Terms of Reference

Transport Network Assurance Committee

1. Introduction

Assets that Transport for New South Wales (TfNSW) owns, or is custodian of, are to enable sustained achievement of TfNSW outcomes. Understanding its asset base and applying controls to asset changes supports TfNSW in achieving justified confidence that the intended outcomes are being achieved through its assets. Likewise, as services changes can affect the assets, control of the interfaces between services and assets also needs to be managed. This circular relationship is presented in Figure 1.
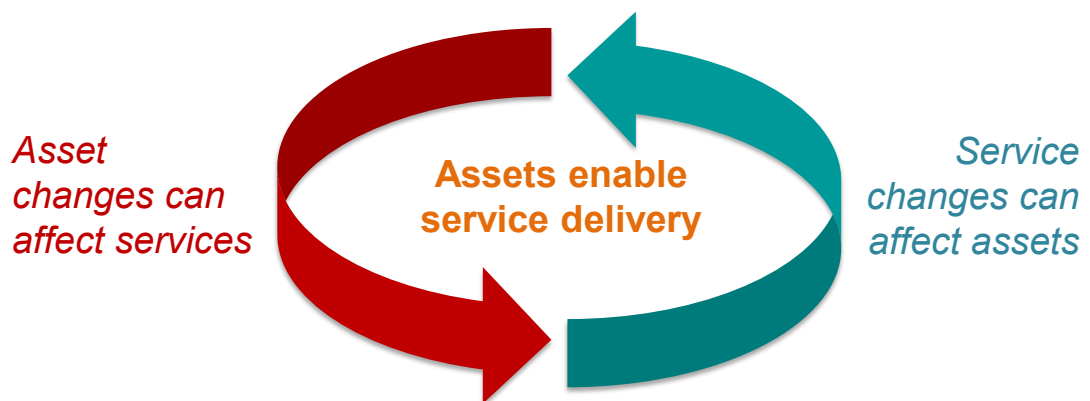

Asset changes can affect services

Assets enable service delivery

Service changes can affect assets

Figure 1 – Assets and services relationship

Configuration management is a set of five functions defined by AS/ISO 10007, that TfNSW applies to facilitate control of assets. Configuration management applies to physical and intangible assets identified in the TfNSW Asset Management Framework. (AMF)

TfNSW identifies specific governance committees as Network Assurance Committees (NACs). NACs provide oversight of configuration management arrangements and make determinations on asset configuration based on assurance evidence and the assurance arguments presented to it. The Transport Network Assurance Committee (TNAC) is the top level, cross cluster NAC within TfNSW. The TNAC operates in association with TfNSW Configuration Management Framework (CMF). This Terms of Reference describes the governance and administration of the TNAC.

1.1 Configuration management standard and TfNSW Configuration Management Plan

The TNAC considers configuration changes in the context of the following two configuration management requirements documents.

TS 01455 Configuration Management Standard defines configuration management requirements including asset assurance requirements for each life cycle stage. It applies to projects initiated after the publication of the standard subject to any transition arrangements and legacy agreements.

T MU AM 04001 PL TfNSW Configuration Management Plan (CMP) defines configuration management requirements including asset assurance requirements for configuration management gates. The requirements apply to projects initiated prior to the publication of TS 01455 or that are covered by transitional arrangements continue to apply T MU AM 04001 PL. The outcome based principles of the CMF may still be used when considering whether requirements have been met.

2. Terms, definitions and abbreviations

The following terms, definitions and abbreviations apply in this document:

AMAP Asset Management Advisory Panel

AMB Asset Management Branch

AMF Asset Management Framework

asset an item, thing, or entity that has potential or actual value to an organisation

asset assurance 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

asset custodian the TfNSW Division accountable for the end to end life cycle 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 steward the entity responsible for the management and performance of assets (including asset condition, risk and reporting) on behalf of the asset custodian for the required life cycle stage and duration of the partner relationship (for example, contracted operators and maintainers)

change authority a person or entity who can authorise a change

CMF Configuration Management Framework

configuration interrelated functional and physical characteristics of a product defined in configuration information

configuration baseline approved product configuration that establishes the characteristics of a product at a point in time that serves as reference for activities throughout the life cycle of the product

configuration change a change to a configuration item or set of configuration items

configuration management a management activity that applies technical and administrative direction over the life cycle of an asset and service, its configuration identification and status, and related asset information

governance the formal process by which an accountable party makes decisions, checks that pre-defined activities have been done, and provide a forum to receive and accept assurances

NAC Network Assurance Committee

outcome a quality of life condition for customers, communities or the people of NSW (Transport's Primary and Intermediate Outcomes are described in the *10 year Blueprint, Connecting to the future*).

