of the advance payment denominated either in the currency(ies) of the advance payment as specified in the contract, or in a freely convertible currency acceptable to the employer.

Insert the expected expiration date of the time for completion. The employer should note that in the event of an extension of the time for completion of the contract, the employer would need to request an extension of this guarantee from the guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the employer might consider adding the following text to the form, at the end of the penultimate paragraph: "The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [6 months][1 year], in response to the Employer's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."

This guarantee is subject to	the Uniform Rules for Demand Guarantees, ICC Publication No. 458 (or ICC Publication
No. 758 as applicable).	
	Signature(s) and seal of bank (where appropriate)

# **NOTE TO BIDDER**

If the institution issuing the advance payment security is located outside the country of the employer, it shall have a correspondent financial institution located in the country of the employer to make it enforceable.

# Agreement for Dispute Adjudication Board Members

NI-	ame and details of Contract			for each member of the Dispute Adjudication Board
Th	nis Agreement made the	day of	, 20, b	etween
Na	ame and address of Employer ame and address of Contractor ame and address of DAB Member			
ab		e DAB as [delete v		e Contract and desire jointly to appoint the plicable] sole adjudicator/one of the three
Ar	nd whereas the Member accepts	the appointment		
	Adjudication Agreement", which include amendments and additio	Adjudication Agis appended heretons to the "Genera	reement cor o, and the fo Il Conditions	s:  mprise the "General Conditions of Dispute illowing provisions. In these provisions, which of Dispute Adjudication Agreement", words o them in the "General Conditions of Dispute
2.	[Details of any amendments or a Agreement" should be given here or		-	"General Conditions of Dispute Adjudication
3.	In accordance with Clause 6 of the shall be paid as follows:	ne "General Cond	litions of Dis	pute Adjudication Agreement", the Member
	A retainer fee ofpe	er calendar month		
				hearings, and other time in connection with s of the Contract between the Employer and
4.	accordance with Clause 6 of the	e "General Condite mber in the capac	tions of Disp	nde by the Employer and the Contractor in bute Adjudication Agreement", the Member entioned in accordance with the terms of this
5.	• •	• •		ake to pay the Member in consideration for nce with this Dispute Adjudication Agreement
6.	This Dispute Adjudication Agreen	nent shall be gove	rned by the l	aw of
SI	GNED by:	SIGNED by:		
	(signature) or and on behalf of the Employer in ne presence of	for and on beha in the presence		'
Ν	/itness: ame: ddress:	Witness: Name: Address:		Witness: Name: Address: Date:

# Agreement for Operation Service Dispute Adjudication Board

Name and details of Contract
This Agreement made theday of, 20, between
Name and address of Employer Name and address of Contractor Name and address of DAB Member

Whereas the Employer and the Contractor have entered into the Contract and desire jointly to appoint the above-named Member to act as sole adjudicator on the Operation Service DAB.

And whereas the Member accepts the appointment

# The Employer, Contractor and Member jointly agree as follows:

- 1. The conditions of this Dispute Adjudication Agreement comprise the "General Conditions of Dispute Adjudication Agreement", which is appended hereto, and the following provisions. In these provisions, which include amendments and additions to the "General Conditions of Dispute Adjudication Agreement", words and expressions shall have the same meanings as are assigned to them in the "General Conditions of Dispute Adjudication Agreement".
- 2. Since the Operation Service DAB is mobilized on ad'hoc basis, there will be no routine duties nor regular Site visits from the DAB and accordingly:
  - a. Clause 6(a) of the "General Conditions of Dispute Adjudication Agreement" shall not apply, as well as any provision in Clause 6 related to the payment of monthly retainer fees, and of air fares quarterly in advance
  - b. Procedural Rules 1, 2, 3 and 12, as appended to the "General Conditions of Dispute Adjudication Agreement", shall not apply.
- 3. [Details of any other amendments or additions or deletions from the "General Conditions of Dispute Adjudication Agreement" should be given here or in an attachment hereto]
- 4. In accordance with Clause 6 of the "General Conditions of Dispute Adjudication Agreement", the Member shall be paid as follows:
  - A daily fee of \_\_\_\_\_ per day spent on hearings, and other time in connection with submissions to the DAB made in accordance with the provisions of the Contract between the Employer and the Contractor.
- 5. In consideration of these fees and other payments to be made by the Employer and the Contractor in accordance with Clause 6 of the "General Conditions of Dispute Adjudication Agreement", the Member undertakes to act as the DAB Member in the capacity above-mentioned in accordance with the terms of this Dispute Adjudication Agreement.
- 6. The Employer and the Contractor jointly and severally undertake to pay the Member in consideration for his/her acting as the DAB Member as aforementioned in accordance with this Dispute Adjudication Agreement.

7. This Dispute Adjudication Agreen	nent shall be governed by the law of	
SIGNED by:(signature)	SIGNED by: (signature)	SIGNED by:(signature)
for and on behalf of the Employer in the presence of	for and on behalf of the Contractor in the presence of	the Member in the presence o
·	•	Witness:
Witness:	Witness:	Name:
Name:	Name:	Address:
Address:	Address:	Date:
Date:	Date:	

# General Conditions of Dispute Adjudication Agreement

For the Dispute Adjudication Board and the Operation Service Dispute Adjudication Board

### 1 Definitions

Each "Dispute Adjudication Agreement" is a tripartite agreement by and between:

- (a) the "Employer";
- (b) the "Contractor"; and
- (c) the "Member" who is defined in the Dispute Adjudication Agreement as being:
  - (i) the sole adjudicator or sole Member of the DAB ("Dispute Adjudication Board") or the Operation Service DAB (as appropriate), and where this is the case, all references to the "Other Members" hereinafter do not apply;

or

(ii) one of the three persons who are jointly called the DAB and, where this is the case, the other two persons are called the "Other Members".

The Employer and the Contractor have entered (or intend to enter) into a contract, which is called the "Contract" and is defined in the Dispute Adjudication Agreement. In the Dispute Adjudication Agreement, words and expressions which are not otherwise defined shall have the meanings assigned to them in the Contract.

### 2 General Provisions

Unless otherwise stated in the Dispute Adjudication Agreement, the Agreement shall take effect on the latest of the following dates:

- (a) the Commencement Date defined in the Contract;
- (b) when the Employer, the Contractor and the Member have each signed the Dispute Adjudication Agreement; or
- (c) when the Employer, the Contractor and each of the Other Members (if any) have respectively each signed a dispute adjudication agreement.

This employment of the Member is a personal appointment. At any time, the Member may give not less than 70-days' Notice of resignation to the Employer and to the Contractor, and the Dispute Adjudication Agreement shall terminate upon the expiry of this period.

The language to be used in all communications, reports, decisions and during all meetings and hearings relating to the business of either the DAB or the Operation Service DAB shall be the language for communications stated in the Contract Data.

### 3 Warranties

The Member warrants and agrees that he/she is and shall be impartial and independent of the Employer, the Contractor, and the Employer's Representative. The Member shall promptly disclose, to each of them and to the Other Members (if any), any fact or circumstance which might appear inconsistent with his/her warranty and agreement of impartiality and independence.

When appointing the Member, the Employer and the Contractor relied upon the Member's representations that he/she is:

- (a) experienced in the work which the Contractor is to carry out under the Contract;
- (b) experienced in the interpretation of contract documentation; and
- (c) fluent in the language for communications which is stated in the Contract Data.

If there is a challenge of a DAB Member by either Party or, in the case of a three-person DAB, jointly by the other Members, for lack of independence, notwithstanding any disclosure made or not made by that Member under Clause 4 [General Obligations of the Member] of these General Conditions of Dispute Adjudication Agreement, the challenging Party or Members (as the case may be) may refer the alleged lack of independence to the appointing entity named in the Contract Data under Subclause 20.4 [Failure to Agree Dispute Adjudication Board] of the General Conditions of Contract. If the appointing entity considers it to be prudent or necessary, it may refer the matter to an independent professional person or body (such as the International Chamber of Commerce) to review and assess the challenge. If such person or body is of the opinion that the Member in question is no longer independent as required by the terms of the Dispute Adjudication Agreement, the Member shall be removed from the DAB and the appointing entity shall, without delay, appoint a new Member. Any costs or fees due to the independent person or body shall be shared equally between the Parties.

# 4 General Obligations of the Member

The Member shall:

- (a) have no interest, financial or otherwise, in the Employer, the Contractor or Employer's Representative, nor any financial interest in the Contract except for payment under the Dispute Adjudication Agreement;
- (b) not previously have been employed as a consultant or otherwise by the Employer, the Contractor or the Employer's Representative, except in such circumstances as were disclosed in writing to the Employer and the Contractor before they signed the Dispute Adjudication Agreement;
- (c) have disclosed in writing to the Employer, the Contractor and the Other Members (if any), before entering into the Dispute Adjudication Agreement and to his/her best knowledge and recollection, any professional or personal relationships with any director, officer or employee of the Employer, the Contractor or the Employer's Representative, and any previous involvement in the overall project of which the Contract forms part;
- (d) not, for the duration of the Dispute Adjudication Agreement, be employed as a consultant or otherwise by the Employer, the Contractor or the Employer's Representative, except as may be agreed in writing by the Employer, the Contractor and the Other Members (if any);
- (e) comply with the annexed "Procedural Rules for Dispute Adjudication Board Members" ("Rules") and with Subclause 20.5 [Avoidance of Disputes] of the General Conditions of Contract;

- (f) not give advice to the Employer, the Contractor, the Employer's Personnel or the Contractor's Personnel concerning the conduct of the Contract, other than in accordance with the Rules;
- (g) not, while a Member, enter into discussions or make any agreement with the Employer, the Contractor or the Employer's Representative regarding employment by any of them, whether as a consultant or otherwise, after ceasing to act under the Dispute Adjudication Agreement;
- (h) ensure his/her availability for all Site visits and hearings as are necessary;
- (i) become conversant with the Contract and with the progress of the Works (and of any other parts of the project of which the Contract forms part) by studying all documents received which shall be maintained in a current working file;
- (j) treat the details of the Contract and all the DAB's activities and hearings as private and confidential, and not publish or disclose them without the prior written consent of the Employer, the Contractor and the Other Members (if any);

and

(k) be available to give advice and opinions, on any matter relevant to the Contract when requested by both the Employer and the Contractor, subject to the agreement of the Other Members (if any).

# 5 General Obligations of the Employer and the Contractor

The Employer, the Contractor, the Employer's Personnel, and the Contractor's Personnel shall not request advice from or consultation with the Member regarding the Contract, otherwise than in the normal course of the DAB's activities under the Contract and the Dispute Adjudication Agreement, or when both Parties jointly agree to refer a matter to the DAB in accordance with Subclause 20.5 [Avoidance of Disputes] of the General Conditions of Contract. The Employer and the Contractor shall be responsible for compliance with this provision by the Employer's Personnel and the Contractor's Personnel respectively.

The Employer and the Contractor undertake to each other and to the Member that the Member shall not, except as otherwise agreed in writing by the Employer, the Contractor, the Member and the Other Members (if any):

- (a) be appointed as an arbitrator in any arbitration under the Contract;
- (b) be called as a witness to give evidence concerning any Dispute before arbitrator(s) appointed for any arbitration under the Contract; or
- (c) be liable for any claims for anything done or omitted in the discharge or purported discharge of the Member's functions, unless the act or omission is shown to have been in bad faith.

The Employer and the Contractor hereby jointly and severally indemnify and hold the Member harmless against and from claims from which he/she is relieved from liability under the preceding paragraph.

Whenever the Employer or the Contractor refers a Dispute to the DAB or the Operation Service DAB under Subclause 20.6 [Obtaining Dispute Adjudication Board's Decision] or Subclause 20.10 [Disputes Arising during the Operation Service Period] of the General Conditions of Contract, which will require the Member to make a Site visit and attend a hearing, the referring Party shall provide appropriate security for a sum equivalent to the reasonable expenses to be incurred by the Member. No account shall be taken of any other payments due or paid to the Member.

# 6 Payment

The Member shall be paid as follows, in the currency named in the Dispute Adjudication Agreement:

- (a) a retainer fee per calendar month, which shall be considered as payment in full for:
  - (i) being available on 28-days' notice for all Site visits and hearings;
  - (ii) becoming and remaining conversant with all project developments and maintaining relevant files, files in accordance with sub-paragraph (i) of Clause 4 hereof [General Obligations of the Member];
  - (iii) all office and overhead expenses including secretarial services, photocopying, and office supplies incurred in connection with his/her duties; and
  - (iv) all services performed hereunder except those referred to in subparagraphs (b) and (c) of this Clause.

During the periods when each Operation Service DAB is acting, the retainer fee shall be paid monthly until the end of the month in which the appointment expires or is otherwise terminated, or the Member resigns.

- (b) a daily fee which shall be considered as payment in full for:
  - (i) each day or part of a day up to a maximum of two days' travel time in each direction for the journey between the Member's home and the Site, or another location of a meeting with the Other Members (if any);
  - (ii) each working day on Site visits, hearings or preparing decisions; and
  - (iii) each day spent reading submissions in preparation for a hearing.
- (c) all reasonable expenses including necessary travel expenses (air fare in less than first class, hotel and subsistence and other direct travel expenses, including visa charges) incurred in connection with the Member's duties, as well as the cost of telephone calls, courier charges, faxes and telexes: a receipt shall be required for each item in excess of five percent (5%) of the daily fee referred to in sub-paragraph (b) of this Clause.
- (d) any taxes properly levied in the Country on payments made to the Member (unless a national or permanent resident of the Country) under this Clause 6.

The retainer and daily fees shall be as specified in the Dispute Adjudication Agreement. Unless it specifies otherwise, these fees shall remain fixed for the first 24 calendar months, and shall thereafter be adjusted by agreement between the Employer, the Contractor, and the Member, at each anniversary of the date on which the Dispute Adjudication Agreement became effective.

If the parties fail to agree on the retainer fee or the daily fee, the appointing entity or official named in the Contract Data shall determine the amount of the fees to be used.

The Member shall submit invoices for payment of the monthly retainer and air fares quarterly in advance. Invoices for other expenses and for daily fees shall be submitted following the conclusion of a Site visit or hearing. All invoices shall be accompanied by a brief description of activities performed during the relevant period and shall be addressed to the Contractor.

The Contractor shall pay each of the Member's invoices in full within 56 days after receiving each invoice and shall apply to the Employer (in the Statements under the Contract) for reimbursement of one-half of the amounts of these invoices. The Employer shall then pay the Contractor in accordance with the Contract.

If the Contractor fails to pay to the Member the amount to which he/she is entitled under the Dispute Adjudication Agreement, the Employer shall pay the amount due to the Member and any other amount which may be required to maintain the function of the DAB, and without prejudice to the Employer's rights or remedies. In addition to all other rights arising from this default, the Employer shall be entitled to reimbursement of all sums paid in excess of one-half of these payments, plus all costs of recovering these sums and financing charges calculated at the rate specified in Subclause 14.9 [Delayed Payment] of the General Conditions of Contract.

If the Member does not receive payment of the amount due within 70 days after submitting a valid invoice, the Member may (i) suspend his/her services (without Notice) until the payment is received, and/or (ii) resign his/her appointment by giving Notice under Clause 7 hereof.

### 7 Default and Termination

At any time: (i) the Employer and the Contractor may jointly terminate the Dispute Adjudication Agreement by giving 42-days' Notice to the Member; or (ii) the Member may resign as provided for in Clause 2 hereof.

If the Member fails to comply with the Dispute Adjudication Agreement, the Employer and the Contractor may, without prejudice to their other rights, terminate the Agreement by Notice to the Member. The Notice shall take effect when received by the Member.

If the Employer or the Contractor fails to comply with the Dispute Adjudication Agreement, the Member may, without prejudice to his/her other rights, terminate the Agreement by Notice to the Employer and the Contractor. The Notice shall take effect when received by them both.

Any such Notice, resignation and termination shall be final and binding on the Employer, the Contractor, and the Member. However, a Notice by the Employer or the Contractor, but not by both, shall be of no effect.

If the Member fails to comply with any of his/her obligations under Clause 4 (a) to (d) above, he/she shall not be entitled to any fees or expenses hereunder and shall, without prejudice to the Employer's and the Contractor's other rights, reimburse each of the Employer and the Contractor for any fees and expenses received by the Member and the Other Members (if any), for proceedings or decisions (if any) of the DAB or the Operation Service DAB which are rendered void or ineffective by the said failure to comply.

If the Member fails to comply with any of his/her obligations under Clause 4 (e) to (k) above, he/she shall not be entitled to any fees or expenses hereunder from the date and to the extent of the noncompliance and shall, without prejudice to their other rights, reimburse each of the Employer and the Contractor for any fees and expenses already received by the Member, for proceedings or decisions (if any) of the DAB or the Operation Service DAB which are rendered void or ineffective by the said failure to comply.

# 8 Disputes

Any Dispute or claim arising out of or in connection with this Dispute Adjudication Agreement, or the breach, termination, or invalidity thereof, shall be finally settled by institutional arbitration. If no other arbitration institute is agreed, the arbitration shall be conducted under the Rules of Arbitration of the International Chamber of Commerce by one arbitrator appointed in accordance with these Rules of Arbitration.

# Procedural Rules for Dispute Adjudication Board Members

- Unless otherwise agreed by the Employer and the Contractor, the DAB shall visit the Site at intervals of not more than 140 days, including times of critical construction events, at the request of either the Employer or the Contractor. Unless otherwise agreed by the Employer, the Contractor and the DAB, the period between consecutive visits shall not be less than 70 days, except as required to convene a hearing as described below.
- 2. The timing of and agenda for each Site visit shall be as agreed jointly by the DAB, the Employer, and the Contractor, or in the absence of agreement, shall be decided by the DAB. The purpose of Site visits is to enable the DAB to become and remain acquainted with the progress of the Works and of any actual or potential problems or claims, and, as far as reasonable, to endeavor to prevent potential problems or claims from becoming Disputes.
- 3. Site visits shall be attended by the Employer, the Contractor and the Employer's Representative and shall be coordinated by the Employer in cooperation with the Contractor. The Employer shall ensure the provision of appropriate conference facilities and secretarial and copying services. At the conclusion of each Site visit and before leaving the Site, the DAB shall prepare a report on its activities during the visit and shall send copies to the Employer and the Contractor.
- 4. The Employer and the Contractor shall furnish to the DAB one copy of all documents which the DAB may request, including Contract documents, progress reports, variation instructions, certificates, and other documents pertinent to the performance of the Contract. All communications between the DAB and the Employer or the Contractor shall be copied to the other Party. If the DAB comprises three persons, the Employer and the Contractor shall send copies of these requested documents and these communications to each of these persons.
- 5. If any Dispute is referred to the DAB in accordance with Subclause 20.6 [Obtaining Dispute Adjudication Board's Decision] or Subclause 20.10 [Disputes Arising during the Operation Service Period] of the General Conditions of Contract, the DAB shall proceed in accordance with the said Subclauses 20.6 and 20.10, and these Rules, or as otherwise agreed by the Employer and the Contractor in writing. Subject to the time allowed to give Notice of a decision and other relevant factors, the DAB shall:
  - (a) act fairly and impartially as between the Employer and the Contractor, giving each of them a reasonable opportunity of putting his/her case and responding to the other's case; and
  - (b) adopt procedures suitable to the Dispute, avoiding unnecessary delay or expense.
- 6. The DAB may conduct a hearing on the Dispute, in which event it will decide on the date and place for the hearing and may request that written documentation and arguments from the Employer and the Contractor be presented to it prior to or at the hearing.
- 7. If, within 14 days after giving its decision, the members of the DAB find and agree that such decision contained errors of fact or principle, the Chairman of the DAB (or the sole Member if applicable) shall advise the Employer and the Contractor of the error and issue an addendum to its decision in writing to both Parties.
- 8. If, within 14 days of receiving a decision from the DAB, either Party believes that such decision contains an ambiguity, that Party may seek clarification from the DAB in writing with a copy of such request to the other Party. Within 14 days of receiving such a request, the DAB shall respond with a copy to the other Party, and if the DAB is of the opinion that the decision did contain an error or ambiguity, it may correct its decision by issuing an addendum to its original decision.

# USER'S GUIDE TO DESIGN-BUILD-OPERATE CONTRACTS FOR WATER AND WASTEWATER GREENFIELD INFRASTRUCTURE PROJECTS

- 9. Except as otherwise agreed in writing by the Employer and the Contractor, the DAB shall have power to adopt an inquisitorial procedure, to refuse admission to hearings or audience at hearings to any persons other than representatives of the Employer, the Contractor and the Employer's Representative, and to proceed in the absence of any party who the DAB is satisfied received Notice of the hearing; but shall have discretion to decide whether and to what extent this power may be exercised.
- 10. The Employer and the Contractor empower the DAB, among other things, to:
  - (a) establish the procedure to be applied in deciding a Dispute;
  - (b) decide upon the DAB's own jurisdiction, and as to the scope of any Dispute referred to it;
  - (c) conduct any hearing as it thinks fit, not being bound by any rules or procedures other than those contained in the Contract and these Rules;
  - (d) take the initiative in ascertaining the facts and matters required for a decision,
  - (e) make use of its own specialist knowledge, if any;
  - (f) decide upon the payment of financing charges in accordance with the Contract;
  - (g) decide upon any provisional relief such as interim or conservatory measures; and
  - (h) open up, review, and revise any certificate, decision, determination, instruction, opinion or valuation of the Employer's Representative, relevant to the Dispute.
- 11. The DAB shall not express any opinions during any hearing concerning the merits of any arguments advanced by the Parties. Thereafter, the DAB shall make and give its decision in accordance with Subclause 20.6 [Obtaining Dispute Adjudication Board's Decision] of the General Conditions of Contract, or as otherwise agreed by the Employer and the Contractor in writing.
- 12. If the DAB comprises three persons:
  - (a) it shall convene in private after a hearing, in order to have discussions and prepare its decision;
  - (b) it shall endeavor to reach a unanimous decision: if this proves impossible the applicable decision shall be made by a majority of the Members, who may require the minority Member to prepare a written report for submission to the Employer and the Contractor; and
  - (c) if a Member fails to attend a meeting or hearing, or to fulfill any required function, the other two Members may nevertheless proceed to make a decision, unless:
    - (i) either the Employer or the Contractor does not agree that they do so; or
    - (ii) the absent Member is the chairman and he/she instructs the other Members not to make a decision.

# STANDARD BIDDING DOCUMENT FOR DESIGN-BUILD-OPERATE CONTRACTS FOR WATER AND WASTEWATER GREENFIELD INFRASTRUCTURE PROJECTS

Two-Stage Bidding Procedure

# **Two-Stage Bidding Procedure**

In the two-stage bidding procedure, Bidders first submit their technical proposals, in accordance with the Employer's Requirements, but without prices. The technical proposals are opened at the date and time advised in the Bidding Document. The technical proposals are evaluated and may be discussed with the Bidders. Deficiencies, extraneous provisions, and unsatisfactory technical features are pointed out to the Bidders whose comments are carefully evaluated. The Bidders are allowed to revise or adjust their technical proposals to meet the requirements of the Employer.

The objective of this process is to ensure that

- Uncertainties and misunderstandings as to the Employer's Requirements are addressed and remedied. This is
  particularly the case for large process plants, where such issues could occur and where a Single-Stage Bidding
  Procedure may run the risk of seeing an excessive number of Bidders being disqualified for having failed to fully
  capture complex Employer's Requirements into their respective Bid.
- All technical proposals are to conform to the same acceptable standards and meet the Employer's Requirements, as possibly amended in between Stage 1 and Stage 2. Bidders who are unable or unwilling to bring their Bids to the acceptable technical standard may be rejected as deficient Bids.
- A competitive and constructive dialogue is initiated with the Bidders, in order for the Employer to benefit from
  their experience and skills, which may in some instances generate ideas and views that the Employer and its
  consultants did not consider when preparing the Bidding Documents, but which are considered positive for
  the project and the communities it served.

After the evaluation of technical proposals has been approved by ADB, the second stage is to invite Bidders to submit price proposals and revised technical proposals in compliance with the Employer's Requirements. The revised technical proposals and price proposals are opened in public at a date and time advised by the Employer. In setting the date, the Employer should allow sufficient time for Bidders to incorporate the changes involved in the technical proposals and prepare price proposals. The price proposals and revised technical proposals are evaluated, and following ADB's approval, the contract is awarded to the Bidder whose Bid has been determined to be the lowest evaluated substantially responsive Bid.

The following documents structure flowchart shows how the Bidding Document is intended to be used both during the bidding process and during the formulation of the eventual contract documents.

# Two-Stage Bidding Procedure Documents Structure Flowchart

	The Bidding Document	Issued by Employer					
	Section 1 – Instructions to Bidders (ITB)						
	Section 2 – Bid Data Sheet (BDS)						
	Section 3 - Evaluation and Qualification Criteria (EQC)						
1	Section 4 – Bidding Forms (BDF)						
	Section 5 – Eligible Countries (ELC)						
	Section 6 – Employer's Requirements (ERQ)						
	Section 7 - General Conditions of Contract (GCC)						
	Section 8 - Particular Conditions of Contract (PCC)						
	Section 9 – Contract Forms (COF)						

		The First-Stage Bid	Submitted by Bidder				
	` '	The Letter of First-Stage Bid;					
	` '	Written confirmation authorizing the signatory of accordance with ITB 18.2;	of the Bid to commit the Bidder, in				
		(iii) Documentary evidence in accordance with ITB 14, the Bidder's eligibilit qualifications to perform the contract if its Bid is accepted;					
		Documentary evidence establishing in accordance with ITB 15 that the Plant,					
2		Materials, and Services offered by the Bidder in its Bid are eligible;  Documentary evidence in accordance with ITB 16, that the Plant, Materials, and					
	5	Services offered by the Bidder conform to the Bidding Document and/or details deviations in accordance with ITB 16.2;					
	` '	Technical Proposal in accordance with ITB 17, in section 17 of the section of Performance Guar					
		loint Venture agreement, or letter of intent to e	9				
		a draft agreement, indicating at least the parts respective partners, in the case of a bid submitter	· · · · · · · · · · · · · · · · · · ·				
	(viii) A	Any other document required in the BDS.					

Clarification of First-Stage Bid

Issued by Employer

3

- (i) Memorandum entitled "Changes Required Pursuant to First-Stage Evaluation";
- (ii) Invitation for Second-Stage Bids; and
- (iii) Any Addendum to the Bidding Document in accordance with ITB 8, if so required.

# The Second-Stage Bid Submitted by Bidder The Letter of Bid: (i) (ii) Completed schedules as required, including Price Schedules, in accordance with ITB 31 and ITB 32; Bid Security or Bid-Securing Declaration, in accordance with ITB 35; Written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with ITB 36.2; Updated First-Stage Bid, comprising any modifications required to the First-Stage Bid as recorded in the Memorandum entitled "Changes Required Pursuant to First-Stage Evaluation"; Documentary evidence regarding any changes that may have occurred between the time of submitting the First and Second-Stage Bids that have any material effect on the Bidder's eligibility and qualifications to perform the Contract in accordance with (vii) Documentary evidence establishing in accordance with ITB 15, that any additional or varied Plant, Materials, and Services offered by the Bidder, and not included in the First-Stage bid, are eligible; (viii) Documentary evidence establishing that any additional or varied Plant, Materials, and Services to be supplied and installed by the Bidder, in accordance with the requirements of the Memorandum entitled "Changes Required Pursuant to First-Stage Evaluation", are technically acceptable in accordance with ITB 16; List of Subcontractors additional to or different from those named in its First-Stage bid for major items of Plant and Services; and Other documentation and information which may be specified in the BDS. (x)

### Issued by Employer and Submitted The Contract by Bidder The Contract Agreement (i) (ii) The Letter of Acceptance Addenda to the Bidding Document (iii) Particular Conditions of Contract - Part A (iv) Particular Conditions of Contract - Part B (v) General Conditions of Contract (vi) (vii) Employer's Requirements (viii) The Completed Schedules The Operating License (ix) (x) The Contractor's Technical Bid (xi) Any other document forming part of the Contract, if so specified

# **Section 1: Instructions to Bidders**

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#### A. General

#### 1. Scope of Bid

- 1.1 In connection with the Invitation for Bids (IFB) indicated in Section 2 (Bid Data Sheet (BDS)), the Employer, as indicated in the BDS, issues this Bidding Document for the procurement of Plant, Materials, and Services as specified in Section 6 (Employer's Requirements). The name, identification, and number of lot(s) or contract(s) of the Open Competitive Bidding (OCB) are provided in the BDS.
- 1.2 Unless otherwise stated, throughout this Bidding Document words and expressions using initial capital letters shall be defined and interpreted as prescribed in:
  - (a) Section 7 (General Conditions of Contract or GCC) and Section 8 (Particular Conditions of Contract or PCC);
  - (b) ITB 1.1 above and ITB 1.3 below; or
  - (c) specifically, in the document where they are used, as the case may be (such as, for the purpose of illustration only but not limited to, under ITB 2.1 below).
- 1.3 The following words and expressions shall have the meaning stated:
  - (a) "Bidder" means a bidder, who acquires the Bidding Document from the source stated in the IFB, and
  - (b) "Addendum" or "Addenda" means any addendum or addenda to the Bidding Document which the Employer may issue from time to time.

