TS 01515.4:1.0

Standard

Asset Information

Part 4: Asset Management Plan for Asset Information

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Document history

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

Preface

This is a first issue.

This standard is aligned to TS 01519 which sets requirements for developing ASPs for physical assets and should be read in conjunction with, TS 01519.

This document has been developed in response to a strategic direction that asset information shall be managed as an asset and that a plan be developed to manage asset information. This document prescribes requirements for TfNSW to develop AMPs for information assets in the same way that they are developed for physical assets.

This standard covers key aspects of a management plan for asset information such as the following:

- the information assets that exist in the business
- the value that they provide to the organisation
- the processes and governance used to manage asset information
- the level that it needs to change over the next 10 years in order to meet objectives
- the changes or improvements that need to be made over the next 10 years
- the funding required to make those changes.

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1 Scope

This standard sets the minimum requirements for all areas within the Transport cluster that are involved in the delivery of asset management related artefacts required by TfNSW as part of TPP 19–07 which includes the requirement to have asset management plans.

This document prescribes requirements that form part of an ASP for asset information as well as specifying the requirements for asset information ASPs at each level of the Transport cluster.

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

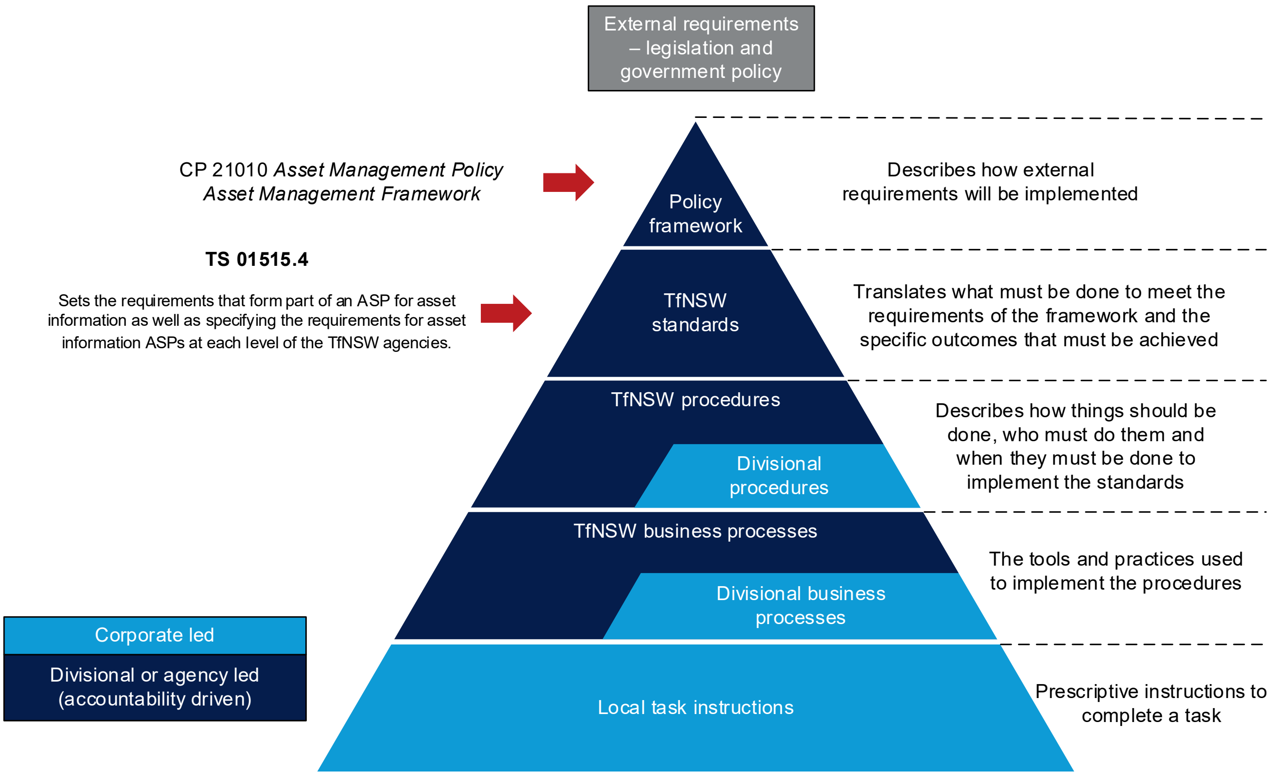

Figure 1 – TfNSW document hierarchy

2 Application

This document is aimed at parties involved in the development and use of ASPs for the Transport cluster.

This standard applies to the following:

- the Transport cluster including TfNSW
- all Transport cluster divisions, branches, modes and agencies
- Operate or maintain service providers, who are typically, but not necessarily, asset stewards. Specifically, this document defines the requirements for each level of the Transport cluster in the delivery of artefacts as required by TPP 19–07.

