Market Operator Service Provider

Reconciliation manager road map

December 2022
Version 7.0

Revision history

Version	Date	Description
1.0	Feb 2017	Initial draft for Authority comment
1.1	May 2017	For initial release to participants. Incorporating Authority comments.
2.0	Nov 2017	Updated road map
3.0	Sep 2018	Road map updated
4.0	May 2020	Road map updated
5.0	November 2020	Road map updated
6.0	December 2021	Road map updated
7.0	December 2022	Road map updated

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1. Introduction

This document presents a product strategy and road map for the reconciliation manager services and systems. It is a living document and will be revised at least annually. The product strategy and road map will be developed and evolved in close collaboration with the Authority and users of our services and systems.

2. Context

The road map provides a high-level overview of work to be progressed over the next 6 – 24 months. It informs the backlog of features used by our IT team to prioritise their work on a week-by-week basis. The road map is not intended to be at a sufficiently granular level to include all work undertaken by NZX.

Our road map has been developed taking into account:

- The Authority's strategy as outlined in their statement of intent and statement of performance objectives,

- The Authority's programme of work,

- Our product strategy for the reconciliation manager and services.

The relationship between these elements is shown in Figure 1.

Figure 1: Relationship between strategic elements

Authority's statutory objective and Statement of Intent

Authority programme of work

RM product strategy

RM road map

RM backlog
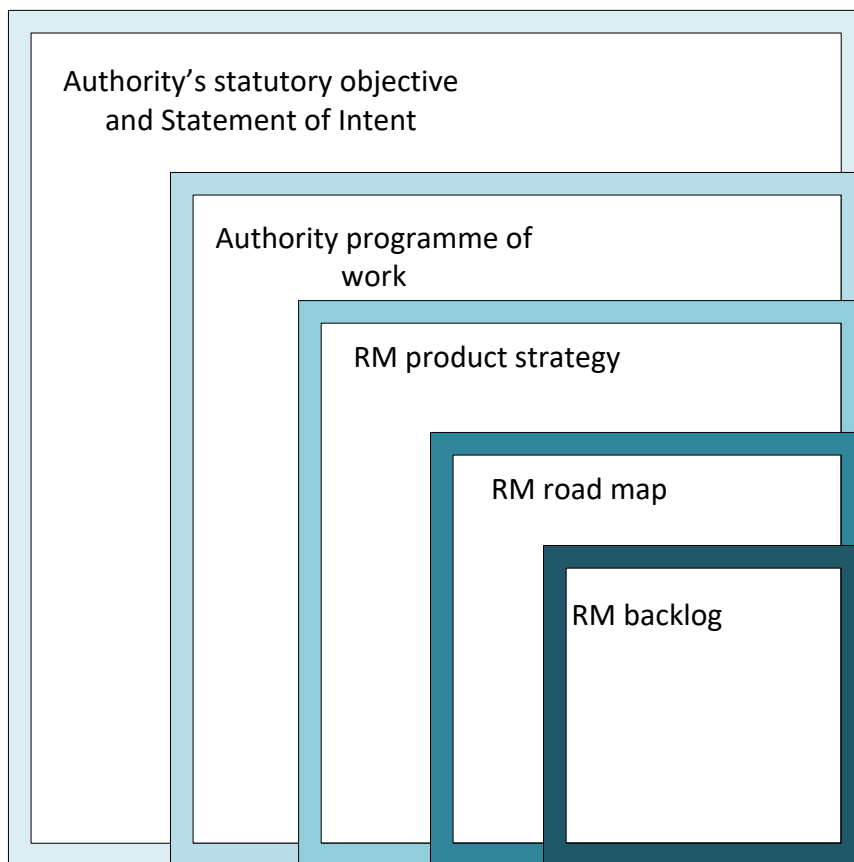
3. Product strategy

Our product strategy provides a high-level plan for the development of the reconciliation manager services and systems.

3.1 How could the reconciliation manager role change in the future?

To ensure that our services and systems continue to meet the needs of the industry, we need to be aware of how the reconciliation manager role could change in the future.

We have identified the below opportunities that could result in changes to our services and systems. While we have consulted with the Authority and participants, these opportunities are solely the reconciliation manager's assessment of what may happen in the future. Significant changes to systems would almost certainly require the normal Authority consultation and approval processes and would be signalled by the Authority well ahead of implementation.