#### 2. Source of Funds

- 2.1 The Borrower or Recipient (hereinafter called "Borrower") indicated in the BDS has applied for or received financing (hereinafter called "Funds") from the Asian Development Bank (hereinafter called "ADB") toward the cost of the project named in the BDS. The Borrower intends to apply a portion of the Funds to eligible payments under the Contract(s) for which this Bidding Document is issued.
- 2.2 Payments by ADB will be made only at the request of the Borrower and upon approval by ADB in accordance with the terms and conditions of the Financing Agreement between the Borrower and ADB (hereinafter called "Financing Agreement"), and will be subject in all respects to the terms and conditions of that Financing Agreement. No party other than the Borrower shall derive any rights from the Financing Agreement or have any claim to the Funds.

### 3. Fraud and Corruption

3.1 ADB's Anticorruption Policy (1998, as amended to date) requires Borrowers (including beneficiaries of ADB-financed activity), as well as Bidders, Suppliers, and Subcontractors under ADB-financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, ADB:

- (a) defines, for the purposes of this provision, the terms set forth below as follows:
  - (i) "corrupt practice" means the offering, giving, receiving, or soliciting, directly or indirectly, anything of value to influence improperly the actions of another party;
  - (ii) "fraudulent practice" means any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;
  - (iii) "coercive practice" means impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
  - (iv) "collusive practice" means an arrangement between two or more parties designed to achieve an improper purpose, including influencing improperly the actions of another party;
  - (v) "abuse" means theft, waste, or improper use of assets related to ADB-related activity, either committed intentionally or through reckless disregard;
  - (vi) "conflict of interest" means any situation in which a party has interests that could improperly influence that party's performance of official duties or responsibilities, contractual obligations, or compliance with applicable laws and regulations;
  - (vii) "obstructive practice" means (a) deliberately destroying, falsifying, altering, or concealing of evidence material to an ADB investigation, or deliberately making false statements to investigators, with the intent to impede an ADB investigation; (b) threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to a Bank investigation or from pursuing the investigation; or (c) deliberate acts intended to impede the exercise of ADB's contractual rights of audit or inspection or access to information; and
  - (viii) "integrity violation" is any act, as defined under ADB's Integrity Principles and Guidelines (2015, as amended from time to time), which violates ADB's Anticorruption Policy, including (i) to (vii) above and the following: violations of ADB sanctions, retaliation against whistleblowers or witnesses, and other violations of ADB's Anticorruption Policy, including failure to adhere to the highest ethical standard.
- (b) will reject a Bid for award if it determines that the Bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices or other integrity violations in competing for the Contract;

- (c) will cancel the portion of the financing allocated to a Contract if it determines at any time that representatives of the Borrower or of a beneficiary of ADB-financing engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices or other integrity violations during the procurement or the execution of that contract, without the Borrower having taken timely and appropriate action satisfactory to ADB to remedy the situation;
- (d) will impose remedial actions on a firm or an individual, at any time, in accordance with ADB's Anticorruption Policy and Integrity Principles and Guidelines, including declaring ineligible, either indefinitely or for a stated period of time, to participate<sup>1</sup> in ADB-financed, -administered, or -supported activities or to benefit from an ADB-financed, -administered, or -supported contract, financially or otherwise, if it at any time determines that the firm or individual has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive or obstructive practices or other integrity violations; and
- (e) will have the right to require that a provision be included in the Bidding Document and in the Contract financed by ADB, requiring Bidders, Suppliers, and Subcontractors to permit ADB or its representative to inspect their accounts and records and other documents relating to the Bid submission and Contract performance and to have them audited by auditors appointed by ADB, as laid down under PCC Subclauses 1.16 and 6.22.
- 3.2 All Bidders, consultants, contractors, Suppliers, and other third parties engaged or involved in ADB-related activities have a duty to cooperate fully in any screening or investigation when requested by ADB to do so. Such cooperation includes, but is not limited to, the following:
  - (a) being available to be interviewed and replying fully and truthfully to all questions asked;
  - (b) providing ADB with any items requested that are within the party's control including, but not limited to, documents and other physical objects;
  - (c) upon written request by ADB, authorizing other related entities to release directly to ADB such information that is specifically and materially related, directly or indirectly, to the said entities or issues which are the subject of the investigation;
  - (d) cooperating with all reasonable requests to search or physically inspect their person and/or work areas, including files, electronic databases, and personal property used on ADB activities, or that utilizes ADB's Information and Communications Technology (ICT) resources or systems (including mobile phones, personal electronic devices, and electronic storage devices such as external disk drives);
  - (e) cooperating in any testing requested by ADB, including but not limited to, fingerprint identification, handwriting analysis, and physical examination and analysis; and
  - (f) preserving and protecting confidentiality of all information discussed with, and as required by, ADB.

Whether as a Contractor, Subcontractor, Consultant, Manufacturer or Supplier, or Service Provider; or in any other capacity (different names are used depending on the particular Bidding Document).

- 3.3 All Bidders, consultants, contractors, and Suppliers shall ensure that, in its Contract with its sub-consultants, Subcontractors, and other third-parties engaged or involved in ADB-related activities, such sub-consultants, Subcontractors and other third parties similarly undertake the foregoing duty to cooperate fully in any screening or investigation when requested by ADB to do so.
- 3.4 The Employer hereby puts the Bidder on notice that the Bidder or any Joint Venture partner of the Bidder (if any) may not be able to receive any payments under the Contract if the Bidder or any of its Joint Venture partners, as appropriate, is, or is owned (in whole or in part) by a person or entity subject to applicable sanctions.
- 3.5 Furthermore, Bidders shall be aware of the provisions stated in the PCC Subclause 1.16, as well as in PCC Subclause 15.8 regarding Employer's Contract termination in such cases as listed under ITB 3.1(a) above.

### 4. Eligible Bidders

- 4.1 A Bidder may be a natural person, private entity, or government-owned enterprise subject to ITB 4.5 or any combination of them with a formal intent to enter into an agreement or under an existing agreement in the form of a Joint Venture. In the case of a Joint Venture, the Bidder should note that, in accordance with GCC Subclause 1.15:
  - (a) all partners shall be jointly and severally liable, and
  - (b) the Joint Venture shall nominate a leader who shall have the authority to bind the Bidder and then the Contractor, and conduct all business for and on behalf of any and all the partners of the Joint Venture during the bidding process and, in the event the Joint Venture is awarded the Contract, during Contract execution.
- 4.2 A Bidder, and all partners constituting the Bidder, shall have the nationality of an eligible country, in accordance with Section 5 (Eligible Countries). A Bidder shall be deemed to have the nationality of a country if the Bidder is a citizen or is constituted, incorporated, or registered, and operates in conformity with the provisions of the laws of that country. This criterion shall also apply to the determination of the nationality of proposed Subcontractors or Suppliers for any part of the Contract including related services.
- 4.3 A Bidder shall not have a conflict of interest. All Bidders found to have a conflict of interest shall be disqualified. A Bidder may be considered to be in a conflict of interest with one or more parties in this bidding process if any of, including but not limited to, the following apply:
  - (a) they have controlling shareholders in common; or
  - (b) they receive or have received any direct or indirect subsidy from any of them; or
  - (c) they have the same legal representative for purposes of this Bid; or
  - (d) they have a relationship with each other, directly or through common third parties, that puts them in a position to have access to material information about or improperly influence the bid of another Bidder, or influence the decisions of the Employer regarding this bidding process; or

- (e) a Bidder participates in more than one Bid in this bidding process, either individually or as a partner in a Joint Venture. This will result in the disqualification of all Bids in which it is involved. However, subject to any finding of a conflict of interest in terms of ITB 4.3 (a)- (d) above, this does not limit the participation of a Bidder as a Subcontractor in another Bid or of a firm as a Subcontractor in more than one Bid; or
- (f) a Bidder, Joint Venture partner, associates, parent company, or any affiliated entity, participated as a consultant in the preparation of the Employer's Requirements for the Plant, Materials, and Services that are the subject of the Bid; or
- (g) a Bidder was affiliated with a firm or entity that has been hired (or is proposed to be hired) by the Employer or Borrower as Employer's Representative for the Contract; or
- (h) a Bidder would be providing goods, works, or nonconsulting services resulting from or directly related to consulting services for the preparation or implementation of the project specified in the BDS ITB 2.1 that it provided or were provided by any affiliate that directly or indirectly controls, is controlled by, or is under common control with that firm.
- A firm shall not be eligible to participate in any procurement activities under an ADB-financed, -administered, or -supported project while under temporary suspension or debarment by ADB pursuant to its Anticorruption Policy (see ITB 3), whether such debarment was directly imposed by ADB, or enforced by ADB pursuant to the Agreement for Mutual Enforcement of Debarment Decisions. A Bid from a temporary suspended or debarred firm will be rejected.
- 4.5 Government-owned enterprises in the Borrower's country shall be eligible only if they can establish that they (i) are legally and financially autonomous, (ii) operate under commercial law, and (iii) are not dependent agencies of the Employer.
- 4.6 A Bidder shall not be under suspension from Bidding by the Employer as the result of the execution of a Bid–Securing Declaration.
- 4.7 Bidders shall provide such evidence of their continued eligibility satisfactory to the Employer, as the Employer shall reasonably request.
- 4.8 Firms shall be excluded if by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, the Borrower's country prohibits any import of goods or contracting of works or services from that country or any payments to persons or entities in that country.
- 4.9 In case a prequalification process has been conducted prior to the bidding process, this bidding is open only to prequalified Bidders.
- 5. Eligible Plant, Materials, and Services
- 5.1 The Plant, Materials, and Services to be supplied under the Contract shall have their origin in eligible source countries as defined in ITB 4.2 and all expenditures under the Contract will be limited to such Plant, Materials, and Services.

5.2 For purposes of ITB 5.1 above, "origin" means the place where the Plant, Materials, or component parts thereof are mined, grown, produced, or manufactured, and from where the services are provided. Plant components are produced when, through manufacturing, processing, or substantial or major assembling of components, a commercially recognized product results that differs substantially in its basic characteristics or in purpose or utility from its components.

### **B.** Contents of Bidding Document

6. Sections of Bidding 6.1 Document

The Bidding Document consists of Parts I, II, and III, which include all the sections indicated below, and should be read in conjunction with any Addendum issued in accordance with ITB 8.

### PART I Bidding Procedures

- Section 1 Instructions to Bidders (ITB)
- Section 2 Bid Data Sheet (BDS)
- Section 3 Evaluation and Qualification Criteria (EQC)
- Section 4 Bidding Forms (BDF)
- Section 5 Eligible Countries (ELC)

### **PART II Requirements**

• Section 6 Employer's Requirements (ERQ)

#### **PART III Conditions of Contract and Contract Forms**

- Section 7 General Conditions of Contract (GCC)
- Section 8 Particular Conditions of Contract (PCC)
- Section 9 Contract Forms (COF)
- 6.2 The Invitation for Bids (IFB) issued by the Employer is not part of the Bidding Document.
- 6.3 The Employer is not responsible for the completeness of the Bidding Document or any of its Addenda, if they were not obtained directly from the source stated by the Employer in the IFB.
- 6.4 The Bidder is expected to examine all instructions, forms, terms, and requirements in the Bidding Document. Failure to furnish all information or documentation required by the Bidding Document may result in the rejection of the Bid.
- 7. Clarification of Bidding Document, Site Visit, Pre-Bid Meeting
- 7.1 A prospective Bidder requiring any clarification on the Bidding Document shall contact the Employer in writing at the Employer's address indicated in the BDS, or raise inquiries during the pre-Bid meeting if provided for in accordance with ITB 7.4. The Employer will respond to any request for clarification, provided that such request is received no later than 21 days prior to the deadline for submission of Bids. The Employer's response shall be in writing with copies to all Bidders who have acquired the Bidding Document in accordance with ITB 6.3, including a description of the inquiry but without identifying its source. Should the Employer deem it necessary to amend the Bidding Document as a result of a request for clarification, it shall do so following the procedure under ITB 8.

- 7.2 The Bidder is advised to visit and examine the Site, where the Permanent Works will be executed, and its surroundings and obtain for itself on its own responsibility all data and information that may be necessary for preparing the Bid and entering into a contract for the provision of Plant, Materials, and Services. The costs of visiting the Site shall be at the Bidder's own expense.
- 7.3 The Bidder and any of its personnel or agents will be granted permission by the Employer to enter its premises and lands for the purpose of such visit, but only upon the express condition that the Bidder, its personnel, and agents, will release and indemnify the Employer and its personnel and agents from and against all liability in respect thereof, and will be responsible for death or personal injury, loss of or damage to property, and any other loss, damage, costs, and expenses incurred as a result of the visit and inspection.
- 7.4 The Bidder's designated representative is invited to attend a pre-Bid meeting, if provided for in the BDS. The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.
- 7.5 The Bidder is requested to submit any questions in writing, to reach the Employer not later than 1 week before the pre-Bid meeting.
- 7.6 Minutes of the pre-Bid meeting, including the text of the questions raised, without identifying the source, and the responses given, together with any responses prepared after the meeting, will be transmitted promptly to all Bidders who have acquired the Bidding Document in accordance with ITB 6.3. Any modification to the Bidding Document that may become necessary as a result of the pre-Bid meeting shall be made by the Employer exclusively through the issue of Addendum or Addenda pursuant to ITB 8 and not through the minutes of the pre-Bid meeting.
- 7.7 Nonattendance at the pre-Bid meeting will not be a cause for disqualification of a Bidder.

## 8. Amendment of Bidding Document

- 8.1 At any time prior to the deadline for submission of Bids, the Employer may amend the Bidding Document by issuing an Addendum or several Addenda.
- 8.2 Any Addendum issued shall be part of the Bidding Document and shall be communicated in writing to all who have obtained the Bidding Document from the Employer in accordance with ITB 6.3.
- 8.3 To give prospective Bidders reasonable time in which to take an Addendum into account in preparing their Bids, the Employer may, at its discretion, extend the deadline for the submission of Bids, pursuant to ITB 20.2 and/or ITB 38.2.

#### 9. Cost of Bidding

9.1 The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Employer shall in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

#### 10. Language of Bid

10.1 The Bid, as well as all correspondence and documents relating to the Bid exchanged by the Bidder and the Employer, shall be written in the language specified in the BDS. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages into the language specified in the BDS, in which case, for purposes of interpretation of the Bid, such translation shall govern.

### C-1. Preparation of First-Stage Bids

# 11. Documents Comprising the Bid

- 11.1 The first-stage Bid (hereinafter called "First-Stage Bid") submitted by the Bidder shall comprise the following:
  - (a) The Letter of First-Stage Bid;
  - (b) written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with ITB 18.2;
  - documentary evidence, in accordance with ITB 14, establishing the Bidder's eligibility and qualifications to perform the Contract if its Bid is accepted;
  - (d) documentary evidence, in accordance with ITB 15, that the Plant, Materials, and Services offered by the Bidder in its Bid are eligible;
  - documentary evidence, in accordance with ITB 16, that the Plant, Materials, and Services offered by the Bidder conform to the Bidding Document;
  - (f) Technical Proposal in accordance with ITB 17, together with the Schedule of Performance Guarantees and the list of Subcontractors, in accordance with ITB 17.2:
  - (g) in the case of a bid submitted by a Joint Venture, the Bid shall include a copy of the Joint Venture agreement entered into by all partners. Alternatively, a letter of intent to execute a Joint Venture agreement in the event of a successful Bid shall be signed by all partners and submitted with the Bid, together with a copy of the proposed agreement; and
  - (h) any other document required in the BDS.
- 11.2 First-Stage Bids are unpriced proposals and shall contain no prices or Price Schedules or other reference to Rates and Prices for completing the facilities. First-Stage Bids containing such price information will be rejected.

### 12. Letter of First-Stage Bid and Attachments

- 12.1 The Letter of First-Stage Bid and any attachments shall be prepared using the relevant forms furnished in Section 4 (Bidding Forms). The forms must be completed as instructed in each form.
- 13. Alternative Bids
- 13.1 Alternative Bids are not allowed.
- 13.2 For the avoidance of doubt, and with reference to ITB 46.2, Bidders' design solutions which deviate from any base design solution provided in the Bidding Document, but which:
  - (a) comply with the quality and performance of Plant, Materials, and Services specified in the Employer's Requirements; and
  - (b) do not change the Employer's rights and Contractor's obligations under the proposed Contract,

are not considered as Alternative Bids and are then allowed.

- 14. Documents
  Establishing the
  Eligibility and
  Qualifications of
  the Bidder
- 14.1 To establish its eligibility and qualifications to perform the Contract in accordance with Section 3 (Evaluation and Qualification Criteria), the Bidder shall provide the information requested in the corresponding information sheets included in Section 4 (Bidding Forms).
- 14.2 Domestic Bidders, individually or in Joint Ventures, applying for eligibility for domestic preference shall supply all information required to satisfy the criteria for eligibility as described in ITB 53.
- 15. Documents
  Establishing the
  Eligibility of Plant,
  Materials, and
  Services
- 15.1 To establish the eligibility of the Plant, Materials, and Services in accordance with ITB 5, Bidders shall complete the country of origin declarations in the Price Schedule forms, included in Section 4 (Bidding Forms).
- 16. Documents
  Establishing
  Conformity of the
  Plant, Materials,
  and Services
- 16.1 The documentary evidence of the conformity of the Plant, Materials, and Services to the Bidding Document may be in the form of literature, drawings, data, or any other medium and shall furnish:
  - (a) a detailed description of the essential technical and performance characteristics of the Plant, Materials, and Services, including the performance guarantees of the proposed Plant, Materials, and Services, in response to the Employer's Requirements;
  - (b) a list giving full particulars, including available sources, of all spare parts and special tools necessary for the proper and continuing operation of the Works for the period named in the BDS, following Contract Completion Date; and
  - (c) a commentary on the Employer's Requirements and adequate evidence demonstrating the substantial responsiveness of the Plant, Materials, and Services to those Employer's Requirements. Bidders shall note that standards for workmanship, Materials, and equipment designated by the Employer in the Bidding Document are intended to be descriptive (establishing standards of quality and performance) only and not restrictive. The Bidder may substitute alternative standards, brand names and/or catalog numbers in its Bid, provided that it demonstrates to the Employer's satisfaction that the substitutions are substantially equivalent or superior to the standards designated in the Employer's Requirements.
- 16.2 Bidders shall give details of deviations, objections, or reservations from the requirements of the Bidding Document, that they would like the Employer to consider during the clarification of the First-Stage Bid with the Bidder, pursuant to ITB 28. The Employer will consider all deviations, pursuant to ITB 27. Those accepted by the Employer will be incorporated either as an amendment to the Bidding Document, or into the "Changes Required Pursuant to First-Stage Evaluation," pursuant to ITB 28.8. The deviations that will not be accepted by the Employer shall be withdrawn by the Bidder in its Second-Stage Bid, failing which the Bid will be rejected, pursuant to ITB 46.

# 17.1 Technical Proposal, Subcontractors

- 17.1 The Bidder shall furnish a Technical Proposal including method statements for the Design-Build Period, Operation and Maintenance Plan, work methods, Contractor's Equipment, Contractor's Personnel, Schedules and any other information as stipulated in Section 4 (Bidding Forms), in sufficient detail to demonstrate the adequacy of the Bidders' Technical Proposal to meet the Contract requirements, including the Time for Completion of Design-Build.
- 17.2 For major items of Plant, Materials, and Services as listed by the Employer in Section 3 (Evaluation and Qualification Criteria), which the Bidder intends to purchase or subcontract, the Bidder shall give details of the name and nationality of the proposed Subcontractors, including Suppliers, for each of those items. In addition, the Bidder shall include in its Bid information establishing compliance with the requirements specified by the Employer for these items. Bidders are free to list more than one Subcontractor against each item of the Plant, Materials, and Services. Quoted Rates and Prices will be deemed to apply to whichever Subcontractor is appointed, and no adjustment of the Rates and Prices will be permitted in case of a change of a Subcontractor.
- 17.3 The Bidder shall be responsible for ensuring that any Subcontractor proposed complies with the requirements of ITB 4, and that any Plant, Materials, or services to be provided by the Subcontractor comply with the requirements of ITB 5.

# 18. Format and Signing of First-Stage Bids

- 18.1 The Bidder shall prepare one original set of the Technical Bid and one original set of the Price Bid comprising the Bid as described in ITB 11 and clearly mark it "FIRST-STAGE BID ORIGINAL". In addition, the Bidder shall submit copies of the Bid, in the number specified in the BDS and clearly mark each of them "FIRST-STAGE BID COPY." In the event of any discrepancy between the original and the copies, the original shall prevail.
- 18.2 The original and all copies of the Bid shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Bidder. This authorization shall consist of a written confirmation as specified in the BDS and shall be attached to the Bid. The name and position held by each person signing the authorization must be typed or printed below the signature. If a Bidder submits a deficient authorization, the Bid shall not be rejected in the first instance. The Employer shall request the Bidder to submit an acceptable authorization within the number of days from the Bidder's receipt of the request, as specified in the BDS. Failure to provide an acceptable authorization within the period stated in the Employer's request shall cause the rejection of the Bid. If the Letter of First-Stage Bid is not signed, the Bid shall be rejected.
- 18.3 A Bid submitted by a Joint Venture shall be signed so as to be legally binding on all partners.
- 18.4 Any amendments such as interlineations, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the Bid.

### C-2. Submission and Opening of First-Stage Bids

- Submission, Sealing, and Marking of First-Stage Bids
- 19.1 Bidders may submit their Bids by mail or by hand. When so specified in the BDS, Bidders shall have the option of submitting their Bids electronically. Procedures for submission, sealing and marking are as follows:
  - (a) Bidders submitting Bids by mail or by hand shall enclose the original and each copy of the Bid in separate sealed envelopes, duly marking the envelopes as "FIRST-STAGE BID ORIGINAL" and "FIRST-STAGE BID COPY." These envelopes containing the original and the copies shall then be enclosed in one single envelope. The rest of the procedure shall be in accordance with ITB 19.2 to ITB 19.3.
  - (b) Bidders submitting Bids electronically shall follow the electronic bid submission procedures specified in the BDS.
- 19.2 The inner and outer envelopes shall
  - (a) bear the name and address of the Bidder;
  - (b) be addressed to the Employer in accordance with ITB 20.1;
  - (c) bear the specific identification of this bidding process indicated in the BDS 1.1; and
  - (d) bear a warning not to open before the time and date for the opening of First-Stage Bids, in accordance with ITB 20.1
- 19.3 If all envelopes are not sealed and marked as required, the Employer will assume no responsibility for the misplacement or premature opening of the Bid.
- 20. Deadline for Submission of First-Stage Bids
- 20.1 First-Stage Bids must be received by the Employer at the address and no later than the date and time indicated in the BDS.
- 20.2 The Employer may, at its discretion, extend the deadline for the submission of First-Stage Bids by amending the Bidding Document in accordance with ITB 8, in which case all rights and obligations of the Employer and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.
- 21. Late Bids
- 21.1 The Employer shall not consider any Bid that arrives after the deadline for submission of Bids, in accordance with ITB 20. Any Bid received by the Employer after the deadline for submission of Bids shall be declared late, rejected, and returned unopened to the Bidder.
- 22. Substitution and Modification of First-Stage Bids
- 22.1 In case a Bidder wishes to substitute or modify its First-Stage Bid after it has been submitted and prior to the deadline for First-Stage Bid submission, it may do so by sending a written notice, as per ITB 20.1 and its substituted or modified Bid will be opened as per ITB 23.2.

### 23. Opening of First-Stage Bids by Employer

- 23.1 The Employer shall open the First-Stage Bids in public at the address, on the date, and time specified in the BDS in the presence of Bidder's designated representatives and anyone who chooses to attend. Any specific electronic Bid opening procedures required, if electronic bidding is permitted in accordance with ITB 19.1, shall be as specified in the BDS.
- 23.2 The names of all Bidders who submitted First-Stage Bids will be read out, and other such details as the Employer, at its discretion, may consider appropriate, will be announced at the opening. Only First-Stage Bids read out and recorded at Bid opening shall be considered for evaluation. No Bid shall be rejected at the opening of First-Stage Bids except for late Bids, in accordance with ITB 21.1.
- 23.3 The Employer shall prepare a record of the first-stage bid opening that shall include, as a minimum, the name of the Bidder, including any alternative bids. The Bidders' representatives who are present shall be requested to sign the record. The omission of a Bidder's signature on the record shall not invalidate the contents and effect of the record. A copy of the record shall be distributed to all Bidders who submitted First-Stage Bids on time, and posted online when electronic bidding is permitted.

### C-3. Evaluation of First-Stage Bids

#### 24. Confidentiality

- 24.1 Information relating to the evaluation of First and Second-Stage Bids and recommendation of Contract award, shall not be disclosed to Bidders or any other persons not officially concerned with such process until the publication of Contract award.
- 24.2 Any attempt by a Bidder to influence the Employer in the evaluation of the First and Second-Stage Bids or Contract award decisions may result in the rejection of its Bid.
- 24.3 Notwithstanding ITB 24.2, from the time of first-stage bid opening to the time of Contract award, if any Bidder wishes to contact the Employer on any matter related to the bidding process, it should do so in writing.

# 25. Eligibility and Qualification of the Bidder

- 25.1 As a first step in the First-Stage Bids evaluation process, the Employer shall determine to its satisfaction whether a Bidder meets the eligibility and qualifying criteria specified in Section 3 (Evaluation and Qualification Criteria).
- 25.2 The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB 14, and on any additional information, which the Employer may request from the Bidder to support such evidence. Unless permitted in the BDS, the determination shall not take into consideration the qualifications of other firms such as the Bidder's subsidiaries, parent entities, affiliates, Subcontractors (other than Specialist Subcontractors if permitted in the Bidding Document), or any other firm(s) different from the Bidder.

- 25.3 An affirmative determination shall be a prerequisite for the Employer to proceed with the next step of the evaluation process in accordance with ITB 26. The Employer reserves the right to reject the Bid of any Bidder found to be in circumstances described in GCC Subclause 15.2(f). A negative determination will result in rejection of the Bidder's Bid.
- The capabilities of the Subcontractors and Suppliers proposed for major items of Plant, Materials, and Services to be used by the Bidders will also be evaluated for acceptability in accordance with Section 3 (Evaluation and Qualification Criteria). Subject to ITB 26, should a Supplier or Subcontractor be determined to be unacceptable, the Employer, through the memorandum entitled "Changes Required Pursuant to First-Stage Evaluation", that is issued together with the invitation to submit a Second-Stage Bid, shall require the invited Bidder to substitute an acceptable Supplier, Subcontractor, or key item.

## **26.** Responsiveness of 26.1 First-Stage Bids

- As a second step in the First-Stage Bids evaluation process, the Employer will examine the First-Stage Bids to determine whether they are substantially complete, whether the documents have been properly signed and whether the First-Stage Bids are generally in order. Any First-Stage Bids found to be nonresponsive or not meeting the minimum performance specifications, or not submitting the minimum information that is essential for the evaluation of the First-Stage Bid, may be rejected by the Employer and not included for further consideration.
- 26.2 The Employer may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial omissions in the Bid related to documentation requirements. Failure of the Bidder to comply with the request may result in the rejection of its Bid.

### 27. Detailed Technical 27.1 Evaluation of First-Stage Bids

- As a third step in the First-Stage Bids evaluation process, the Employer will carry out a detailed technical evaluation of the Bids not previously rejected as being substantially nonresponsive, to determine whether the technical aspects are in compliance with the Bidding Document. To reach such a determination, the Employer will examine and compare the technical aspects of the First-Stage Bids on the basis of the information supplied by the Bidders, taking into account the following:
- (a) overall completeness and compliance with the Employer's Requirements; the technical merits of alternatives offered and deviations from the Employer's Requirements; conformity of the Plant, Materials, and Services offered with specified performance criteria, including conformity with the specified minimum and/or maximum requirements corresponding to each performance guarantees, as indicated in the Employer's Requirements and in the Schedule of Performance Guarantees; suitability of the Plant, Materials, and Services offered in relation to the environmental and climatic conditions prevailing at the Site; and quality, function, and operation of any process control concept included in the Bid;
- (b) any deviations to the commercial and contractual provisions stipulated in the Bidding Documents; and
- (c) other relevant factors, if any, listed in Section 3 (Evaluation and Qualification Criteria).

