

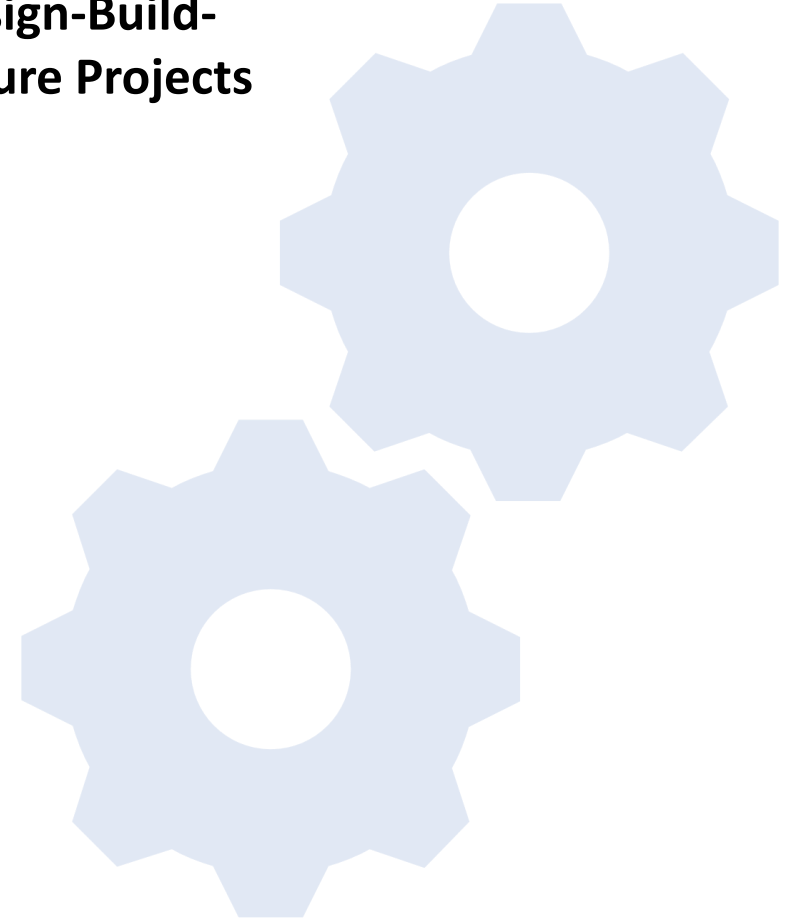
ADB Joint Regional Workshop on 11 December 2018

