

EXPRO National Manual for Projects Management

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Project Delivery Strategy

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Project Delivery Strategy

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Table of Contents

| 1.0 F | PURPOSE | <u> </u> | . 5 |
|---------|------------|---|-----|
| | | | |
| | | | |
| 3.0 [| DEFINITION | DNS | . 5 |
| 4.0 F | REFEREN | ICES | . 5 |
| | | SIBILITIES | |
| | | | |
| | | 3 | |
| 6.1 | Introduc | rtion | . 6 |
| 6.2 | Project | Delivery Strategy Guidelines Executive Summary Scope of Work Delivery Strategy | . 6 |
| | 6.2.1 | Executive Summary | . 6 |
| | 6.2.2 | Scope of Work | . 6 |
| | 6.2.3 | Delivery Strategy | . 7 |
| 6.3 Sui | oportina F | Documents | ۶ |



1.0 PURPOSE

The purpose of this document is to describe the requirements and responsibilities for developing a Project Delivery Strategy (PDS). The document provides guidance on the content and considerations for the PDS by the various Entity departments.

2.0 SCOPE

A PDS should be prepared for all government infrastructure projects executed across the Kingdom of Saudi Arabia. The first issue of the PDS shall be prepared during Stage 2 of the Project Stage Gate process, Initial Planning, and is a pre-requisite document to pass the Stage 2 Gate Review. The PDS should be revisited at each subsequent Stage and revised, if the delivery strategy is deemed to deviate significantly.

3.0 DEFINITIONS

| Definitions | Description |
|--|---|
| A/E Consultant | Architectural/Engineer Consultant appointed by the EPMO to undertake the design of the project. |
| Contractor | One that agrees to furnish materials or perform services at a specified price, especially for construction work. |
| Entity | A Saudi Government organization which is responsible for the delivery of government funded infrastructure construction projects. |
| Entity Project Management Organization (EPMO) | An Entity Project Management Organization, this is an integrated team that comprises the Entity and its PMC responsible for managing all the Entity's projects. |
| GES | General Engineering Services |
| Project Delivery Strategy (PDS) | High level description of how the Entity proposed to deliver a specific project. |
| Project Management Company (PMC) | An external consultant engaged by the Entity to deliver capital expenditure infrastructure projects. |
| Scope of Work | Scope of work defines the limits of the project support / estimating effort. |

4.0 REFERENCES

The PDS shall be prepared in conjunction with the other documents required as part of Stage 2 of the Project Stage Gate process. The PDS shall make references to the documents prepared following these procedures, as appropriate.

- 1. EPM-S00-PR-000009 Project Land Acquisition Strategy Procedure
- 2. EPM-S00-PR-000001 Project Stakeholder Engagement Plan Procedure
- 3. EPM-S00-PR-000002 Project Concept Master Plan and Development Framework Procedure
- 4. EPM-S00-PR-000003 Project Environmental Impact Assessment Procedure
- 5. EPM-S00-PR-000004 Project Permitting Plan Procedure
- 6. EPM-S00-PR-000005 Project Schedule Level 1 Procedure
- 7. EPM-S00-PR-000006 Project Cost Estimate (Class 4) Procedure
- 8. EPM-S00-PR-000007 Project Outline Business Case Procedure
- 9. EOM-ZP0-PR-00004 Operation and Maintenance Project Interface



5.0 RESPONSIBILITIES

The Entity, either by itself or through its assigned EPMO / PMC, has the responsibility to ensure that PDS is prepared for each specific project. The first issue of the PDS is prepared during Stage 2 (Initial Planning) by the Entity's Strategic Planning and Studies Dept., in collaboration with other department managers such as Engineering, Construction, Contracts, etc. Following Stage 2, the Entity's Control and Monitoring Department assumes responsibility for any further revisions to the document, if required.

PROCESS

6.1 Introduction

Based on the scope of services required and the desired project objectives, the PDS sets out the overarching strategy of how each project will be delivered by the Entity. It is the culmination of decision analyses of the various functions involved in the project delivery (Engineering, Construction, Contracts, Assets and Facilities, etc.) that lays out the most optimum strategy for delivering the specific project.

The execution of the project, however, shall conform to the content of the Expro Projects White Book.

6.2 Project Delivery Strategy Guidelines

The following are guidelines on content to be included to address project specifics that help define the strategy for project delivery.

6.2.1 Executive Summary

To preclude undue repetition throughout the PDS, this section should provide an overview of the project by briefly summarizing the salient aspects of the project, as listed herein.