### D. Clarification of First-Stage Bids

### 28. Clarification Procedures

- 28.1 The Employer may conduct clarification meetings with each or any Bidder to clarify any aspects of its First-Stage Bid that require explanation and to review a Bidder's proposed deviations and alternative solutions.
- 28.2 The Employer may bring to the attention of the Bidder any amendments or changes that the Employer may require to be made to the First-Stage Bid; however, the Employer may not require amendments or changes at variance from the Employers' requirements unless the Employer intends to amend the Bidding Document in accordance with ITB 29.1(a).
- 28.3 The Employer may also seek clarifications in writing. In case the Employer has not sought clarifications in writing or through a meeting, but the Bidder wishes to explain its technical proposal, particularly its deviations and reservations, the Bidder is allowed one opportunity to request the Employer for a clarification meeting.
- 28.4 The Bidder's written request for a clarification meeting should be received by the Employer not later than 14 days prior to the submission deadline for Second-Stage Bids, and should provide an outline description of the particulars that the Bidder wishes to clarify with the Employer. Failure by a Bidder to meet these requirements may cause the Employer to decline the Bidder's request for clarification meeting. The option to hold the clarification meeting, however, remains with the Employer, whose decision shall be communicated to the Bidder in writing.
- 28.5 Bidders shall ensure that they are represented in the clarification meetings by persons who are duly authorized to conduct business for the Bidders during the bidding process.
- 28.6 At the end of the clarification meeting, the Employer shall issue minutes of the clarification meeting, documenting all clarifications and agreements reached during the meeting.
- 28.7 No agreement reached between the Employer and the Bidder during the clarification meeting shall constitute an amendment to the Bidding Document or the Employer's waiver of any requirement of the Bidding Document, unless and until such amendment and/or waiver, as the case may be, is formalized in accordance with ITB 28.8 and ITB 29.1.
- 28.8 The Employer will issue a Memorandum entitled "Changes Required Pursuant to First-Stage Evaluation", documenting the clarifications made in writing and/or in a meeting, if any, and including an annex listing all decisions, and required amendments or changes resulting from the clarification of the First-Stage Bid. The Memorandum will be communicated to the Bidder as part of the invitation to submit the Second-Stage Bid. Through this Memorandum, the Employer will
  - (a) advise the Bidder of any exceptions or deviations to the technical, commercial, or contractual provisions of the Bidding Document in the First-Stage Bid, that are unacceptable and that are to be withdrawn in the Second-Stage Bid, and of such exceptions or deviations that the Employer finds acceptable; and
  - (b) advise the Bidder to submit for consideration in the Second-Stage any Subcontractor or Supplier that is to be replaced pursuant to ITB 25.4.

### 29. Invitation to Submit Second-Stage Bids

- 29.1 At the end of the clarification process pursuant to ITB 28, conducted as necessary:
  - (a) the Employer may need to issue an Addendum to the Bidding Document resulting from the First-Stage evaluation and clarification process, with the objective of clarifying the requirements and improving competition without compromising essential project objectives; and/or
  - (b) with regard to each of the Bidders, the Employer will either
    - (i) invite the Bidder to submit a final updated technical and a commercial Second-Stage Bid based on its First-Stage Bid taking into account the Bidding Document, if and as amended, and any other modifications as recorded in the Annex to the Memorandum entitled "Changes Required Pursuant to First-Stage Evaluation". Bidders will be allowed to submit only one Second-Stage Bid, or
    - (ii) notify the Bidder that its Bid has been rejected on the grounds of being substantially nonresponsive, or that the Bidder does not meet the minimum qualification requirements set forth in the Bidding Document.
- 29.2 The deadline for submission of Second-Stage Bids will be specified in the invitation to submit Second-Stage Bids, pursuant to ITB 38.1.
- 29.3 Bidders are not allowed to form Joint Venture(s) or consortium (consortia) with other Bidders, nor change the partner or structure of the Joint Venture or consortium if the Bidder in the First-Stage was a Joint Venture or consortium.
- 29.4 If, as a result of the First-Stage evaluation, only one Bidder will be determined as substantially responsive, the Second-Stage bidding process shall be annulled due to a lack of competition in the submission of Price Bids. In such a case, all First-Stage Bids submitted shall be promptly returned to Bidders.

### **E-1. Preparation of Second-Stage Bids**

- 30. Documents

  Comprising SecondStage Bid
- 1.1 The Second-Stage Bid submitted by the Bidder shall comprise the following:
  - (a) Letter of Second-Stage Bid;
  - (b) Completed schedules as required, including Price Schedules, in accordance with ITB 31 and ITB 32;
  - (c) Bid Security or Bid-Securing Declaration, in accordance with ITB 35;
  - (d) Written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with ITB 36.2;
  - (e) The updated First-Stage Bid, comprising any modifications required to the First-Stage Bid as recorded in the Memorandum entitled "Changes Required Pursuant to First-Stage Evaluation";
  - (f) Documentary evidence regarding any changes that may have occurred between the time of submitting the First and Second-Stage Bids that have any material effect on the Bidder's eligibility and qualifications to perform the Contract, in accordance with ITB 14;

- (g) Documentary evidence establishing in accordance with ITB 15, that any additional or varied Plant, Materials, and Services offered by the Bidder, and not included in the First-Stage bid, are eligible;
- (h) Documentary evidence establishing that any additional or varied Plant, Materials, or services to be supplied and installed by the Bidder, in accordance with the requirements of the Memorandum entitled "Changes Required Pursuant to First-Stage Evaluation", are technically acceptable in accordance with ITB 16;
- (i) If, as a result of complying with the memorandum "Changes Required Pursuant to First-Stage Evaluation", the Bidder proposes to engage any Subcontractors or Suppliers additional to or different from those named in its First-Stage Bid for major items of plant and services as listed by the Employer in Section 3 (Evaluation and Qualification Criteria), which the Bidder intends to purchase or subcontract, the Bidder shall give details of the name and nationality of the proposed Subcontractors, including Suppliers, for each of those items. In addition, the Bidder shall include in its Bid information establishing compliance with the requirements specified by the Employer for these items; and
- (j) Other documentation and information which may be specified in the BDS.
- 31. Letter of Second-Stage Bid and Schedules
- 31.1 The Bidder shall complete the Letter of Second-Stage Bid and Schedules, including the appropriate Price Schedules, using the relevant forms furnished in Section 4 (Bidding Forms). The forms must be completed as instructed in each form and as required in the BDS.
- 32. Bid Price and Discounts
- 32.1 Unless otherwise specified in the BDS and/or Section 6 (Employer's Requirements), Bidders shall quote for the entire Plant, Materials, and Services on a "single responsibility" basis such that the total Bid price covers, in accordance with GCC Subclause 4.11 [Sufficiency of the Accepted Contract Amount], all the Contractor's obligations mentioned in or to be reasonably inferred from the Bidding Document in respect of the design, manufacture, including procurement and subcontracting (if any), delivery, construction, installation, completion and operation of the Works under the Contract. Items against which no rate or price is entered by the Bidder will not be additionally paid for by the Employer when executed and shall be deemed to be covered by the Rates and Prices for other items.
- 32.2 Bidders are required to quote the price for all obligations outlined in the Bidding
- 32.3 Bidders shall give a breakdown of the Rates and Prices in the manner and detail called for in the Price Schedules included in Section 4 (Bidding Forms). Where no different Price Schedules are included in the Bidding Document, Bidders shall present their Rates and Prices in the following manner: separately numbered Schedules included in Section 4 (Bidding Forms) shall be used for each of elements listed below. The total amount from each Schedule (Nos. 1 to 7) shall be summarized in a Grand Summary (Schedule No. 8) giving the total Bid amount to be entered in the Letter of Second-Stage Bid. Absence of the total Bid amount in the Letter of Second-Stage Bid may result in the rejection of the Bid.

Schedule No. 1: Plant and mandatory spare parts supplied from abroad

Schedule No. 2: Plant and mandatory spare parts supplied from within the Employer's country

Schedule No. 3: Design services

Schedule No. 4: Installation and other services during the Design Build Period

Schedule No. 5: Operation Service

Schedule No. 6: Other services during the Operation Service Period

Schedule No. 7: Asset Replacement Fund

Schedule No. 8 Grand Summary (Schedule Nos. 1 to 7)

Bidders shall note that the Plant and mandatory spare parts included in Schedule Nos. 1 and 2 above exclude Materials used for civil, building, and other construction works. All such Materials shall be included and priced under Schedule No. 4 (Installation and other services during the Design–Build Period).

- 32.4 In the Schedules, Bidders shall give the required details and a breakdown of their Rates and Prices as follows:
  - (a) Plant to be supplied from abroad (Price Schedule No. 1):
    - (i) the price of the Plant shall be quoted carriage and insurance paid (CIP)-named place of destination basis specified in the BDS;
    - (ii) all customs duties and other taxes paid or payable in the Employer's country on the Plant, at the Base Date, i.e., 28 days prior to the deadline for submission of Bids, if the Contract is awarded to the Bidder; and
    - (iii) the total price for the Plant.
  - (b) Plant supplied from within the Employer's country (Price Schedule No. 2):
    - (i) the price of the Plant shall be quoted on an EXW Incoterm basis (ex works, ex factory, ex warehouse, ex showroom, as applicable), including all customs duties and sales and other taxes already paid or payable at the Base Date on the components and raw material used in the manufacture or assembly of Plant quoted ex works or ex factory, or on the previously imported Plant of foreign origin quoted ex warehouse, ex showroom;
    - (ii) sales tax and other taxes payable in the Employer's country on the Plant at the Base Date if the Contract is awarded to the Bidder; and
    - (iii) the total price for the Plant.
  - (c) Design services (Price Schedule No. 3). Rates and Prices shall include all taxes, duties, levies, and charges payable in the Employer's country at the Base Date.

- (d) Installation and other services during the Design-Build Period (Price Schedule No. 4) shall be quoted separately and shall include Rates and Prices for local transportation, insurance, and other services incidental to delivery of the Plant, all Contractor's Personnel, Contractor's Equipment, Temporary Works, Materials, consumables, and all matters and things of whatsoever nature related to the execution of the Works during the Design-Build Period, as and where identified in the Bidding Document, and as necessary for the proper execution of the installation and other services, including all taxes, duties, levies, and charges payable in the Employer's country at the Base Date.
- (e) Operation Service (Price Schedule No. 5), other services during the Operation Service Period (Price Schedule No. 6) and Asset Replacement Fund (Price Schedule No. 7). Rates and Prices shall include all taxes, duties, levies, and charges payable in the Employer's country at the Base Date.
- 32.5 The current edition of Incoterms, published by the International Chamber of Commerce shall govern.
- 32.6 Prices quoted by the Bidder shall be subject to adjustment during performance of the Contract to reflect changes in the cost elements such as labour, Materials, transport, and Contractor's Equipment, all in accordance with the procedures specified in the corresponding Schedule of cost indexation. A Bid submitted with a fixed price quotation will be treated as nonresponsive and be rejected. Bidders are required to indicate the source of labour and Materials indexes in the corresponding form for the Schedule of cost indexation in Section 4 (Bidding Forms). The Employer may require the Bidder to justify its proposed indexes and weightings. Any Bid that omits indexes and weightings shall be subject to clarification with the Bidder.
- 32.7 If so indicated in BDS 1.1, Bids are being invited for individual lots (contracts) or for any combination of lots (packages). Bidders wishing to offer any price reduction (discount) for the award of more than one Contract shall specify in their Letter of Second-Stage Bid the price reductions applicable to each package, or alternatively, to individual contracts within the package, and the manner in which the price reductions will apply.

## 33. Currencies of Bid and Payment

- 33.1 The currency(ies) of the Bid shall be as follows:
  - (a) The Rates and Prices shall be quoted either in the currency of the Bidder's home country, or in any fully convertible currency(ies).
  - (b) A Bidder expecting to incur a portion of its expenditures in the performance of the Contract in more than one currency, and wishing to be paid accordingly, shall so indicate in the Schedule of Prices and the Letter of Second-Stage Bid.
  - (c) If some of the Contract expenditures are to be incurred in the Employer's country, such expenditures shall be quoted in either Foreign and/or Local Currency, depending upon the currency in which the costs are to be incurred.

- (d) Bidders may be required by the Employer to clarify and justify their Local and Foreign Currency requirements, and to substantiate that the amounts included in the Price Schedules are reasonable and responsive to ITB 32.1 in which case a detailed breakdown of its Foreign Currency requirements shall be provided by the Bidder.
- (e) During the performance of the Contract, the Foreign Currency portions of the outstanding balance of the Contract Price may be adjusted by agreement between the Employer and the Contractor to reflect any changes in Foreign Currency requirements for the Contract. Any such adjustment shall be effected by comparing the amounts quoted in the Bid with the amounts already used under the Contract and the Contractor's future needs for imported items.

### 34. Period of Validity of Bids

- 34.1 Second-Stage Bids shall remain valid for the period specified in the BDS after the Bid submission deadline date prescribed by the Employer. A Bid valid for a shorter period shall be rejected by the Employer as nonresponsive.
- 34.2 In exceptional circumstances, prior to the expiration of the Bid validity period, the Employer may request Bidders to extend the period of validity of their Bids. The request and the responses shall be made in writing. If a Bid Security is requested in accordance with ITB 35, it shall also be extended 28 days beyond the deadline of the extended Bid validity period. A Bidder may refuse the request without forfeiting its Bid Security. A Bidder granting the request shall not be required or permitted to modify its Bid.

### 35. Bid Security/ Bid-Securing Declaration

- 35.1 The Bidder shall furnish as part of its Bid, in original form, either a bid-securing declaration (a "Bid-Securing Declaration") or a bid security (a "Bid Security") as specified in the BDS. In the case of a Bid Security, the amount and currency shall be as specified in the BDS.
- 35.2 If a Bid-Securing Declaration is required pursuant to ITB 35.1, it shall use the form included in Section 4 (Bidding Forms). The Employer will declare a Bidder ineligible to be awarded a Contract for a specified period of time, as indicated in the BDS, if a Bid-Securing Declaration is executed.
- 35.3 If a Bid Security is specified pursuant to ITB 35.1, the Bid Security shall be, at the Bidder's option, in any of the following forms:
  - (a) an unconditional bank guarantee,
  - (b) an irrevocable letter of credit,
  - (c) a cashier's or certified check, or
  - (d) SWIFT message in the form of MT760.

all from a reputable source from an eligible country as described in Section 5 (Eligible Countries). In the case of a bank guarantee, the Bid Security shall be submitted using either the Bid Security Form included in Section 4 (Bidding Forms) or another form acceptable to the Employer. The form must include the complete name of the Bidder. The Bid Security shall be valid for 28 days beyond the original validity period of the Bid, or beyond any period of extension if requested under ITB 34.2.

- 35.4 Subject to the succeeding sentences, any Bid not accompanied by a substantially compliant Bid Security or Bid-Securing Declaration, as required in accordance with ITB 35.1, shall be rejected by the Employer as nonresponsive. If a Bidder submits a Bid Security that (i) deviates in form, amount, and/or period of validity, or (ii) does not provide sufficient identification of the Bidder (including, without limitation, failure to indicate the name of the Joint Venture or, where the Joint Venture has not yet been constituted, the names of all future Joint Venture partners), the Employer shall request the Bidder to submit a compliant Bid Security within the number of days, as specified in the BDS, of receiving such a request. Failure to provide a compliant Bid Security within the prescribed period of receiving such a request shall cause the rejection of the Bid.
- 35.5 If a Bid Security is specified pursuant to ITB 35.1, the Bid Security shall be returned promptly upon the successful Bidder:
  - (a) providing the Performance Security and the parent company guarantee pursuant to ITB 60, and
  - (b) signing the Contract Agreement pursuant to ITB 59.
- 35.6 The Bid Security may be forfeited or the Bid-Securing Declaration executed, if
  - (a) notwithstanding ITB 40.3 a Bidder withdraws its Bid during the period of Bid validity specified by the Bidder on the Letter of Second-Stage Bid, except as provided in ITB 34.2; or
  - (b) the successful Bidder fails to:
    - (i) sign the Contract Agreement in accordance with ITB 59;
    - (ii) furnish a Performance Security and a parent company guarantee in accordance with ITB 60; or
    - (iii) accept the arithmetical corrections of its Bid in accordance with ITB 50.
- 35.7 If the Bid Security is required as per ITB 35.1, the Bid Security of a Joint Venture shall be in the name of the Joint Venture that submits the Bid. If the Joint Venture has not been legally constituted at the time of bidding, the Bid Security shall be in the name of any or all of the Joint Venture partners. If the Bid-Securing Declaration is required as per ITB 35.1, the Bid-Securing Declaration of a Joint Venture shall be in the name of the Joint Venture that submits the Bid. If the Joint Venture has not been legally constituted at the time of bidding, the Bid-Securing Declaration shall be in the names of all future partners as named in the letter of intent referred to in ITB 4.1.
- 36. Format and Signing 36.1 The Bidder shall prepare one original set of the documents comprising the bid as described in ITB 30 and clearly mark it "SECOND-STAGE BID ORIGINAL." In addition, the Bidder shall submit copies of the bid, in the number specified in the BDS and clearly mark them "SECOND-STAGE BID COPY." In the event of any discrepancy between the original and the copies, the original shall prevail.

- 36.2 The original and all copies of the Bid shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Bidder. This authorization shall consist of a written confirmation as specified in the BDS and shall be attached to the Bid. The name and position held by each person signing the authorization must be typed or printed below the signature. If a Bidder submits a deficient authorization, the Bid shall not be rejected in the first instance. The Employer shall request the Bidder to submit an acceptable authorization within the number of days as specified in the BDS. Failure to provide an acceptable authorization within the period as stated in the Employer's request shall cause the rejection of the Bid. If either the Letter of Second-Stage Bid or the Bid-Securing Declaration (if applicable) is not signed, the Bid shall be rejected.
- 36.3 A Bid submitted by a Joint Venture shall be signed so as to be legally binding on all partners.
- 36.4 Any amendments such as interlineations, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the Bid.

### E-2. Submission and Opening of Second-Stage Bids

- 37. Submission, Sealing, 37.1 and Marking of Second-Stage Bids
- Bidders may always submit their Second-Stage Bids by mail or by hand. When so specified in the BDS, Bidders shall have the option of submitting their Bids electronically. Procedures for submission, sealing, and marking are as follows:
- (a) Bidders submitting bids by mail or by hand shall enclose the original and each copy of the Bid, in separate sealed envelopes, duly marking the envelopes as "SECOND-STAGE BID - ORIGINAL", and "SECOND-STAGE BID - COPY." These envelopes containing the original and the copies shall then be enclosed in one single envelope. The rest of the procedure shall be in accordance with ITB 37.2 and ITB 37.3.
- (b) Bidders submitting Bids electronically shall follow the electronic bid submission procedures specified in the BDS.
- 37.2 The inner and outer envelopes shall
  - (a) bear the name and address of the Bidder;
  - (b) be addressed to the Employer in accordance with ITB 38.1;
  - (c) bear the specific identification of this bidding process indicated in the BDS 1.1; and
  - (d) bear a warning not to open before the time and date for Bid opening, in accordance with ITB 38.1.
- 37.3 If all envelopes are not sealed and marked as required, the Employer will assume no responsibility for the misplacement or premature opening of the Bid.

### 38. Deadline for Submission of Second-Stage Bids

- 38.1 Second-Stage Bids must be received by the Employer at the address and no later than the date and time indicated in the Letter of Invitation to submit Second-Stage Bids.
- 38.2 The Employer may, at its discretion, extend the deadline for the submission of Second-Stage Bids by amending the Bidding Document in accordance with ITB 8, in which case all rights and obligations of the Employer and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.

#### 39. Late Bids

- 39.1 The Employer shall not consider any Second-Stage Bid that arrive after the deadline for submission of Second-Stage Bids, in accordance with ITB 38. Any Bid received by the Employer after the deadline for submission of Second-Stage Bids shall be declared late, rejected, and returned unopened to the Bidder.
- 40. Withdrawal, Substitution, and Modification of Bids
- 40.1 A Bidder may withdraw, substitute, or modify its Bid after it has been submitted by sending a written notice, duly signed by an authorized representative, and shall include a copy of the authorization in accordance with ITB 36.2 (except for withdrawal notices, which do not require copies). The corresponding substitution or modification of the Bid must accompany the respective written notice. All notices must be:
  - (a) prepared and submitted in accordance with ITB 36 and ITB 37 (except for withdrawal notices, which do not require copies), and in addition, the respective envelopes shall be clearly marked "WITHDRAWAL," "SUBSTITUTION," "MODIFICATION;" and
  - (b) received by the Employer prior to the deadline prescribed for submission of Second-Stage Bids, in accordance with ITB 38.
- 40.2 Bids requested to be withdrawn in accordance with ITB 40.1 shall be returned unopened to the Bidders.
- 40.3 No Bid may be withdrawn, substituted, or modified in the interval between the deadline for submission of Second-Stage Bids and the expiration of the period of Bid validity specified by the Bidder on the Letter of Second-Stage Bid or any extension thereof.

## **41.** Second-Stage Bids 41.1 Opening

- 41.1 The Employer shall open the Second-Stage Bids in public at the address, on the date, and time specified in the Letter of Invitation to submit Second-Stage Bids in the presence of Bidder's designated representatives and anyone who choose to attend. Any specific electronic Bid opening procedures required, if electronic bidding is permitted in accordance with ITB 37.1, shall be as specified in the BDS.
- 41.2 First, envelopes marked "WITHDRAWAL" shall be opened and read out and the envelope with the corresponding Bid shall not be opened, but returned to the Bidder. No Bid withdrawal shall be permitted unless the corresponding withdrawal notice contains a valid authorization to request the withdrawal and is read out at Bid opening.

- 41.3 Second, envelopes marked "SUBSTITUTION" shall be opened and read out and exchanged with the corresponding Bid being substituted, and the substituted Bid shall not be opened, but returned to the Bidder. No Bid substitution shall be permitted unless the corresponding substitution notice contains a valid authorization to request the substitution and is read out at bid opening. Only the substitution Second-Stage Bid, if any, shall be opened, read out, and recorded.
- 41.4 Next, envelopes marked "MODIFICATION" shall be opened and read out with the corresponding Bid. No Bid modification shall be permitted unless the corresponding modification notice contains a valid authorization to request the modification and is read out at Bid opening. Only envelopes that are opened and read out at Bid opening shall be considered further.
- 41.5 All other envelopes holding the Second-Stage Bids shall be opened one at a time, and the following read out and recorded:
  - (a) the name of the Bidder;
  - (b) whether there is a modification or substitution;
  - (c) the Bid Price(s) including any discounts;
  - (d) the presence of a Bid Security or a Bid-Securing Declaration, as required; and
  - (e) any other details as the Employer may consider appropriate.

Only discounts read out at bid opening shall be considered for evaluation. Unless otherwise specified in the BDS, all pages of the Letter of Second-Stage Bid and Price Schedules are to be initialed by at least three representatives of the Employer attending the bid opening. No Bid shall be rejected at bid opening except for late bids, in accordance with ITB 39.1.

41.6 The Employer shall prepare a record of the Bid opening that shall include, as a minimum, the name of the Bidder and whether there is a withdrawal, substitution, or modification; the Bid Price, per lot if applicable, including any discounts; and the presence or absence of a bid security or a Bid-Securing Declaration, if one was required. The Bidders' representatives who are present shall be requested to sign the record. The omission of a Bidder's signature on the record shall not invalidate the contents and effect of the record. A copy of the record shall be distributed to all Bidders who submitted Bids on time, and posted online when electronic bidding is permitted.

### E-3. Evaluation and Comparison of Second-Stage Bids

42. Clarification of Bids

42.1 To assist in the examination, evaluation, and comparison of the Second-Stage Bids, and qualification of the Bidders, the Employer may, at its discretion, ask any Bidder for a clarification of its Bid. Any clarification submitted by a Bidder that is not in response to a request by the Employer shall not be considered. The Employer's request for clarification and the response shall be in writing. No change in the substance of the Bid or in prices shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the Second-Stage Bids, in accordance with ITB 50.1.

- 42.2 If a Bidder does not provide clarifications of its Bid by the date and time set by the Employer, acting reasonably, in the Employer's request for clarification, its Bid may be rejected.
- 43. Examination of Second-Stage Bids
- 43.1 As a first step in the Second-Stage Bids evaluation process, the Employer shall examine the Second-Stage Bid to confirm that all documents and technical documentation requested in ITB 30.1 have been provided, and to determine the completeness of each document submitted. If any of these documents or information is missing, the Bid may be rejected.
- 43.2 The Employer shall confirm that the following documents and information have been provided in the Second-Stage Bid. If any of these documents or information is missing, the offer shall be rejected:
  - (a) Letter of Second-Stage Bid;
  - (b) Completed Schedules;
  - (c) Written confirmation of authorization to commit the Bidder;
  - (d) Bid Security or Bid-Securing Declaration, as required; and
  - (e) Updated First-Stage Bid.
- 44. Eligibility and Qualification of the Bidder
- 44.1 As a second step in the Second-Stage Bids evaluation process, the Employer shall determine to its satisfaction whether a Bidder still meets the eligibility and qualifying criteria specified in Section 3 (Evaluation and Qualification Criteria).
- 44.2 The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB 14.
- 44.3 An affirmative determination shall be a prerequisite for proceeding with the next step of the evaluation process under ITB 45. The Employer reserves the right to reject the Bid of any Bidder found to be in circumstances described in GCC Subclause 15.2(f). A negative determination shall result in the disqualification of the Bid.
- 44.4 The capabilities of the Subcontractors and Suppliers proposed in its Bid for the major items of Plant, Materials, and Services to be used by the Bidder will also be evaluated for acceptability in accordance with Section 3 (Evaluation and Qualification Criteria). Their participation should be confirmed with a letter of intent between the parties, as needed. Should a Subcontractor or Supplier be determined to be unacceptable, the Bid will not be rejected, but the Bidder will be required to propose, without changing its Bid amount, an acceptable substitute Subcontractor or Supplier meeting the minimum criteria stated in Section 3 (Evaluation and Qualification Criteria). If a Bidder does not provide an acceptable substitute Subcontractor or Supplier by the date and time (which shall be reasonable) set in the Employer's request for substitution of Subcontractor or Supplier, its Bid may be rejected.

### 45. Deviations, Reservations, and Omissions

- 45.1 During the evaluation of Second-Stage Bids, the following definitions apply:
  - (a) "Deviation" is a departure from the requirements specified in the Bidding Document;
  - (b) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the Bidding Document; and
  - (c) "Omission" is the failure to submit part or all of the information or documentation required in the Bidding Document.

## **46.** Responsiveness of 46.1 Second-Stage Bids

- 46.1 As a third step in the Second-Stage Bids evaluation process, the Employer's determination of a bid's responsiveness is to be based on the contents of the Bid itself, as defined in ITB 30.
- 46.2 A substantially responsive Second-Stage Bid is one that meets the requirements of the Bidding Document (incorporating all modifications listed in the Memorandum entitled "Changes Required Pursuant to First-Stage Evaluation") without material Deviation, Reservation, or Omission. A material Deviation, Reservation, or Omission is one that,
  - (a) if accepted, would:
    - (i) affect in any substantial way the scope, quality, or performance of the Plant, Materials, and Services specified in the Contract; or
    - (ii) limit in any substantial way, inconsistent with the Bidding Document, the Employer's rights or the Bidder's obligations under the proposed Contract; or
  - (b) if rectified, would unfairly affect the competitive position of other Bidders presenting substantially responsive Bids.

For the avoidance of doubt, Bidders are free to propose any design solution which deviates from any base design solution provided in the Bidding Document, and this will be considered substantially responsive as long as it does not affect the quality or performance of Plant, Materials, and Services specified in the Employer's Requirements and does not change the Employer's rights and Contractor's obligations under the proposed Contract.

- 46.3 If a Bid is not substantially responsive to the requirements of the Bidding Document, it shall be rejected by the Employer and may not subsequently be made responsive by correction of the material Deviation, Reservation, or Omission.
- 47. Nonmaterial
  Deviation,
  Reservation, or
  Omission
- 47.1 Provided that a Bid is substantially responsive, the Employer may waive any nonconformities in the Bid that do not constitute a material Deviation, Reservation, or Omission.

- 47.2 Provided that a Bid is substantially responsive, the Employer may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial Deviation, Reservation, or Omission in the Bid related to documentation requirements. Requesting information or documentation on such nonconformities shall not be related to any aspect of the price of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.
- 47.3 Provided that a Bid is substantially responsive, the Employer shall rectify quantifiable nonmaterial Deviation, Reservation, or Omission related to the Bid amount. To this effect, the Bid amount shall be adjusted, for comparison purposes only, to reflect the rate or price of a missing or nonconforming item or component. The adjustment shall be made using the method indicated in Section 3 (Evaluation and Qualification Criteria).

### 48. Detailed Technical 48.1 Evaluation of Second-Stage Bids

- As a fourth step in the Second-Stage Bids evaluation process, the Employer will carry out a detailed technical evaluation of the Bids not previously rejected as being substantially nonresponsive, to determine whether the technical aspects are in compliance with the Bidding Document (incorporating all modifications listed in the Memorandum entitled "Changes Required Pursuant to First-Stage Evaluation"). To reach such a determination, the Employer will examine and compare the technical aspects of the Bids based on the information supplied by the Bidders, taking into account the following:
- (a) overall completeness and compliance with the Employer's Requirements; Deviations from the Employer's Requirements; conformity of the Plant, Materials, and Services offered with specified performance criteria; suitability of the Plant, Materials, and Services offered in relation to the environmental and climatic conditions prevailing at the site; and quality, function and operation of any process control concept included in the Bid. The Bid that does not meet minimum and/or maximum acceptable standards of completeness, consistency, detail, and performance guarantees, will be rejected for nonresponsiveness; and
- (b) other relevant factors, if any, listed in Section 3 (Evaluation and Qualification Criteria).

