



TS 01508:1.0
T MU AM 01005 ST
Standard

Asset Handover Requirements

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3.0	19 September 2019	Third issue. Changes because of further consultation within Transport cluster and its stakeholders
1.0	28 June 2023	Renumbered as TS 01508:1.0 in line with new designation.

Preface

This is a first issue as TS 01508 and supersedes T MU AM 01005 ST *Asset Handover Requirements*, version 3.0.

Asset handover within the context of this standard refers to the handover of control of transport assets for operational or maintenance management. It does not necessarily need to coincide with a change of ownership, contract closure or other administrative process.

Asset handover is an important milestone in the asset life cycle that requires careful planning by all parties involved. It can take place at any time in the asset life cycle however it often occurs on completion of a new or altered transport asset.

This standard provides the minimum requirements for the handover of transport assets. The handover process can vary depending on the organisations involved and the contractual obligations that apply to each handover.

The requirements in this standard ensure appropriate handover of transport assets and to prevent or minimise additional costs, delays and safety risks arising from the asset handover.

Application of this standard will provide the asset custodian with visibility of the impact to cost, risk and performance of the network due to the change in asset or services and allow the asset custodian to discharge its statutory and asset management accountabilities.

Changes from the previous version include the following:

- clarifying roles and responsibilities in line with TfNSW asset life cycle key roles (that is, asset custodian, asset steward – delivery and asset steward – operate or maintain)
- changes in the responsibility to approve the AHP from the delivering party to the asset custodian
- requirements for the approval of the AHP to occur at the earlier of contract award or completion of the approved design baseline

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1 Scope

This standard establishes asset handover requirements for the handover of transport assets, both physical and intangible assets, between parties. It does not cover asset information handover requirements, which are addressed in TS 01515.1.

Asset handover is often a precursor to a vesting event. While vesting is outside the scope of this document and is covered by other standards such as TS 00051, the precursor asset handover is within the scope of this document.

Asset handovers from one delivery contractor to another during the delivery phase are outside the scope of this document. In this situation, the requirement to provide clarity on roles, responsibilities and processes should be governed through effective application of project and contract management.

2 Application

This standard applies to the Transport cluster, TAOs, operators and maintainers and other organisations undertaking work for TfNSW involved in the development, implementation, finalisation and transfer of maintenance and operation of new or altered assets.

As the scope of each handover may vary, the specific requirements of this standard will need to be defined in further detail for specific application by parties implementing the requirements of this document.

The principles and requirements outlined in this document apply to asset handover at any point in the asset life cycle.

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 00051 (PN 192) *Transfer of assets and asset management functions between the RTA and other roads authorities*

TS 01455 *Configuration Management*

TS 01504 (T MU AM 00003 ST) *Assurance and Governance Plan Requirements*

TS 01515.1 (T MU AM 02004 ST) *Management of Asset Information*

4 Terms, definitions and abbreviations

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

AHC asset handover certificate

AHP asset handover plan

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 (for example, TfNSW and the Transport Asset Holding Entity(TAHE)) to achieve agreed customer and community outcomes

asset handover the handover of control of transport assets for operational or maintenance management

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

asset steward – delivery the entity responsible for:

- procurement of asset from investment decision to commissioning
- delivering the benefits
- translating requirements from the client and managing delivery outcomes
- selecting the most appropriate suppliers to meet project objectives.

asset steward – operate or maintain the entity responsible for 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

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

DLP defects liability period

FFS fit for service

life cycle the scope of the system or product evolution beginning with the identification of a perceived customer need, addressing development, test, manufacturing, operation, support and training activities, continuing through various upgrades or evolutions, until the product and its related processes are disposed of

NAC network assurance committee; a governance entity that reviews proposed or progressing configuration changes and recommends if a configuration baseline be approved based on a presented assurance case. Also known as a configuration control board.

NOFAH notice of forthcoming asset handover

TfNSW Transport for NSW

technical assurance confidence that the technical aspects of an asset or service change have been appropriately considered and conducted against a set of requirements to achieve an agreed outcome

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 handover

5.1 Overview

Asset handover is the process of transferring responsibility of a transport asset from one party to another. In the context of this standard, it specifically refers to the transfer of control of transport assets for operational or maintenance management.

