

Whole of Life thinking and asset management - Light Rail

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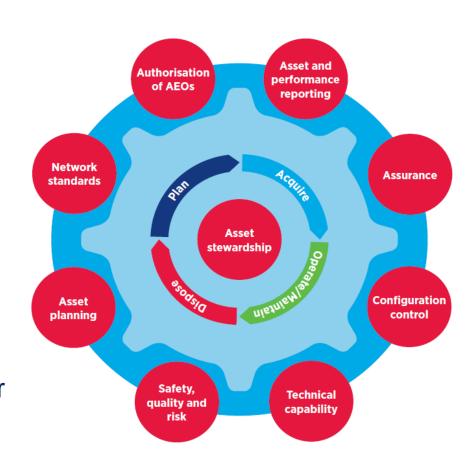
Scope of presentation

- Introduction of the Asset Standards Authority
- Asset management
- Asset assurance and configuration management
- Whole of Life thinking
- Light Rail examples and discussion

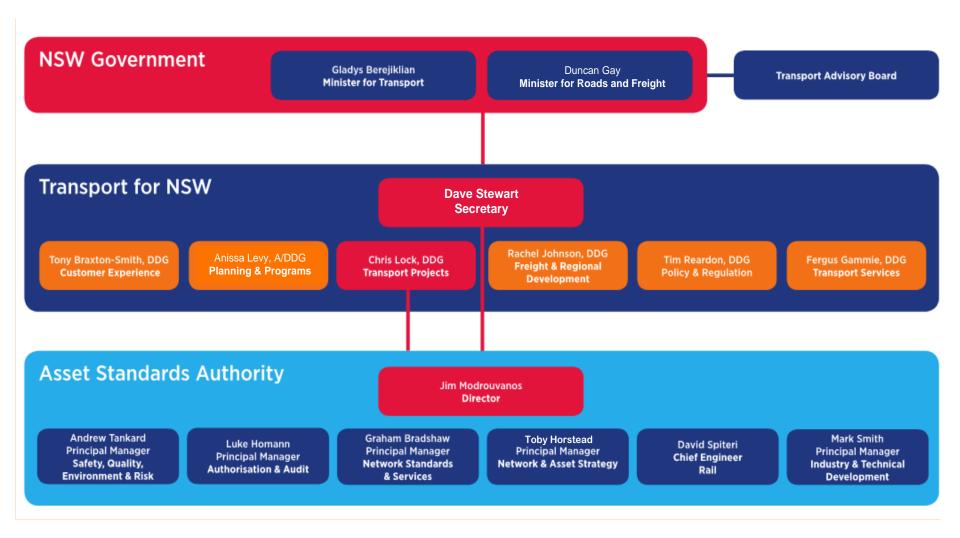


Asset Standards Authority (ASA)

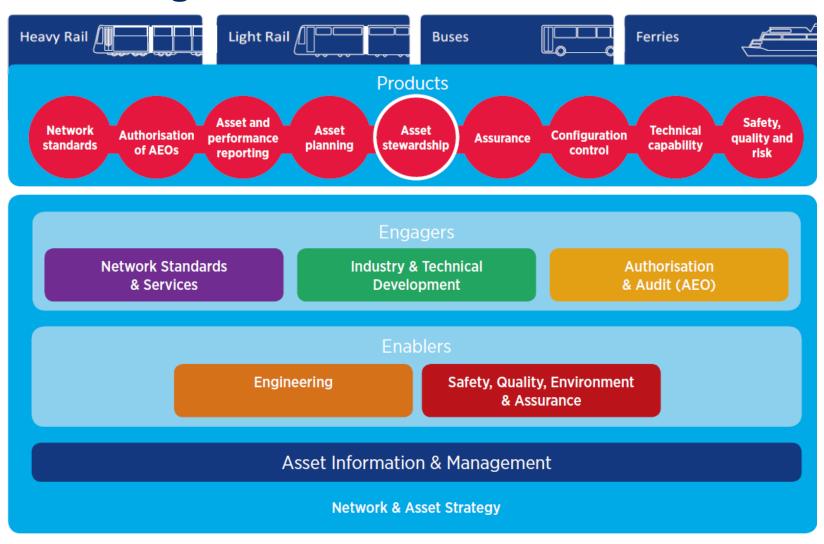
- "Making it clearer and simpler"
 - For Transport cluster
 - For supply chain
- Supporting TfNSW to be informed and efficient asset owner
 - Risk based
 - Whole of life assurance
 - Asset management
 - **Standards**
- Facilitate increased private sector participation and capability
- TfNSW values and customer focus



ASA within TfNSW



ASA's organisational function

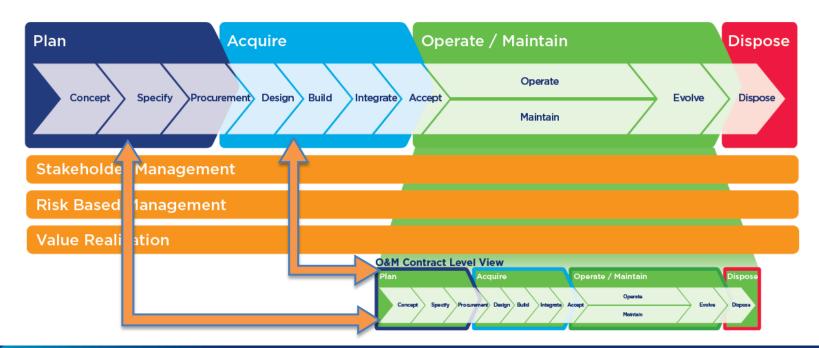


ASA achievements - 2014

- Strong diverse team 125 people
- New engineering governance frameworks
- Set the common asset life cycle model within Transport for NSW
- Standards 140 standards published including asset management topics
- National and international alignment to standards; partnerships with national bodies
- AEO status 28 organisations and 74 projects
- Industry engagement 28 industry events
- Support to Long Term Rail Future and Rail Services Delivery Group
- Support to Sydney Light Rail and North West Rail Link / Sydney Rapid Transit