### 49. Economic Evaluation of Second-Stage Bids

- 49.1 As a fifth step in the Second-Stage Bids evaluation process, the Employer shall use the criteria and methodologies listed in this clause. No other evaluation criteria or methodologies shall be permitted.
- 49.2 I. To perform the economic evaluation of a Second-Stage Bid, the Employer shall consider the following:
  - the Bid amount, including Provisional Sums and the provision, if any, for contingencies in the Price Schedules;
  - (b) price adjustment for correction of arithmetical errors in accordance with ITB 50.1;
  - (c) price adjustment due to discounts offered in accordance with ITB 32.7;

- (d) price adjustment due to quantifiable nonmaterial Deviations, Reservations, or Omissions in accordance with ITB 47.3;
- (e) converting the amount resulting from applying (a) to (d) above, if relevant, to a single currency in accordance with ITB 51;
- (f) assessment whether the bid is abnormally low in accordance with ITB 52;
   and
- (g) the evaluation factors indicated in Section 3 (Evaluation and Qualification Criteria).
- II. The Employer's evaluation of a Second-Stage Bid will exclude and not take into account,
- (a) in the case of Plant and mandatory spare parts (Price Schedule No. 1) supplied from abroad, all taxes and duties, applicable in the Employer's country and payable on the Plant and mandatory spare parts if the Contract is awarded to the Bidder; and
- (b) in the case of Plant and mandatory spare parts (Price Schedule No. 2) supplied from within the Employer's country, sales and other taxes, applicable in the Employer's country and payable on the Plant and mandatory spare parts if the Contract is awarded to the Bidder.
- 49.3 If price adjustment is allowed in accordance with ITB 32.6, the estimated effect of the price adjustment provisions of Schedule of cost indexation, applied over the period of execution of the Contract, shall not be taken into account in Bid evaluation.
- 49.4 If this Bidding Document allows Bidders to quote separate prices for different lots (contracts), and the award to a single Bidder of multiple lots (contracts), the methodology to determine the lowest evaluated price of the lot (contract) combinations, including any discounts offered in the Letter of Second-Stage Bid, is specified in Section 3 (Evaluation and Qualification Criteria).
- 49.5 If the Bid, which results in the lowest Evaluated Bid amount, is seriously unbalanced or front-loaded in the opinion of the Employer, the Employer may require the Bidder to produce detailed price analyses for any or all items of the Price Schedules, to demonstrate the internal consistency of those Rates and Prices with the methods and time schedule proposed. After evaluation of the price analyses, taking into consideration the terms of payments, the Employer may require that the amount of the Performance Security be increased at the expense of the Bidder to a level sufficient to protect the Employer against financial loss in the event of default of the successful Bidder under the Contract. If the Bidder does not increase its Performance Security in accordance with the requirements of the Employer, its Bid may be rejected.
- 49.6 The Employer shall compare all substantially responsive Bids to determine the lowest evaluated Bid amount, in accordance with ITB 49.2.

### 50. Correction of Arithmetical Errors

- 50.1 During the evaluation of Second-Stage Bids, the Employer shall correct arithmetical errors on the following basis:
  - (a) where there are errors between the total of the amounts given under the column for the price breakdown and the amount given under the total price, the amounts given under the column for the price breakdown shall prevail and the total price will be corrected accordingly;
  - (b) where there are errors between the total of the amounts of Price Schedules Nos. 1 to 7 and the amount given in Price Schedule No. 8 (Grand Summary), the total of the amounts of Price Schedules Nos. 1 to 7 shall prevail and the Price Schedule No. 8 (Grand Summary) will be corrected accordingly;
  - (c) if there is a discrepancy between the grand total amount given in Price Schedule No. 8 (Grand Summary) and the Bid amount in item (b) of the Letter of Second-Stage Bid, the grand total price given in Price Schedule No. 8 (Grand Summary) will prevail and the Bid amount in item (b) of the Letter of Second-Stage Bid will be corrected; and
  - (d) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetical error, in which case the amount in figures shall prevail subject to (a), (b), and (c) above.
- 50.2 If the Bidder that submitted the lowest evaluated Bid does not accept the correction of errors, its Bid shall be disqualified and its Bid Security may be forfeited or its Bid-Securing Declaration executed, as the case may be.
- 51. Conversion to Single Currency
- 51.1 For evaluation and comparison purposes, the currency(ies) of the Bid shall be converted into a single currency as specified in the BDS.
- 52. Abnormally Low Bids
- 52.1 An abnormally low bid is one where the bid price, in combination with other elements of the bid, appears to be so low that it raises concerns as to the capability of the Bidder to perform the contract for the offered bid price.
- 52.2 When the offered Bid amount appears to be abnormally low, the Employer shall undertake a three-step review process as follows:
  - (a) identify abnormally low costs and unit rates by comparing them with the Employer's estimates, other substantially responsive Bids, or recently awarded similar contracts;
  - (b) clarify and analyze the Bidder's resource inputs and pricing, including overheads, contingencies, and profit margins; and
  - (c) decide whether to accept or reject the Bid.
- 52.3 With regard to ITB 52.2 (b) above, the Employer will seek a written explanation from the Bidder of the reasons for the offered Bid amount, including a detailed analysis of costs and unit prices, by reference to the scope, proposed methodology, schedule, and allocation of risks and responsibilities. This may also include information regarding the economy of the manufacturing process; the services to be provided, or the construction method to be used; the technical solutions to be adopted; and any exceptionally favorable conditions available to the Bidder for the Plant, Materials, or Services proposed.

- 52.4 After examining the explanation given and the detailed price analyses presented by the Bidder, the Employer may:
  - (a) accept the Bid, if the evidence provided satisfactorily accounts for the low Bid amount and costs, in which case the Bid is not considered abnormally low;
  - (b) accept the Bid, but require that the amount of the Performance Security be increased at the expense of the Bidder to a level sufficient to protect the Employer against financial loss. The amount of the Performance Security shall generally be not more than 20% of the Contract Price; or
  - (c) reject the Bid if the evidence provided does not satisfactorily account for the low Bid amount, and make a similar determination for the next ranked bid, if required.
- 53. Domestic Preference
- 53.1 Unless otherwise specified in the BDS, domestic preference shall not apply.
- 54. Comparison of Second-Stage Bids
- 54.1 The Employer shall compare all substantially responsive Second-Stage Bids to determine the lowest evaluated Bid, in accordance with ITB 49.2.
- 55. Employer's Right to Accept Any Bid, and to Reject Any or All Bids
- 55.1 The Employer reserves the right to accept or reject any Bid, and to annul the bidding process and reject all Bids at any time prior to Contract award, without thereby incurring any liability to Bidders. In case of annulment, all Bids submitted and specifically, Bid Securities, shall be promptly returned to the Bidders.
- **56.** Notice of Intention 56.1 for Award of Contract
- If standstill provisions apply as specified in the BDS, the standstill period shall be defined in the BDS to specify the duration subsequent to notification of intention for award of Contract (before making the actual Contract award) within which any unsuccessful Bidder can challenge the proposed award.

#### F. Award of Contract

- 57. Award Criteria
- 57.1 The Employer shall award the Contract to the Bidder whose offer has been determined in line with ITB 49 and ITB 52 above to be the lowest evaluated Bid and is substantially responsive to the Bidding Document, provided further that the Bidder is determined to be eligible and qualified to perform the Contract satisfactorily.
- 58. Notification of Award
- 58.1 Prior to the expiration of the period of Bid validity, and upon expiry of the standstill period specified in ITB 56.1, or upon satisfactory resolution of a complaint filed within standstill period, if applicable, the Employer shall notify the successful Bidder, in writing, that its Bid has been accepted by sending a Letter of Acceptance as per the form given under Section 9 (Contract Forms) of the Bidding Document. At the same time, the Employer shall also notify all other Bidders of the results of the bidding.

- 58.2 Unless standstill period applies, upon notification of award, unsuccessful Bidders may request in writing to the Employer for a debriefing seeking explanations on the grounds on which their Bids were not selected. The Employer shall promptly respond in writing and/or in a debriefing meeting to any unsuccessful Bidder who, after publication of Contract award, requests a debriefing.
- 58.3 Within 2 weeks of the award of Contract or expiry of the standstill period, where such period applies, or, if a complaint has been filed within the standstill period, upon receipt of ADB's confirmation of satisfactory resolution of the complaint, the borrower shall publish in an English language newspaper or widely known and freely accessible website the results identifying the Bid and lot or package numbers, as applicable, and the following information:
  - (a) name of each Bidder who submitted a Bid;
  - (b) Bid amounts as read out at Bid opening;
  - (c) name and evaluated amounts of each Bid that was evaluated;
  - (d) name of Bidders whose Bids were rejected and the reasons for their rejection; and
  - (e) name of the winning Bidder, and the amount it offered, as well as the duration and summary scope of the Contract awarded.
- 58.4 The Letter of Acceptance of the Bid creates a binding Contract in between the Employer and the Bidder, now becoming the Contractor, as per the terms set out under Section 7 (General Conditions of Contract) and Section 8 (Particular Conditions of Contract).
- **59. Signing of Contract** 59.1 Promptly after issue of the Letter of Acceptance, the Employer shall send the successful Bidder the Contract Agreement, as per the form given under Section 9 (Contract Forms) of the Bidding Document.
  - 59.2 Within 28 days of receipt of the Contract Agreement, the successful Bidder shall sign, date, and return it to the Employer.
  - 59.3 Failure of the successful Bidder to sign the Contract Agreement in accordance with GCC Subclause 1.6, shall constitute sufficient ground for the annulment of the award, the Contract termination in accordance with PCC Subclause 15.2, and forfeiture of the Bid Security or execution of the Bid-Securing Declaration. In that event, the Employer may award the Contract to the next lowest evaluated Bidder whose offer is substantially responsive and is determined by the Employer to be qualified to perform the Contract satisfactorily.

### 60. Performance Security and Parent Company Guarantee

- 50.1 Within 28 days of the receipt of the Letter of Acceptance from the Employer, the successful Bidder shall provide the Performance Security in accordance with PCC Subclause 4.2, subject to ITB 49.5 and ITB 52.4(b), and the parent company guarantee in accordance with PCC Subclause 4.2A, using for that purpose the Performance Security form and the parent company guarantee form included in Section 9 (Contract Forms), or another form acceptable to the Employer. If the entity issuing the Performance Security is located outside the country of the Employer, it shall have a correspondent financial institution located in the country of the Employer to make it enforceable.
- 60.2 Failure of the successful Bidder to submit the abovementioned Performance Security or parent company guarantee, shall constitute sufficient grounds for the annulment of the award, the Contract termination in accordance with PCC Subclause 15.2, and forfeiture of the Bid Security or execution of the Bid-Securing Declaration. In that event, the Employer may award the Contract to the next lowest evaluated Bidder whose offer is substantially responsive and is determined by the Employer to be qualified to perform the Contract satisfactorily.

### 61. Bidding-Related Complaints

The procedures for dealing with Bidding-Related Complaints arising out of this bidding process are specified in the BDS.

## **Section 2: Bid Data Sheet**

This section consists of provisions that are specific to each procurement and supplement the information or requirements included in Section 1: Instructions to Bidders.

### A. General

ITB 1.1	The number of the Invitation for Bids (IFB) is: [Insert IFB number]
	The Employer is: [Insert name of the Employer]
	The name of the open competitive bidding (OCB) is: [Insert name/title of the OCB]
	The identification number of the OCB is: [Insert OCB number]
	The number and identification of lots (contracts) comprising this OCB is: [if there are no lots, insert "None". If there are lots, insert list of lots, identifying each lot by indicating number and name/title of lots/contracts]
ITB 2.1	The Borrower is: [Insert name of the Borrower]
	The name of the project is: [Insert name of project]

### **B.** Contents of Bidding Documents

ITB 7.1	For <b>clarification purposes</b> only, the Employer's address is:
	[Insert required details below]
	Attention: [insert full name of the person, if applicable]
	Street address: [insert street address and number]
	Floor/Room number: [insert floor and room number, if applicable]
	City: [insert name of the city or town]
	ZIP code: [insert postal (ZIP) code, if applicable]
	Country: [insert name of country]
	Telephone: [insert telephone number, including country and city codes]
	Fax: [insert fax number, with country and city codes]
	E-mail: [insert e-mail address, if applicable]

ITB 7.4	[Use one of the following options as appropriate—If a pre-Bid meeting will take place, insert the date, time, and place for the meeting]:
	No pre-Bid meeting will be held.
	[or]
	A pre-Bid meeting will take place as follows:
	Date:
	Time:
	Place:
	A site visit conducted by the Employer [insert "will" or "will not" as appropriate] will be organized.

### C-1. Preparation of First-Stage Bids

ITB 10.1	The language of the Bid is: [insert "English"]
ITB 11.2 (h)	The Bidder shall submit with its First-Stage Bid the following additional documents:  [insert a list of additional documents if so required]
ITB 16.1 (b)	The period following Contract Completion Date shall be [insert number of years as appropriate]
ITB 18.1	In addition to the original First-Stage Bid, the number of copies is: [insert number of copies]
ITB 18.2	The written confirmation of authorization to sign on behalf of the Bidder shall consist of [insert the name and description of the documentation required to demonstrate the authority of the signatory to sign the Bid. Employer may wish to consider the following language: "An organisational document, board resolution or its equivalent, or power of attorney specifying the representative's authority to sign the Bid on behalf of, and to legally bind the Bidder. If the Bidder is an intended or an existing Joint Venture, the power of attorney should be signed by all partners and specify the authority of the named representative of the Joint Venture to sign on behalf of, and legally bind the intended or existing Joint Venture.  If the Joint Venture has not yet been formed, also include evidence from all proposed Joint Venture partners of their intent to enter into a Joint Venture in the event of a contract award in accordance with ITB 11.1."]
ITB 18.2	The Bidder shall submit an acceptable authorization within [insert number of days, normally 14] days from receipt of the request of the Employer

### C-2. Submission and Opening of First-Stage Bids

ITB 19.1	Bidders have/do not have [select one option and delete the other as appropriate] the option of submitting their bids electronically.
ITB 19.1 (b)	[remove the following, and replace it by "Not applicable", if there is no electronic submission allowed under BDS 19.1 above]  If Bidders have the option of submitting their bids electronically, the electronic bidding submission procedures shall be: [state applicable procedures]
ITB 20.1	For <b>bid submission purposes</b> only, the Employer's address is
	[Insert required details below]
	Attention:
	Street address:
	Floor/Room number:
	City:
	ZIP code:
	Country:
	The deadline for bid submission is
	Date:
	Time:
ITB 23.1	The bid opening of First-Stage Bids shall take place at
	[Insert required details below]
	Street address:
	Floor/Room number:
	City:
	Country:
	Date:
	Time:
ITB 23.1	Electronic bid opening procedure shall be as follows: [bid opening procedures; otherwise, state "not applicable"]

### C-3. Evaluation of First-Stage Bids

ITB 25.2	The qualifications of other firms such as the Bidder's subsidiaries, parent entities, affiliates, Subcontractors [insert "shall" or "shall not"] be permitted.
	[If permitted, add "The Bidder shall fill out the Affiliate Company Guarantee Form included in Section 4 (Bidding Forms) for each subsidiary, parent entity, affiliate, Subcontractor, etc. that the Bidder submits for consideration of the Employer in determining its qualifications.]

### **E-1.** Preparation of Second-Stage Bids

E-1. Preparat	E-1. Preparation of Second-Stage Bids	
ITB 30.1 (j)	The Bidder shall submit with its Second-Stage Bid the following additional documents:  [insert a list of additional documents if so required]	
ITB 31.1	The units and rates in figures entered into the Price Schedules should be typewritten or if written by hand, must be in print form. Price Schedules not presented accordingly may be considered nonresponsive.	
ITB 32.1	The following components or services will be provided under the responsibility of the Employer: [insert list of components or services, if appropriate; otherwise state "not applicable"]	
IT 32.4(a)(i)	The Incoterm for quoting plant to be supplied from abroad is: [insert CIP-named place of destination]	
ITB 34.1	The Bid validity period shall be [insert number of days] days.	
	[The period should be sufficient to permit completion of evaluation and comparison of Bids, review of the recommended selection by ADB (if so required), acquire all necessary approvals, and notify the successful Bidder of the Contract award. Normally, the bid validity period should not exceed 120 days.]	
ITB 35.1	[Use one of the following options as appropriate.]	
	The Bidder shall furnish a Bid Security in the amount of: [state amount] [state currency] [The amount of the bid security should be stated as a fixed amount, normally computed as 1% to 2% of the estimated contract value. The amount may be reduced for very large contracts].  [or]	
	The Bidder shall furnish a Bid-Securing Declaration.	
ITB 35.2	[remove the following, and replace it by "Not applicable", if a Bid Security is used instead of a Bid-Securing Declaration]	
	The ineligibility period will be [insert number of years] years	
ITB 35.4	Period within which the Bidder shall provide a compliant Bid Security: [insert number of days, generally 14 days] days from receipt of the request of the Employer.	
ITB 36.1	In addition to the original Bid, the number of copies is: [insert number of copies]	
	· · · · · · · · · · · · · · · · · · ·	

ITB 36.2	The written confirmation of authorization to sign on behalf of the Bidder shall consist of: [insert the name and description of the documentation required to demonstrate the authority of the signatory to sign the Bid. Employer may wish to consider the following language: "An organisational document, board resolution or its equivalent, or power of attorney specifying the representative's authority to sign the Bid on behalf of, and to legally bind the Bidder. If the
	Bidder is an intended or an existing Joint Venture, the power of attorney should be signed by all partners and specify the authority of the named representative of the Joint Venture to sign on behalf of, and legally bind the intended or existing Joint Venture.  If the Joint Venture has not yet been formed, also include evidence from all proposed Joint Venture partners of their intent to enter into a Joint Venture in the event of a contract award in accordance with ITB 30.1."]
ITB 36.2	The Bidder shall submit an acceptable authorization within [insert number of days, generally 14 days] days from receipt of the request of the Employer

### **E-2.** Submission and Opening of Second-Stage Bids

	<u> </u>
ITB 37.1	Bidders have/do not have [select one option and delete the other as appropriate] the option of submitting their bids electronically.
ITB 37.1 (b)	[remove the following, and replace it by "Not applicable", if there is no electronic submission allowed under BDS 23.1 above]  If Bidders have the option of submitting their bids electronically, the electronic bidding submission procedures shall be: [state applicable procedures]
ITB 41.1	Electronic bid opening procedure shall be as follows: [bid opening procedures; otherwise, state "not applicable"]
ITB 41.5	The Letter of Second-Stage Bid and Price Schedules shall be initialed by [state number] representatives of the Employer attending the Price Bid opening.

### **E-3.** Evaluation and Comparison of Second-Stage Bids

ITB 51.1	The currency that shall be used for Second-Stage Bid evaluation and comparison purposes to convert all Bid prices expressed in various currencies into a single currency is: [state currency]
	The source of the selling exchange rate shall be: [insert the name of the source of the exchange rates, which should be the Central Bank in the Employer's country or specify another institution that carries out the function of a central bank]
	The date for the selling exchange rate shall be: [the Base Date, as defined under GCC Subclause 1.1.5]
ITB 53.1	Domestic preference [insert "shall" or "shall not"] apply.
	[If domestic preference applies, insert] "If domestic preference applies, the application methodology will be as specified in Section 3 (Evaluation and Qualification Criteria)."

#### ITB 56.1

[Choose one of the following options as appropriate.]

Standstill provisions shall not apply.

[or]

Standstill provisions shall apply. The duration of standstill period will be [insert number of days, generally 14 days] days from the date of notice of intention for award of contract.

The Employer shall, at the start of the standstill period, notify in writing each Bidder that submitted a Bid, of its intention to award a Contract to the successful Bidder at the end of standstill period. The notification using the form included in Section 9 (Contract Forms) shall include the following information:

- (a) the name of each Bidder who submitted a Bid;
- (b) the Bid amounts as read out at Bid opening;
- (c) the name and evaluated amounts of each Bid that was evaluated;
- (d) the name of Bidders whose Bids were rejected and the reasons for their rejection;
- (e) the name of the winning Bidder, and the amount it offered, as well as the duration and summary scope of the Contract awarded; and
- (f) a statement of the reason(s) the Bid of the unsuccessful Bidder to whom the notification is addressed was unsuccessful, unless the amount information under (e) of this paragraph already reveals the reason.

#### F. Award of Contract

#### ITB 61.1

The procedures for Bidding-Related Complaints are referenced in the Procurement Regulations for ADB Borrowers (Appendix 7). The Bidder should submit its complaint following these procedures, in writing, to:

For the attention: [insert full name of person receiving complaints]

Title/position: [insert title/position]

Employer: [insert name of Employer]

E-mail address: [insert e-mail address]

Fax number: [insert fax number] [delete if not used]

# Section 3: Evaluation and Qualification Criteria

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#### **NOTES**

This section contains the criteria that the Employer shall use to evaluate Bids and qualify Bidders if the bidding was not preceded by a prequalification exercise and post qualification is applied. If prequalification is undertaken by the Employer, the qualification criteria set out under that Section should be used.

ADB requires Bidders to be qualified by meeting predefined, precise minimum requirements. The method entails setting pass-fail criteria, which, if not met by the Bidder, results in disqualification.

It will therefore be necessary to ensure that a Bidder's risk of having its bid rejected on grounds of qualification is remote if due diligence is exercised by the Bidder during bid preparation. For that purpose, clear-cut, pass-fail qualification criteria need to be defined and indicated in the Invitation for Bids and the Bidding Document to enable Bidders to make an informed decision whether to pursue a specific Contract and, if so, whether to pursue it as a single entity or in Joint Venture. The criteria adopted must relate to characteristics that are essential to ensure satisfactory execution of the Contract, and must be stated in clear terms. In accordance with ITB 25, ITB 27, ITB 44, ITB 48, and ITB 49, no other methods, criteria, and factors shall be used.

The Bidder shall provide all the information requested in the forms included in Section 4 (Bidding Forms). In case the bidding was preceded by a prequalification process, updating of information pertaining to a Bidder's eligibility, historical contract nonperformance, and financial situation will be necessary during bidding.

# A. First-Stage Evaluation

#### 1. Qualification

#### 1.1 Eligibility

Criteria		Documents			
			Joint Venture		
Requirement	Single Entity	All Partners Combined	Each Partner	One Partner	Submission Requirements

#### 1.1.1 Nationality

Nationality in accordance with ITB 4.2.	Must meet requirement	Must meet requirement	Must meet requirement	Not applicable	Forms ELI – 1; ELI – 2 with attachments
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#### 1.1.2 Conflict of Interest

No conflicts of interest in	Must meet	Must meet	Must meet	Not	Letter of First-	
accordance with ITB 4.3.	requirement	requirement	requirement	applicable	Stage Bid	

#### 1.1.3 ADB Eligibility

Not having been declared ineligible by ADB, as described in ITB 4.4.	Must meet requirement	Must meet requirement	Must meet requirement	Not applicable	Letter of First- Stage Bid
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#### 1.1.4 Government-Owned Enterprise

Bidder required to meet conditions of ITB 4.5.	Must meet requirement	Must meet requirement	Must meet requirement	Not applicable	Forms ELI - 1; ELI - 2 with attachments
					with attachments

#### 1.1.5 United Nations Eligibility

Not having been excluded by an act of compliance with a United Nations Security Council resolution in accordance with ITB 4.8.	Must meet requirement	Must meet requirement	Must meet requirement	Not applicable	Letter of First- Stage Bid
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#### 1.2 Historical Contract Nonperformance

#### 1.2.1 History of Nonperforming Contracts

Criteria	С	Documents			
			Joint Venture		
Requirement	Single Entity	All Partners Combined	Each Partner	One Partner	Submission Requirements
Nonperformance of a contract <sup>a</sup> did not occur as a result of contractor default since 1 January [insert year].	Must meet requirement	Must meet requirement	Must meet requirement <sup>b</sup>	Not applicable	Form CON-1

<sup>&</sup>lt;sup>a</sup> Nonperformance, as decided by the Employer, shall include all contracts where (a) nonperformance was not challenged by the contractor, including through referral to the dispute resolution mechanism under the respective contract, and (b) contracts that were so challenged but fully settled against the contractor. Nonperformance shall not include contracts where Employers decision was overruled by the dispute resolution mechanism. Nonperformance must be based on all information on fully settled disputes or litigation, i.e., dispute or litigation that has been resolved in accordance with the dispute resolution mechanism under the respective contract and where all appeal instances available to the Bidder have been exhausted.

#### 1.2.2 Suspension Based on Execution of Bid-Securing Declaration

Criteria	С	Documents			
		Joint Venture			
Requirement	Single Entity	All Partners Combined	Each Partner	One Partner	Submission Requirements
Not under suspension based on execution of a Bid-Securing Declaration pursuant to ITB 4.6.	Must meet requirement	Must meet requirement	Must meet requirement	Not applicable	Letter of First- Stage Bid

<sup>&</sup>lt;sup>b</sup> This requirement also applies to contracts executed by the Bidder as Joint Venture member.

#### 1.2.3 Pending Litigation and Arbitration

Pending litigation and arbitration criterion shall not apply.1

Criteria	Compliance Requirements				Documents
		Joint Venture			
Requirement	Single Entity	All Partners Combined	Each Partner	One Partner	Submission Requirements
All pending litigation and arbitration, if any, shall be treated as resolved against the Bidder and so shall in total not represent more thana of the Bidder's net worth calculated as the difference between total assets and total liabilities.	Must meet requirement	Not applicable	Must meet requirement	Not applicable	Form CON – 1

<sup>&</sup>lt;sup>a</sup> If the criterion is applied, the Employer should indicate a percentage within the range of 50%–100% of the Bidder's net worth.

The Employer may choose to apply this criterion on an exceptional basis. If the Employer chooses to apply this criterion, it should indicate "shall apply" and use the table in 1.2.3.

#### 1.3 Financial Situation

#### 1.3.1 Historical Financial Performance

Criteria	c	Documents			
			Joint Venture		
Requirement	Single Entity	All Partners Combined	Each Partner	One Partner	Submission Requirements
Submission of audited financial statements or, if not required by the law of the Bidder's country, other financial statements acceptable to the Employer, for the lasta years to demonstrate the current soundness of the Bidder's financial position. As a minimum, the Bidder's net worth for each of the last three years, calculated as the difference between total assets and total liabilities, should be positive.	Must meet requirement	Not applicable	Must meet requirement	Not applicable	Form FIN-1 with attachments

 $<sup>^{\</sup>rm a}\,$  Indicate time period between 3 and 5 years.

#### NOTES

The financial information provided by the Bidder should be reviewed in its entirety to allow a truly informed judgment, and the pass–fail decision on the financial position of the Bidder should be given on this basis. Any abnormal feature that may lead to financial problems should alert the Employer to seek expert professional advice for further review and interpretation.

#### 1.3.2 Average Annual Turnover

Criteria	Compliance Requirements				Documents
	Joint Venture				
Requirement	Single Entity	All Partners Combined	Each Partner	One Partner	Submission Requirements
Minimum average annual turnover of \$a calculated as total certified payments received for contracts in progress or completed, within the lastb years.	Must meet requirement	Must meet requirement	Must meet	Must meetd of the requirement	Form FIN – 2

<sup>&</sup>lt;sup>a</sup> The amount stated should normally not be less than three times the value of the subject Contract divided by its Design–Build Period, expressed as 3 x V/T; where V is the Employer's estimated value of the Contract (for the avoidance of doubt: including the Design–Build, the Operation Service and the Asset Replacement costs under the Contract as well as contingencies), and where T is the Time for Completion of the Design–Build duration under the Contract, in years.

<sup>&</sup>lt;sup>b</sup> Insert number of years in words and figures and indicate time period between 3 to 5 years.

<sup>&</sup>lt;sup>c</sup> The Employer is to define this value based on the minimum amount required that all partners of the Joint Venture must meet taking joint and several liability into account, usually at least 25%.

<sup>&</sup>lt;sup>d</sup> The Employer is to define this value based on the minimum amount required that one partner of the Joint Venture must meet, usually at least 40%.

#### 1.3.3 Financial Resources<sup>2</sup>

If the Bid evaluation process and the decision for the award of the Contract takes more than 1 year from the date of Bid submission, Bidders may be asked to resubmit their current contract commitments and latest information on financial resources supported by latest audited accounts / audited financial statements, or if not required by the law of the Bidder's country, other financial statements acceptable to the Employer, and the Bidders' financial capacity will be reassessed on this basis.

Criteria	Compliance Requirements			Documents	
			Joint Venture		
Requirement	Single Entity	All Partners Combined	Each Partner	One Partner	Submission Requirements
For Single Entities: The Bidder must demonstrate that its financial resources defined in Form FIN – 3, less its financial obligations for its current contract commitments defined in Form FIN – 4, meet or exceed the total requirement for the Subject Contract of	Must meet requirement	Not applicable	Not applicable	Not applicable	Form FIN – 3 and Form FIN – 4
For Joint Ventures:  (1) One partner must demonstrate that its financial resources defined in Form FIN – 3, less its financial obligations for its own current contract commitments defined in Form FIN – 4, meet or exceed its required share of	Not applicable	Not applicable	Not applicable	Must meet requirement	Form FIN – 3 and Form FIN – 4
AND					

The Employer has the option to move this criterion from Section 3 (Evaluation and Qualification Criteria) to Section 6 (Employer's Requirements), in which case

<sup>(</sup>a) the Employer shall confirm compliance with the financial resources prior to award of contract in accordance with ITB 57.1 Award Criteria; and

<sup>(</sup>b) in place of the Financial Resources criterion, the Employer shall require the Bidder to submit together with its Bid, and for confirmation during Bid evaluation, a Letter of Undertaking to comply with the financial resources given in Section 6 prior to award of Contract.