The asset custodian identifies specific requirements that trigger the need to construct, alter or procure an asset or change the operations or maintenance service provider. The asset custodian also identifies the delivering and receiving parties.

In addition to the asset custodian, the delivering and receiving parties have responsibilities across the asset handover process. The individual parties involved may be from different organisations or from different parts of the same organisation.

Asset handover includes the following:

- handover of new or altered assets to contracted operations or maintenance service providers (either existing or new providers)
- handover of existing assets when transferring between contracted operations or maintenance service providers or when transferring the asset for upgrade or alteration or at the end of lease when the asset is handed back to the asset owner or asset custodian.

Several handover instances can occur consecutively. For example, due to contractual arrangements, several parties may be involved between the initial delivering party and the final receiving party. Each handover instance has its own defined delivering party and receiving party. In phased project delivery, each phase has its own set of assets and respective parties.

Determining whether the asset handover requirements have been complied with is part of the asset acceptance process and is the responsibility of the asset custodian (demonstrated by approval of the AHC). Appendix A provides an overview of the processes and responsibilities.

The asset handover requirements shall be documented in the AHP and confirm the nature and configuration of the assets to be handed over and should be accompanied with the following information:

- description of the assets that will be handed over including the condition of the assets and safety and operational arrangements that are in place at the time of handover
 - statements confirming that the delivering party considers the assets ready to be handed over
 - assurance that necessary asset information including maintenance manuals, financial information and certifications have already been provided to the appropriate party
- Note: Often the appropriate party is the future asset steward – operate or maintain
- assurance that any additional information or clarification related to the handover have been provided, such as conditions related to approvals to operate
 - clarifications on any asset matters that the delivering party continues to manage, such as rectifying construction defects post asset handover, defect risk assessments or other risk mitigation activities
 - clarifications on any asset matters that the receiving party needs to manage post asset handover such as outstanding construction related approval conditions

The delivering party is responsible for the technical assurance of the assets and associated deliverables being handed over. Additional responsibilities and accountabilities may exist depending on the relationship with the receiving party. The responsibility for technical assurance, subject to any other agreements, usually includes the production of all documentation required for the ongoing operations and maintenance of assets or services as detailed in Sections 7.4.1 and 7.4.2.

For new or altered assets, the asset handover is usually associated with configuration management handover baseline review gate in TS 01455.

The receiving party in a series of handovers is often an asset steward – operate or maintain and is responsible for the ongoing technical assurance of the assets after asset handover.

The organisations involved in the asset handover process shall have their own procedures for asset handover that, while applying the requirements of this standard, provide detailed information specific to their situations.

5.2 Expected handover outcomes

Effective exercise of responsibilities supports the handover of assets in a state that is suitable for its intended purpose.

When assets are handed over from a project delivering new or altered transport assets, either directly or indirectly to an asset steward – operate or maintain, or in any other asset handover circumstances, the following outcomes shall be achieved:

- assets are accepted in an appropriate condition and conform to approved design and specification requirements
- potential issues concerning future maintenance or operation are addressed
- identified defects, maintenance issues and operation issues are addressed
- identified funding required for the operations and maintenance of the asset or assets is established, revised or both
- appropriate asset information, documentation and data are received by the responsible party as defined in TS 01515.1
- assets handed over comply with regulatory requirements and standards, TfNSW standards, or other applicable requirements such as contract requirements, type approvals, accreditations, concessions or waivers
- assets are safe so far as is reasonably practicable (SFAIRP)
- the required configuration management gateways have been met in accordance with TS 01455
- assets are fit for purpose for the next stage
- necessary insurance arrangements are made without delay
- the asset custodian, and where identified the receiving asset steward – operate or maintain is consulted throughout the project life cycle and made aware of the scope and schedule
- any training and documentation necessary for the immediate operations and maintenances of the asset have been provided to the asset steward – operate or maintain
- the asset custodian, and where identified the receiving asset steward – operate or maintain is ready to accept and operate or maintain the assets and is made aware of any impact to cost, risk and performance of the network due to the change in asset or services
- the asset custodian, and where identified the receiving asset steward – operate or maintain, has the necessary asset information to discharge its statutory and asset management accountabilities.

