TRANSPORT

Master Information Delivery Plan (MIDP) Quick Reference Guide

Digital Engineering Framework

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Contents

Introduction

This technical guide describes the purpose and application of the Master Information Delivery Plan (MIDP), including guidance for the contractor during its creation, use and possible additional benefits.

Purpose

The purpose of the MIDP is to improve the efficiency, timeliness, consistency and quality of project delivery by:

- planning the deliverables required to complete the contract scope from the start
- clarifying responsibility for each deliverable
- communicating the planned deliverables to the contractor team
- communicating the planned deliverables to the TfNSW project team.

Definition

The MIDP is a master deliverable register produced by the contractor, which documents all planned deliverables across the full contract scope and assigns responsibility for each. Additional information for each deliverable is recorded, including its document number, design package and due date.

The MIDP is kept up to date throughout the project to communicate any changes to planned deliverables and to track the status of deliverables as they are submitted. The MIDP is for all deliverables, not only models and drawings.

Contractors with only a small number of deliverables are recommended but not required to produce an MIDP.

Benefits

The primary benefits of the MIDP are:

- Assurance that the contractor has considered the full project scope carefully at the start of the contract and understands what is required to fulfil the requirements.
- An opportunity for the Transport for NSW (TfNSW) project team to review the contractor's planned deliverables against expected outcomes and propose adjustments where time and cost savings or product optimisations can be achieved.
- Clarity for the contractor's team on various factors including:
  - scope
  - division of responsibilities
  - due dates
  - document numbering
  - titles
  - breakdown of Work Package for each staging.
- Clarity for the TfNSW project team on what deliverables are expected when, enabling better resourcing for reviews.
- Assurance of appropriate metadata and naming convention at an early stage prior to submission
- Validation of incoming deliverables against project Enterprise Content Management (ECM) tool.

DE Framework context

Comparison with Model Production and Delivery Table (MPDT)

The MIDP fulfils the purpose of the 'responsibility matrix' defined in ISO 19650-1:2018 (clause 10.3), at the 'deliverable' level. In contrast TfNSW's use of the MPDT represents the 'responsibility matrix' at the 'object type' level.

MIDP template

A MIDP template (DMS-FT-555) is available with the TfNSW DE Framework and is provided to contractors as an attachment to the Digital Engineering Execution Plan (DEXP) template. There is no requirement for the TfNSW project team to pre-populate or adjust the template before providing it to the contractor.

If the contractor wishes to use a different MIDP template or modify the template provided, alternatives can be agreed with the TfNSW Digital Engineering Manager.

Contractor responsibilities

Providing an up-to-date MIDP

Creation, submission and updates of the MIDP are requirements of the DMS-ST-207 – *Digital Engineering (DE) Standard, Part 2*, Section 5.2.

While the MIDP could be submitted as an appendix to the DEXP, the recommended process is to submit the MIDP as a standalone deliverable, because it may need updating more frequently than the DEXP.

An update to the MIDP shall be provided to TfNSW after any significant changes to planned deliverables which may affect TfNSW's expectations or resourcing.

Planning for delivery

The contractor is required to populate all the fields of the MIDP template, for all planned deliverables, over all stages the project for which the contract runs, so far as is reasonably practicable. Where the number of models or drawings required for future stages is not known, a package of drawings falling under a single responsible person or team may initially be included as a single entry and expanded later.

All planned deliverables for the current stage must be listed separately. Normal changes to planned deliverables are accepted as a matter of course, for example, if the number of architectural detail drawings for a particular building turns out to be higher or lower than originally anticipated.

Consistency of information

The contractor is expected to maintain consistency between the information written in deliverables (such as title and document number), and the information about each deliverable in the MIDP. For example, if a team changes the title of a deliverable, its title should be updated in the MIDP.

Other status information about deliverables should be kept up to date in the MIDP, including whether a deliverable has been submitted, its revision number, the design package it is part of (if applicable), the responsible party, and the planned or actual issue date.

For major projects with large numbers of deliverables, a method for automatically gathering up-to-date deliverables metadata from the Common Data Environment (CDE) is recommended.

Field guidance

Unless agreed otherwise, fields in the MIDP template should be used as follows:

- **State/Suitability** – The contractor should note as a minimum whether the document is work in progress or has been shared with TfNSW. Establishing the state and suitability to a more precise degree is recommended. Refer to the DMS-ST-207 – *DE Standard, Part 2*, information on CDE.

- **Document number** – It is recommended that the individual code fields are used to build document numbers in the MIDP, in line with TfNSW Enterprise Content Management (ECM) requirements (see DMS-FT-533 for details). The project team can then refer to the MIDP for numbering of documents and drawings.
- **Revision number** – Align revision numbers with the project ECM schema and apply the latest revision.
- **Exchange format** – This field is allocated for all project deliverables that is listed in the contract.
- **Work Zone** – This field is more relevant for delivery projects to allocate deliverables to specific work zone. Refer to the project ECM schema.
- **Work Package** – If the project is using Work Packages (see the project ECM schema), allocate each deliverable to its Work Package group using this field.
- **Responsible party** – This may be a person or a task team (normally a single discipline team).
- **Issue date** – For planned deliverables, include the submission due date from the programme. For submitted deliverables, include the actual submission date.

Optional further uses

Managing large numbers of task teams

Contractors working with large numbers of task teams and deliverables may wish to set up a subset delivery plan for each task team and federate these to form the MIDP. Task team deliverables lists are commonly referred to as Task Information Delivery Plans (TIDPs).

The use of TIDPs is entirely at the discretion of the contractor. If used, it is recommended that a standard form for the TIDPs is developed and provided to task teams as an appendix to the DEXP, to enable an efficient approach to updating the MIDP for submission.

Advanced project controls

The DE Framework's emphasis on structured data is intended to enable cross-referencing of data from the deliverables to the programme, to costs, risks, and other aspects of the project. Contractors working with comprehensive CDE tools can establish means by which metadata from the deliverables, programme and other areas of the project can be aggregated in the MIDP with great ease, for analytics and dashboards.

With a little modification the MIDP can become a powerful tool for project controls, with uses including:

- predicting and managing demand fluctuation in delivery
- assessing resourcing needs
- presenting dashboard statistics on progress and delays including assessment against spend and program

- aggregating deliverables status for percentage completeness and earned value analysis.

Currently much of the information (for example, documents, models, drawings, registers, and so on) that our contractors deliver are all provided in isolation, without a common (linking) thread. This means that information from one discipline can often not be related to another discipline.

Under the DE Framework, we strive to define structured data that can be used across the different types of information. These common pieces of data are collectively known as the Project Data Building Blocks (PDBB).

For information on DE Framework

To find out more about the DE Framework, contact **Digital.Engineering@transport.nsw.gov.au.**