Criteria	Compliance Requirements			Documents	
			Joint Venture		
Requirement	Single Entity	All Partners Combined	Each Partner	One Partner	Submission Requirements
(2) Each partner must demonstrate that its financial resources defined in Form FIN – 3, less its financial obligations for its own current contract commitments defined in Form FIN – 4, meet or exceed its required share of	Not applicable	Not applicable	Must meet requirement	Not applicable	Form FIN – 3 and Form FIN – 4
AND					
(3) The Joint Venture must demonstrate that the combined financial resources of all partners defined in Form FIN – 3, less all the partners' total financial obligations for the current contract commitments defined in Form FIN – 4, meet or exceed the total requirement for the Subject Contract of	Not applicable	Must meet requirement	Not applicable	Not applicable	Form FIN – 3 and Form FIN – 4

<sup>&</sup>lt;sup>a</sup> The Employer to specify financial resources for the subject contract based on the following calculation:

3 (or 4) x Estimated Design-Build component of the Contract value (inclusive of taxes and duties)

Time for Completion for the Design-Build, in months

- <sup>b</sup> The Employer is to define this value based on the minimum amount one partner of the Joint Venture must meet, usually at least 40% of the total requirement for the Subject Contract. This value is to be carried forward to Form FIN 5B when it is used.
- <sup>c</sup> The Employer is to define this value based on the minimum amount each partner of the Joint Venture must meet, usually at least 25% of the total requirement for the Subject Contract. This value is to be carried forward to Form FIN 5B when it is used.

#### **NOTE**

Form FIN – 5 is made available for use by the Bidder as a self-assessment tool, and by the Employer as an evaluation work sheet, to determine compliance with the financial resources requirement as stated in 1.3.3. Failure to submit Form FIN – 5 by the Bidder shall not lead to bid rejection.

#### 1.4 Bidder's Experience

#### 1.4.1 Contracts of Similar Size and Nature<sup>3</sup>

Criteria		Compliance Requirements			Documents
		Join	t Venture		
Requirement	Single Entity	All Partners Combined	Each Partner	One Partner	Submission Requirements
Participation, as a contractor, Joint Venture partner, or Subcontractor, in at least one contract that has been successfully or substantially completed within the lasta years and that is similar to the proposed contract, where the value of the Bidder's participation exceeds \$b. The similarity of the Bidder's participation shall be based on:c	Must meet requirement	Not applicable	Not applicable <sup>d</sup>	Must meet requirement	Form EXP – 1

Or

Participation in at least two contracts that have been successfully or substantially completed within the lasta years and that are similar to the proposed contract, where the value of the Bidder's participation exceeds  \$b .The similarity of the Bidder's participation shall be based on:  1 23	Must meet requirement	Must meet requirement as follows: (i) Either one partner must meet requirement Or (ii) any two partners must each demonstrate one successfully or substantially completed contract of similar size and	Not applicable <sup>d</sup>	Not applicable	Form EXP – 1
3		of similar size and nature			

<sup>&</sup>lt;sup>a</sup> Insert number of years in words and figures. The range is normally 5-10 years.

<sup>&</sup>lt;sup>b</sup> Usually 80% of the estimated value of the subject contract. In case of repetitive and contiguous works (e.g., transmission lines, water pipeline), the Employer has the option of specifying a value that is between 50% and 80% of the subject contract value. If the contract value is not in the specific currency, the exchange rate to be used to calculate the value of the contract shall be the selling rate of the Borrower's national bank on the date of the contract.

<sup>&</sup>lt;sup>c</sup> Specify major requirements in terms of any of the following: physical size, nature of works, complexity, methods, technology, or other characteristics.

<sup>&</sup>lt;sup>d</sup> In case of complex works, the Employer may require each partner to demonstrate one successfully or substantially completed contract of similar nature where such partner's value of participation exceeds 25% of the subject contract value.

The Employer has the option of requiring either one or two contracts of similar size and nature and should choose the appropriate language below.

#### 1.4.2 Experience in Key Activities<sup>4</sup>

1.4.2(a) Must be complied with by the Bidder. In case of a Joint Venture Bidder, at least one of the partners must meet the requirement in the key activity.

Table A

Criteria	Compliance F	Documents	
Requirement	Single Entity	Joint Venture	Submission Requirements
For the above or other contracts executed during the period stipulated in 1.4.1, a minimum experience in the following key activities:	Must meet requirement	Must meet requirement	Form EXP – 2
1			
2			
3 etc			

1.4.2(b) The Employer accepts any of the following activities to be subcontracted. They may be complied with by the Bidder or by its proposed Specialist Subcontractor.

Table B

Criteria	Compliance F	Documents	
Requirement	Single Entity or its Specialist Subcontractors	Joint Venture or its Specialist Subcontractors	Submission Requirements
For the above or other contracts executed during the period stipulated in 1.4.1, a minimum experience in the following key activities:	One must meet requirement	One must meet requirement	Form EXP – 2
4			
5			
6 etc			

<sup>&</sup>lt;sup>4</sup> Key activities criterion should confirm Bidder's experience in performing highly specialized activities such as design, installation, testing, commissioning, etc. There shall not be any inconsistency or repetition of requirements between 1.4.1 and 1.4.2.

#### 1.5 Subcontractors

Subcontractors or Suppliers for the following major items of Plant, Materials, and Services must meet the following minimum qualification criteria, herein listed for a Subcontractor for that item. Failure to comply with this requirement will result in rejection of the Subcontractor but not the Bidder.

Item No.	Description of Item	Minimum Criteria to be metª	Documents Submission Requirements
1			Form EXP – 3
2			
3			
4			
5			

<sup>&</sup>lt;sup>a</sup> Subcontractor must have the experience of having completed at least one contract of size and complexity similar to the proposed subcontract within the last 3 to 5 years.

In the case of a Bidder who offers to supply and install major items of plant under the contract, which the Bidder did not manufacture or otherwise produce, the Bidder shall provide the Manufacturer's authorization, using the form provided in Section 4 (Bidding Forms), showing that the Bidder has been duly authorized by the Manufacturer or producer of the related plant and equipment or component to supply and install that item in the Employer's country. Failure to submit the Manufacturer's authorization at the first instance is considered a minor, nonmaterial omission and shall be subject to clarification. However, failure of the Bidder to submit the omitted authorization shall lead to rejection of the Subcontractor or Manufacturer of the item under evaluation in accordance with ITB 44.4.

#### 2. Technical Evaluation

(also applies for Second-Stage Evaluation)

In addition to the criteria listed in ITB 27.1 and ITB 48.1, other relevant factors are as follows:

• [State additional criteria, if any]

Evaluation of the Bidder's Technical Proposal will include an assessment of the Bidder's technical capacity to mobilize key Contractor's Equipment and Contractor's Personnel for the Contract consistent with its proposal regarding work methods, scheduling, and material sourcing in sufficient detail and fully in accordance with the requirements stipulated in Section 6 (Employer's Requirements).

However, noncompliance with Contractor's Equipment and Contractor's Personnel requirements described in Section 6 (Employer's Requirements) shall not normally be a ground for Bid rejection and such noncompliance will be subject to clarification during Bid evaluation and rectification prior to Contract award.

## **B.** Second-Stage Evaluation

#### 3. Economic Evaluation

In addition to the criteria listed in ITB 49.2 I (a)–(f), the other relevant evaluation factors are developed below.

The following evaluation factors shall be considered for determining the lowest evaluated Bid. Adjustments in price that result from the procedures outlined below shall be added, for purposes of comparative evaluation only, to arrive at an "Evaluated Bid Price." Bid prices quoted by Bidders shall remain unaltered.

#### NOTE

Those factors are provided for the purpose of evaluation only, and shall not affect the Bid amount as stated under the Letter of Bid. They purport to assist the Employer in determining what will be the life cycle cost, to the Employer, of the facility as proposed by the Bidder.

The substantially responsive Bid showing the lowest life cycle cost to the Employer shall be determined as the lowest evaluated Bid for the purpose of ITB 54.

#### 3.1 Quantifiable Nonmaterial Deviations, Reservations, and Omissions

The evaluation shall be based on the evaluated cost of fulfilling all of the Contract obligations as laid down under this Bidding Document. Accordingly, the Employer shall proceed with a Bid price adjustment whenever there are quantifiable nonmaterial Deviations, Reservations, and Omissions of item(s) or component(s) in a Bid, to correct the effect of those in order to be able to compare all Bids on an equal basis, i.e., on the basis of the same set of Contract obligations.

The price adjustment shall be:

- based on a reasonable estimate of the cost of removing any nonmaterial Deviation, Reservation, and/or
   Omission for any item or component of the Bid, where such cost shall be added to the Bid amount, with all
   reasonable supporting means (such as, for the sake of illustration but not necessarily limited to, a market price
   study for the said item or component) and/or
- where applicable, made by taking into consideration the corresponding quoted prices from other conforming bids. The price adjustment should be based on the highest price quoted for the same item or component by the other responsive Bidders.

# 3.2 Whole Life Cycle Costs of the Facility to Be Designed, Built, and Operated Under the Contract

#### **NOTE**

Those factors are provided for the purpose of evaluation only, and shall not affect the Bid amount as stated under the Letter of Bid. They purport to assist the Employer in determining what will be the life cycle cost, to the Employer, of the facility as proposed by the Bidder.

The substantially responsive Bid showing the lowest life cycle cost to the Employer shall be determined as the lowest evaluated Bid for the purpose of ITB 54.

In case the life span expectancy of the facility to be designed, built, and operated by the Contractor under the Contract, as stated by the Employer under the Schedule of Performance Guarantees, is higher than the Contract Operation Service Period, then the provisions below shall apply. Otherwise, there shall be no Bid price adjustment on the account of the life-cycle costs of the facility.

For the purpose of Bid evaluation only, the Operation Service Period hereby taken into account is the one defined under PCC Part A – Contract Data – Subclause 8.2.

The following methodology shall be used to calculate the residual life cost of the facility, beyond the Operation Service Period:

- 1. Calculate the **residual life of the facility**, which is the difference between:
  - (a) The life span expectancy of the facility to be designed, built, and operated by the Contractor under the Contract, as stated by the Employer under the Schedule of Performance Guarantees, and
  - (b) The Operation Service Period as defined above.
- 2. Determine the **fixed operation fees over the residual life** of the facility by multiplying:
  - (a) The Contractor's Annual Fixed Fee, as stated by the Contractor under the Price Schedule No. 5.1, by
  - (b) The residual life of the facility, as calculated under item 1 above.
- 3. Determine the variable operation fees over the residual life of the facility by multiplying:
  - (a) The Contractor's Variable Fee Bid price for the last year of the Contract Period, as stated by the Contractor under the Price Schedule No. 5.2, by
  - (b) The residual life of the facility, as calculated under item 1 above.
- 4. Determine the **electricity costs over the residual life** of the facility by multiplying:
  - (a) The Annual Contractor's Electricity Payment as stated by the Contractor under the Price Schedule No. 5.3, by
  - (b) The residual life of the facility, as calculated under item 1 above.
- 5. Determine the asset replacement costs over the residual life of the facility by multiplying:
  - (a) The total Asset Replacement Fund stated by the Contractor under the Price Schedule No. 7, by
  - (b) The ratio between the residual life of the facility, as calculated under item 1 above, and the Operation Service Period as defined above.
- 6. Use a rate of [state percentage] to be used to discount and to present value all annual future costs calculated under items 2 to 5 above for the period specified in item 1.

Sum all costs, through items 2 to 6 above, in order to determine the adjustment to be made to the Bid amount.

#### NOTE 1 - EFFECT OF OPERATION SERVICE PERIOD DURATION ON THE CONTRACT FEATURES

It might be that the DBO Contract Period envisaged will be lower than the life expectancy of the facility to be designed, built and operated by the Contractor, in which case this methodology developed above will assist the Employer in determining what are likely to be his/her operation and maintenance costs over the residual life of the facility beyond the Contract Period, i.e., after the Contractor has completed his/her obligations under the Contract and left the Site.

Generally, the life span of a treatment plant is considered to be in the range of 25 to 30 years, and the Employer should accordingly set such expected life span at the end of the Schedule of Performance Guarantees under Section 4 (Bidding Forms) of this Bidding Document. Obviously, if the Contract Period equates such expected life span, there shall be no adjustment under this part since the Contractor will bear the operation and maintenance cost risk of the facility over its entire expected life span, and the Bid price shall then be considered as a fair reflection of the Employer's whole life cycle cost for the said facility.

If the period for Operation Service is less than 5 years, then:

- Either the Employer may wish to maintain the Asset Replacement Fund and Schedule mechanism foreseen under the Contract, in which case he/she shall:
  - o Amend the terms of GCC Subclause 14.18, by means of the PCC, to lower the 5-year threshold to the targeted threshold; and
  - o Amend Price Schedule 7 under Section 4 of this Bidding Document to make the Schedule applicable as of 1 year after the threshold, instead of Year 6 which is the default position under the Contract;
- Or the Employer may prefer to remove all references to the Asset Replacement Fund and Schedule mechanism. In which case, the Employer shall remove any reference in this respect in the Bidding Document such as under:
  - o Section 3 item 5 above;
  - o Section 4 Letter of Bid, Preamble to the Price Schedules, Price Schedule 7, and Price Schedule 8;
  - o Section 6 Appendix 1 ToR Auditing Body, ad hoc duties item b);
  - o Section 8
    - The provisions related to the Asset Replacement Fund and Schedule which are currently found in the PCC shall be removed. PCC SC 8.6 shall be removed, as well as SC 14.18 and the Price Schedule 7 portion of Appendix to PCC Part B
    - Likewise, the GCC provisions which relate to the Asset Replacement Fund and Schedule shall then be removed and such removal shall be stated in the PCC. This does apply to the following GCC SC: 1.1.1 to 1.1.3, 1.1.68, 2.4, 11.8, 14.1, 14.3, 14.5, 14.13, 14.18

Once again, the attention of the Employer is drawn to the fact that the shorter the Operation Service Period under the Contract, the less benefits the Employer will draw from the DBO contractual arrangement (in particular from the Asset Replacement Fund and Schedule), and the closer the Employer will come to a Design-Build contractual arrangement.

# NOTE 2 - EFFECT OF A SHORT OPERATION SERVICE PERIOD DURATION ON THE WHOLE LIFE CYCLE COSTS EVALUATION

If setting a short Operation Service Period duration, **the Employer should be aware of a risk of bias in the whole life cycle costs evaluation.** Indeed, a Bidder could be tempted to artificially come up with a low Operation Service price in his/her bid, which would make that, when this low Operation Service is extrapolated over the life span of the facility (for the sake of bid evaluation only), it would give him/her an undue competitive advantage.

As an example, assume that:

- the DB component of the facility is meant to be worth 50; and
- the O component is meant to be worth 50 over 25 years, hence 2 per year;

then a prudent Bidder for a 5-year operation DBO Contract would bid for  $50 (DB) + 2 \times 5 (2 \text{ of Operation Service per year multiplied by 5 years)} = 60.$ 

A Bidder trying to take advantage of the whole life cycle cost formula for bid evaluation could come up with an O&M price of say 0.5 instead of 2.

This would make that:

- his/her Contract Price is  $50 (DB) + 0.5 \times 5 (O&M) = 52.5$ ; and
- the whole life cycle cost evaluation of his/her bid, over 25 years (life span of the facility) is 50 (DB) + 0.5x25 (O&M) = 62.5 where a prudent Bidder would come up with 100

One may argue that the DBO Contractor would then have to suffer from the consequences of having a low Operation Service price, possibly lower than the actual cost, hence why would he/she do this? Or, taking it the other way around, why not leave him/her to be held to his/her bargain and to suffer from the financial consequences of an Operation Service bid price being below the actual cost?

The difficulty with this line of thinking is that the Bidder can also artificially increase the DB component of his/her bid price to compensate the loss he/she would make on the Operation Service side of the job. In the example above, the Bidder could bring his/her DB price from 50 to 57.5 to compensate the loss of 7.5 on the 5-years of 0M period under the Contract. The whole life cycle cost evaluation of his/her bid would give, as a result: 57.5 (DB) + 0.5x25 (0M) = 70, which is still more competitive than the prudent Bidder coming up at 100, and without any financial loss for the clever Bidder.

By applying this approach, the clever Bidder would indeed take advantage of the whole life cycle cost evaluation formula for getting an undue competitive advantage since, all things being equal i.e., assuming the hypothetical case where 2 bids are exactly the same and coming from 2 equally competent and experienced Bidders, that clever Bidder would get such competitive advantage (70 instead of 100 – hence 30 artificially "cheaper" than the prudent Bidder) just by spreading his/her Bid price in such a way which allows him/her to take full advantage of the formula. However, once the DBO Contract is completed, this is the Employer who will have to bear the real O&M cost of 2 per year. The table below illustrates this issue, showing that:

- despite the same nominal Bid Price between Bid 1 and Bid 2;
- Bid 2 wins based on the whole life cycle cost approach, as abused by Bidder 2 since it misrepresents to the Employer that it will nominally amount to 70 while it should actually be 100 i.e., same as for Bid 1; and
- while Bid 2 actually ends up being a most expensive solution than Bid 1, on a present value comparison basis.

One remedy for this situation could be to define a threshold (such as when the Operation Service period is less than 5 years for example) below which the whole life cycle cost evaluation would not apply. However, this would bring the Employer back to the usual problem of DB contracts: having a Bidder coming in with an aggressive/low Bid price for the DB component, and not being bothered by the possible high Operation Service costs in the long run since those would be financially borne by the Employer. This is illustrated under the second table below, where the low CAPEX/high OPEX Bid gets selected although it proves to cost more to the Employer over the life cycle of the facility.

	Ride	der 1				
		mal)	(artificially low	Actual life cyc		
			OPEX)		loyer	1
CAPEX	50,00		57,50	57,50		DF% 10%
OPEX/year	2,00		0,50	0,5 then 2		Inf% 5%
Year	Nominal	Present Value	Nominal	Nominal	Present Value	
1-3	50,00	50,00	57,50	57,50	57,50	Design-Build Period
4	2,00	1,74	0,50	0,50	0,43	
5	2,00	1,66	0,50	0,50	0,42	
6	2,00	1,58	0,50	0,50	0,40	Operation Service Period
7	2,00	1,51	0,50	0,50	0,38	
8	2,00	1,44	0,50	0,50	0,36	
9	2,00	1,38	0,50	2,00	1,38	
10	2,00	1,32	0,50	2,00	1,32	
11	2,00	1,26	0,50	2,00	1,26	
12	2,00	1,20	0,50	2,00	1,20	
13	2,00	1,14	0,50	2,00	1,14	
14	2,00	1,09	0,50	2,00	1,09	
15	2,00	1,04	0,50	2,00	1,04	
16	2,00	1,00	0,50	2,00	1,00	
17	2,00	0,95	0,50	2,00	0,95	20
18	2,00	0,91	0,50	2,00	0,91	20 years of operation
19	2,00	0,87	0,50	2,00	0,87	beyond the DBO Contract
20	2,00	0,83	0,50	2,00	0,83	completion
21	2,00	0,79	0,50	2,00	0,79	
22	2,00	0,75	0,50	2,00	0,75	
23	2,00	0,72	0,50	2,00	0,72	
24	2,00	0,69	0,50	2,00	0,69	
25	2,00	0,65	0,50	2,00	0,65	
26	2,00	0,63	0,50	2,00	0,63	
27	2,00	0,60	0,50	2,00	0,60	
28	2,00	0,57	0,50	2,00	0,57	
Bid Price	60,00		60,00	60,00		Bidder 2 wins based on
Whole-life	100,00	76,31	70,00	100,00	77,85	artificial life cycle cost
cycle cost						

Bidder 2

Bidder 2

Source: Asian Development Bank.

All in all, the Employer could find itself trapped in between the two following adverse situations for short Operation Service Periods:

- 1) Applying the whole life cycle cost approach, and having the risk of a Bidder artificially increasing the Design-Build component of his/her Bid price, and artificially decreasing the Operation Service component of his/her Bid price, to take an undue advantage of the Bid evaluation methodology.
- 2) Not applying the whole life cycle cost approach, and having the usual Design-Build Contracts risk of a Bidder going for a cheap Design-Build option, which would prove to be expensive on the Operation Service side. He/she would be more competitive, hence would be selected against a higher CAPEX/lower OPEX alternative Bid, hence depriving the Employer of the benefit of such latter Bid which brings higher economic benefits for the Employer over the life span of the facility.

The whole life cycle costs evaluation is the method which makes the utmost economic sense for the Employer in the long run, hence it is recommended to the Employer to keep using it even with short Operation Service Periods but, in such cases, to strengthen the performance damages associated to the Operation Service expenditure to avoid the aforementioned bias.

Indeed, as an example, the Operation Service Price on WTP and WWTP is prominently determined by two factors as follows:

- the payment the Employer will make to the Contractor for the electricity consumption, which derives from the Guaranteed Maximum Energy Consumption Rate which the Contractor commits to with his/her Bid, and
- the chemical consumption costs incurred.

		Bidder 1					
		mal)	(Low CAPEX	-High OPEX)	1	.0%	
CAPEX	50,00	40,00		Inf%	5%		
OPEX/year	2,00		3,00				
Year	Nominal	Present Value	Nominal	Present Value			
1-3	50,00	50,00	40,00	40,00	Design-Build Period		
4	2,00	1,74	3,00	2,61			
5	2,00	1,66	3,00	2,49			
6	2,00	1,58	3,00	2,38	Operation Service Perio	bd	
7	2,00	1,51	3,00	2,27			
8	2,00	1,44	3,00	2,17			
9	2,00	1,38	3,00	2,07			
10	2,00	1,32	3,00	1,97			
11	2,00	1,26	3,00	1,88			
12	2,00	1,20	3,00	1,80			
13	2,00	1,14	3,00	1,72			
14	2,00	1,09	3,00	1,64			
15	2,00	1,04	3,00	1,56			
16	2,00	1,00	3,00	1,49			
17	2,00	0,95	3,00	1,43	20 years of operation		
18	2,00	0,91	3,00	1,36	beyond the DBO Contra		
19	2,00	0,87	3,00	1,30	completion	ICE	
20	2,00	0,83	3,00	1,24	completion		
21	2,00	0,79	3,00	1,18			
22	2,00	0,75	3,00	1,13			
23	2,00	0,72	3,00	1,08			
24	2,00	0,69	3,00	1,03			
25	2,00	0,65	3,00	0,98			
26	2,00	0,63	3,00	0,94			
27	2,00	0,60	3,00	0,90			
28	2,00	0,57	3,00	0,85			
Bid Price	60,00	57,94	55,00		Bidder 2 wins		
Whole-life	100,00	76,31	115,00	79,46	Bidder 2 = highest life-cy	cle	
cycle cost					cost		

Bidder 2

Source: Asian Development Bank.

The Contract already provides for severe consequences to the Contractor in case he/she breaches his/her obligation as to the Guaranteed Maximum Energy Consumption Rate:

- during the Operation Service Period, the Contractor will not be reimbursed of any electricity paid for in excess to that guaranteed maximum consumption—see Appendix 1 of the PCC Part B; and
- the Contractor will be liable to pay the additional cost that breach will generate to the Employer over the residual life span of the facility beyond the Contract completion, as per the performance damages mechanism laid down under GCC Subclause 11.11 [Failure to Pass Tests Prior to Contract Completion] and under Appendix 2 to the PCC Part B.

It is recommended to the Employer to apply the same mechanism for chemicals, hence:

- requiring the Contractor to commit on Guaranteed Maximum Chemical Consumption Rates—this will require amending the Schedule of Performance Guarantees and setting-up a new Price Schedule (5.4) under Price Schedule 5—see the guidance note to that effect under Section 4 of this Bidding Document, Preamble to the Price Schedules
- developing the same payment mechanism (under Appendix 1 to the PCC Part B) and the same performance damages mechanism (under Appendix 2 to the PCC Part B) as applied for electricity

As a corollary to the above, in case of short Operation Service Periods, and in order to avoid any distortion of/bias to the whole life cycle costs Bid evaluation methodology, the Employer should require guarantees from the Contractor as to electricity and chemicals consumption rates, which are the two highest cost items in the operation of a WTP or WWTP, and should develop in the Contract the relevant payment deductions during the Operation Service Period, and performance damages upon its completion. This would, in effect, act as a deterrent to the Contractor to propose artificially low Operation Service Prices, as this would make him/her otherwise suffer from severe financial consequences.

#### 3.3 Contractor's Overhead and Profit for Compensation Events

Multiply the Bidder's proposed percentages in the Schedule of overhead and profit to the Bid amount for the Design-Build of Works (which is the sum of Price Schedules Nos. 1 to 4), and add this to the Bid price for evaluation.

#### **NOTE**

Defining such overhead and profit components under the Contract is found to be a positive measure, which will contribute to avoid practical difficulties in contract administration when it comes to valuating claims and Variations.

Owing to the long-term contractual arrangement at stake, and the risk profile borne by the Contractor under this DBO Contract for the benefit of the Employer, it is found preferable to leave it to the Contractor to set such percentages.

This will furthermore enable the Employer to benefit from competitive overhead and profit percentage proposal from the Bidder, since the percentages selected will have an impact on the economic evaluation of the Bid.

#### 3.4 Work, Services, Facilities, etc., to Be Provided by the Employer

Where Bids include the undertaking of work or the provision of services or facilities by the Employer in excess of the provisions allowed for in the Bidding Document, the Employer shall assess the costs of such additional work, services, and/or facilities during the duration of the Contract, and factor for those when calculating the whole life cycle costs under the preceding part. Such costs shall be added to the Bid price for evaluation.

#### 3.5 Domestic Preference

If domestic preference applies as per BDS 53.1, then the following shall apply. Otherwise, there shall be no Bid price adjustment on the account of domestic preference.

A domestic preference will be granted to eligible domestically produced Plant and Materials in accordance with the following provisions:

- (a) The preference margin shall not be applied to the whole facility but only to the eligible domestically produced Plant and Materials within the Contract.
- (b) Plant and mandatory spare parts supplied from abroad shall be quoted CIP (Section 4, Bidding Forms, Price Schedule No. 1) and Plant and mandatory spare parts supplied from within the Employer's country shall be quoted EXW (ex works, ex factory, ex warehouse, ex showroom, or off-the-shelf, as applicable) free of sales and similar taxes (Section 4, Bidding Forms, Price Schedule No. 2).
- (c) All other cost components for services and works such as costs for design, local handling, transportation, storage, installation, commissioning, operation, and asset replacement shall be quoted separately (Section 4, Bidding Forms, Schedule No. 3 to No. 7).
- (d) In the comparison of Bids, only the CIP price component of each Bid for the Plant and Materials offered from outside the Employer's country shall be increased by 15%.
- (e) No domestic preference shall be applied to any of the services or works included in the Contract.
- (f) Bidders shall not be permitted or required to modify the mix of local and foreign Plant and Materials after Bid opening.

#### 3.6 Specific Additional Criteria

The following additional criteria will be used in the evaluation: [detail those as need be]

#### 4. Multiple Contracts

If Works are grouped in multiple contracts and pursuant to ITB 49.4, the Employer will evaluate and compare Bids based on a Contract, or a combination of Contracts, or as a total of Contracts to arrive at the least cost combination for the Employer by taking into account discounts offered by Bidders in case of award of multiple contracts.

If a Bidder, as defined in ITB 1.3 and in ITB 4.1, submits several successful (lowest evaluated substantially responsive) Bids, the evaluation will also include an assessment of the Bidder's capacity to meet the following aggregated requirements as presented in the bid:

- Average annual turnover,
- Financial resources,
- Contractor's Equipment to be allocated, and
- Contractor's Personnel to be fielded.

#### NOTE

The Employer shall refer to the applicable qualification requirement(s) for each contract in Part 2 of this section.

# **Section 4: Bidding Forms**

This section contains the forms to be completed by the Bidder and submitted as part of its Bid.

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# **Letter of First-Stage Bid**

**NOTE** 

The Bidder must accomplish the Letter of Bid on its letterhead clearly showing the Bidder's complete name and address.

Date:	
OCB No :	
Name of Contract:	

To:

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Documents, including Addenda issued in accordance with Instructions to Bidders (ITB) 8.
- (b) We offer to design, manufacture, test, deliver, install, pre-commission, commission, operate in conformity with the Bidding Document the following facilities: [insert narrative]
- (c) We, including any Subcontractors or Suppliers for any part of the Contract, have or will have nationalities from eligible countries, in accordance with ITB 4.2.
- (d) We, including any Subcontractors or Suppliers for any part of the Contract, do not have any conflict of interest in accordance with ITB 4.3.
- (e) We are not participating, as a Bidder, either individually or as partner in a Joint Venture, in more than one Bid in this bidding process in accordance with ITB 4.3(e).
- (f) Our firm, Joint Venture partners, associates, parent company, its affiliates or subsidiaries, including any Subcontractors or Suppliers for any part of the contract, are not subject to, or not controlled by any entity or individual that is subject to, a temporary suspension or a debarment imposed by the Asian Development Bank or a debarment imposed by the Asian Development Bank in accordance with the Agreement for Mutual Enforcement of Debarment Decisions between the Asian Development Bank and other development banks.<sup>1</sup>
- (g) Our firm, Joint Venture partners, associates, parent company, affiliates or subsidiaries, including any Subcontractors or Suppliers for any part of the Contract, are not, or have never been, temporarily suspended, debarred, declared ineligible, or blacklisted by the Employer's country, any international organisation, or any other donor agency.

<sup>&</sup>lt;sup>1</sup> These institutions include African Development Bank, European Bank for Reconstruction and Development (EBRD), Inter-American Development Bank (IADB), and the World Bank Group. According to para. 9 of the Agreement, other international financial institutions may join upon the consent of all Participating Institutions and signature of a Letter of Adherence by the international financial institution substantially in the form provided (Annex B to the Agreement). Upon adherence, such international financial institution shall become a Participating Institution for purposes of the Agreement. Bidders are advised to check www.adb.org/integrity for updates.

If so debarred, declared ineligible, temporarily suspended, or blacklisted, please state details
(as applicable to each Joint Venture partner, associate, parent company, affiliate, subsidiaries
Subcontractors, or Suppliers):

(i) Name of Institut	on:
----------------------	-----

(ii)	Period of debarment.	ineligibility, or	blacklisting [start an	d end date]:
\ /		, - 0 1) -	O L	

(	(iii	Reason for the debarment	ineligibility.	or blacklisting:	
`			,	,	

(h) Our firm's, Joint Venture partners, associates, parent company's affiliates or subsidiaries, including any Subcontractors or Suppliers key officers and directors have not been [charged or convicted] of any criminal offense (including felonies and misdemeanors) or infractions and/or violations of ordinance which carry the penalty of imprisonment.

If so charged or convicted, please state details:

(	i)	Nature of the offense	e/violation:

- (ii) Court and/or area of jurisdiction: \_\_\_\_\_
- (iii) Resolution [i.e. dismissed, settled, or convicted; duration of penalty]: \_\_\_\_\_\_
- (iv) Other relevant details [please specify]: \_\_\_\_\_\_
- (i) We understand that it is our obligation to notify ADB should our firm, Joint Venture partners, associates, parent company, affiliates or subsidiaries, including any Subcontractors or Suppliers, be temporarily suspended, debarred or become ineligible to work with ADB or any other MDBs, the Employer's country, international organisations, or any other donor agencies, or any of our key officers and directors be charged or convicted of any criminal offense or infractions/violations of ordinance which carry the penalty of imprisonment.
- (j) Our firm, Joint Venture partners, associates, parent company, affiliates or subsidiaries, including any Subcontractors or Suppliers, are not from a country which is prohibited to export goods to or receive any payments from the Employer's country by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations.
- (k) [We are not a government-owned enterprise] / [We are a government-owned enterprise but meet the requirements of ITB 4.5].<sup>2</sup>
- (I) We have not been suspended nor declared ineligible by the Employer based on execution of a Bid-Securing Declaration in accordance with ITB 4.6.
- (m) We further undertake, if invited to do so by you, and at our own cost, to attend a clarification meeting at a place of your choice, for the purpose of reviewing our First-Stage Bid and duly noting all amendments and additions thereto, and noting omissions therefrom that you may require.
- (n) We further undertake, upon receiving your written invitation, to proceed with the preparation of our Second-Stage Bid, updating our First-Stage Bid in accordance with the requirements from the Memorandum "Changes Required Pursuant to First-Stage Evaluation", and completing our Second-Stage Bid for supplying the Plant and Services.
- (o) We agree to permit ADB or its representative to inspect our accounts and records and other documents relating to the bid submission and to have them audited by auditors appointed by ADB.

Use one of the two options as appropriate.

(p) We understand that any misrepresentation that knowingly or recklessly misleads, or attempts to mislead may lead to the automatic rejection of the Bid or cancellation of the contract, if awarded, and may result in remedial actions, in accordance with ADB's Anticorruption Policy (1998, as amended to date) and Integrity Principles and Guidelines (2015, as amended from time to time).

Name: [insert complete name of person signing the Bid]

In the capacity of [insert legal capacity of person signing the Bid]

Signed: [insert signature of person whose name and capacity are shown above]

Duly authorized to sign the Bid for and on behalf of [insert complete name of the Bidder]

Date [insert date of signing]

# **Country of Origin Declaration Form**

Name of Bidder	IFB Number	Page of
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Item	Description	Country

# **Letter of Second-Stage Bid**

NOTE

The Bidder must accomplish the Letter of Bid on its letterhead clearly showing the Bidder's complete name and address.

 Date:
 OCB No.:
 Invitation for Bid No.:
Name of Contract:

To:

We, the undersigned, declare that:

- (a) We have examined the Conditions of Contract, Employer's Requirements, Schedules, Contract Data, including Addenda Nos [insert number] issued in accordance with Instructions to Bidders (ITB) 8, for the above-named Contract.
- (b) We have understood and checked these documents and have ascertained that they contain no errors or other defects except as identified in our Bid. We accordingly offer to design, execute and complete the Works and remedy any defects therein so that they are fit for the purposes defined in the Contract, and to operate and maintain the facility under licence from the Employer for the period and in conformity with the terms and conditions contained in the Contract for the amount of [currency and amount in words] [currency and amount in figures] or such other amount as may be determined in accordance with the Contract.
- (c) This amount is made up of the following components:

For the Design–Build of the Works, the lump sum amount of [currency and amount in words] [currency and amount in figures]

For the Operation Service, the amount of [currency and amount in words] [currency and amount in figures]

For the Asset Replacement Fund, the lump sum amount of [currency and amount in words] [currency and amount in figures]

#### NOTE

The Bidder must enter amounts, in figures and words, for each Foreign Currency, and for the Local Currency, under items (b) and (c) above, based on the Price Schedule No.8 – Grand Summary. Absence of the total Bid price in the Letter of Bid may result in the rejection of the bid.

- (d) The discounts offered and the methodology for their application are as follows: [insert discounts and methodology for their application if any]
- (e) Our Bid shall be valid for a period of [insert bid validity period as specified in ITB 34.1 of the BDS] days from the date fixed for the submission deadline in accordance with the Bidding Documents, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
- (f) We are fully aware of the onus given in this Contract to performance compliance, of our obligations accordingly, and of our liability to the Employer in case we breach such obligations. We are in particular fully aware of the implication of the performance damages regime set out under the Particular Conditions of Contract Part B Appendix 2. We understand that, when entering to the Contract, the Employer relies on our representation that we have the necessary skills and experience for complying with those obligations.
- (g) We, including any Subcontractors or Suppliers for any part of the Contract, have or will have nationalities from eligible countries, in accordance with ITB 4.2.
- (h) We, including any Subcontractors or Suppliers for any part of the Contract, do not have any conflict of interest in accordance with ITB 4.3.
- (i) We are not participating, as a Bidder, either individually or as partner in a Joint Venture, in more than one Bid in this bidding process in accordance with ITB 4.3(e).
- (j) Our firm, Joint Venture partners, associates, parent company, its affiliates or subsidiaries, including any Subcontractors or Suppliers for any part of the contract, are not subject to, or not controlled by any entity or individual that is subject to, a temporary suspension or a debarment imposed by the Asian Development Bank or a debarment imposed by the Asian Development Bank in accordance with the Agreement for Mutual Enforcement of Debarment Decisions between the Asian Development Bank and other development banks.<sup>1</sup>
- (k) [We are not a government-owned enterprise] / [We are a government-owned enterprise but meet the requirements of ITB 4.5].<sup>2</sup>
- (I) We have paid, or will pay the following commissions, gratuities, or fees with respect to the bidding process or execution of the Contract:<sup>3</sup>

Name of Recipient	Address	Reason	Amount

(m) If our Bid is accepted, we will provide the required Performance Security and parent company guarantee, and commence and complete the Works, and provide the Operation Service, in accordance with the requirements of the Contract.

These institutions include African Development Bank, European Bank for Reconstruction and Development (EBRD), Inter-American Development Bank (IADB), and the World Bank Group. According to para. 9 of the Agreement, other international financial institutions may join upon the consent of all Participating Institutions and signature of a Letter of Adherence by the international financial institution substantially in the form provided (Annex B to the Agreement). Upon adherence, such international financial institution shall become a Participating Institution for purposes of the Agreement. Bidders are advised to check www.adb.org/integrity for updates.

<sup>&</sup>lt;sup>2</sup> Use one of the two options as appropriate.

<sup>&</sup>lt;sup>3</sup> If none has been paid or is to be paid, indicate "None."

- (n) We further undertake, together with the Employer, to jointly appoint the DAB and the Auditing Body in accordance with the requirements of the Contract.
- (o) We understand that, until a formal Contract Agreement is prepared and executed, this Bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding Contract between us.
- (p) We understand that you are not bound to accept the lowest evaluated Bid or any other Bid that you may receive.
- (q) We agree to permit ADB or its representative to inspect our accounts and records and other documents relating to the Bid submission and to have them audited by auditors appointed by ADB.
- (r) If our Bid is accepted, we commit to mobilizing key equipment and personnel in accordance with the requirements set forth in Section 6 (Employer's Requirements) and our technical proposal, or as otherwise agreed with the Employer.
- (s) We understand that any misrepresentation that knowingly or recklessly misleads, or attempts to mislead may lead to the automatic rejection of the Bid or cancellation of the Contract, if awarded, and may result in remedial actions, in accordance with ADB's Anticorruption Policy (1998, as amended to date) and Integrity Principles and Guidelines (2015, as amended from time to time).
- (t) We confirm and stand by our commitments and other declarations made in connection with the submission of our Letter of First-Stage Bid.

Name: [insert complete name of person signing the Bid]

In the capacity of [insert legal capacity of person signing the Bid]

Signed: [insert signature of person whose name and capacity are shown above]

Duly authorized to sign the Bid for and on behalf of [insert complete name of the Bidder]

Date [insert date of signing]

### **Price Schedules**

#### **NOTES**

To receive consistent and responsive bids, it is recommended that Employers include a Preamble to the Price schedules, indicating exactly what is required of bidders when completing and pricing their bids.

The following Preamble is given as an example only. Employers are responsible for ensuring that the Preamble included in the Bidding Document is complete and appropriate for the contract in question.

#### **PREAMBLE**

#### General

- 1. The Price Schedules are divided into separate Schedules as follows:
  - Schedule No. 1: Plant and Mandatory Spare Parts Supplied from Abroad
  - Schedule No. 2: Plant and Mandatory Spare Parts Supplied from within the Employer's Country
  - Schedule No. 3: Design Services
  - Schedule No. 4: Installation and other services during the Design-Build Period
  - Schedule No. 5: Operation Service
  - Schedule No. 6: Other Services during the Operation Service Period
  - Schedule No. 7: Asset Replacement Fund and Schedule
  - Schedule No. 8: Grand Summary
- 2. The Schedules do not generally give a full description of the plant to be supplied and the services to be performed under each item. Bidders shall be deemed to have read the Employer's Requirements and other sections of the Bidding Document to ascertain the full scope of the requirements included in each item prior to filling in the Rates and Prices. The entered Rates and Prices shall be deemed to cover the full scope as aforesaid, including overheads and profit.
- 3. If Bidders are unclear or uncertain as to the scope of any item, they shall seek clarification in accordance with ITB 7 prior to submitting their bid.

#### **Pricing**

- 4. The units and rates in figures entered into the Price Schedules should be typewritten, or if written by hand must be in print form. Price Schedules not presented accordingly may be considered nonresponsive. Any alterations necessary due to errors, etc., shall be initialed by the Bidder.
  - As specified in the Bid Data Sheet and Particular Conditions of Contract, prices shall be subject to adjustment in accordance with the corresponding Schedule of cost indexation, which is to be filled in by the Bidder below and which will be included in the Schedule of Payments.

- 5. Bid prices shall be quoted in the manner indicated and in the currencies specified in the Instructions to Bidders in the Bidding Document.
  - For each item, Bidders shall complete each appropriate column in the respective Schedules, giving the price breakdown as indicated in the Schedules.
  - Prices given in the Schedules against each item shall be for the scope covered by that item as detailed in Section 6 (Employer's Requirements) or elsewhere in the Bidding Document.
- 6. Payments will be made to the Contractor in the currency or currencies indicated under each respective item.
- 7. When requested by the Employer for the purposes of making payments or part payments, valuing variations or evaluating claims, or for such other purposes as the Employer may reasonably require, the Contractor shall provide the Employer with a breakdown of any composite or lump sum items included in the Schedules.
- 8. Warning: the attention of Bidders is brought to the fact that compliance with the performance requirements set out under the Contract is an essential obligation which goes to the root of the Contract. The Employer will rely on the skills and experience of the Contractor in designing, building and operating a facility which is fit-for-purpose and fully meets the requirements set out under the Contract, in particular with due regard to performance of the facility. Bidders will be asked, through the Price Schedules and the Schedule of Performance Guarantees, to guarantee performance values for the facility. By preparing their Bid, the Bidders shall then be fully aware that:
  - (a) Those guaranteed values will be used for the determination of the Bid Price based on the forms developed in this Section of the Bidding Document, and for the determination of the lowest evaluated substantially responsive Bid as per the evaluation methodology defined in Section 3 of the Bidding Document, and
  - (b) those guaranteed values will be used for the determination of payments under the Contract, as per the provisions of Appendix 1 [Schedule of Payment] to the Particular Conditions of Contract Part B
  - (c) Failure to reach those values, during the Contract implementation, will also make the Contractor liable to pay damages to the Employer in accordance with the provisions of Appendix 2 [Performance Damages] to the Particular Conditions of Contract Part B, GCC Subclause 10.7 [Failure to Reach Production Outputs] and GCC Subclause 11.11 [Failure to Pass Tests Prior to Contract Completion].

#### **Price Schedules Structure**

- 9. Schedules 1 to 4 include Rates and Price to be paid to the Contractor for the Design–Build Period under the Contract. The total amount of these Schedules will constitute the lump sum amount for the Design–Build of the Works.
- 10. Schedule 5 and 6 include Rates and Prices to be paid to the Contractor for the Operation Service Period under the Contract. The total amount of this Schedule will constitute the amount for the Operation Service, which is composed of fixed and variable fees, as detailed below.
- 11. Schedule 7 include Rates and Prices to be paid to the Contractor for the Asset Replacement under the Contract. The total amount of this Schedule will constitute the lump sum amount for the Asset Replacement Fund.

#### **Operation Service Period**

- 12. Schedule 5 is composed of fixed and variable fees, as follows.
- 13. Schedule 5.1 reflects annual fixed fees which are deemed to cover the expenses incurred by the Contractor for providing the Operation Service, regardless of and whatever the actual production output of the treatment plant is. Typically, this will cover the following, without necessarily being limited to, Contractor's cost items:
  - (a) Maintenance and replacement, for all aspects not covered by the Asset Replacement Fund according to the provisions of GCC Subclause 14.18
  - (b) Personnel (administration, management, etc.)
  - (c) Facilities (offices, warehouses, accommodation, workshops, etc.)
  - (d) Equipment
  - (e) Insurances, guarantees, financial services, support services
  - (f) Overheads and profit
- 14. Schedule 5.2 reflects variable fees which are deemed to cover the expenses incurred by the Contractor for providing the Operation Service and which vary depending on the actual production output of the treatment plant. Typically, this will cover the following, without necessarily being limited to, Contractor's cost items:
  - (a) Maintenance and replacement, for all aspects not covered by the Asset Replacement Fund according to the provisions of GCC Subclause 14.18
  - (b) Chemicals
  - (c) Personnel (management, operation, etc.)
  - (d) Facilities
- 15. Schedule 5.3 reflects prices to be paid to the Contractor for the electricity he/she will use for the Operation Service Period and which he/she will pay to the local grid/power Supplier. This is based on:
  - (a) the average energy tariff prior to bidding stage, which will be filled in by the Employer;
  - (b) the forecast production of the plant, in m³, over the years of the Operation Service Period, also filled in by the Employer; and
  - (c) the Guaranteed Maximum Energy Consumption Rate, which is the maximum consumption of energy per m³ of production as committed by the Bidder through the Schedule of Performance Guarantees.
- 16. As per the Schedule of Payments, appended to the Particular Conditions of Contract, the Employer bears the risk of the electricity tariff fluctuation but only up to the Guaranteed Maximum Energy Consumption. If the facility designed, built and operated by the Contractor proves to consume more energy per m³ of production than the Guaranteed Maximum Energy Consumption Rate, the cost of electricity in excess of that Rate shall be borne by the Contractor. However, if the Contractor manages to achieve lower consumption rates than guaranteed under the Contract, the annual electricity cost savings this will generate to the Employer will be equally shared in between the Parties.

#### **NOTES**

Splitting the Operation Service payment in between fixed and variable fees brings the required flexibility to deal with all production situations which may occur due to, for example, different water supply demands or wastewater inflows than anticipated by the Employer based on the Feasibility Study, since under DBO Contracts the Contractor does not bear the commercial risk of the facility. If the facility produces less than anticipated for reasons beyond the control of the Contractor, a fair and reasonable mechanism must be in place to make sure he/she is paid for his/her fixed fees.

International experience shows that it is preferable for the Employer to bear the risk of electricity tariff fluctuations in DBO Contracts for water and wastewater treatment plants. The same principle can be extrapolated to other kind of water and wastewater infrastructure. This would otherwise lead to adverse risk premiums which would negatively impact the Contract Price. The Contractor is on the other hand required to contractually commit to what he/she can reasonably control—the maximum energy consumption rate per m³ of production.

An incentive is also provided to the Contractor for endeavouring to do better than contracted in term of energy consumption rate. A lower rate will bring savings to the Employer as he/she will pay less electricity costs than he/she would have had to if the electricity consumption was at the level of the Guaranteed Maximum Energy Consumption Rate. Such savings are shared with the Contractor, to align the Employer and the Contractor's objectives through such win-win arrangement.

It should be noted that the Employer may wish to apply the same principles for chemicals consumption, since it is another major cost item within the operating expenditure of a facility. Indeed, the Employer may then wish to:

- bear the risk of the relevant chemical tariff fluctuation but only up to the Guaranteed Maximum Energy Consumption;
- make the Contractor liable for cost overrun in case the actual chemical consumption exceeds the Guaranteed Maximum Chemical Consumption defined by the Contractor in his/her bid; and
- share the savings made by the Employer in case the relevant chemical consumption falls below the relevant Guaranteed Maximum Consumption Rate, as an incentive for the Contractor to do better than committed in his/her Bid and in Contract.

In such case, the Employer should:

- Introduce a Schedule 5.4, in similar terms as those used under Schedule 5.3 for electricity.
- Amend Schedule 5 to accommodate for an additional column reflecting the Contractor's Chemicals Payment, which will capture price data flowing from Schedule 5.4.
- Insert Key Performance Indicators related to chemicals, if and as need be under the Employer's Requirements (section 4 thereunder) and the Schedule of Performance Guarantees.
- Amend the PCC Part B Appendix 1 and 2 to introduce similar terms for chemicals payment and performance damages as the ones used for electricity payment and performance damages.

The attention of the Employer is drawn to the fact that introducing too many constraints to the bidders on Guaranteed Maximum Chemical Consumption Rates can lead to the adverse result that the design and engineering added values of the bidders are undermined. The more maximum consumption rates are defined by the Employer (for example with a WTP: on aluminium sulphate, organic polymers, chlorine, ozone, etc.), the less flexibility bidders will have to propose their most fit for purpose design solution meeting the Employer's Requirements. As much as possible, the Employer should resist the temptation of becoming too prescriptive on such matters, as otherwise the Employer will progressively lose the full strength of the DBO procurement process and contracting arrangement. It might indeed well be that one design and engineering solution would, for example, exceed a Key Performance Indicator maximum value introduced for chemicals, and would then have to be discarded, despite being a more attractive solution on capital expenditure and on energy expenditure under a whole life cycle costs approach than a solution being fully compliant with over-prescriptive Employer's Requirements.

Under the latter approach, matters such as capital and operating expenditure should not be considered in isolation, but always under an integrated manner. Accordingly, Key Performance Indicators can be introduced for energy and/or chemical consumptions, but care should be given before setting a KPI maximum value. Nothing indeed prevents the Employer to introduce a KPI with no imposed maximum value, hence for which full flexibility is given to the Bidder to set in his/her Bid the guaranteed value he/she deems suitable. That is then that guaranteed value which will be monitored during the Contract implementation, and any excess to that value will make the Contractor subject to nonpayment under Appendix 1 of the PCC Part B, and/or performance damages under Appendix 2 of the PCC Part B.

#### **Asset Replacement Fund and Schedule**

The Contractor will be responsible to proceed with Asset Replacement during the Operation Service Period, based on the Asset Replacement Schedule inserted in the Price Schedule 7.1 and through the financing of the Asset Replacement Fund inserted in the Price Schedule 7, all in accordance with the provisions of the GCC Subclause 14.5 [Asset Replacement Schedule] and 14.18 [Asset Replacement Fund]

#### **NOTES**

The Contractor will be liable for any Asset Replacement occurring earlier than anticipated in the Asset Replacement Schedule, since payment will not be made to the Contractor before the date stated in such Schedule, in accordance with the provisions of GCC Subclause 14.5.

Savings against the Asset Replacement Fund, at the end of the Operation Service Period, will be determined and shared in between the Parties as per the procedure defined in the GCC Subclause 14.18. This is provided as an incentive for the Contractor to optimize his/her operation and maintenance practices to increase the asset life span.

Note that the replacement of:

- any asset not identified in the Asset Replacement Schedule, and/or
- any asset of a life expectancy of less than five years,

is to be done at the cost of the Contractor hence will not entitle him/her to any payment under the Asset Replacement Fund, in accordance with the provisions of GCC Subclause 14.5 and GCC Subclause 14.18.

# **Schedules of Rates and Prices**

Schedule No. 1: Plant and Mandatory Spare Parts Supplied from Abroad

				Unit I	Priceª	Total Price <sup>a</sup>	Taxes and Duties
Item	Description	Country of Origin	Quantity	Foreign Currency	CIP	Foreign Currency	Local Currency
1	2	3	4	5	6	7 = 4 x 6	8
-	TOTAL Column 7 to be	e carried forw	ard to Schedul	e No. 8: Gran	ıd Summary		

<sup>a</sup> Specify currencies in accordance with ITB 33.1 of the BDS. Create additional columns for foreign currencies if so required.
Name of Bidder
Signature of Bidder

# Country of Origin Declaration Form (as per ITB 15)

ltem	Description	Country

Schedule No. 2: Plant and Mandatory Spare Parts Supplied from Within the Employer's Country

			Unit	Price <sup>a</sup>		<b>.</b>
ltem	Description	Quantity	Local Currency	EXW Price	Total EXW Price <sup>a</sup>	Sales and Other Taxes
1	2	3	4	5	6 = 3 x 5	7
Т	OTAL Column 6 to be carried for	ward to Sched	ule No. 8: Gra	and Summary		

 $<sup>^{\</sup>rm a}\,$  Specify currency in accordance with ITB 33.1 of the BDS.

Name of Bidder	
Signature of Bidder	

<sup>&</sup>lt;sup>b</sup> Column 5 Price shall include all customs duties and sales and other taxes already paid or payable on the components and raw materials used in the manufacture or assembly of the item or the customs duties and sales and other taxes already paid on previously imported items.

# Schedule No. 3: Design Services

			Unit	Price <sup>a</sup>	Total	Price <sup>a</sup>
ltem	Description	Quantity	Local Currency Portion	Foreign Currency Portion	Local Currency Portion	Foreign Currency Portion
1	2	3	4	5	6 = 3 x 4	7 = 3 x 5
TOTAL	Columns 6 and 7 to be carried forwa	ard to Schedu	ıle No. 8: Gra	nd Summary		

Name of Bidder	
Signature of Bidder	

<sup>a</sup> Specify currency in accordance with ITB 33.1 of the BDS.

Schedule No. 4: Installation and Other Services During the Design-Build Period

			Unit	Price <sup>a</sup>	Total I	Price <sup>a</sup>
ltem	Description	Quantity	Local Currency Portion	Foreign Currency Portion	Local Currency Portion	Foreign Currency Portion
1	2	3	4	5	6 = 3 x 4	7 = 3 x 5
1						
2						
3						
4						
5						
6	Health, Safety, Environmental (HSE) and Social requirements <sup>b</sup>					
7	Provisional Sum for STI/STD and HIV/AIDS alleviation programme <sup>c</sup>	1				
8	Percentage of item 6 for Contractor's overhead charges and profit <sup>d</sup>	% of item				
9	Provisional Sum for the Employer's share of the Dispute Adjudication Board <sup>e</sup>	1				
Etc.						
TOT	AL Columns 6 and 7 to be carried forwa	rd to Schedu	ıle No. 8: Gra	nd Summary		

a C	specify	currency	in accord	lance wi	ith I I B	33.1 of	the b	BDS.
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Name of Bidder	
Signature of Bidder	

<sup>&</sup>lt;sup>b</sup> The Employer could consider requiring the Bidders to specifically detail the amount they priced for the Health, Safety, Environmental and Social obligations under the Contract to better ascertain whether the Bidders correctly appraised the extent of these obligations as laid down under the Employer's Requirements. The Employer may also consider setting a Provisional Sum to set the same financial basis for all Bidders, and avoid the Bidders generating undue savings under that key account.

<sup>&</sup>lt;sup>c</sup> As described in PCC Subclause 6.7. Sum filled in by the Employer in the Bidding Document, and to be inserted by the Contractor in this Schedule without any alteration.

<sup>&</sup>lt;sup>d</sup> As described in GCC Subclause 13.5, subparagraph (b)(ii).

<sup>&</sup>lt;sup>e</sup> As described in PCC Subclause 13.5. Sum filled in by the Employer in the Bidding Document, and to be inserted by the Contractor in this Schedule without any alteration. No Contractor's overhead charges and profit percentage applies.

The Employer should calculate those Provisional Sums and insert those here before finalizing and releasing the Bidding Document.

Detailed guidance on how estimating the Dispute Adjudication Board's cost has been provided by JICA in its Dispute Board Manual available at http://www.jica.go.jp/activities/schemes/finance\_co/procedure/guideline/pdf/DisputeBoardManual\_201203\_e.pdf.

Schedule No. 5: Operation Service

		Contractor's Fixed Fee	Contractor's Variable Fee	Contractor's Electricity Payment	
		(From Price Schedule 5.1)	(From Price Schedule 5.1) (From Price Schedule 5.2) (From Price Schedule 5.3)	(From Price Schedule 5.3)	lotal Operation Service Bid Price
	Currency	(1)	(2)	(3)	(1)+(2)+(3)
<ol> <li>Bid Price in foreign currency</li> </ol>					
1.1 Foreign currency 1 (if any)	[state currency]				
1.2 Foreign currency 2 (if any)	[state currency]				
1.3 Foreign currency 3 (if any)	[state currency]				
2. Bid price in local currency	[state currency]				

Totals carried forward to the Schedule 8 (Grand Summary)

lame of Bidder	Signature of Bidder
Name	Signatu

Schedule 5.1: Contractor's Annual Fixed Fee

foreign currency         [state currency]         [enter amount]         Ya           urrency 2 [if any]         [state currency]         [enter amount]         Ya           urrency 3 [if any]         [state currency]         [enter amount]         Ya           local currency         [state currency]         [enter amount]         Ya	Fixed Fee Item	Currency	Annual Fixed Fee (1)	No. of Years (2)	Total fixed fees for the Operation Service Period (1) x (2)
[state currency] [enter amount] Ya	1. Fixed Price in foreign currency				
[state currency] [enter amount] Ya  [state currency] [enter amount] Ya  [state currency] [enter amount] Ya	1.1 Foreign currency 1 [if any]	[state currency]	[enter amount]	Ya	[calculated value]
[state currency] [enter amount] Ya Ya [enter amount] Ya Ya	1.2 Foreign currency 2 [if any]	[state currency]	[enter amount]	Ya	[calculated value]
[state currency] [enter amount] Ya	1.3 Foreign currency 3 [if any]	[state currency]	[enter amount]	Ya	[calculated value]
[state currency] [enter amount] Ya					
[state currency] [enter amount] Y <sup>a</sup>	2. Fixed price in local currency				
	2.1 Fixed fee	[state currency]	[enter amount]	√a	[calculated value]

Totals carried forward to the Schedule 5 (Operation Service)

Name of Bidder \_\_\_\_\_\_\_\_Signature of Bidder \_\_\_\_\_\_\_\_

a Insert number of years of the Operation Service Period.

# Schedule 5.2: Contractor's Variable Fee

Applicability range of this Schedule: [In case the variable fee fluctuates depending on the production range of the facility, or another parameter, specify the production rate of the facility / parameter within which this Schedule applies. Insert as many sets of this Schedule as are required to cover the various production ranges / parameters of the facility. The value to carry forward to Schedule 5 shall then be the sum of the values in each individual Schedule 5.2].