For the purposes of this document, asset steward refers to asset steward – operate or maintain. Branches, modes, and agencies within the TfNSW cluster can also be considered asset stewards (in that they oversee part of the life cycle process for an asset, either directly or through operate or maintain service providers), but for the purposes of this standard they will be referred to separately. Public private partnerships will generally fall under the asset steward level.

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*

TS 01519 *Transport Cluster Asset Attestation Requirements*

TS 01520 *Transport Service Provider Asset Management Reporting Standard*

Other referenced documents

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

State Records NSW, *Standard on records management* (Standard No 12, November 2018)

TfNSW, CP17005.1 *Data and Information Asset Management Policy*

TfNSW, *Transport for NSW: Asset Management Framework* (available on request from standards@transport.nsw.gov.au)

4 Terms, definitions and abbreviations

AMF *Transport for NSW: Asset Management Framework*

asset custodian the TfNSW Division accountable for the end to end lifecycle management and performance of assets (including asset condition, risk and reporting) on behalf of the asset owner to achieve agreed customer and community outcomes

asset information the combined set of data (graphical and non-graphical) and documents (drawings, manuals, plans, certificates) required to support the management of assets over the life cycle

asset owner the entity that is the owner of the asset (for example, TfNSW and TAHE)

asset steward the entity given the responsibility by an asset custodian to oversee part of the life cycle process for an asset

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.

ASP asset and services plan; is also commonly referred to as an asset management plan

TfNSW Transport for NSW

transport assets means assets used for or in connection with or to facilitate the movement of persons and freight by road, rail, sea, air or other mode of transport, and includes transport infrastructure (Source: *Transport Administration Act 1988*)

Transport cluster all organisations who work with and around the transport infrastructure space, who are represented by the Minister for Transport and Roads and the Minister for Regional Transport and Roads

5 Asset Information

This standard is aligned with several guiding principles related to asset information, including the following:

- Asset information, being an intangible asset, provides actual value to TfNSW in that it supports the knowledge required to make decisions to meet various asset management objectives.
- TfNSW requires that data and information, being assets, are effectively managed across the life cycle of the asset information.
- Asset information requires planning and funding to obtain, and processes to utilise, improve, maintain and archive.
- In accordance with CP17005.1, TfNSW ensures that data and information is managed as an asset. This enables informed customer focused decision making in relation to planning, delivery and management of a safe, sustainable and integrated transport system, by having the right data and information, at the right time.

Asset information shall be managed in accordance with TS 01515.1 which specifies the requirements for the management of asset information, including roles, providing the framework for the collection, governance and maintenance of accurate, complete and consistent asset information for transport assets

6 Asset management plan

Asset management plans can vary in content and structure however, it is common practice for asset management plans to contain:

- the activities and resources required to meet the organisation's asset management objectives
- the plans required to operate and maintain the assets
- the funding required to manage the asset through the asset lifecycle stages.

As with an asset management plan for physical assets, the operate/maintain stage of the lifecycle represents the highest total expenditure (TOTEX) of the asset and therefore the majority of the plan over the life of the asset.

In the Transport cluster, an asset management plan is generally referred to as an ASP. The ASP, as described in TS 01519 articulates the approach to manage asset and service performance, condition and risk over the asset life cycle to meet the required service outcomes. The ASP has a key focus on the next 10 year horizon and considers both existing and planned asset and service portfolio. The same approach shall be taken with asset information.

While the lifecycle of the physical asset and its associated information are linked, the management of the information differs from the management of the physical asset.

In terms of asset information assets, the processes used to manage asset information are prescribed in TS 01515.1 as:

- plan
- obtain
- validate
- store
- access
- utilise
- improve
- archive
- delete.

Each of the processes in the preceding bullet list require a level of funding to achieve the required objectives. The required funding shall be included in the ASP.

Requirements to develop and deliver an ASP at the different levels within the Transport cluster are in TS 01519. Requirements for asset performance reporting against the ASPs are in TS 01520.

The requirements in this standard are additional to TS 01519 and are subject to the same governance, approvals, submission details and due dates as in TS 01519.

7 Register of asset information repositories

A register of asset information repositories is a record of the scope of information assets that shall be included in the ASP.

The register of asset information repositories shall include:

- Name of the asset information repository.
- Scope of the repository including type and details of information managed.
- The criticality of each repository of information in terms of the risk associated with that repository of information. This shall relate to the business processes that the information supports as well as the reliability of the repository itself. Criticality shall also take into account variance of criticality of information within a register.

Criticality is an important metric as it informs the level of funding that should be approved in terms of managing that information. This is especially relevant in the improvement of asset information business process described in TS 01515.1.

8 Quality of asset information

TS 01519 contains a requirement for an ASP to include an analysis of asset condition.

The condition of asset information relates to the assurance of quality of that information. In accordance with TS 01515.1, asset information shall be continually assessed to ensure the quality of information is maintained. Information quality is determined by the following factors:

- completeness – information shall be complete
- correctness – information shall be accurate and up to date
- consistency – information shall be defined including business rules and format
- clarity – information shall be clear and unambiguous
- integrity – information shall be structured and relationships maintained with other asset information repositories
- uniqueness – no duplication of the information shall exist.