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

Use of Design-Build-Operate Contracts in SARD Infrastructure Projects

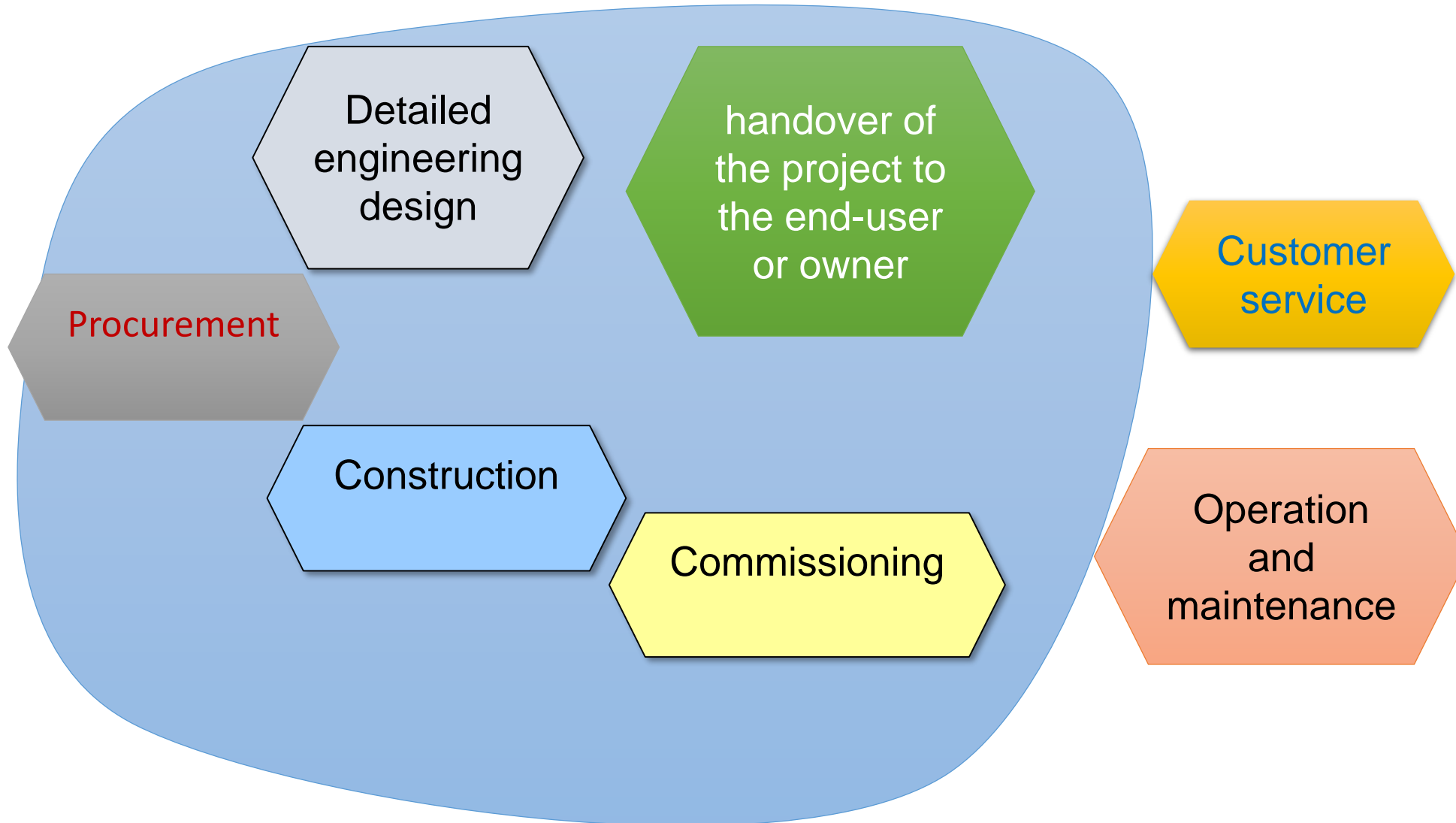
Jingmin Huang

SARD/SAUW



The views expressed in this paper/presentation are the views of the author and do not necessarily reflect the views or policies of the Asian Development Bank (ADB), or its Board of Governors, or the governments they represent. ADB does not guarantee the accuracy of the data included in this paper/presentation and accepts no responsibility for any consequence of their use. Terminology used may not necessarily be consistent with ADB official terms.

Infrastructure project activities



Which contract should I use in FIDIC



Traditional contracts



- Red: construction contract,
- Yellow: plant and Design build contract;
- Silver: EPC and turn key contract

Results from traditional contracts

- Intermittent water supply
- Broken facility;
- High NRW and waste of water.
- Waste of investment