# Part A: Contractor's Variable Fee (CVF) unit rate

	unit	<b>CVF by currency</b> (values carried to Part B below)
1. Contractor's Variable Fee (CVF) in foreign currency (FC)		
1.1 CVF – Foreign currency 1 [state currency]	$FC1/m^3$	
1.2 CVF – Foreign currency 2 [state currency]	FC2/m³	
1.3 CVF – Foreign currency 3 [state currency]	FC3/m³	
2. Contractor's Variable Fee in local currency (LC)		
2.1 CVF – Local currency	LC/m³	

Part B: Contractor's Variable Fee (CVF) Bid Price

				<b>CVF Bid Price</b> (Calculated values: CVF in Part A x Annual Production in Line 1)	<b>(</b> alues: CVF ir	<b>CVF Bid Price</b> n Part A x Ann	e nual Product	ion in Line 1	$\overline{}$	Total Years
		Unit	Year 1	Year 2	Year 3	Year 4	Year 5	Etc.	Year Ya	1 to Y
П	Annual production [to be detailed]	m³								
7	CVF Bid price in foreign currency									
2.1	2.1 CVF – Foreign currency 1	[statecurrency]								
2.2	2.2 CVF – Foreign currency 2	[state currency]								
2.3	2.3 2.3 CVF – Foreign currency 3	[state currency]								
3	CVF Bid price in local currency									
3.1	3.1   3.1 CVF - Local currency	[state currency]								
						Totals carrie	d forward to	the Schedul	Totals carried forward to the Schedule 5 (Operation Service)	on Service)

<sup>a</sup> Insert as many columns as the number of years of the Operation Service Period.

Signature of Bidder\_

Name of Bidder\_

The Variable Fee is expressed in currency per m<sup>3</sup> of production in Part A above. Typically this would represent, as well as in the annual production line under Part B above:

- For a Water Treatment Plant—the output production of the plant, measured at a defined point
- For a Wastewater Treatment Plant—the influent wastewater to the plant, measured at a defined point
- For a water supply or wastewater network—the actual flow in the network, measured at defined points

This is indicative only and should be amended, and further developed as need be, depending on the type of facility at stake.

Measurement point methodology should be detailed in Section 6: Employer's Requirements and should aim at defining measurement point(s) which is(are) easily verifiable, regularly checked and calibrated, and tamper-proof to mitigate as much as possible any dispute stemming from measurement readings, owing to their critical impact on payment under the Contract.

This Schedule 5.2, as well as Schedule 5.3 below (and Schedule 5.4, if inserted for dealing with chemicals) is based on an applicability range which is to be filled in. Indeed, various production conditions can lead to different cost structures. Consequently, there can be several sets of Schedules 5.2 and 5.3 (and 5.4, if any) that can be used by the Bidder to reflect the specificities of this process. As an example, for a WTP producing  $50,000 \, \text{m}^3/\text{day}$ , there can be:

- One set of Variable Fees per m³/produced, and of Guaranteed Maximum Energy Consumption Rate to be applied to the plant when it produces in between 0 and 10,000 m³/day
- Then another set in between 10,000 m<sup>3</sup>/day and 30,000 m<sup>3</sup>/day, etc.

# Schedule 5.3 Contractor's Electricity Payment

Applicability range of this Schedule: [Incase the electricity consumption rate varies depending on the production range of the plant, or another factor, specify the production rate of the plant / factor within which this Schedule applies. Insert as many sets of this Schedule as are required to cover the various production ranges / parameters of the plant. The value to carry forward to Schedule 5 shall then be the sum of the values in each individual Schedule 5.3].

# Part A: Contractor's Guaranteed Electricity Consumption

Guaranteed Maximum Energy Consumption Rate for the plant in kWh per m³ production
Nominal Average Tariff in local currency per kWh from the local grid

# Part B: Contractor's Electricity Payment by Employer

					Electric	Electricity Annual Amount	Amount			Total
		Unit	Year 1	Year 2	Year 3	Year 3 Year 4	Year 5	Etc.	Year Y <sup>a</sup>	Years 1 to Y
Н	Annual water production (forecast) [to be detailed]	m³								
7	Annual electricity consumption (kWh)									
	(Line 1 x Bidder's Guaranteed Maximum Energy Consumption Rate in Part A)	kWh								
M	Annual Contractor's Electricity Payment in local currency	[state								Value carried forward to Schedule 5
	(Line 2 x Nominal Average Tariff in Part A)	currency]								(Operation Service)

<sup>&</sup>lt;sup>a</sup> Insert as many columns as the number of years of the Operation Service Period.

The Contractor will fill in his/her Guaranteed Maximum Energy Consumption Rate (in kWh per m³ of production), which is the value committed to by the Contractor in the Schedule of Performance Guarantees, and the Employer will fill in the nominal average electricity tariff applied by the local grid (in local currency per kWh) for bidding purposes.

 $The \ Employer \ should \ also \ fill \ in \ the \ annual \ water \ production \ forecast \ in \ line \ 1 \ above, \ over \ the \ years \ of \ the \ Operation \ Service \ Period.$ 

A similar approach, as the one developed here for electricity, could be used for chemicals. In which case, a Schedule 5.4 should be created—see the guidance note above under the Preamble to the Price Schedules.

# Schedule No. 6: Other Services During the Operation Service Period

			Unit	Priceª	Total I	Price <sup>a</sup>
ltem	Description	Quantity	Local Currency Portion	Foreign Currency Portion	Local Currency Portion	Foreign Currency Portion
1	2	3	4	5	6 = 3 x 4	7 = 3 x 5
1						
2						
3						
4						
5	Health, Safety, Environmental (HSE), and Social requirements <sup>b</sup>					
6	Provisional Sum for the Auditing Body <sup>c</sup>	1				
7	Percentage of item 6 for Contractor's overhead charges and profit <sup>d</sup>	% of item				
8	Provisional Sum for the Employer's share of the Dispute Adjudication Boarde	1				
ТОТ	Lack Columns 6 and 7 to be carried forwa	rd to Schedu	ıle No. 5: Gra	nd Summary		

Name of Bidder
Signature of Bidder

- <sup>a</sup> Specify currency in accordance with ITB 33.1 of the BDS.
- b The Employer could consider requiring the Bidders to specifically detail the amount they priced for the Health, Safety, Environmental and Social obligations under the Contract to better ascertain whether the Bidders correctly appraised the extent of these obligations as laid down under the Employer's Requirements. The Employer may also consider setting a Provisional Sum to set the same financial basis for all Bidders, and avoid the Bidders generating undue savings under that key account.
- <sup>c</sup> As described in GCC Subclause 10.3. Sum filled in by the Employer in the Bidding Document, and to be inserted by the Contractor in this Schedule without any alteration.
- <sup>d</sup> As described in GCC Subclause 13.5, subparagraph (b)(ii).
- <sup>e</sup> As described in PCC Subclause 13.5. Sum filled in by the Employer in the Bidding Document, and to be inserted by the Contractor in this Schedule without any alteration. No Contractor's overhead charges and profit percentage applies.

The Auditing Body costs are to be estimated against the Terms of Reference of the Auditing Body which are to be included in the Employer's Requirements. The Contractor will pay the Auditing Body's invoices, and will then seek reimbursement of those toward the Employer though this Provisional Sum.

During the Operation Service Period, the Dispute Adjudication Board (DAB) is composed of one sole member mobilized on ad hoc basis. It means the DAB will only be mobilized if and when a Dispute occurs and is referred to the DAB.

The Provisional Sum would accordingly be tentatively lower than during the Design–Build Period under Schedule 4 where the DAB is a standing DAB, i.e., mobilized from the outset of the Contract execution and carrying out routine duties even if no Dispute is referred to it. Tentatively, since the Operation Service Period may be much longer than the Design–Build Period.

# Schedule 7: Asset Replacement Fund

The table below reflects the Asset Replacement Fund, as defined under GCC Subclause 1.1.2, from the start of year 6 into the Operation Service Period.

	Currency	Year 6	Year 7	Etc.	Year Ya	Total
1. Foreign currency						
1.1 Foreign currency 1	[state currency]	[values from price schedule 7.1]				
1.2 Foreign currency 2	[state currency]	[values from price schedule 7.1]				
1.3 Foreign currency 3	[state currency]	[values from price schedule 7.1]				
2. Local currency	[state currency]	[values from price schedule 7.1]				

Totals carried forward to the Schedule 8: Grand Summary

a Insert as many columns as the number of years of the Operation Service Period.

GCC Subclause 14.18 provides that the Asset Replacement Fund will finance the Contractor's planned Asset Replacement, which is reflected in the Asset Replacement Schedule – Schedule 7.1 below.

Note that the Asset Replacement Fund does not cover the costs of:

- a) routine maintenance items associated with the correction of defects;
- b) replacement of Plant and Material which have a life expectancy of less than five years, which explains why the Asset Replacement Fund and Schedule start at Year 6 into the Operation Service Period;
- c) providing spares between scheduled dates for major plant replacement; and
- d) the replacement of Plant and Materials which are not identified in the Asset Replacement Schedule.

All such costs are deemed to be covered by the Price Schedule 5 - Operation Service.

# Schedule 7.1: Asset Replacement Schedule

The table below reflects the time at which the Contractor plans to proceed with Asset Replacement under the Contract, and the associated prices for doing so, in accordance with the provisions of GCC Subclause 14.5 [Asset Replacement Schedule] and Subclause 14.18 [Asset Replacement Fund].

The totals in each year shall be carried to Price Schedule 7 above.

	Local	Foreig	oreign Currency Price		
ltem	Currency Price	FC1	FC2	FC3	Description/Specification
Year 6: Asset Replacement					
Item 1					
Item 2					
Item 3					
Etc.					
Total year 6	[sum of above]	[sum of above]	[sum of above]	[sum of above]	Totals carried to Price Schedule 7
Year 7: Asset Replacement					
Item 1					
Item 2					
Item 3					
Etc.					
Total year 7	[sum of above]	[sum of above]	[sum of above]	[sum of above]	Totals carried to Price Schedule 7
Etc.					
Year Ya: Asset Replacement					
Item 1					
Item 2					
Item 3					
Etc.					
Total year Y	[sum of above]	[sum of above]	[sum of above]	[sum of above]	Totals carried to Price Schedule 7

Name of Bidder
Signature of Bidder

 $<sup>^{\</sup>rm a}$   $\,$  Extend the number of lines to fit the number of years of the Operation Service Period.

The Asset Replacement Fund and Schedule is a specific creature of the FIDIC Gold Book Conditions of Contract. Its operation is governed by the terms of GCC Subclause 14.5 and Subclause 14.18 and further explained below.

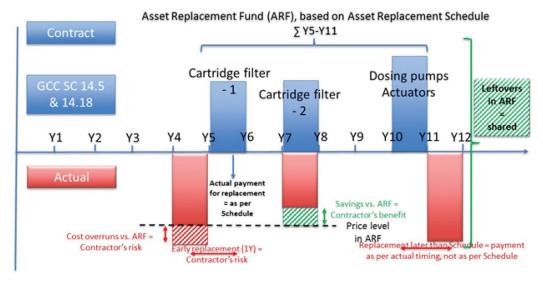
- At bidding stage, the Bidder will define an Asset Replacement Schedule, which is reflected under the Price Schedule 7.1
  above. This Asset Replacement Schedule sets, for each major asset within the facility, when its replacement is scheduled
  over the Operation Service Period. A price is reflected in the Bid for that replacement at that scheduled date. In effect,
  this means the Bidder represents to the Employer that that asset will not have to be replaced before the replacement date
  inserted by the Bidder under the Asset Replacement Schedule, and, when it is to be replaced, the Employer will have to
  pay the price stated in the Bid for that replacement.
- Accordingly, from the Employer's perspective, the asset replacement is set in time and price from the outset of the Contract implementation, as follows:
  - o the Bidder who becomes Contractor will be paid the price he/she filled in his/her Bid (and which now forms part of the Contract), whatever the actual cost of the replacement is when replacement is to be made. I.e., whether the actual cost is higher or lower than the price in the Bid does not make any difference—the Contractor remains paid that price,
  - o the Bidder who becomes Contractor will be paid the price he/she filled in his/her Bid (and which now forms part of the Contract) if the replacement date scheduled in the Asset Replacement Schedule is met, and when the replacement is actually made. Consequently, if an asset is to be replaced earlier than scheduled (for whatever reason, such as a defect in the manufacturing of the asset, or improper operation and maintenance practices), then no payment is made to the Contractor until such time the scheduled replacement date occurs. The Contractor therefore suffers from the cash flow consequences of having to replace an asset earlier than what he/she declared in the Contract, for the period ranging from the actual date of replacement until the date set in the Asset Replacement Schedule.
  - o On the other hand, if a replacement turns out to be required later than the date set in the Asset Replacement Schedule (for various reasons, such as a better life expectancy than envisaged caused by design or operation and maintenance practices optimization), then replacement payment is only done when the replacement is actually made, and not at the date set in the Asset Replacement Schedule.
- All sums to be paid, as per the Asset Replacement Schedule, are then consolidated on a yearly basis in the Asset Replacement Fund (Price Schedule 7) which summarizes payment the Employer is planned to make on a yearly basis for all asset replacement under the Contract
- Note that the Asset Replacement Fund does not cover the costs of:
  - o routine maintenance items associated with the correction of defects;
  - o replacement of Plant and Material which have a life expectancy of less than five years, which explains why the Asset Replacement Fund and Schedule start at Year 6 into the Operation Service Period;
  - o providing spares between scheduled dates for major plant replacement; and
  - o the replacement of Plant and Materials which are not identified in the Asset Replacement Schedule.

All such costs are deemed to be covered by the Price Schedule 5 – Operation Service.

As can be seen from the above, this mechanism provides the Employer with an early price certainty as to the cost of asset replacement over the Operation Service Period under the Contract.

An example is given below to further illustrate this mechanism.

- Assume a treatment plant based on membrane processes, with a 12-year Operation Service Period.
- The Contractor, through the Asset Replacement Schedule, declared the planned replacement of:
  - o a first set of cartridge filters in the 6th year into the Operation Service Period,
  - o a second set in the 8th year, and
  - o a set of dosing pumps and actuators in the 11th year.
- During the Operation Service Period, the following occurs:
  - o The first set of cartridge filters is to be replaced in the 5th year, hence earlier than in Contract, and for a higher cost to the Contractor than the price set in the Asset Replacement Schedule and Fund. The Contractor will only get paid in the 6th year, and only of the price set in the Asset Replacement Schedule and Fund. Accordingly, the Contractor suffers from a cost overrun (the difference in between the actual replacement cost, and the replacement price in Contract), and from a payment 1 year later than when the replacement costs are actually incurred.
  - o The second set of cartridge filters is to be replaced in the 8th year, right as per what was planned in the Asset Replacement Schedule. Replacement cost is lower than the replacement price set in Contract. Nevertheless, the Contractor gets paid of that price and benefits from the savings, i.e., from the difference in between price set in Contract and the actual replacement cost.
  - o Dosing pumps and actuators are to be replaced in the 12th year, hence a year later than set in the Asset Replacement Schedule, and for a cost corresponding to the price set in Contract. The Contractor does not get paid as per the date set in the Asset Replacement Schedule, i.e., in the 11th year, but when the replacement is done i.e., in the 12th year.



Source: Asian Development Bank.

Prior to the issue of the Contract Completion Certificate, a comparison is made in between the actual depreciation
of the assets listed in the Asset Replacement Schedule, against the depreciation which was initially expected under
the Schedule. Assets which had to be replaced later than envisaged do generate a gain for the Employer since asset
depreciation is then lower than expected, while those which had to be replaced earlier generate a loss owing to a higher
depreciation mechanism. Corresponding payment liabilities and incentives are defined under Appendix 1 to the PCC
Part B—please refer to the guidance note thereunder for further explanations.

# Schedule No. 8: Grand Summary

Schedule	Title	Total Price <sup>a</sup>		
No.	litie	Foreign	Local	
1	Plant and Mandatory Spare Parts Supplied from Abroad <sup>b</sup>			
2	Plant and Mandatory Spare Parts Supplied from Within the Employer's Country <sup>b</sup>			
3	Design Services			
4	Installation and Other Services During the Design-Build Period			
Sum of (1) to (4)	Subtotal for the Design–Build of the Works, to be carried forward to the Letter of Bid			
5	Operation Service			
6	Other Services During the Operation Service Period			
(5)+(6)	Subtotal for the Operation Service, to be carried forward to the Letter of Bid			
7	Asset Replacement Fund to be carried forward to Letter of Bid			
	Grand Total to be carried forward to Letter of Bid			

Name of Bidder	
Signature of Ridder	

Specify currency in accordance with ITB 33.1 of the BDS. Create additional columns for foreign currencies as required. Taxes and/or duties from Schedules 1 and 2 may be added to the contract price in accordance with GCC Clause 14 but excluded from Bid evaluation in accordance with ITB 49.2.

# **Schedule of Cost Indexation**

Prices payable to the Contractor, in accordance with the Contract, shall be subject to adjustment during performance of the Contract to reflect rises and falls in the cost of labour, Goods, and other inputs to the design and the execution of the Works, and to the Operation Service.

To the extent that full compensation for any rise or fall in Costs is not covered by the provisions of this Schedule of cost indexation, the Accepted Contract Amount shall be deemed to have included amounts to cover the contingency of other rises and falls in Costs.

The adjustment to be applied to the amount otherwise payable to the Contractor, as valued in accordance with the appropriate Schedule and certified in Payment Certificates, shall be determined from formulae for each of the currencies in which the Contract Price is payable, as laid down below. No adjustment is to be applied to work valued based on Cost or current prices.

The cost indices or reference prices stated in the tables of adjustment data below shall be used.

If their source is in doubt, it shall be determined by the Employer's Representative. For this purpose, reference shall be made to the values of the indices at stated dates for the purposes of clarification of the source; although these dates (and thus these values) may not correspond to the base cost indices.

In cases where the "currency of index" is not the relevant currency of payment, each index shall be converted into the relevant currency of payment at the selling rate, established by the central bank of the Country, of this relevant currency on the above date for which the index is required to be applicable.

Until each current cost index is available, the Employer's Representative shall determine a provisional index for the issue of Interim Payment Certificates. When a current cost index is available, the adjustment shall be recalculated accordingly.

If the Contractor fails to complete the Works within the Time for Completion, adjustment of prices thereafter shall be made using either (i) each index or price applicable on the date 49 days prior to the expiry of the Time for Completion of the Works, or (ii) the current index or price, whichever is more favorable to the Employer.

The weightings (coefficients) for each of the factors of cost stated in the table(s) of adjustment data shall only be adjusted if they have been rendered unreasonable, unbalanced, or inapplicable, as a result of Variations.

[The Employer shall specify below which Price Schedule(s) is(are) subject to adjustment, and, where price adjustment is applicable, insert the relevant formulae for the relevant Schedule(s). The Bidder will then fill in the tables of adjustment data.]

## Price Schedule X

[The Employer should choose one of the 2 options below for each of the Price Schedules No. 1 to 4. Price adjustment shall always apply for Schedules No. 5 to 7.]

No price adjustment shall apply for this Price Schedule.

Or

The price adjustment formulae for this Price Schedule shall be as follows:

Pn = a + b Ln/Lo + c En/Eo + d Mn/Mo + .....(Employer to complete and amend as necessary)

### where:

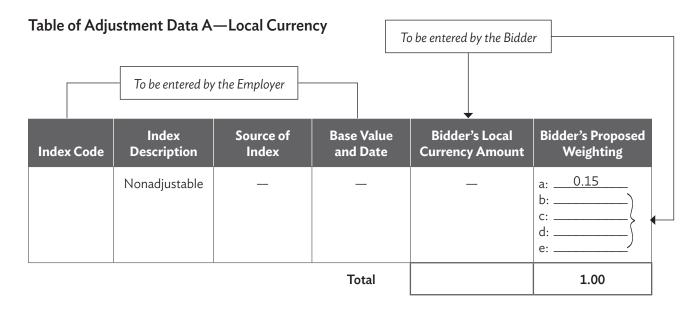
"Pn" is the adjustment multiplier to be applied to the estimated contract value in the relevant currency of the work carried out in period "n", this period being a month unless otherwise stated in the Contract Data;

"a" is a fixed coefficient, stated in the relevant table of adjustment data, representing the nonadjustable portion in contractual payments;

"b", "c", "d", .. are coefficients representing the estimated proportion of each cost element related to the execution of the Works, as stated in the relevant table of adjustment data; such tabulated cost elements may be indicative of resources such as labour, equipment and materials;

"Ln", "En", "Mn", .. are the current cost indices or reference prices for period "n", expressed in the relevant currency of payment, each of which is applicable to the relevant tabulated cost element on the date 49 days prior to the last day of the period (to which the particular Payment Certificate relates); and

"Lo", "Eo", "Mo", .. are the base cost indices or reference prices, expressed in the relevant currency of payment, each of which is applicable to the relevant tabulated cost element on the Base Date.



**Table of Adjustment Data B—Foreign Currency** (table to be repeated if there is more than one foreign currency)

Name of Currency: \_\_\_\_\_

		To be entered	by the Bidder				
Index Code	Index Description	Source of Index	Base Value and Date	Bidder's Currency in Type/Amount	Equivalent in FC1	Bidder's Proposed Weighting	
	Nonadjustable	_	_	_		a:	
				Total		1.00	

# **NOTES**

The Base Date stated above means the date 28 days prior to the latest date for submission of the Bid, as per the definition in GCC Subclause 1.1.5.

The Employer can group Schedules in case he/she wishes to apply the same formulae across different Schedules, to avoid repeating the same under different Schedules as listed above.

# Schedule of Overhead and Profit

Applicable only for the valuation claims or Variations under the Contract. This is not meant to represent the overhead and profit in Rates and Prices filled in elsewhere in the Schedules, which might be different.

Description	Bidder's Proposed Percentage
Overhead—When agreeing or determining Cost under the Contract (as defined under GCC Subclause 1.1.23), the following percentage shall be considered to be the proportion of Cost representing the Contractor's overhead. Overhead represents all Contractor's indirect costs in performing an obligation.	%
Profit—Applicable percentage of Cost for the purpose of:  calculating Cost Plus Profit, as defined under GCC Subclause 1.1.24  calculating reasonable profit in Variations under GCC Subclause 13.3	%

Name of Bidder
Signature of Bidder

The Contract entitles the Contractor to be compensated of his/her Cost (as defined under GCC Subclause 1.1.23) incurred for risk events under the Contract which are borne by the Employer.

The overhead percentage defined above will allow to predetermine the overhead component of the Cost, without any further justification/substantiation to be provided by the Contractor. This will simplify contract administration processes.

The Contractor is also sometimes entitled to be paid of a profit component, in addition to his/her Cost, for those risk events which are caused by the Employer as follows:

- Failure to give right of access to, or possession of, the Site to the Contractor in accordance with GCC Subclause 2.1
- Errors in the items of reference used for setting-out the site in accordance with GCC Subclause 4.7
- Changes to the testing regime under GCC Subclause 7.4
- Failure to deliver to the Contractor the raw material foreseen under the Contract during the Operation Service Period, in accordance with GCC Subclause 10.4
- Delays and interruptions caused by the Employer to the Operation Service in accordance with GCC Subclause 10.6
- Failure by the Contractor to reach production outputs, when caused by the Employer, in accordance with GCC Subclause 10.7
- Failure by the Contractor to pass Tests Prior to Contract Completion, when caused by the Employer, in accordance with GCC Subclause 11.11
- Contractor searching for the cause of any defect attributable to the Employer under GCC Subclause 12.6
- Suspension, or reduction of the rate, of work by the Contractor under GCC Subclause 16.1
- Work instructed by the Employer under a Contract termination for Employer's cause under Subclause 16.3
- Employer's Risk of Damage under Subclause 17.6

He/she is also entitled to be paid of his/her profit in case of Variations, under GCC Subclause 13.3.

The profit percentage defined above will allow to predetermine the profit to be added to the Cost calculated, without any further justification/substantiation to be provided by the Contractor. This will simplify contract administration processes.

The Bidder's proposed percentages will be taken into account in the evaluation of Bid Prices, although they will not form part of the Contract Price as such.

This will enable the Employer to benefit from competitive overhead and profit percentages proposal from Bidders.

As an example, during Contract implementation, whenever agreeing or determining the valuation of a Variation which is to be based on Cost and reasonable profit, the following steps will be observed:

- 1. Assessment of all Contractor's direct cost incurred under the Contract for the implementation of the Variation. That is the cost of, though not necessarily limited to, the following kinds of item:
  - a. Contractor's Personnel
  - b. Plant and Materials
  - c. Contractor's Equipment
  - d. Subcontractors

For the purpose of that example, the direct cost shall be referred to below as "DC".

2. The total Cost (as defined under GCC Subclause 1.1.23) of implementing the Variation under the Contract shall then be as follows:

$$Cost = \frac{(DC)}{(1 - Overhead\ Percentage\ in\ this\ Schedule)}$$

- 3. The profit shall be calculated as follows: profit = (Profit Percentage in this Schedule) x Cost
- 4. The Contractor is then entitled to be paid of Cost and profit as respectively calculated under items 2 and 3 above.

# Schedule of Performance Guarantees

As per the provisions of GCC Subclause 4.1 [Contractor's General Obligations], the Contractor is to design, execute and complete Works which shall be fit for the purposes for which the Works are intended as defined in the Contract, and as per GCC Subclause 10.1 [General Requirements] the Contractor shall be responsible for ensuring that the Works remain fit for such purposes during the Operation Service Period.

The Employer has accordingly defined the following Key Performance Indicators (KPI) which reflect the main performance standards to be achieved by the facility designed, executed, and operated by the Contractor. Those are split in between two categories as follows:

- Inputs-based KPI, i.e., indicators which will measure the facility consumption of inputs, and
- Outputs-based KPI, i.e., indicators which will measure the outputs of the facility.

## **NOTES**

Inputs-based KPI assist in determining how efficient is the facility in its operation and in reaching the contracted outputs. In other words, this measures how many inputs are necessary for the facility to deliver its contracted outputs, since the global performance of the plant is not only measured by what it delivers (m³ of water or treated wastewater, water of quality compliant with local laws and regulations, etc.), but also how it delivers the same.

Outputs-based KPI assist in determining whether what the facility produces/delivers complies with the Employer's Requirements (minimum production of water per day to be achieved, maximum level of noise or odor, etc.).

The two tables below reflect these two categories of KPIs, and define for each of them:

- KPI Name
- KPI Description
- The KPI maximum or minimum value to be achieved by the Contractor, as the case may be
- Any tolerance on KPI achievement
- The KPI measurement/testing methodology

The first table below reflect inputs-based KPIs which have the greatest impact on the operating expenditure of the facility, and for which the Contractor guarantees values through his/her Bid as follows:

Inputs-based KPI

	KPI name	KPI description	KPI minimum value (if any)	KPI maximum value (if any)	KPI measurement/ testing methodology	Contractor's guaranteed KPI value
Guarante Energy C Rate	Guaranteed Maximum Energy Consumption Rate	In kWh per m³ of plant output production	N/A		Measurement point and methodology as defined in the Employer's Requirements	
Guaranto Energy C Rate	Guaranteed Maximum Energy Consumption Rate	In kWh per kg of COD at the Wastewater Treatment Plant inlet	A/X		Measurement point and methodology as defined in the Employer's Requirements	
Guaranteed Maximum Cl Consumptio	Guaranteed Maximum Chemicals Consumption Rate	In kg per m³ of plant output production	N/A		Measurement point and methodology as defined in the Employer's Requirements	

This table reflects major KPI for the life cycle costs of the plant.

Examples are given in italic in the table and are to be replaced by the Employer by actual KPI when preparing the Bidding Document.

The Guaranteed Maximum Energy Consumption Rate shall be used in all instances as energy is a major operating expenditure. This Rate is used under the Price Schedule 5.3 for determining the maximum electricity cost payment from the Employer to the Contractor, as well as any electricity cost saving split in between the Parties. This is also used under the Appendix 2 [Performance Damages] of the PCC Part B, where any remaining failure by the Contractor to meet this KPI will expose him/her to pay to the Employer, in case of failure to pass the Tests Prior to Contract Completion, the additional electricity cost which will be suffered by the Employer over the remaining life span of the facility after completion of the Operation Service Period and of the Contract.

The Guaranteed Maximum Chemical Consumption Rate reflects another major operating expenditure, which should be considered for use by the Employer. Key Performance Indicators can be introduced for chemical consumptions, but care should be given before setting a KPI maximum value for the reasons laid down in the Guidance Note under the Preamble of the Price Schedules. Nothing indeed prevents the Employer to introduce a KPI with no imposed maximum value, hence for which full flexibility is given to the Bidder to set in his/her Bid the guaranteed value he/she deems suitable.

The Employer can also leave the Bidders free to propose their own KPI for Chemicals consumption, since different processes mean different chemicals, and not all design solutions use the same range of chemicals.

Other major inputs-based KPI can be added by the Employer in the table above, based on the project specific features.

The second table below reflect other KPIs which will apply throughout the Contract execution, and with which the Contractor shall comply.

### **Outputs-based KPI**

No	KPI name	KPI description	KPI [minimum of maximum] value	KPI tolerance (if any)	KPI measurement/ testing methodology	Comment if any

# **NOTES**

The following example KPI can be selected by the Employer.