TAHE Transport Asset Holding Entity

TfNSW Transport for NSW

TfNSW owned assets asset owned by Transport for NSW

TfNSW custodian asset assets that are not owned by TfNSW but for which TfNSW performs the function of custodian (e.g. TAHE owned assets)

TNAC Transport Network Assurance Committee

3. Purpose and scope of the committee

The TNAC is established to provide TfNSW with a whole of network, whole of asset life cycle, independent perspective to the configuration management of assets that form the TfNSW network. The committee may evaluate the following aspects of current or proposed asset configurations:

- Interdependencies and interfaces to other assets and the function of those other assets
- Impacts, risks and associated controls of a proposed asset configuration
- Whole of life asset implications of a proposed asset configuration
- Traceability of benefits and requirements throughout a configuration change activity
- Custodian and Steward Network Assurance Committee (NAC) conditions applied to a configuration change
- Stakeholder consultation relating to an asset configuration

Reviews of configuration changes presented to the committee are part of due diligence activities at a strategic level and not a detailed technical review.

The TNAC has responsibility for the following:

- Due diligence reviews and making determinations on configuration changes that are classified as Level 1 by the CMF and TS 01455 Configuration Management Standard. Configuration change levels are described in Appendix A.

- Due diligence reviews and making determinations on configuration changes requiring submission for acceptance by TNAC that were started and are continuing under arrangements defined by the TfNSW CMP.

- Make determinations on the interpretation or applications of configuration management assurance and governance arrangements associated with configuration changes.

- Seeking and receiving assurance updates, or other information as needed, from configuration change projects to facilitate making determinations about configuration changes within its scope.

Determinations made by TNAC constitute advice to the configuration change authority on the appropriateness of the proposed configuration baseline from the following perspectives:

- Appropriateness of the asset solution in the context of the whole of asset life and whole of network.

- Maturity of the asset assurance evidence available.

- Asset and asset interface risks and impacts.

The change authority may use the determinations made by TNAC and consider a range of other matters including financial, commercial and government priorities before approving a proposed configuration change or approving a new configuration baseline.

4. Submissions

The TNAC reviews and makes determinations on configuration change submissions based on the requirements defined by TS 01455 or T MU AM 04001 PL as applicable to the circumstance. The TNAC will normally be presented with the following information:

- TNAC submission form

- Assurance and Governance Plan

- Asset Management Advisory Panel (AMAP) advice paper

- Project presentation

TNAC may request any other information they deem necessary to make their determination.

Where notifications defined by T MU AM 04001 PL are provided instead of submissions, the notifications may take the form of reporting entries, tabled papers or presentations as appropriate. The TNAC may request more information from a project on review of any notification.

TNAC does not perform gate reviews retrospective to the stage that a configuration change project is at, however may receive briefings or assurance updates on the progressing configuration change. Notifications are normally received by TNAC retrospectively.

Final version of project submissions shall be sent to the TNAC Secretariat at configuration@transport.nsw.gov.au and Asset Management Advisory Panel (AMAP) lead at least 15 (15) business days prior to TNAC to allow sufficient time for AMAP, and subsequent TNAC member review. AMAP is described in Section 8. The timeline of events is shown in Appendix C. The acceptance of late submissions shall be at the discretion of the TNAC Chair (or delegate).

4.1 Review Gates

The TfNSW CMF identifies several stages throughout the asset life cycle. Requirements are set in TS 01455 for each stage regardless of whether a review gate is applied at the end of the stage. When a submission is presented to TNAC seeking acceptance it is done so at a review gate. Provision exists within the CMF and TS 01455 for review gates to be applied where appropriate however all Level 1 configuration changes will be presented to TNAC at least once.

A configuration baseline consists of the asset information that represents an approved configuration. Configuration baselines are approved by the change authority with consideration of TNAC determinations where applicable.

Typical review gates and configuration baselines are shown in Figure 2 against asset life cycle stages. While the timing of some review gates is based on the NSW Gateway Policy, review gates requiring TNAC consideration are applied whenever appropriate. A configuration change process may include additional or fewer reviews by TNAC or other Network Assurance Committees (NACs) than presented in Figure 2.
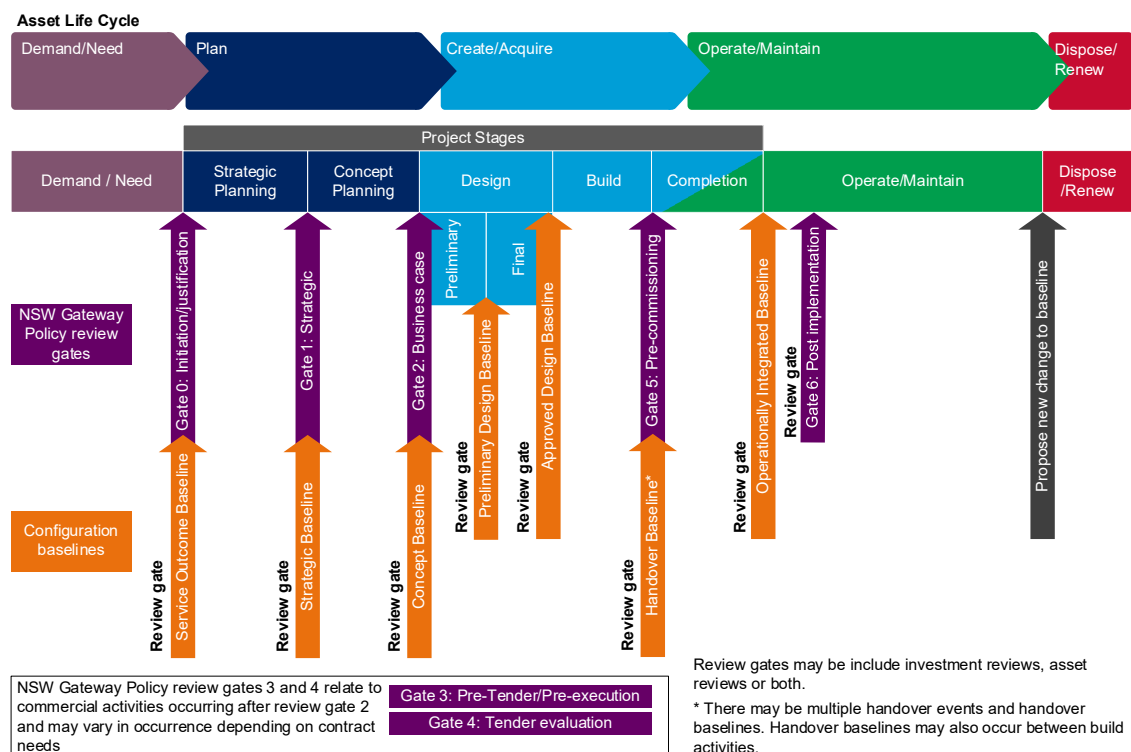
Figure 2 – Asset life cycle stages with typical review gates and baselines

Where a TNAC submission is associated with a project seeking approval for funding then the TNAC submission must be completed in advance of the funding request. This applies to TfNSW and Transport Asset Holding Entity (TAHE) funding approvals as stated in the TAHE Investment Framework. Investment review activities leading up to the funding request can however occur in parallel with the TNAC submission.

5. Membership of the committee

Members represent functional areas and life cycle accountabilities but make decisions based on the overall interest of TfNSW and independent from projects.

A functional area has been identified against each TNAC member in Table 1 as an area of their focus however members may, and are encouraged to, contribute to TNAC discussions and decisions on any topic.

The collective TNAC membership is intended to provide a diverse range of senior management perspectives from TfNSW to enable due diligence reviews of configuration changes to be performed.

Members are expected to consult with, and inform, other stakeholders within their functional focus areas.

Table 1 – TNAC members

Represented by	Functional areas
Executive Director, Asset Management, Safety Environment and Regulation (SER)	Governance
Director Engineering, AMB, SER	Technical integrity, standards compliance, supplier arrangements and technical due diligence
Director Asset Planning & Assurance, AMB, SER	Whole-of-life and whole-of-network asset management considerations
Head of Transport Safety Security and Emergency Management, SER	Safety and security
Executive Director, Customer Strategy and Experience, Customer Strategy and Technology (CST)	Customer and community outcomes
Executive Director, Freight, Regional and Outer Metropolitan (ROM)	Freight outcomes
Executive Director, Investment and Assurance, Group Chief Financial Office	Investment planning and investment assurance interface
Chief Transport Planner, CST	Transport strategy and planning
Executive Director Network and Assets, ROM	Asset and service impacts to ROM as a whole
Executive Director Planning and Programs, Greater Sydney (GS)	Service planning and outcome delivery for GS as a whole
Head of Technical Services, Infrastructure and Place (IP)	Configuration change deliverability, assurance during delivery and property development implications.
Executive Director Environment and Sustainability, SER	Environment and sustainability outcomes
Chief Technology and Innovation Officer, CST	Information technology, customer technology and operational technology

Director Active Transport, Cities and Active Transport (CAT)	Active transport, parklands and placemaking outcomes
Executive General Manager Asset, Safety & Environment, TAHE	TAHE assets owner as observer of technical due diligence

5.1 Membership delegation

Members may nominate delegates to attend on their behalf. Delegates are required to represent the functional areas of the member that they represent.

5.2 Invited guests and observers

Additional people may be invited to TNAC at the discretion of committee members or the TNAC secretariat. Guests are generally invited to meetings for the purpose of contributing to discussions on one or more agenda item. Guests include individuals presenting to the committee members.

Invited observers are predominately optional invitations extended to provide the observer with visibility of TNAC agenda items or deliberations for the purpose of facilitating work outside of the committee meeting.

Guests and observers do not form part of a quorum.

5.3 Chair of the committee

The chair of the TNAC is the Executive Director, AMB. Should the Executive Director be unable to attend, the Executive Director shall nominate an alternative regular member to be the chair. In the absence of a nominated alternative, the TNAC Secretariat shall nominate a member that with the agreement of members in attendance shall chair.

6. Quorum

A quorum for a regular meeting consists of half the TNAC membership. For each agenda item where approval of a configuration change submission is sought, a representative of the asset custodian shall be present for there to be a quorum for the agenda item. Individuals with responsibility for a submission shall not be considered eligible to be part of the quorum.

Notwithstanding the above, the chair of the TNAC may adjust the quorum to accommodate specific circumstances and agenda items that may warrant specific representation or not require the normal quorum.

When a TNAC submission relates to a particular functional area, that area's member or appropriate delegate is normally expected to attend. Where an appropriate representative from an affected functional area attendance, the chair may decide to defer the agenda item or apply conditions on decisions.

7. Meeting schedule

TNAC meetings are to be scheduled monthly, except for January. Additional meetings may be scheduled if necessary.

The timeline of events and deadlines leading up to and after each TNAC meeting is shown in Appendix C

8. Asset Management Advisory Panel (AMAP)

The AMAP is an independent panel that reviews configuration change submissions in advance of their presentation to the TNAC. AMAP produces an advice paper to accompany the configuration change submission within the agenda pack distributed to the TNAC members and delegates. The advice paper provides guidance and recommendations to the TNAC.

Advice provided by AMAP is presented from an asset whole-of-life and whole of network perspective. The advice is formed based on a high level review of documentation provided by the submitting project identifying general areas of concern, interest or support. It does not represent a detailed or technical review.

The activities of AMAP do not extend beyond the TNAC meeting. Any outstanding matters related to AMAP advice shall be addressed directly with the subject matter individual or team that identified the matter as part of normal business activity to enable the release of other AMAP team members.

Formal minuted actions noted in TNAC resulting from AMAP advice shall be monitored to closure via the TNAC actions or conditions register within the TNAC minutes.

The AMAP Terms of Reference presented in Appendix B provides additional information. Appendix B may be updated independently from the rest of the TNAC Terms of Reference content by Asset Management Branch, SER.

9. Determinations of the committee

Determinations made by the TNAC regarding configuration change requests seeking acceptance shall be by consensus. Determinations shall fall into one of the three categories:

- **Accepted** indicates the committee is satisfied that the configuration change request may proceed as presented, inclusive of any commitments made by the proponent or directions given by TNAC.

- **Accepted with conditions** indicates the committee is generally satisfied but has identified conditions that shall be imposed. Conditions must be addressed and reported back to TNAC within a timeframe considered satisfactory by TNAC for the acceptance to remain valid.

- **Deferred** indicates the committee is not satisfied with the configuration change request in its current form. TNAC does not support the project to proceeding to the next stage.

Where a notification, assurance update, briefing note for approval or any other matter is presented to the TNAC, decisions may take any form the committee deems appropriate.

9.1 Validity of determinations

Determinations made by the TNAC are based on the information provided by the proponent at the time of submission. If the outcomes that a configuration change project will deliver change from what TNAC was informed of then then the project is required to notify the TNAC of the change to the outcomes for the TNAC determination to remain valid. The TNAC may request further information or if the change is significant enough require a resubmission.

Changes to outcomes are changes to business requirements or other variations that affect the benefit, risk or performance that the asset custodian expects to receive. Variations that maintain the outcomes within the envelope of custodian expectations do not require notification to the TNAC.

10. Delegation of authority

The TNAC may delegate its' authority as it deems appropriate to specific circumstances. Delegations may be explicit or implied through determinations or conditions. Delegations are recorded indirectly in meeting minutes or through minuted acceptance of presented documentation describing delegation arrangements.

11. Secretariat

The Asset Management Branch (AMB) provides secretariat services for the TNAC including:

- scheduling meetings

- support the AMAP interface to TNAC

- preparing meeting agendas including supporting material

- take and distribute minutes of meetings

- facilitate responses to action items and imposed conditions

- assist the chair to facilitate deliberations and the progress of TNAC meetings

- provides the nominated TNAC secretary for each meeting.

The management of the TNAC Secretariat sits with the Senior Manager Configuration Management within the AMB's Asset Management Partnering and Services team.

The TNAC agenda and papers shall be circulated to members a minimum of four (4) business days prior to the meeting.

Minutes shall be circulated to members a maximum of seven (7) business days following the meeting.

The timeline of events is shown in Appendix C

Approved by TNAC April 2023:

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Appendices revision:	1.0
Appendices date of issue:	20/10/2022

Document Control – Appendix C Timeline	
Appendices revision:	1.0
Appendices date of issue:	20/10/2022

Appendix A - Configuration change levels

Table 2 presents the configuration change levels specified in TS 01455. Appendix A may be updated independently from the rest of the TNAC Terms of Reference to maintain consistency with changes to TS 01455.

Table 2 – Configuration Change Levels

Configuration change level	Description
Level 1	Level 1 configuration changes are identified as those that meet any of the following criteria: • substantially affect the functional outcomes delivered by assets of multiple asset custodians in more than one TfNSW Division. • substantially affect the functional outcomes delivered by assets of asset custodians predominately in one TfNSW Division and is also a complex or safety significant change as defined in *T MU MD 20001 ST System Safety Standard for New or Altered Assets*. • is considered a High Risk High Profile (HRHP) project by the NSW Government or is of similar stature due to complexity or community interest. A Level 1 configuration change is a significant change or solution requiring assessment by the TNAC at least once at the beginning of its change process for acceptance. Significant configuration changes have wide reaching impacts for TfNSW or NSW Government objectives.
Level 2	Level 2 configuration changes are identified as those that meet any of the following criteria: • substantially affect the functional outcomes delivered by assets of asset custodians predominately in one TfNSW Division and is a not complex or safety significant as defined in *T MU MD 20001 ST System Safety Standard for New or Altered Assets*. • do not substantially affect the functional outcomes delivered by assets but is a complex or safety significant change. A Level 2 configuration change is a moderate change or solution requiring assessment by an asset custodian NAC or delegate at least once at the beginning of its change process for acceptance. Moderate configuration changes have material implications to the delivery of outcomes predominately managed within one TfNSW Division.
Level 3	Level 3 configuration changes are identified as those that do not substantially affect the functional outcomes delivered by assets and is not complex or safety significant change as defined in *T MU MD 20001 ST System Safety Standard for New or Altered Assets*. A Level 3 configuration change is a minor change or solution requiring assessment by an asset steward NAC or delegate at least once at the beginning of its change process for acceptance. Minor configuration changes affect an asset solution but have limited implications for the delivery of outcomes.
Level 4	Level 4 does not result in a change to an approved baseline. It includes maintenance to retain or return assets to the approved configuration baseline. It may require update to asset information records. An asset activity that does not change the approved configuration does not require assessment by a NAC.

Appendix B – Asset Management Advisory Panel Terms of Reference

B.1 Introduction and background

The TNAC is a configuration management governance committee whose members are executive managers. While each TNAC member has focus areas and areas of expertise, as members of the committee their decisions are by consensus. Receiving support to interpret the nuances of configuration change submissions aids each member in understanding salient points of the documentation while helping the proponent provide information to the TNAC in a suitable way.

B.2 Purpose and scope

The purpose of the AMAP is to provide independent asset management and technical advice about configuration change submissions made to the TNAC.

To achieve its purpose the AMAP uses the expertise and resources predominately, but not exclusively, of the Safety Environment and Regulation Division and is led by the Asset Management Branch.

The AMAP is considered a Subject Matter Expert panel in the context of Figure 3 extracted from the Asset Management Framework.
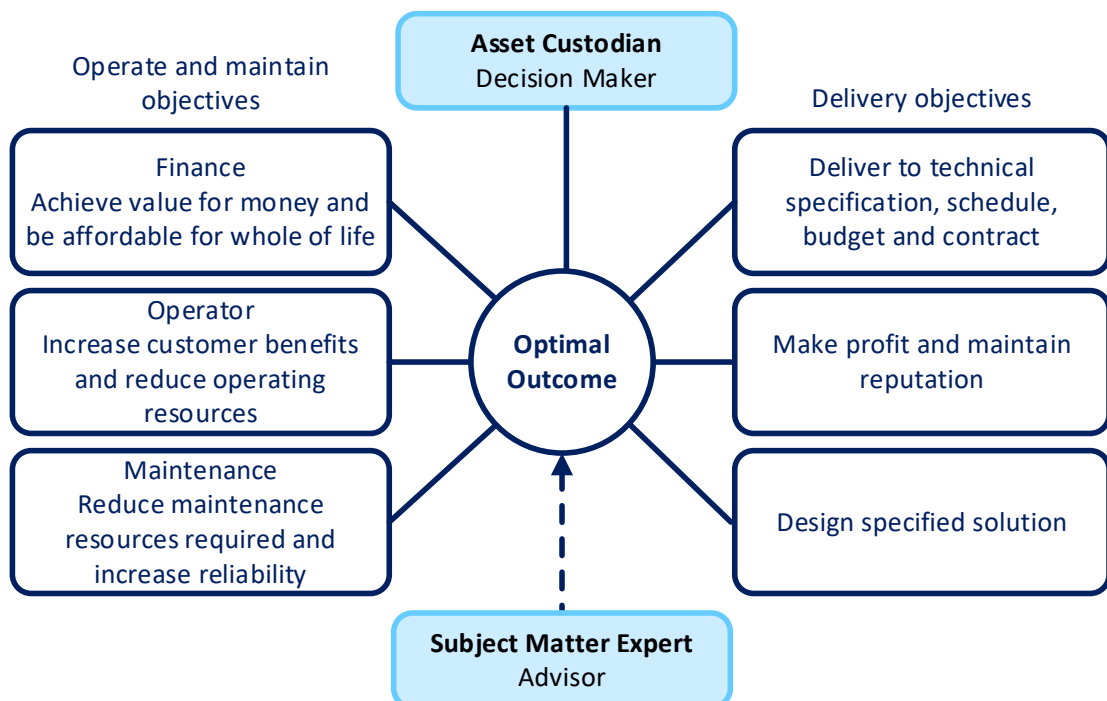

Figure 3 – Role of the AMAP as a SME advisor

B.3   Role

The AMAP operates to support the objectives of the TfNSW AMF by assisting TNAC members to be informed decision makers. TNAC is a governance committee positioned at a strategic due diligence level that recognises other governance bodies, hence the role of AMAP is similarly scaled to support TNAC's due diligence.

AMAP advice to TNAC is to highlight significant matters that affect the confidence TfNSW has that a configuration change will achieve TfNSW outcomes without unexpected consequences. AMAP is not expected to conduct comprehensive reviews, rather it is an assessment of the confidence TNAC should have of the proposed configuration change and the maturity of assurance evidence that supports decisions made by the proponent.

While detailed technical matters that may be incidentally identified by AMAP during the review process may be consolidated as a summary for TNAC the role of an individual as an AMAP member does not preclude them from pursuing identified matters though other channels as well.

In performing its role, the AMAP conducts the following activities:

- Collaboratively engages with the proponent of a proposed TNAC configuration change submission as soon as practical.

- Review proposed TNAC configuration change submissions and any supporting documentation AMAP deems necessary to provide reasonable advice.

- Provide feedback and guidance to the proponent and provide opportunity for the proponent to improve their submission where time permits.

- Produce an advice paper for TNAC members that accompanies the configuration change submission in the TNAC agenda.

The AMAP does not replace due diligence activities of the asset custodian, asset steward, independent professional reviewers, technical advisors or any other party.

B.4   AMAP organisation

The AMAP has two standing members, being the co-chairs. AMAP teams are formed whenever a configuration change is expected to be presented to TNAC for acceptance. The individuals in the AMAP team are considered AMAP members for the duration of their participation. Each AMAP team will have an identified team lead.

The TNAC secretariat normally facilitates initial establishment of AMAP teams and provides overarching monitoring of active AMAP teams but not individual AMAP team activities.

Other assurance reviewers may also be conducting, or have conducted, reviews on proposed configuration changes while the AMAP team is active. Sharing information between AMAP teams and other review teams may be expected or beneficial to the overall assurance outcome.

B.4.1   AMAP co-chairs

AMAP will be co-chaired by both the Director Engineering, Asset Management Branch and the Director Asset Planning and Assurance, Asset Management Branch. The co-chairs shall monitor the activities of the AMAP to assure that teams have been appropriately established and are operating effectively. The co-chairs are escalation points for AMAP teams and may intervene to resolve any AMAP matters.

The AMAP co-chairs may on a needs basis review the activities of teams to assure themselves that the following is being achieved:

- AMAP members are complying with the AMAP code of conduct;

- Advice is appropriately balanced in the interest of TfNSW and its customers;

- AMAP members and teams are effectively collaborating and consulting with other experts and stakeholders as appropriate to formulate their advice;

- AMAP teams are adequately engaging with appropriately reviewing material;

Being TNAC members as well, the AMAP co-chairs have routine visibility of the performance of AMAP teams by receiving the resulting AMAP advice.

AMAP Co-chairs may act independently from each other or collaboratively where they deem necessary.

B.4.2   AMAP members

AMAP members may be drawn from across the Transport cluster and must be competent to provide the necessary subject matter expertise. The expertise sought from a member may be technical, operational or procedural.

B.4.3   AMAP teams

AMAP teams are formed from a group of AMAP members. The teams may be established in several ways:

- Established by either of the co-chairs;

- Established by the Director Asset Management Partnering and Services, Senior Manager Configuration Management, AMB or TNAC Secretariat to support TNAC agenda items;

AMAP members may seek or evaluate advice from other parties, including other technical experts as they see fit or necessary to conclude a position that becomes advice of the AMAP.