- 1. **General Project Information:** Provide a brief description of the type of project, including the project's location, function, objectives, requirements and other relevant project characteristics. Also, provide project's reference to the Entity's 5-Year Projects Portfolio Plan.
- Project Ownership/Sponsors/Stakeholders: Provide a brief description of the project sponsor(s) and stakeholders.
- 3. Project Strategic Objectives: Highlight the key strategic objectives of the project.
- **4. Project Organization:** Describe the Entity's project organization structure and prime interfaces with project Sponsors, Architect and Engineer (A/E), and Construction contractors.
- **5. Project Financing:** Provide a description of the project financing, and highlight any unique sourcing, local content, invoicing, or other requirements that may be associated with the financing agreements.
- **6. Delivery Approach:** Provide a brief description of the approach to project delivery, addressing key areas such as, design-bid-build or design-build, pre/post Notice to Proceed work scopes, work packaging, construction approach, specialty services, use of technology / innovation, etc.

6.2.2 Scope of Work

This section provides a description of the technical and contractual obligations of the project. The Scope of Work is derived primarily from the outputs of the Project Concept Masterplan and Development Framework, also undertaken during Stage 2. In the following Stage (Stage 3: Tender for Design), the Scope of Work established in the PDS is used as the basis for furnishing the service requisition to appoint an A/E firm or to assign the work to General Engineering Services (GES) A/E already onboard, to undertake the detail design. Once appointed or the task has been initiated, the A/E shall develop and maintain the Design Basis Report, a document that conforms its performance obligation to the Entity.

34

Project Delivery Strategy

Delivery Strategy

This section identifies the various functions involved in the delivery of the project and how they contribute in formulating the overall PDS. Tabulated below (Figure 1) are topics to be addressed by the respective project functions. Note that the list of topics is not exhaustive and provides the minimum expected content to be addressed. Specific details relevant to the project should be addressed and any exceptions or deviations from the Expro Projects White Book should be explicitly identified.

It is expected that due consideration is given to new technology and innovation where applicable, in terms of materials, equipment and methods to be used in the construction phase of the project. These considerations are required to be taken into the design phase. Confirmation is required that the considerations have informed the Class 4 Cost Estimate.

Figure 1: Table of required functional topics to be addressed in the PDS

| Project Management | Will the project be executed as Design-Build or Design-Bid-Build? Will the project be managed by the Entity's EPMO or through appointment of a separate PMC? Will the Entity establish an integrated Entity-PMC team? What will be the project's organization structure? Where will the project team be located? |
|--------------------|--|
| Engineering | Will the project be executed as Design-Build or Design-Bid-Build? Will Engineering be performed in-house through the Entity's GES team or by 3rd party A/E Company? How is the Engineering work scope packaged? Will work be undertaken by single A/E Company or packaged to undertaken by multiple A/E companies? Does the scope of work require services of specialty consultants, such as for iconic structures or special architectural features? Are there any geographic considerations for the performance of the Engineering scope (In-Kingdom, Regional, Global)? Has optioneering exercise been undertaken (location of site, modular construction, access to site)? |
| Contracts | Will the project be executed as Design-Build or Design-Bid-Build? How will the Engineering / Construction scope be packaged? Will the construction scope be awarded to a single main contractor or multiple main contractors? Will the project specify a sub-contracting strategy to be followed by the main Contractor(s)? Will the project have any special contractual considerations, such as liquidated damages, Guarantees, etc.? Does the proposed contracting strategy require exceptions / waivers against the local procurement law? |
| Procurement | Will the project have any special procurement considerations, such free issue material, local supply, etc.? |



| Construction | Will the project be executed as Design-Build or Design-Bid-Build? How will the Construction scope be packaged? Does the project require appointment of specialty construction contracts, such as for dredging, off-shore works, tunneling, etc. Is there a geographic consideration to the sourcing of construction contractors (In-Kingdom, Regional, Global)? Will the entire Construction scope be undertaken at once or in phases? Does the Construction scope require modular or off-site fabrication? Will the project be constructed on an existing site, and are there any shutdown activities that will be required to be integrated into existing services? |
|-----------------------------|---|
| Project Controls | Will the project specify a predefined Work Breakdown Structure? How will change control be managed on the project? Will the project have any specific / special reporting requirements? |
| Project Finance | How will the project be financed? Is the project funding fully committed or to be approved incrementally? Does the project involve any private sector participation? If so, has the project achieved a full financial close? Is the resulted operating expense considered and included in the entity budget |
| Other Special Consideration | Are there any other special considerations that may have a bearing on the project's delivery strategy? Special security clearance requirements; Environmental restrictions; Local content; Financing arrangement, etc. Will the proposed project delivery strategy have any exceptions or deviations from the Expro Project White Book? If so, these should be explicitly identified. |
| Technology and Innovation | Has consideration been given to current technological advances in design and construction, such as? Materials (Modular, Pre-cast, Smart Roads, Transparent Solar Panels, 3D Concrete Printing) Equipment (Robotics, Smart Helmets)) Methods of Construction (Laser guided works, 3D Printed building elements, Anti-collision software) IT (BIM, Drones) Ensure requirements for Technology and Innovation are included in Project Execution Plan |

345

Project Delivery Strategy

6.3 Supporting Documents

The Entity should include along with PDS any other supporting documents that it deems appropriate, as providing further detail and / or validation of the projects proposed delivery strategy.

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