6 Key asset handover artefacts

All asset handovers within the scope of this standard shall have an approved AHP.

While preparing for asset handover and during the asset handover event, several documents may need to be exchanged between parties. In addition, the NOFAH, FFS attestation and AHC shall be issued as outlined in the AHP.

Note: The names for each artefact may vary depending on individual asset custodian requirements.

The NOFAH, FFS attestation and AHC facilitate a clear understanding of the assets being handed over and identify the parties responsible for the assurance of the asset before and after handover. Timing and specifics for the exchange of these documents should be detailed in the AHP.

All handover artefacts shall be readily available to the asset custodian and relevant handover artefacts shall be readily available to the asset steward.

6.1 Asset handover plan

The AHP is intended to support the asset custodian by specifying handover details and aligning stakeholder groups upfront. Details should include the following:

- roles and responsibilities of all relevant parties, including those external to TfNSW for which there are interdependencies
- asset handover communications, governance, delegations and approval mechanisms
- lists of deliverables
- timing and details of milestones such as the NOFAH and DLP
- FFS checks
- resourcing requirements for asset handover
- statutory, financial and asset information requirements.

The AHP shall be a live document that is updated to reflect changes in handover details throughout the project.

6.2 Notice of forthcoming asset handover

The NOFAH is designed to inform the receiving stakeholder groups of the proposed date when the handover of control of the asset is due to take place.

The NOFAH also triggers the establishment of a joint inspection with relevant stakeholders, as identified in the AHP, to check for critical defects.

6.3 Fit for service

An FFS attestation is used to signify that no defects affecting safety or functionality were found throughout the joint inspection, and that new or altered assets are safe to commence operations for altered existing assets to continue operations. The FFS attestation also confirms the date of asset handover.

All nonconformances shall be identified, registered and have a plan for managing the identified risks.

The FFS attestation shall be shared with all parties involved in the asset handover process. The FFS attestation generally prompts the initiation of the DLP and commissioning of the asset.

6.4 Asset handover certificate

The AHC is the final asset handover document and marks the completion of all asset handover activities which will generally be at the conclusion of the DLP. The AHC shall not be issued until the following requirements are met:

- all defects shall be rectified by the delegate identified in the AHP
- all asset information shall be received
- all contractual requirements (unless otherwise specified) shall be completed
- the asset handover process shall be completed and closed.

The acceptance of the assets, including their risk, is as at the date of the asset handover as confirmed in the FFS attestation.

6.5 Timeline for key artefacts

The timeline for key asset handover artefacts is guided by configuration gates in TS 01455.

Asset handover planning and development of the draft AHP is normally initiated during the concept planning phase. The following shall occur for new or altered assets:

- The AHP shall be approved prior to the earlier of the contract being awarded or completion of the approved design baseline. At this stage asset handover arrangements shall be developed, documented and agreed.
- The AHP shall be a live document as appropriate change control is applied to manage changes to the approved requirements baseline.
- The AHC shall be approved prior to completion of the operational integrated baseline. The NOFAH and FFS notice shall be completed prior to issuing the AHC based on the timeline requirements in the AHP.

The timeline for key artefacts in the handover of existing assets when transferring between contracted operations or maintenance service providers (including asset disposal) shall be based on the timeline detailed in the AHP.

7 Key roles and responsibilities

7.1 Asset custodian

The asset custodian is accountable for the following in relation to asset handover:

- identifying the delivering and receiving parties
- approving the AHP.

An asset cannot be created, or an existing asset modified or disposed of, without identification and confirmation of the asset custodian.

7.2 Asset steward – delivery

The asset steward – delivery is given the responsibility by the asset custodian to oversee part of the life cycle process for an asset.

In relation to asset handover of new or altered assets the asset steward – delivery is the delivering party and is responsible for planning and executing the asset handover process and ensuring all deliverables are provided and other requirements are met prior to reaching the operations and maintenance stage.

7.3 Asset steward – operate or maintain

The asset steward – operate or maintain is given responsibility by the asset custodian for day to day operations or maintenance of assets once commissioned. The asset steward – operate or maintain may be a part of the asset custodian division or a separate entity. The operator and maintainer may be separate entities.