B.4.4   AMAP team lead

Each AMAP team will have a nominated lead that will be the primary point of contact for a team. The lead is responsible for the following:

- Delivery of advice papers for inclusion in the TNAC or NAC agenda;

- Identifying AMAP team members and coordinating their activities;

- Meeting with project teams or other stakeholders as necessary to provide advice;

- Escalating any matters to one or both AMAP co-chairs.

The lead does not need to be involved in all discussions however the lead should ensure that any potential overlaps between AMAP team members is managed so that a consistent position is presented by the AMAP team.

B.4.5   Asset Management Partnering and Services

The Director Asset Management Partnering and Services is custodian of the AMAP Terms of Reference and along with the Senior Manager Configuration Management, AMB may interpret application to circumstances.

The Director Asset Management Partnering and Services, Senior Manager Configuration Management, AMB and TNAC Secretariat may initiate establishment of AMAP teams and provide advice to facilitate operation of AMAP.

The TNAC Secretariat maintains a register of active AMAP teams and provides the interface between the AMAP team and the TNAC.

B.4.6   Other assurance reviewers

The AMAP team may engage with other TfNSW assurance reviewers to share information that may facilitate the objectives of both parties. The AMAP team may also seek from the configuration change proponent reports produced by other governance bodies or assurance reviewers.

Local agreements may be established between AMAP and other TfNSW assurance teams to have ongoing arrangements for sharing of information that aid both parties. The establishment of local agreements on behalf of AMAP may be done by the Director Asset Management Partnering and Services and Senior Manager Configuration Management, AMB.

B.5   Advice process

The process for establishing an advisory team and providing an AMAP Advice Paper to TNAC is shown in Figure 4. The final AMAP Advice Paper shall be submitted to the TNAC Secretariat at least five (5) business days prior to the TNAC meeting.
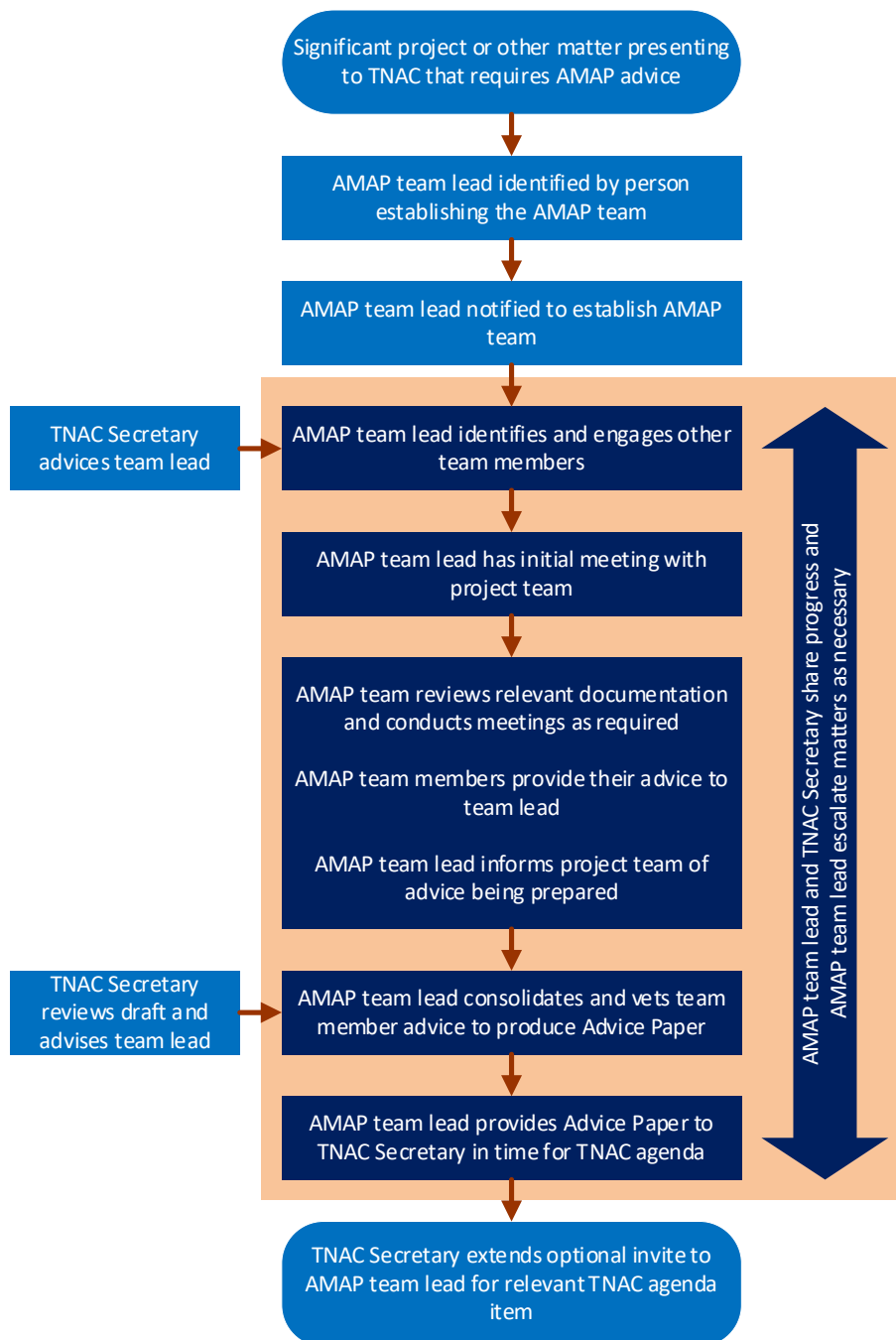
Figure 4 – Advice process