Short to medium term goals (over the next 36 months):

1. Performance optimisation for participants

The reconciliation manager continues to focus on providing a high level of service to new and existing participants through enhancements including:

a. Greater efficiency for participants to submit files - Although this functionality exists in the current system, it's been identified, through analysis and participant engagement, that improvements in general submission status visibility could be helpful in reducing processing time. The deadline requirements can be challenging at times, we feel this would hold much benefit for many participants, specifically those who submit on behalf of multiple participant codes.

b. Improved system access to reconciliation data - We expect an increase in demand for reconciliation system information. Users will want to access individual reconciliation datasets, in an automated, low-cost manner such that they can easily customise the analysis of this data and incorporate it into their own systems as they see fit. For some users this could be as an alternative to receiving the standard set of GR reports currently published by the reconciliation system.

c. Improved participant access to non-confidential market information - This would allow participants to understand reconciliation across the grid rather than only in those areas where they trade. Changes in this area would need to be co-ordinated with the Authority's EMI website.

d. Improved system functionality to ensure compliance and reduce errors - Participants may start to ask for reconciliation system features which will help them comply with the Code and reduce errors. For example, confirmation of successful submissions and an indication of whether there are outstanding submission obligations.

e. Future proofing of our services and systems for an increase in participants to ensure that we can deliver consistent high levels of service.

2. Modernising of the portal

Refreshing the looks, usability and content will ensure that the portal is up to date, user friendly and reflects the importance of the reconciliation manager role in the electricity market. The project has started to create a refreshed APEX environment to provide increased and modernised functionality and ensure consistency with other market operator platforms.

3. Operational excellence

The reconciliation manager plans to increase robustness and efficiency of operations with:

    a. Improvements to the process of maintaining trade notifications
    b. Quality assurance enhancements over daily processes

4. Reliability

Regular review of infrastructure and software means that systems are supported and updated, as necessary.

Longer term goals (36+ months):

1. Peer to peer trading

There is some interest at present in peer-to-peer trading of energy. It is possible that such trading would be parallel to and outside of the current wholesale electricity market. Such trading may be facilitated by block chain technology. It is highly likely that were peer-to-peer trading to be progressed it would have an impact on the reconciliation system. This may link into the Authority's multiple traders at an ICP project.

2. Centralised management of metering information

Centralised management of metering information is another possible future industry initiative. This is where a central party would manage the storage and initial processing of ICP metering data. One implication of such an initiative is that submission volumes could be provided to the reconciliation manager disaggregated to an ICP level. Should this occur, relatively significant changes to the reconciliation system could be required to cater for greater data volumes and for changes to system design features, such as ICP scaling.

3.2 Product strategy overview

Figure 2 provides an overview of the reconciliation manger's product strategy.

Fig 2. Reconciliation Manager Strategy Over View:

Our Users

RM internal users

Analysts

Developers

Participant users

High frequency users with complex requirements:

Traders:

- Established
- New or recent entrant - tech enabled
- New or recent entrant - systems evolving

Agents

Distributors:

- Network owners
- Embedded network owners
- Grid owner

High frequency users with simple requirements:

Generators

DCLS owners

Authority

Service providers:

- Registry
- Clearing manager
- Extended reserves manager
- System operator

The public

User Needs

Our users need:

Reliable services:

- With high availability, especially during busy times of the month

Security:

- The system should be cyber secure with confidentiality of data paramount

Usability:

- The system should integrate with user's systems, reduce user's workload and support Code compliance

Support:

- We are able to rapidly resolve and respond to issues
- We can identify issues to reduce UFE and disputes

Quality reconciliation system reports:

- Reports should be Code compliant, error free, as expected and timely

Transparency:

- Users should be aware of changes to reference information
- Users should have sufficient information to gain confidence in system outputs

Key Services and System Features

The reconciliation manager and associated system:

- Provides mechanisms for users to supply input information and receive reports to and from the reconciliation system. Multiple mechanisms are provided to suit a range of users
- Processes input information as required under the Code
- Produces reconciliation reports as required under the Code
- Is the database of records for NSP and reconciliation reference information
- Provide essential communications
- Is a point of escalation for users on reconciliation issues

Future directions

Performance optimisation for participants: *We aim to improve usability of the system and provide better access to reconciliation data and non-confidential information.*

Operational excellence: *We aim to improve the efficiency and robustness of routine operations. This includes improving the analytical tools and controls available to the reconciliation analysts.*

Reliability: *Maintaining an up to date and supported technology suite.*

Improved maintenance of reference information.