In relation to asset handover of new or altered assets the asset steward – operate or maintain is generally the receiving party and shall be engaged at the beginning of the asset handover process to provide inputs (such as identifying operations and maintenance requirements and so on). The asset steward – operate or maintain also performs various other activities such as providing inputs during AHP development, performing quality assurance checks and so on.

There are the two following asset steward – operate or maintain roles in relation to asset handover of existing assets:

- the delivering party which is responsible for planning and executing the asset handover process and ensuring all deliverables and other requirements are met to achieve handover
- the receiving party which is engaged at the beginning of the handover process to provide inputs and perform various activities.

7.4 Responsibilities

Asset handover planning consists of both preparing to deliver assets and preparing to receive assets.

The delivering party shall be responsible for the development of the handover plan. The receiving party shall be responsible for the review of the handover plan. Amendments approved through change control shall be incorporated into the plan. The delivering party responsible for the applicable assets shall sign-off the asset handover notification and certificate. See Section 6 for further information about key asset handover artefacts.

Note: Multiple organisations may be involved in the process as specified in the contract.

The approval mechanisms are agreed to in the AHP.

7.4.1 Delivering parties

Each delivering party shall be responsible for the following:

- initiating engagement with the receiving party or parties
- negotiating project specific handover arrangements with the receiving party or parties
- addressing handover issues raised by the receiving party or parties where practical and reasonable
- preparing a handover plan that describes the timing, scope and activities for asset handover that supports one or multiple staged handovers
- obtaining approval from the asset custodian of the handover plan
- updating the handover plan throughout the course of the project when changes are required
- providing the receiving party or parties with the relevant parts of the handover plan
- obtaining agreement on the AHP, and on any updates, from the receiving party or parties
- identifying funding requirements for the design life of assets including stakeholder involvement and corresponding documentation
- completing the asset handover process in line with the AHP
- ensuring that required asset insurance is in place up to asset handover
- ensuring that all assets meet regulatory obligations, TfNSW and other relevant standards.

7.4.2 Receiving parties

Each receiving party shall be responsible for the following:

- engaging with the delivering party
- facilitating the handover of assets by making arrangements to accept the assets
- facilitating the handover of assets by making staff available for training in accordance with the agreed schedule
- reviewing and providing feedback on proposed handover arrangements to the delivering party in a timely manner
- documenting the asset receiving arrangements that the receiving party will undertake in preparing for and receiving the assets
- planning for funding and maintenance required for the operation and maintenance of the asset or assets (that is, for an existing asset steward – operate or maintain include the planning for funding and maintenance in the asset management plan)
- updating the asset receiving arrangements as required

- ensuring required asset insurance is in place from asset handover
- providing the asset receiving arrangements to TfNSW on request.

8 Governance

The asset handover governance shall be detailed in the project assurance and governance plan in accordance with TS 01504 and the AHP. The level of governance across asset handover should be informed by the size, complexity and risk associated with the project and handover.

The governance role of NAC shall be included in the AHP including the following:

- the role of each NAC (Transport, asset custodian and asset steward)
- NAC review requirements in developing the AHP, assessing compliance with the AHP and completing the asset handover process.

Appendix A Asset handover process flowchart examples and responsibilities

A.1 Asset handover process flowchart examples

Figure 1 and Figure 2 show informative asset handover process flowchart examples. Refer to individual AHPs for requirements related to specific asset handovers.