ASA's role - providing assurance to TfNSW

- Engineering decisions
- Obligations to the owner
- Industry service providers
- Deployment of TfNSW protocols



Asset Management – Light Rail

- "...support realisation of value while balancing financial, environmental and social costs, risk, quality of service and performance related to assets."
- Where Rail Safety National Law (2012) is applicable it is a requirement of the legislation
 - Schedule 1 Content of Safety Management System
 - Clause 21 Asset management
 - An asset management policy and processes that address all phases of the asset life cycle of the rail infrastructure or rolling stock operations.
- Asset owner may contract in part to operator/ maintainer, but only apply in operate/maintain phase.
- Legislation requires ALL PHASES of life cycle to be covered

Asset management – Transport cluster

AM policy published

- all TfNSW agencies and suppliers to comply
- ASA's activities and requirements embody its principles

ISO 55001 based AM Framework

- ASA developing
- Each agency to operate their own framework aligned to and compliant with



Asset Management Policy

Asset management in TfNSW – ISO 55001

Transport AM framework

- will guide organisation, stakeholders and service providers
- Use, link or integrate many of organisation's activities and otherwise managed or operated in isolation

Alignment to ISO 55001

- Current AM practices and processes
- against 7 requirements through AM framework
- common language for the Transport Cluster



ISO 55001 - seven specific elements

Assurance definition

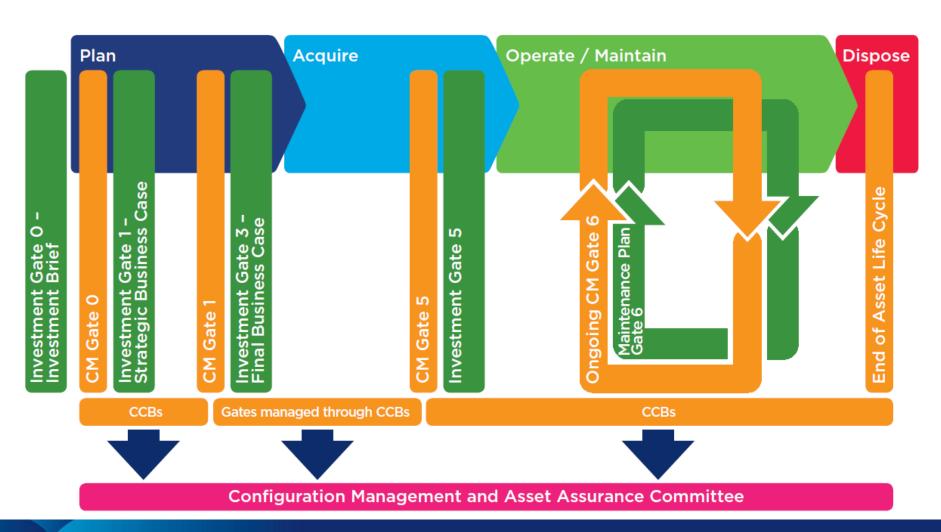
"Assurance is a set of structured and planned activities conducted through the asset life cycle providing progressive justified confidence that objectives are being achieved and that the asset is or will be fit for purpose"

An effective assurance argument will...

- Provide a story of what has been/is being done to ensure right asset is established and operated
- Give compelling argument supported by evidence that demonstrates asset is/will be fit for purpose
- Confirm assurance activities are integrated into engineering activities
- Aid development of demonstrably SFAIRP outcome
- Be structured, key pillars of argument are provided
- Demonstrates optimisation of risk

Asset assurance and configuration control

Asset Life Cycle



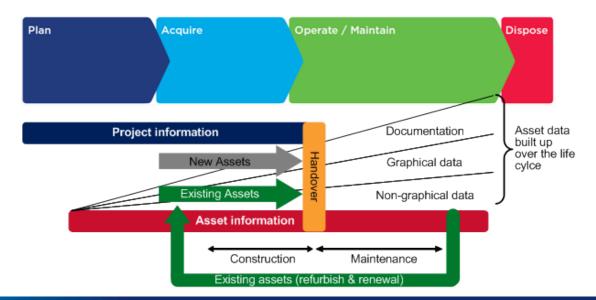
Applied to Light Rail

Asset Life Cycle



Asset information management

- A strategic asset owned by Transport for NSW that needs to be managed the same as a physical asset
- Standard for Asset Information Management published
 - requirements for asset information
 - requirements of an asset information management system
 - specifies an asset classification structure to be used



Whole of Life thinking – for thought

Inner West Light Rail Extension

- Track (sleepers, rail and formation) look fit for heavy rail they are
- Systems and whole of life economic case
 - RailCorp resources not engaged and still being paid for
 - Contract for materials supply in place
 - No planning approval required to renew existing track
 - Economic case showed long term benefits of renewal over spending less capital and doing minimum
 - Required maintenance would be minimised



Our future – assuring all modes



northwestraillink





