



Defining Operations and Maintenance under Design-Build-Operate Contracts as Applied to ADB Infrastructure Projects

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Content

- Employer's requirements
- Standard Bidding Document
- Bid evaluation
- DBO approach by other development banks



Employer's requirements

- Definitions
- Types of maintenance
 - ▶ preventive maintenance
 - ▶ corrective maintenance
- Maintenance operations
- Planning and archiving of maintenance data



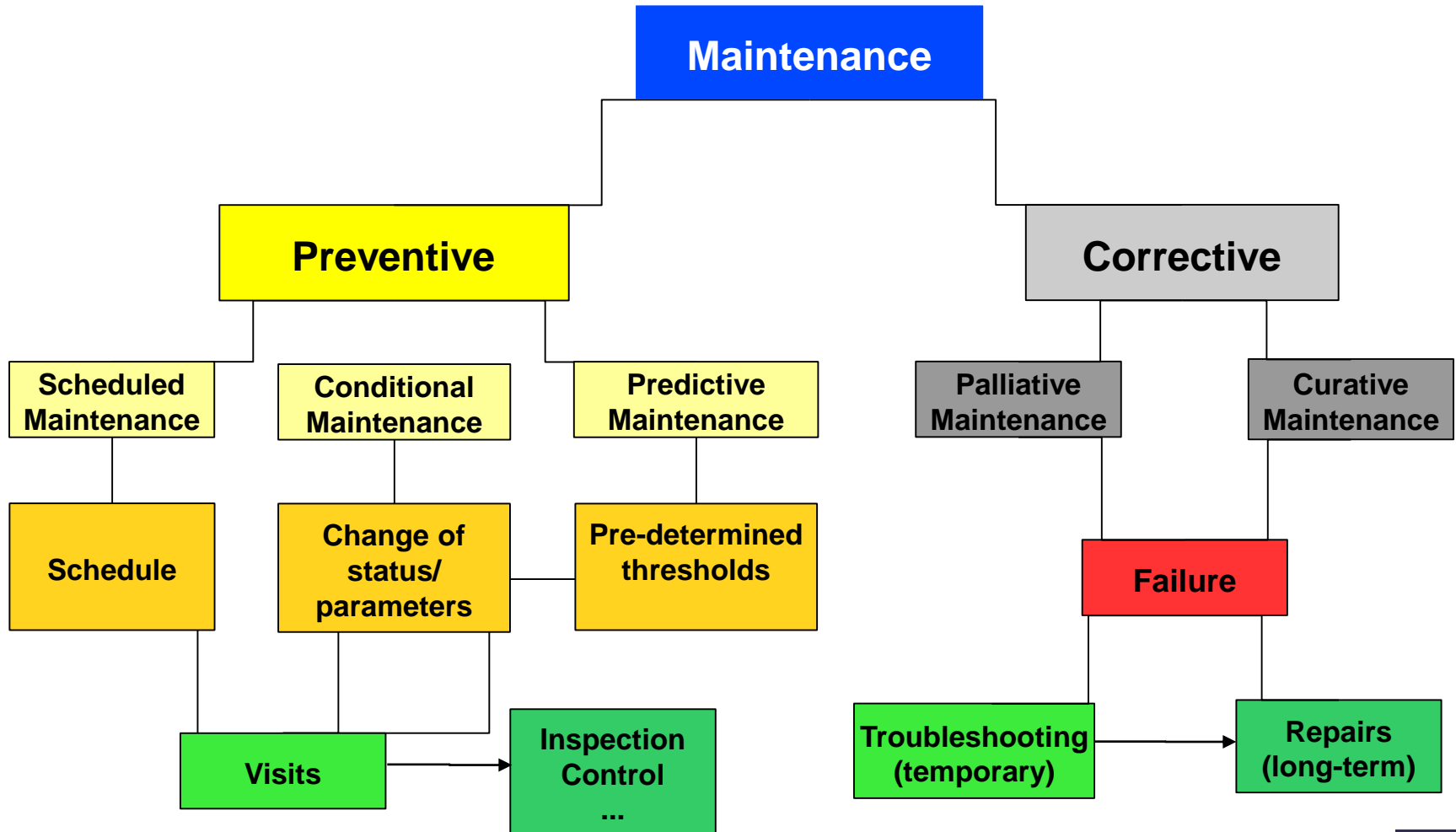
Employer's requirements

- **Operation:** To operate or run an asset with the objective of providing a given service.
- **Maintenance:** To maintain or restore an asset to a specific state so that it is capable of providing a given service.

In 2001, it was defined as “Set of all technical, administrative, and management actions during an asset's life cycle intended to maintain the asset or restore it to a state where it can carry out the required function.”



Employer's requirements



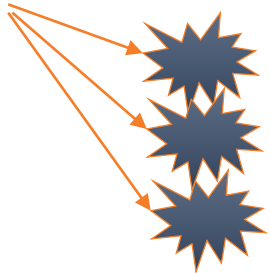


Standard Bidding Document Structure

SBD Plant used as support document



...with main changes introduced there



Section No.	Section description
0 Preface (UG)	Presentation of DBO Contracts / Methodology for Risk Matrix Bidding process
1	Instructions to Bidders (ITB)
2	Bid Data Sheet (BDS)
3	Evaluation and Qualification Criteria (EQC)
4	Bidding Forms (BDF)
5	Eligible Countries (ELC)
6	Employer's Requirements (ERQ)
7	General Conditions of Contract (GCC)
8	Particular Conditions of Contract (PCC)
9	Contract Forms (COF)



Under Section 6: Operation Service Period

- 6.1 Operation Management Requirements
- 6.2 Auditing Body
- 6.3 Site delineation, use, access and possession details
- 6.4 Interfaces
- 6.5 Law, regulations, codes and standards
- 6.6 Health, Safety, Environmental (HSE) and Social requirements
- 6.7 Permits and licences to be obtained by the Parties