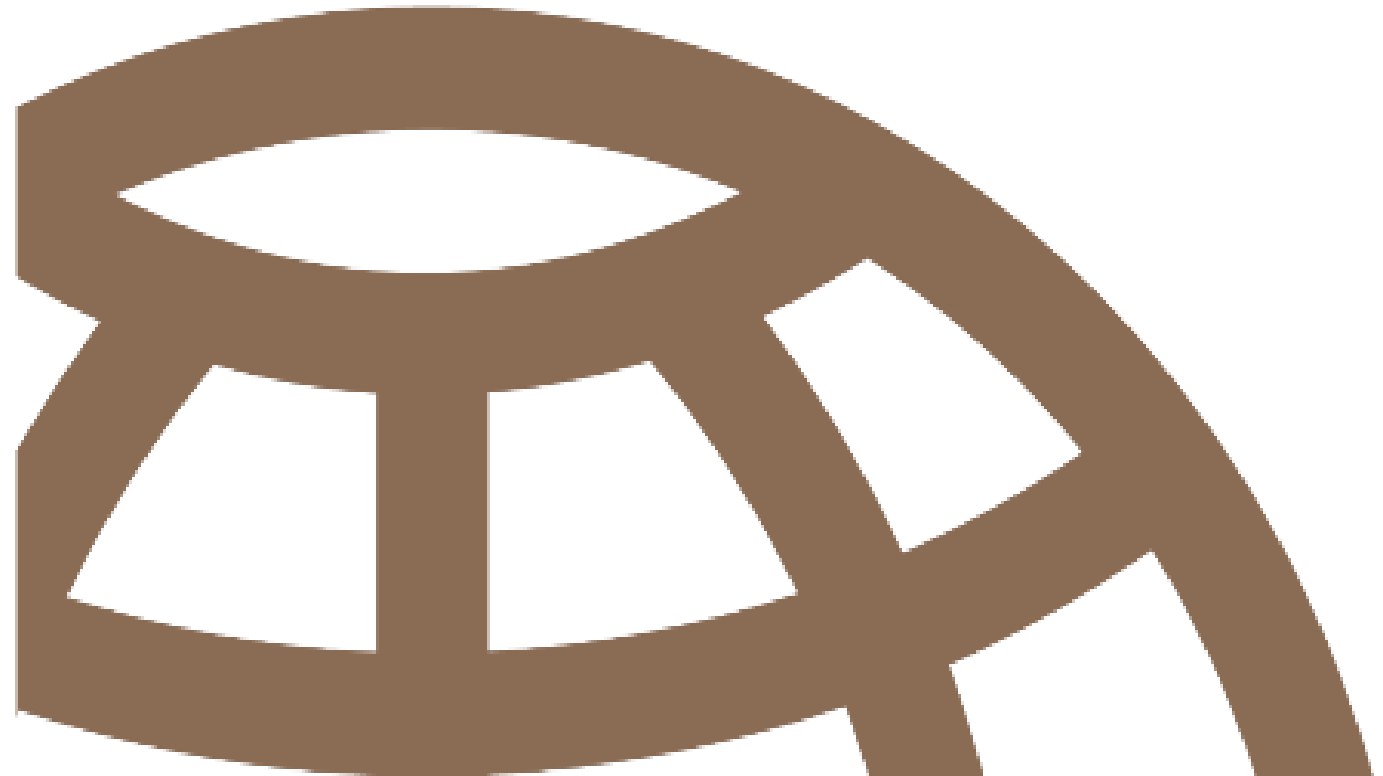


Benefit of DBO

- Combine detailed design, construction and O&M
- Operator's sustainability and sustained service
- Transfer know-how to the local authorities
- Pure gold—FIDIC book, GCC

Conditions of Contract for **Design, Build and Operate Projects**

GENERAL CONDITIONS
PARTICULAR CONDITIONS
SAMPLE FORMS



Definition of Real DBO

- No detailed project design before bidding
- Bill of quantity (*BOQ*) in *bidding* documents is more for unit cost, BOQ be finalized after the detailed design is done.

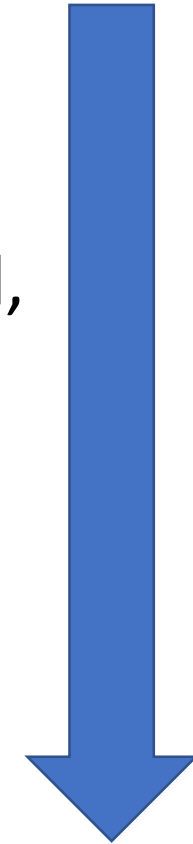
SARD experience of DBO

- From outline design in bidding document to 100% detailed design in bidding document
- Key: O&M included from 2 years to 10 years

DBOs under implementation in SAUW

Based on how much design is done and any BOQ included before the package is bid out;

- West Bengal Water Supply; 100% detailed design, BOQ included, 2 years O&M;
- Rajasthan Water supply: 100% detailed design, BOQ included, 10 years O&M;
- Madhya Pradesh Water Supply in 64 Towns; preliminary design, BOQ included, 10 years O&M;
- Sri Lanka Jaffna Desalination package; outline design, pure DBO, no BOQ, 7 years O&M
- Dhaka WASA, water treatment plant; outline design, pure DBO, no BOQ, 3 years O&M



Outline design DBOs

Issues of DBO implementation

- Difficult to get bidders;
- Difficulty in bid evaluations;
- Slow design progress and slow disbursement;
- Not able to regulate the O&M;
- Potential issues of transferring the know-how.

Workshop Sessions

DBO Know how: Why, What and how to do DBO

Related Procurement of DBO

DBO in wide application

Quiz:

