



TS 01515.2:1.0

Standard

Asset Information

Part 2: Asset Data Interchange

Issue date: 30 June 2023

Effective date: 30 June 2023

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Document information

Owner: Director Asset Planning and Assurance
Asset Management
Safety, Environment and Regulation

Mode: Multimodal

Discipline: Asset management

Document history

Revision	Effective date	Summary of changes
1.0	30/06/2023	First issue.

Preface

This is a first issue.

This standard sets out requirements related to the exchange of asset related data specifically pertaining to the transfer of data between asset stewards – operate or maintain asset systems and the TACP.

This document was developed in response to the implementation of the TACP. The primary purpose of this document is to standardise, simplify and clarify the requirements for the exchange of asset related data for all asset stewards – operate or maintain across the TfNSW agencies. The TACP is a centralised database containing data such as operational performance, risk exposure, condition, maintenance planning and execution of assets.

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1 Scope

This standard specifies requirements for the interchange and exchange of asset data and information between asset stewards – operate or maintain and the TfNSW ODM that is required for TfNSW to meet the requirements of TPP 19–07.

TPP 19–07 requires that NSW Government agencies develop a fit-for-purpose asset register which contains accurate and comprehensive information on the agency’s planned and existing assets.

This document specifies trigger events that result in changes to asset related data. Each trigger event has a requirement to produce data for example, creating, maintaining, modifying and removing an asset requires an update to the asset steward – operate or maintain asset register as well as the TACP.

This standard does not cover general requirements for the transmittal of asset information following asset handover which is defined in TS 01515.1.

Figure 1 shows the TfNSW document hierarchy and the level at which this standard sits.

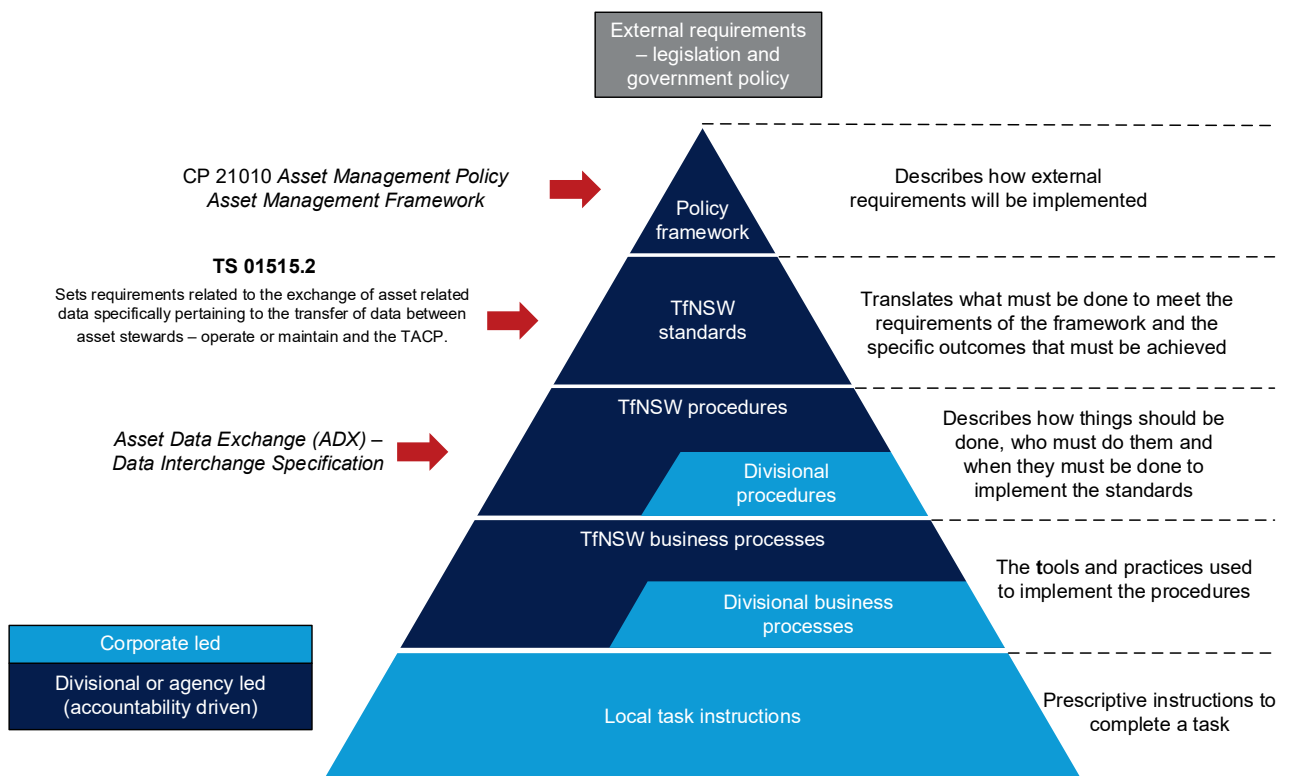


Figure 1 – TfNSW document hierarchy

2 Application

This document is intended to be used by asset stewards – operate or maintain who maintain asset data repositories as part of their role in managing TfNSW assets.

The requirements contained within this document relate specifically to events that trigger the requirement to update relevant asset data and then provide the updated data to the TfNSW ODM.

3 Referenced documents

The following documents are cited in the text. For dated references, only the cited edition applies. For undated references, the latest edition of the referenced document applies.

Transport for NSW standards

TS 01515.1 *Asset Information – Part 1 Management of Asset Information*

Other referenced documents

NSW Treasury, TPP 19–07 *Asset Management Policy for the NSW Public Sector*

TfNSW, *Asset Data Exchange (ADX) – Data Interchange Specification* (available on request from standards@transport.nsw.gov.au)

4 Terms, definitions and abbreviations

In addition to the terms, definitions and abbreviations in TS 01515.1, the following terms, definitions and abbreviations apply in this document

asset steward – operate or maintain the entity responsible for the day to day operations and maintenance of assets once commissioned. May be a part of the asset custodian division or a separate entity. Operator and maintainer of the assets might be separate entities.

data interchange specification artefacts that provide the formal definition on how data is to be exchanged between business partners

information reinterpretable representation of data in a formalized manner suitable for communication, interpretation or processing (Source ISO 19650.1. Note removed)

information model set of structured and unstructured information containers

interchange refers to the electronic exchange of data between information technology systems

information requirements a statement of the information that TfNSW requires to meet its organisational objectives and its asset management objectives

ODM operational data manager; responsible for data quality within their respective area, ensuring adherence to asset information standards and supporting the resolution of data quality issues within their asset information

TACP Transport Asset Custodian Platform

TfNSW Transport for NSW

trigger event planned or unplanned event that changes an asset or its status during its life cycle which results in information exchange (Source ISO 19650.1. Note removed)

5 Asset related data exchange requirements

This standard relates to the interchange and exchange of data and information between asset stewards – operate or maintain or TfNSW agencies and the TACP. This document aligns with the requirements of TS 01515.1 which sets out the structure and format of the information model. The information requirements provided throughout the asset life cycle are determined by TfNSW's objectives at each stage. The data and information are used to assess performance against the TfNSW objectives, facilitate verification of requirements and to assist in life cycle decision-making.

The data exchange requirements are defined in the data interchange specification. A data interchange specification shall be provided as a standardised format for exchanging data between different computer systems and applications, ensuring consistent and accurate transmission, processing and interpretation of the data that is independent of the underlying technology or architecture.

TfNSW shall publish the following:

- The data interchange specifications to allow information providers to develop computer programs to export and import data automatically.
- Both a human readable data interchange specification document and data schema. The *Asset Data Exchange (ADX) – Data Interchange Specification* is an example of a data interchange specification and TfNSW may introduce additional data interchange specifications from time to time.

The data exchange process shall be determined by TfNSW in collaboration and agreement with the relevant Transport agency or asset steward – operate or maintain.

The data shall be provided and validated through electronic means in accordance with the data interchange specifications. The ODM shall ensure that the data exchanged meets the requirements of this standard in accordance with Section 5.7.

5.1 Trigger events

Across the asset life cycle, various events can occur that trigger the requirement to update asset related data. These events can result from changes to asset strategy, service strategy, new asset types, maintenance strategy including maintenance requirements and asset configuration.

Examples of events that trigger the need for the data to be updated include the following:

- introduction of new assets, whether an existing asset type or new asset type, including asset trials
- changes to asset such as name, location, or status
- asset decommissioning
- asset disposal
- major maintenance – refurbishment (component change out), upgrade (new asset type) or replacement (existing like for like asset)
- asset revaluation
- changes in asset ownership, asset operator or asset maintainer (demarcation of responsibility)
- changes in asset stewardship
- changes to asset information standards
- changes to NSW Government policy requirements such as TPP 19–07
- changes to legislation or ministerial direction
- asset repurposing.

5.2 Data exchange roles

TfNSW shall appoint an ODM responsible for receiving data which has been provided by an asset steward – operate or maintain.

The asset steward – operate or maintain shall appoint an ODM responsible for providing data to the TfNSW ODM.

5.3 Data exchange timing and frequency

Asset stewards – operate or maintain shall provide updated asset related data that is part of a data interchange specification either as changes to source asset related data occur as a result of a trigger event or monthly or as agreed between TfNSW and the asset steward – operate or maintain. Where there have been no changes to the asset related data during the period, the relevant data interchange specification shall define any communication requirements.

5.4 Data production method and format

The asset related data shall be produced in the format as designated by the relevant data interchange specification.

5.5 Version control

Data interchange specifications are subject to change as systems are improved and updated. asset stewards – operate or maintain shall keep track of the version for each data interchange specification they are using. Following notice from TfNSW, asset stewards – operate or maintain shall update to the latest version of the data interchange specification at an agreed time to ensure compliance with the TACP.

Where a new version of a data interchange specification impacts asset related data that was previously submitted, asset stewards – operate or maintain may, as directed by TfNSW, need to provide the full data set, inclusive of the updated requirements from the data interchange specification.

5.6 Data security

In this document, data security relates only to security of the exchange of data and not the security of any IT system, for example TACP.

All parties transmitting and receiving data specified by this standard are required to comply with TS 01515.1.

The ODMs shall ensure compliance with TfNSW security requirements.

5.7 Data acceptance criteria and assurance

Asset related data submitted to the TfNSW ODM shall be an accurate record of an approved asset or actual asset. Asset stewards – operate or maintain shall have systems in place to assure asset data submitted meets the requirements of the data interchange specification. If the submitted data does not meet the acceptance criteria, the TfNSW ODM shall notify the asset steward – operate or maintain and request a re-submission of the data. The asset steward – operate or maintain ODM will be notified when the data meets acceptance criteria.

6 Archiving and disposal of data

All parties transmitting, receiving and storing data specified by this standard shall comply with TS 01515.1 in relation to archiving and disposing of records.