- 6.8 Inspection & Testing requirements
- 6.9 Training requirements
- 6.10 Quality assurance and control requirements
- 6.11 Progress monitoring and reporting
- 6.12 Handback requirements
- 6.13 Technical specifications
- 6.14 Any other project specific requirements



Bid evaluation – Whole-life-cycle-cost evaluation

➤ Bid Economic Evaluation

Schedule of profit created, in order to set a competitive upfront profit percentage for Contractor's claims and Variations => Included in economic evaluation

Total
life
cycle
cost

➤ Bid Price

- Design-Build lump sum – Schedules 1 to 4
- Operation Service component – Schedule 5
- Asset Replacement Fund
- **+ Extension of Operation Service costs to residual life span of the facility** (if design life = 25Y, and O = 7Y, residual life = 18Y)
- **+ Extension of Asset Replacement costs**
- Discount rate to present value all annual future costs calculated above



DBO at The World Bank



Published in 2017 its Standard Procurement Document for DBO Contracts for WTP/WWTP, with the following different features vs ADB:

- Min. of 10 years
- No management of balance in Asset Replacement Fund
- No whole-life cycle cost Bid evaluation
- No performance incentives
- Attempt to address existing facilities
- 2-stage-bidding process, mandatory PQ
- Award criteria: combination of max 30% to 50% technical score, and min 50 to 70% of financial score
- ESHS requirements



DBO at AFD-French Development Agency **AFD** AGENCE FRANÇAISE DE DÉVELOPPEMENT

Developed its own SBD in 2018, using our and WB's SBDs as reference with the following different features vs ADB:

- Sector-neutral SBD
- Operation Service Period of 2 to 5 years
- 1-stage-bidding process only, mandatory PQ
- Award criteria: combination of max 30% technical score, and min 70% of financial score
- ESHS Specifications



Thank you!

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