For a Water Treatment Plant:

- Plant production in m³/day or, with possible fluctuations depending on time (peak output to be reached during peak demand period in a day) and seasons (hot season, touristic season, etc.)
- Output water quality (compliance with standards defined in the Employer's Requirements such as bacteriological contents, pH, chlorine, etc.)
- Management of by-products—sludge production quantity and/or dryness
- Noise levels
- Compliance with specific local environmental laws and regulations

For a Wastewater Treatment Plant:

- Plant capacity in m³/day or with possible fluctuations depending on time (peak output to be reached during peak demand period in a day) and seasons (hot season, rainy season, seasonal population increase, etc.)
- Effluent quality (compliance with standards defined in the Employer's Requirements such as BOD<sub>e</sub>, COD, SS, etc.)
- Noise levels
- · Odor levels
- Management of by-products—sludge dry solids contents, sludge quantity, etc.
- Compliance with specific local environmental laws and regulations

It is for instance common practice to reflect KPI on sludge production quantity and/or dryness for Wastewater Treatment Plant, since sludge management is also a significant operating expenditure over the life span of a WWTP. Noncompliant sludge can lead the Employer to suffer from significant additional costs, after the DBO Contract completion—for instance when the defaulting dryness contents do not allow the Employer to make use any more of a sludge disposal/valorization process locally available.

For Water supply / Wastewater networks

- Continuity of water supply (24x7)
- Flow and pressure at designated points in the water supply network
- Silt levels at designated point in the wastewater network
- · Accessibility of manholes for maintenance works
- Decrease of Nonrevenue Water
- Residual chlorine contents in the water supply network
- Water quality at delivery points of the water supply network (at customer meters, or customer taps, etc.)
- Etc.

The Bidder hereby guarantees that his/her Bid ensures compliance with these Key Performance Indicators values. Failure to reach those will impact the Contractor's payment under Appendix 1 [Schedule of Payments] to the Particular Conditions of Contract Part B, and will make the Contractor liable to pay damages to the Employer in accordance with the provisions of Appendix 2 [Performance Damages] to the Particular Conditions of Contract Part B, GCC Subclause 10.7 [Failure to Reach Production Outputs] and GCC Subclause 11.11 [Failure to Pass Tests Prior to Contract Completion].

For the purpose of calculating performance damages, the Contractor is fully aware that the life expectancy of the facility is as follows:

Life span expectancy of the facility to be designed, built, and operated by the Contractor under the Contract

(data to be filled in by the Employer) years

### **NOTES**

The Employer should fill in above the life expectancy sought for the facility.

For example, it is common practice to refer to a 20 to 30-year expected life span for a Water Treatment Plant or a Wastewater Treatment Plant. Civil works (basins, tanks, etc.) generally have a life span of 50 years, while electrical and mechanical equipment are more in the range of 10 to 20 years, and it is recommended to set the life expectancy of the facility as being a period going over the life expectancy of most of the electrical and mechanical equipment.

Overall, 25 years for a plant is considered reasonable and in line with international practice since over that period the necessary technology upgrades made (to cope with science, technology, practices, legal, and regulatory environment evolutions) are likely to make that the resulting plant has little to be compared to the initial plant as designed and built by the Contractor.

The life expectancy filled in by the Employer will serve the purpose of calculating the whole life cycle cost of the facility based on the Contractor's Price Bid, as per Section 3 of this Bidding Document, as well as performance damages under Appendix 2 of the Particular Conditions of Contract Part B.

Name of Bidder
Signature of Bidder

# **Bid Security**

# **Bank Guarantee**

[insert bank's name, and address of issuing branch or office]<sup>1</sup>

Nan	ne of Contract/Contract No
INdII	ne and address of Beneficiary ("the Employer"):
the a	have been informed that [name of the Contractor] (hereinafter called the "Principal") is submitting a Bid for above-named Contract in response to your invitation, and the instructions to Bidders (hereinafter "the") require that this Bid is supported by a Bid Security.
Emp	the request of the Principal, we [name of bank] hereby irrevocably undertake to pay you, the Beneficiary/ ployer, any sum not exceeding in total the amount of [amount in words] [amount in figures] upon receipt by f your demand in writing with your written statement (in the demand) stating that:  the Principal has, without your agreement, withdrawn his/her Bid after the latest time specified for its submission and before the expiry of its period of validity, or
(b)	the Principal has refused to accept the correction of errors in his/her Bid in accordance with the ITB, or
(c)	you awarded the Contract to the Principal and he/she has failed to comply with Subclause 1.6 [Contract Agreement] of the Conditions of Contract, or
(d)	you awarded the Contract to the Principal and he/she has failed to comply with Subclause 4.2 [Performance Security] or Subclause 4.2A [Parent Company Guarantee] of the Conditions of Contract.
a no	demand for payment must contain your signature(s) which must be authenticated by your bankers or by stary public. The authenticated demand and statement must be received by us at this office on or before date 35 days after the expiry of the validity of the Letter of Second-Stage Bid], when this guarantee shall expire and shall eturned to us.
the l	s guarantee shall be governed by the laws of and shall be subject to Uniform Rules for Demand Guarantees, published as number 758 by the International Chamber of Comce, except as stated above.
Sign	ed by:[name]
Sign	ature and seal:
Date	e:

 $<sup>^{1}\</sup>qquad \text{All italicized text is for use in preparing this form and shall be deleted from the final document.}$ 

# **Bid-Securing Declaration**

Date:	_insert date (as day, month, and year)
Bid No	D.: [insert number of bidding process]

**To:** [insert complete name of Employer]

We, the undersigned, declare that:

We understand that, according to your conditions, Bids must be supported by a Bid-Securing Declaration.

We accept that we will automatically be suspended from being eligible for bidding in any contract with the Borrower for the period of time of [insert number of years as indicated in ITB 35.2 of the BDS] starting on the date that we receive a notification from the Employer, if we are in breach of our obligation(s) under the Bid conditions, because we:

- (a) have withdrawn our Bid during the period of bid validity specified in the Letter of Bid; or
- (b) do not accept the correction of errors in accordance with the Instruction to Bidders (hereinafter "the ITB"); or
- (c) have failed, after you awarded the Contract to us, to comply with Subclause 1.6 [Contract Agreement] of the Conditions of Contract; or
- (d) have failed, after you awarded the Contract to us, to comply with Subclause 4.2 [Performance Security] or Subclause 4.2A [Parent Company Guarantee] of the Conditions of Contract.

We understand that this Bid-Securing Declaration shall expire if we are not the successful Bidder, upon the earlier of (i) our receipt of your notification to us of the name of the successful Bidder; or (ii) 28 days after the expiration of our Bid.

Signed: [insert signature of person whose name and capacity are shown]
In the capacity of [insert legal capacity of person signing the Bid-Securing Declaration]
Name: [insert complete name of person signing the Bid-Securing Declaration]
Duly authorized to sign the bid for and on behalf of: [insert complete name of Bidder]
Dated on day of, [insert date of signing]
Corporate Seal (where appropriate)

# **Technical Proposal**

## NOTES

The Bidder's Technical Proposal shall address the matters covered by the Employer's Requirements.

It shall include the Bidder's proposed preliminary design with the description of the technology solution proposed to meet the Employer's Requirements. The FIDIC Gold Book operates on the basis of three main levels of design, as defined in the FIDIC DBO Contract Guide, 2011 Edition:

- 1. Conceptual design (if any) which might be included in the Employer's Requirements, and which consists of a simple layout with possibly basic dimensions and defined criteria to identify the Works sufficiently for tenderers to be able to understand and develop the requirements in order to prepare a responsive tender. Note that setting a conceptual design, and possibly imposing a base solution to be complied with by Bidders, is not mandatory and the Employer may only specify requirements to be complied with by Bidders (performance of the plant, etc.) and leave full flexibility to Bidders to freely propose their best fit-for-purpose design engineering solution.
- 2. **Preliminary design of the technological solution proposed by the Bidders**, and to be inserted in their Bid. The level of detail required in the preliminary design should be stated in the Bidding Document but it should be that necessary for the Employer to be able to understand the Bid from the Bidder. Bidders should not be asked for an elaborate detailed design at this stage, since this would be expensive to produce and a corresponding excessive economic burden for all except the successful Bidder.
- 3. **Detailed/final design** stage is that made by the Contractor as part of his/her obligations under the Contract. Unless any changes have been agreed prior to the Contract award this will usually be a development of his/her preliminary design and will become a part of the Contractor's Documents (as defined under GCC Subclause 1.1.19).

It is fully recognized that different countries use different terminology and procedures for design, and it is down to the Employer to adapt the wording used above, and the various design stages, to fit the prevailing situation for the project, based on applicable laws, regulations, and practices.

No specific format and structure is imposed for the Technical Proposal, however it is suggested, for ease of evaluation of the conformity of the Technical Proposal with the Employer's Requirements, that a similar structure to the latter is adopted by the Bidder.

The Technical Proposal is expected in particular to include as a minimum, though not being limited to, the following contractual warranties, representations, and statements of information:

- The details of the Contractor's proposed design engineering solution for the plant.
- The Operation and Maintenance Plan proposed by the Bidder which fulfils the Operation Management Requirements contained in the Employer's Requirements.
- The Contractor's method statements for the Design-Build Period.
- The Bidder's proposed Site organisation.
- The list of proposed Subcontractors and Suppliers of Plant under the Contract, in furtherance to the Conditions of Contract Subclause 4.4 and which have their origin in eligible source countries as defined under Section 5 of this Bidding Document. The Bidder shall use the specific form for that purpose which is included in the following pages.
- The programme the Contractor intends to observe when executing its obligations under the Contract, complying with the level of details described in the Employer's Requirements, and demonstrating the Contractor's ability to meet the Time for Completion and his/her other time-related obligations.
- The proposed Contractor's Equipment and Personnel to deliver the Contractor's obligations under the Contract, and meeting the Employer's Requirements—specific forms shall be used by the Bidders in this respect, and are included in the following pages.
- The necessary evidences demonstrating the Bidder's compliance with the Qualification criteria set out under Section 3 of this Bidding Document. The Bidder shall use the specific forms for that purpose which are included in the following pages.

# Proposed Subcontractors and/or Suppliers of Major Items of Plant, Materials, and Services

The following Subcontractors and/or Suppliers are proposed for carrying out the item of the Works indicated based on Criterion 1.5 of Section 3 (Evaluation and Qualification Criteria). Bidders are free to propose more than one for each item.

Major Items of Plant, Materials, and Services	Proposed Subcontractors or Suppliers	Nationality

# **NOTES**

The list of proposed Subcontractors and Suppliers of Plant, Materials, and Services under the Contract, in furtherance to the Conditions of Contract Subclause 4.4 and which have their origin in eligible source countries as defined under Section 5 of this Bidding Document. The Contractor shall summarize those in a tabulated form, describing:

- The item of services to be Subcontracted, or item of Plant supply
- The identity of the proposed Subcontractor or Supplier
- The nationality of the proposed Subcontractor or Supplier

# **Contractor's Personnel**

# Form PER-1: Proposed Personnel

Bidders should provide the details of proposed personnel and their experience record in the relevant Information Forms below for each of the candidate.

1.	Title of position
	Name
2.	Title of position
	Name
3.	Title of position
	Name
4.	Title of position
	Name
etc.	Title of position
	Name

# NOTE

All titles of positions will be as listed in Section 6 (Employer's Requirements).

# Form PER-2: Resume of Proposed Personnel

The Bidder shall provide all the information requested below. Use one form for each position.

Position				
Personnel information	Name	Date of birth		
	Professional qualifications			
Present employment	Name of employer			
	Address of employer			
	Telephone	Contact (manager/personnel officer)		
	Fax	E-mail		
	Job title	Years with present employer		

Summarize professional experience in reverse chronological order. Indicate particular technical and managerial experience relevant to the project.

From	То	Company/Project/Position/Relevant Technical and Management Experience

# **Contractor's Equipment**

## Form EQU: Equipment

The Bidder shall provide adequate information and details to demonstrate clearly that it has the capability to meet the equipment requirements indicated in Section 6 (Employer's Requirements), using the Forms below. A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Bidder.

Item of Contractor's Equipment					
Contractor's Equipment	Name of manufacturer			Model and power rating	
Information	Capacity			Year of manufacture	
Current Status	Current location				
	Details of current commitments				
Source	Indicate source of the equipment				
	□ Owned	□ Rented	□ Leased	☐ Specially manufactured	

Omit the following information for equipment owned by the Bidder.

Owner	Name of owner		
	Address of owner		
	Telephone	Contact name and title	
	Fax	Telex	
Agreements	Details of rental/lease/manufacture agreen	ntal/lease/manufacture agreements specific to the project	

# **Affiliate Company Guarantee**

Name of Contract/Contract No.:
Name and address of Employer:
(together with successors and assigns).
We have been informed that [name of Contractor] (hereinafter called the "Contractor") is submitting an offe for the above-referenced Contract in response to your invitation, and that the conditions of your invitatior require its offer to be supported by an affiliate company guarantee.

In consideration of you, the Employer, awarding the Contract to the Contractor, we [name of affiliated company] irrevocably and unconditionally guarantee to you, as a primary obligation, that (i) throughout the duration of the Contract, we will make available to the Contractor our financial, technical capacity, expertise and resources required for the Contractor's satisfactory performance of the Contract; and (ii) we are fully committed, along with the Contractor, to ensuring a satisfactory performance of the Contract.

If the Contractor fails to so perform its obligations and liabilities and comply with the Contract, we will indemnify the Employer against and from all damages, losses and expenses (including legal fees and expenses) which arise from any such failure for which the Contractor is liable to the Employer under the Contract.

This guarantee shall come into full force and effect when the Contract comes into full force and effect. If the Contract does not come into full force and effect within a year of the date of this guarantee, or if you demonstrate that you do not intend to enter into the Contract with the Contractor, this guarantee shall be void and ineffective. This guarantee shall continue in full force and effect until all the Contractor's obligations and liabilities under the Contract have been discharged, when this guarantee shall expire and shall be returned to us, and our liability hereunder shall be discharged absolutely.

This guarantee shall apply and be supplemental to the Contract as amended or varied by the Employer and the Contractor from time to time. We hereby authorize them to agree on any such amendment or variation, the due performance of which and compliance with which by the Contractor are likewise guaranteed hereunder. Our obligations and liabilities under this guarantee shall not be discharged by any allowance of time or other indulgence whatsoever by the Employer to the Contractor, or by any variation or suspension of the works to be executed under the Contract, or by any amendments to the Contract or to the constitution of the Contractor or the Employer, or by any other matters, whether with or without our knowledge or consent.

This guarantee shall be governed by the law of the same country (or other jurisdiction) that governs the Contract and any dispute under this guarantee shall be finally settled under the [Rules or Arbitration provided in the Contract]. We confirm that the benefit of this guarantee may be assigned subject only to the provisions for assignment of the Contract.

Signed by:(signature)	Signed by:(signature)
(name)	(name)
(position in parent/subsidiary company)	) (position in parent/subsidiary company)
Date:	

## NOTE

If permitted in accordance with ITB 25.2 of the BDS, the Bidder shall fill out the Affiliate Company Guarantee Form for each subsidiary, parent entity, affiliate, Subcontractor, etc., that the Bidder submits for consideration of the Employer in determining its qualifications.

# **Bidder's Qualification**

To establish its qualifications to perform the Contract in accordance with Section 3 (Evaluation and Qualification Criteria) the Bidder shall provide the following information requested in the corresponding forms.

## Form ELI-1: Bidder's Information Sheet

	Bidder's Information
Bidder's legal name	
In case of Joint Venture, legal name of each partner	
Bidder's country of constitution	
Bidder's year of constitution	
Bidder's legal address in country of constitution	
Bidder's authorized representative (name, address, telephone number(s), fax number(s), e-mail address)	
Attached are copies of the following docu	iments:
$\ \square$ 1. In case of single entity, articles of in accordance with ITB 4.1 and ITB 4.	corporation or constitution of the legal entity named above, in 2.
2. Authorization to represent the firm or Joint Venture named above, in accordance with ITB 18.2 and 18.3	
<ol> <li>In case of Joint Venture, letter of intent to form Joint Venture or Joint Venture agreement, in accordance with ITB 11.2(g).</li> </ol>	
☐ 4. In case of a government-owned ent to comply with ITB 4.5.	erprise, any additional documents not covered under 1 above required

## Form ELI-2: Joint Venture Information Sheet

Each member of the Joint Venture must fill out this form separately. Subcontractor must fill out this form.

Joint Venture/Subcontractor Information			
Bidder's legal name			
Joint Venture partner's or Subcontractor's legal name			
Joint Venture partner's or Subcontractor's country of constitution			
Joint Venture partner's or Subcontractor's year of constitution			
Joint Venture partner's or Subcontractor's legal address in country of constitution			
Joint Venture partner's or Subcontractor's authorized representative information (name, address, telephone number(s), fax number(s), e-mail address)			
Attached are copies of the following documents:			
□ 1. Articles of incorporation or constitution of the legal entity named above, in accordance with ITB 4.1 and ITB 4.2.			
☐ 2. Authorization to represent the fi	rm named above, in accordance with ITB 18.2.		
3. In the case of government-owned enterprise, documents establishing legal and financial autonomy and compliance with commercial law, in accordance with ITB 4.5.			

Subcontractors are those listed in Technical Proposal—Proposed Subcontractors and/or Manufacturers for Major Items of Plant and Services.

#### Form CON-1: Historical Contract Nonperformance

Each Bidder must fill out this form in accordance with Criteria 1.2.1 and 1.2.3 of Section 3 (Evaluation and Qualification Criteria) to describe any history of nonperforming contracts and pending litigation or arbitration formally commenced against it.

In case of Joint Ventures, each Joint Venture partner must fill out this form separately, and provide the Joint Venture partner name:

Joint Venture partner:	
------------------------	--

#### **Table 1: History of Nonperforming Contracts** Choose one of the following: $\square$ No nonperforming contracts. ☐ Below is a description of nonperforming contracts involving the Bidder (or each Joint Venture member if Bidder is a Joint Venture). Amount of **Nonperformed Portion** of Contract **Total Contract Amount** Year Description (\$ equivalent) (\$ equivalent) Contract Identification: [indicate complete [insert [insert amount] [insert amount] contract name/number, and any other year] identification] Name of Employer: [insert full name] Address of Employer: [insert street/city/ country Reason(s) for nonperformance: [indicate main reason(s)

## Table 2: Pending Litigation and Arbitration

## Choose one of the following:

- ☐ No pending litigation and arbitration.
- ☐ Below is a description of all pending litigation and arbitration against the Bidder (or each Joint Venture member if Bidder is a Joint Venture).

Year	Matter in Dispute	Value of Pending Claim in US\$ Equivalent	Value of Pending Clain as a Percentage of Net Worth
year]	Contract Identification: [indicate complete contract name/ number, and any other identification]	[insert amount]	[insert amount]
	Name of Employer: [insert full name]		
	Address of Employer: [insert street/city/country]		
	Matter of Dispute: [indicate full description of dispute]		
	Party who initiated the dispute: [indicate "Employer" or "Contractor"]		
	Status: [indicate status of dispute]		

## NOTE

 $Table\ 2\ of\ this\ form\ shall\ only\ be\ included\ if\ Criterion\ 1.2.3\ of\ Section\ 3\ (Evaluation\ and\ Qualification\ Criteria)\ is\ applicable.$ 

#### Form FIN-1: Historical Financial Performance

Each Bidder must fill out this form.

In case of Joint Ventures, each Joint Venture partner must fill out this form separately, and provide the Joint Venture partner name:

Joint Venture partner:	
------------------------	--

, and the second				
	Financial Data for Previous [state a figure in between 3 to 5 as per criterion 1.3.1 under Section 3] <sup>a</sup> Years [US\$ Equivalent]			
	Year 1: Year 2: Year:			
	Information from Ba	lance Sheet		
Total Assets (TA)				
Total Liabilities (TL)				
Net Worth = TA – TL				
Current Assets (CA)				
Current Liabilities (CL)				
Working Capital = CA - CL				
Most Recent Working Capital		To be obtained for most recent year and carried forward to FIN-3 Line 1; in case of Joint Ventures, to the corresponding Joint Venture partner's FIN-3		
Information from Income Statement				
Total Revenues				
Profits Before Taxes				
Profits After Taxes				

- □ Attached are copies of financial statements (balance sheets including all related notes, and income statements) for the last [state a figure in between 3 to 5, as per criterion 1.3.1 under Section 3] years, as indicated above, complying with the following conditions:
  - Unless otherwise required by Section 3 of the Bidding Documents, all such documents reflect the financial situation of the legal entity or entities comprising the Bidder and not the Bidder's parent companies, subsidiaries or affiliates.
  - Historical financial statements must be audited by a certified accountant.
  - Historical financial statements must be complete, including all notes to the financial statements.
  - Historical financial statements must correspond to accounting periods already completed and audited (no statements for partial periods shall be requested or accepted).

<sup>&</sup>lt;sup>a</sup> If the time period indicated under Criterion 1.3.1 under Section 3 (Evaluation and Qualification Criteria) is either four (4) or five (5) years, then the table columns above should be expanded accordingly.

## Form FIN-2: Average Annual Turnover

Each Bidder must fill out this form.

The information supplied should be the annual turnover of the Bidder or each member of a Joint Venture in terms of the amounts billed to clients for each year for work in progress or completed, converted to US dollars at the rate of exchange at the end of the period reported.

In case of Joint Ventures, each Joint Venture partner must fill out this form separately, and provide the Joint Venture partner name:

Joint '	Venture	partner:
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Annual Turnover Data for the Last [state a figure in between 3 to 5 as per criterion 1.3.2 under Section 3] Years					
Amount Exchange Year Currency Rate US\$ Equivalent					
	Average Annual Turnover				

#### Form FIN-3: Availability of Financial Resources

Bidders must demonstrate sufficient financial resources, usually comprising of Working Capital supplemented by credit line statements or overdraft facilities and others to meet the Bidder's financial requirements for

- (a) its current contract commitments, and
- (b) the subject Contract.

In case of Joint Ventures, each Joint Venture partner must fill out this form separately and provide the Joint Venture partner name:

Joint Venture partner: \_\_\_\_\_\_

	Financial Resources				
No.	Source of Financing	Amount (US\$ equivalent)			
1	Working Capital (to be taken from FIN – 1)				
2	Credit Line <sup>a</sup>				
3	Other Financial Resources <sup>b</sup>				
	Total Available Financial Resources				

 $<sup>^{\</sup>rm a}\,$  To be substantiated by a letter from the bank issuing the line of credit.

<sup>&</sup>lt;sup>b</sup> Bidder to substantiate this amount by relevant evidences.

#### Form FIN-4: Financial Requirements for Current Contract Commitments

Bidders (or each Joint Venture partner) should provide information on their current commitments on all contracts that have been awarded, or for which a letter of intent or acceptance has been received, or for contracts approaching completion, but for which an unqualified, full substantial/practical completion or taking-over certificate (for build only or design-build contracts), or contract completion certificate (for design-build-operate contracts) has yet to be issued.

In case of Joint Ventures, each Joint Venture partner must fill out this form separately and provide the Joint Venture partner name:

Joint Venture partner:	

Current Contract Commitments						
No.	Name of Contract	Employer's Contact (Address, Tel, Fax)	Contract Completion Date <sup>a</sup>	Outstanding Contract Value (X) <sup>b</sup>	Remaining Contract Period in Months (Y) <sup>c</sup>	Monthly Financial Resources Requirement (X/Y)
1						
2						
3						
4						
	Total Monthly Financial Requirement for Current Contract Commitments					US\$

- <sup>a</sup> Contract completion date means here:
- the expected date of the substantial/practical completion or taking-over of the works (as the case may be) for a build only or a design-build contract, or
- the expected contract completion date for a design-build-operate contract.
- <sup>b</sup> Remaining outstanding contract values, being the remaining portion of the contract price yet to be paid to the Bidder or Joint Venture partner, as the case may be, to be calculated at the Base Date (\$ equivalent based on the foreign exchange rate as of the same date).
- <sup>c</sup> Remaining contract period, until either of the dates as stated under item a above, to be calculated from the Base Date.

# Form FIN-5: Self-Assessment Tool for Bidder's Compliance to Financial Resources (Criterion 1.3.3 of Section 3)

This form requires the same information submitted in Forms FIN - 3 and FIN - 4. All conditions of "Available Financial Resources Net of CCC  $\geq$  Requirement for the Subject Contract" must be satisfied to qualify.

## Form FIN - 5A: For Single Entities

For Single Entities: (A)	Total Monthly Financial Requirement for Current Contract Commitments (CCC) from FIN - 4 (C)		Results: Yes or No [D must be greater than or equal to E] (F)
(Name of Bidder)		a	

#### Form FIN - 5B: For Joint Ventures

For Joint Ventures: (A)	Total Available Financial Resources from FIN – 3 (B)	Total Monthly Financial Requirement for Current Contract Commitments (CCC) from FIN - 4 (C)	Available Financial Resources Net of CCC D = (B - C)	Requirement for the Subject Contract (E)	Results: Yes or No [D must be greater than or equal to E] (F)
One Partner:					
(Name of Partner)				b	
Each (Other) Partner:					
(Name of Partner 1)				c	
(Name of Partner 2)				c	
(Name of Partner 3)				c	
All partners combined	$\Sigma$ D = Sum of available financial resources net of current contract commitments for all partners		ΣD =	a	

<sup>&</sup>lt;sup>a</sup> The Employer should insert here the total requirement for the Subject Contract (for both, single entity and all partners combined) as defined in Criterion 1.3.3 of Section 3.

#### NOTE

Form FIN -5 is made available for use by the Bidder as a self-assessment tool, and by the Employer as evaluation work sheet, to determine compliance with financial resources requirement as stated in Criterion 1.3.3 of Section 3. Failure to submit Form FIN -5 by the Bidder shall not lead to bid rejection.

<sup>&</sup>lt;sup>b</sup> The Employer should insert here the required share for one partner as defined in Criterion 1.3.3 of Section 3.

<sup>&</sup>lt;sup>c</sup> The Employer should insert here the required share for each partner as defined in Criterion 1.3.3 of Section 3.

## Form EXP-1: Contracts of Similar Size and Nature

Fill out one (1) form per contract.

The exchange rate to be used to calculate the value of the contract for conversion to a specific currency shall be the selling rate of the Borrower's national bank on the date of the contract.

Contract of Similar Size and Nature				
Contract No of	Contract Identification			
Award Date		Completion Date		
Role in Contract	□ Contractor	☐ Management ☐ Subcontractor Contractor		
Total Contract Amount	\$			
If partner in a Joint Venture or Subcontractor, specify participation of total contract amount	Percent of Total	Amount		
Employer's name Address Telephone number Fax number E-mail				
Description of the s	imilarity in accordance	with Criterion 1.4.1 of Section 3		
The Employer should insert here contract size, complexity, methods, technology, or other characteristics as described in Criterion 1.4.1 of Section 3 against which the Bidder demonstrates similarity in the box on the right-hand side.				

## Form EXP-2: Experience in Key Activities

Fill out one (1) form per contract.

If complied by Specialist Subcontractor, each Specialist Subcontractor must fill out this form and provide the Specialist Subcontractor's name:

Specialist Subcontractor: \_\_\_\_\_

	Contract with Similar Ko	ey Activities			
Contract No of	Contract Identification				
Award Date		Completion Date			
Role in Contract	□ Contractor	☐ Management ☐ Subcontractor Contractor			
Total Contract Amount	\$				
If partner in a Joint Venture or Subcontractor, specify participation of total contract amount	Percent of Total	Amount			
Employer's name Address Telephone number Fax number E-mail					
Description of the ke	Description of the key activities in accordance with Criterion 1.4.2 of Section 3				
The Employer should insert here the highly specialized construction activities listed under Criterion 1.4.2 of Section 3 against which the Bidder demonstrates similarity in the box on the right-hand side.					

## Form EXP-3: Subcontractors

Fill out one (1) form per contract.

Contract for the Major Items				
Contract No of	Contract Identification			
Award Date		Completion Date		
Role in Contract	□ Contractor	☐ Management ☐ Subcontractor Contractor		
Total Contract Amount	\$			
If partner in a Joint Venture or Subcontractor, specify participation of total contract amount	Percent of Total	Amount		
Employer's name Address Telephone number Fax number E-mail				
Description of the M	Najor Items in Accordance	with Criterion 1.5 of Section 3		
The Employer should insert here the major items of Plant, Materials, and Services listed under Criterion 1.5 of Section 3 against which the Bidder demonstrates similarity in the box on the right-hand side.				

# User's Guide to Design-Build-Operate Contracts for Water and Wastewater Greenfield Infrastructure Projects

Standard Bidding Document

This user's guide covers the Asian Development Bank Standard Bidding Document for the Procurement of Design-Build-Operate Contracts for Water and Wastewater Greenfield Infrastructure Projects using a single-stage: two-envelope or a two-stage bidding procedure. The guide provides the relevant documentation for preparing a bidding document as well as the methodological approach for the evaluation and selection of a design-build-operate contractor, considering the distinctive features of the underlying contract.

#### About the Asian Development Bank

ADB's vision is an Asia and Pacific region free of poverty. Its mission is to help its developing member countries reduce poverty and improve the quality of life of their people. Despite the region's many successes, it remains home to a large share of the world's poor. ADB is committed to reducing poverty through inclusive economic growth, environmentally sustainable growth, and regional integration.

Based in Manila, ADB is owned by 67 members, including 48 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.

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