An ASP shall include an analysis on the quality of asset information within the scope of the ASP (register of asset information repositories) as well as the processes used to assure the quality of asset information. This includes validating asset information at the asset handover lifecycle stage.

Any identified gaps shall be included as well as funding required to close these gaps. As described in Section 7, criticality of asset information informs the level of effort and funding to be applied to maintaining and improving the quality of asset information.

9 Risk

The quality and availability of up to date asset information has a direct impact on achieving TfNSW asset management objectives as well as meeting the requirements of TS 01519. Asset information risks identified in the ASP shall reflect the impact on achieving these objectives and requirements.

Risks shall be identified that impact any of the processes in Section 6 that are required for effective management of asset information. One of the more prominent risks is obtaining and validating asset information at the asset handover stage.

10 Asset information asset and services plan requirements

The requirements in Sections to 10.1 to 10.4 are additional to those of TS 01519.

10.1 Transport cluster asset and services plan requirements

The Transport cluster ASP shall include the following sections on asset information as a minimum:

- asset information overview – an overview of the asset information and the information repositories including the following:
  - quality of asset information
  - risks associated with asset information and the impact that these risks have on meeting TfNSW objectives as stated in the AMF and TPP 19–07
- funding options related to asset information
- continuous improvement initiatives for asset information and the management of asset information.

10.2 Divisional asset and services plan requirements

Requirements in TS 01519 covering the development of division ASPs state that there shall be alignment between the branch, modal and agency level ASPs. This alignment shall apply to all asset information ASPs produced by each branch, mode and agency and asset steward.

Every division or equivalent shall ensure that there is alignment between the narrative contained within the division's strategic plan, integrated budgeting activities, and the ASP (allowing for differences in timing of the respective plan periods). Lower level artefacts shall be used as inputs into the divisional ASP.

Funding scenarios and risks related to funding scenarios shall be consistent with TS 01519. Levels of funding shall be associated with improvements to the quality of asset information, improvements, upgrades and maintenance of asset information repositories and organisational improvements associated with the management of asset information.

The divisional ASP shall include the following sections on asset information as a minimum:

- divisional asset information overview: an overview of the asset information and the information repositories including the following:
    - quality of asset information
    - risks associated with asset information and the impact that these risks have on meeting TfNSW objectives as stated in the AMF and TPP 19–07
- funding scenarios related to asset information and the management of asset information
- key challenges and risks – an overview of the key divisional challenges and risks relating to asset information
- continuous improvement initiatives for asset information and the management of asset information.

10.3 Branch, modal, and agency asset and services plan requirements

The requirements for a branch, mode or agency to develop an ASP for asset information are prescribed in TS 01519.

Where a branch, mode, or agency has been directed to develop an ASP submission, and there are no asset steward submissions that will feed into the ASP, the relevant party shall complete a branch, modal or agency ASP equivalent to a detailed asset steward ASP document as per the requirements in Section 10.4. Doing this ensures the relevant levels of assurance and data is captured.

If an ASP is the required deliverable and there are feeding asset steward submissions, the relevant party shall include the following sections on asset information as a minimum:

- branch, modal or agency asset information overview– an overview of the asset information and the information repositories
    - quality of asset information
    - risks associated with asset information and the impact that these risks have on meeting TfNSW objectives as stated in the AMF and TPP 19–07
- funding scenarios related to asset information and the management of asset information
- key challenges and risks: an overview of the key divisional challenges and risks relating to asset information

- continuous improvement initiatives for asset information and the management of asset information.

10.4 Asset steward asset and services plan requirements

The Transport cluster asset portfolio is managed on behalf of TfNSW by numerous government and non-government asset stewards who are O&M service providers. Asset stewards that are considered branches, modes, or agencies under the Transport cluster shall refer to section 10.3.

Section 8.4.2 of TS 01519 has a table of the minimum requirements for an asset steward ASP. A statement of the asset information system is included in this table. In the asset management framework section of the ASP, the following sections shall include asset information:

- governance and assurance framework
- resource competency and capability management
- continuous improvement including assurance activities.

The following requirements specific to asset information shall be included in the ASP:

- asset information overview – an overview of the asset information and the information repositories
    - quality of asset information
    - asset information criticality and the impact of outcomes and service deliverables
    - risks associated with asset information and the impact that these risks have on meeting TfNSW objectives as stated in the AMF and TPP 19–07
- gap assessment related to the following:
    - current quality of asset information compared to the required quality
    - current capability, competency and capacity related to the management of asset information and the desired state
    - current repositories of asset information including security of those repositories and the desired state
    - required roadmaps to close the identified gaps focussing on, cost, risk and benefit
- funding options required to implement the roadmap, funding options shall be in accordance with TS 01519
- key challenges and risks relating to asset information and services based on funding options.