B.6 AMAP code of conduct

All AMAP team members are to abide by the following code of conduct:

- Review matters and provide advice from the perspective of TfNSW as a whole, avoiding bias that reflects the preferences of any party including themselves where it is not also in the best interest of TfNSW.

- Collaborate with other AMAP team members and provide fair consideration to the views of any other relevant subject matter expert or affected business area.

- Notify their AMAP lead or AMAP co-chair if they are not able to perform their duties as an AMAP member.

Where an AMAP team member is not acting in accordance with the advisory panel code of conduct, the AMAP co-chairs may remove them from an AMAP team.

The AMAP is expected to maintain a high standard of probity and integrity, and to respect Project confidentiality.

B.7 Recording of advice provided

AMAP team members shall keep records of advice provided as required by TfNSW policies. AMAP advice papers are also recorded as part of TNAC records.

Appendix C – TNAC meeting timeline

The timeline indicating key events and deadlines for pre and post TNAC meeting activities is shown in Figure 5. This appendix may be updated independently from the rest of the TNAC Terms of Reference.
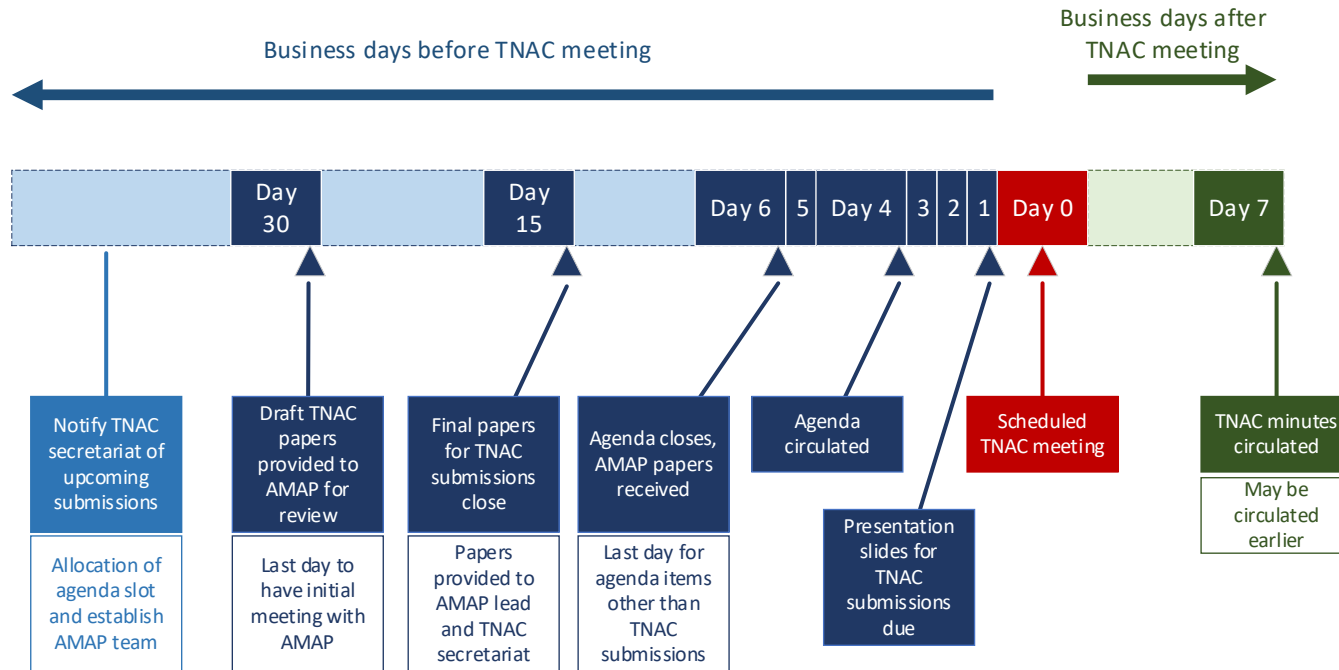

Figure 5 – Timeline of TNAC meeting events