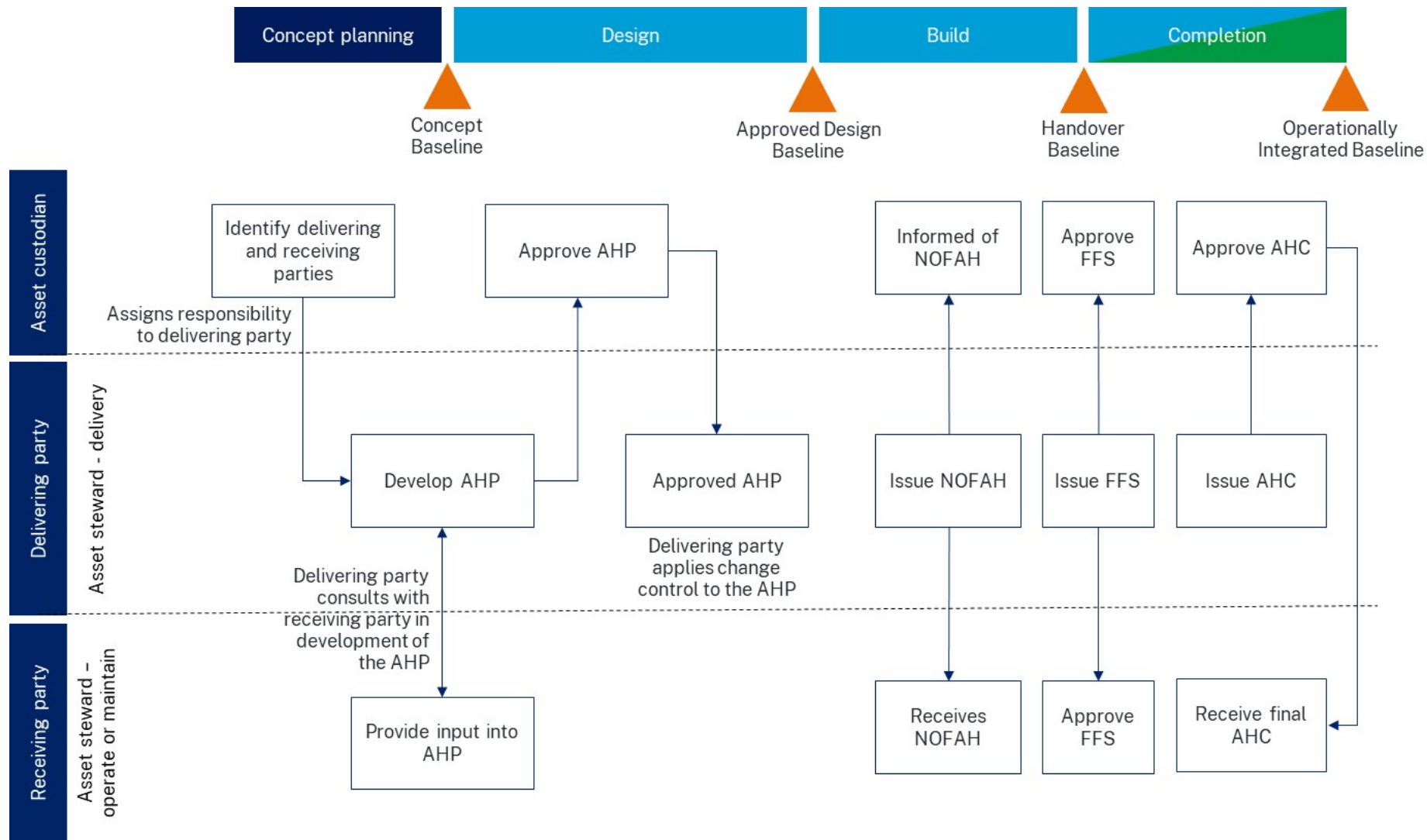


Figure 1 – Asset handover process for new or altered assets

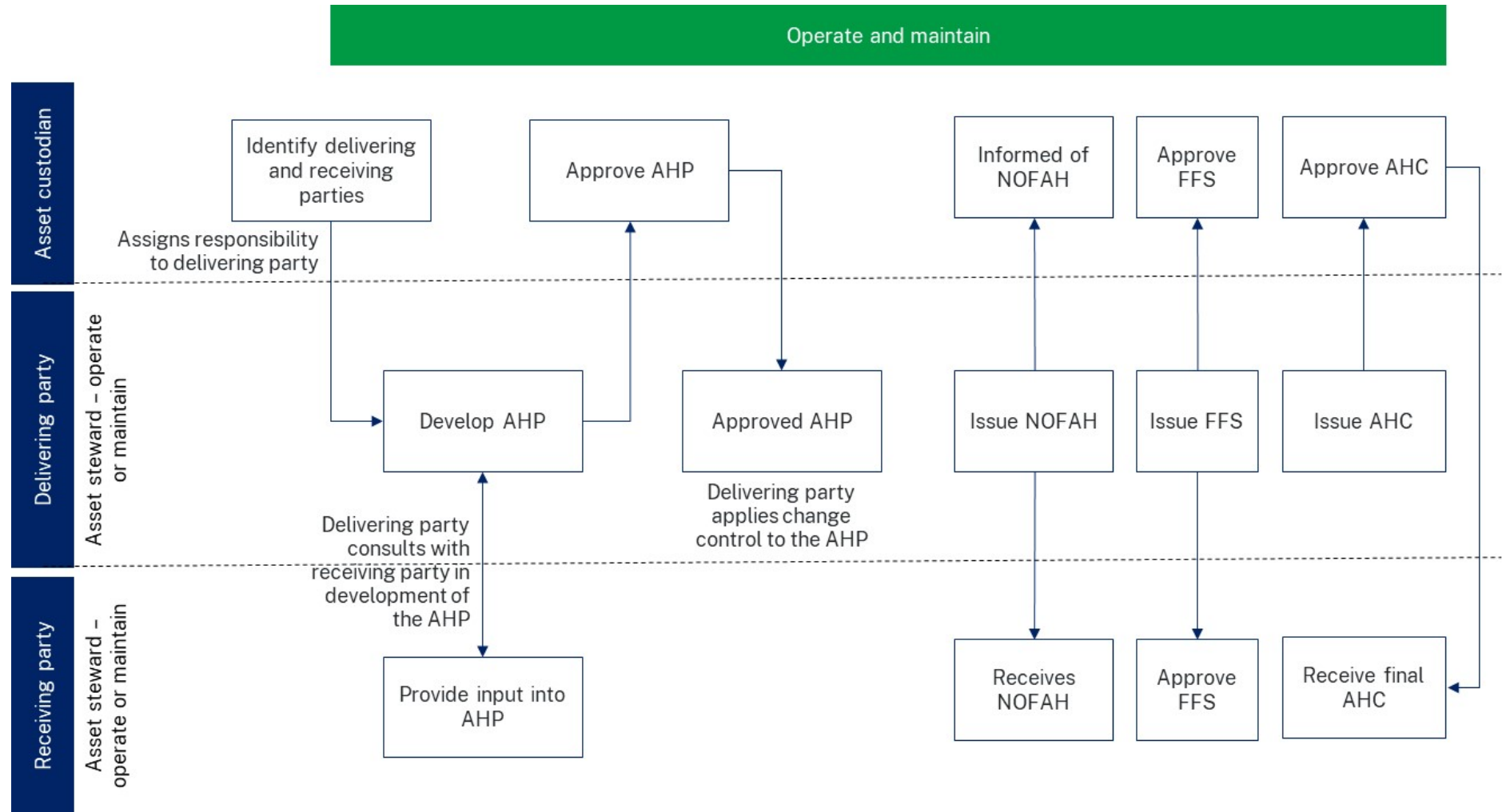


Figure 2 – Asset handover process for existing assets

A.2 Asset handover responsibilities

Table 1 shows the roles and responsibilities that apply to the handover of assets. The following abbreviations apply in Table 1.

- R = responsible – the role that does the work to complete the task or deliverable.
- A = accountable – the role that is answerable for the correct and thorough completion of the task or deliverable. There is only one accountable party specified for each task or deliverable.
- C = consulted – the role or roles that are engaged on the task or deliverable and asked for their input, expert opinion.
- I = informed – the role or roles that are advised on the status or completion of the task or deliverable.

Table 1 – Handover responsibilities

Activity	Asset custodian	Delivering party (note 1)	Receiving party (note 2)
Identify delivering and receiving parties	A and R	I	I
Develop AHP	A	R	C
Approve AHP including change control	A and R	I	I
Apply change control to AHP	C and I	A and R	C
Prepare and issue NOFAH	I	A and R	C
Prepare and issue FFS attestation	C	A and R	C
Approve FFS attestation	A	C	R
Prepare and issue AHC	C	A and R	C
Approve AHC	A and R	I	C and I

Note1: For new or altered assets this would be the asset steward (delivery). For existing assets this would be the asset steward – operate or maintain.

Note 2: This is the asset steward – operate or maintain.