Authority Business Goals

Reconciliation manager system and services:

- Are fit for purpose
- Remain suitable for the evolving needs of the NZEM
- Deliver changes at lowest cost to Authority, participants and users
- Are easy for participants and users to interact with
- Ensure ongoing role contestability and the ability to seamlessly transition to a new provider
- Demonstrate value for money

Our users

The reconciliation manager has a wide range of different users.

Traders, distributors and their agents are all high frequency users, with varied and complex requirements that are expected to evolve over time. The majority of the effort to maintain and develop the reconciliation system will be focussed on these users.

Generators, DCLS owners, the Authority and service providers are also high frequency users of the system, however their requirements are somewhat simpler. These users only require a relatively small number of files to be received by or sent from the system and very rarely require support from the reconciliation manager. In the case of service providers, almost all interaction is in the form of system to system exchange of files.

User needs

At a high level all users have, to an extent, a common set of needs. These can be grouped together as follows:

- Reliability, cyber security and the provision of Code compliant correct reconciliation results are basic needs for all users that must be met without compromise,

- Usability, access to support and transparent operations are needs that will vary by user group. The extent to which these needs are met will drive user satisfaction and value delivered by the services and systems.

Key services and features

The reconciliation manager:

- Provides mechanisms for the exchange of reconciliation information,

- Processes input information from users and produces reconciliation reports as required by the Code,

- Is the database of records for reconciliation reference information, including NSPs; and

- Is the first point of escalation for reconciliation related matters.

Authority business goal

As the Authority owns the reconciliation manager role, the direction and pace of the product strategy will be heavily influenced by the Authority's business goals (see Figure 3).

Whether any given initiative is implemented will depend on:

- Participant support as expressed in, for example, surveys and user group meetings,

- Authority approval – An initiative should be consistent with the Authority's statutory objective and business goals for the reconciliation system,

- Available budget for system improvements – This will be a critical factor.

Our strong preference is for low cost, low risk initiatives that have a high likelihood of providing value to participants and other users.

4. Road map

The reconciliation manager road map is shown in Figure 3.

The Authority and NZX have an internal joint development process to manage project conflicts and priorities. This process will manage all active road map initiatives. Part of the reconciliation manager role is to develop a joint goal setting framework. This framework has been integrated into the road map.

It is highly likely that the road map will change in response to:

- Participant feedback,

- Changes to the Authority's strategy or programme of work,

- Operational necessities, and

- Conflicts and changes in priority as identified through the Authority - NZX joint development process.

Fig 3. Reconciliation manager road map:

Feature / Enhancement	Reconciliation	Authority	NZX Internal	Benefit	Status	2023 Q1	Q2	Q3	Q4	2024 Q1	Q2	Q3	Q4	2025 Q1	Q2	Q3	Q4
Performance optimization for participants																	
Analyse system for market growth and performance enhancement	X	X	X	Review the system and future proof for potential market growth	In progress	█	█	█	█	█	█	█	█	█	█	█	█
Better access to participant data	X			Both public and private information to be easily and quickly accessed	Future work	█	█										
Improved NSP management portal functionality	X			Better layout of the NSP meter page to help participants managing certification	In progress	█	█										
Full update of the external portal	X			Refreshing the looks, usability and content, making the portal user friendly	In progress	█											
Operational excellence																	
Improve the process of maintaining trade notifications		X	X	Trade notifications managed more efficiently	In progress	█	█										
Enhance RM quality assurance			X	Boost the RM's ability to identify issues in participant submissions which drive incorrect UFE and balanc	In progress	█	█	█									
Automation of Embedded Generation reporting		X	X	Going from manual process involving 2 teams to an automated process, improving efficiency and reliabi	Future work		█	█									
Improvement of agent management	X		X	Ability for participant to add and manage agents themselves with a higher level of personalisation	Future work			█	█								
Reliability																	
Asset management			X	Review of infrastructure and software	Future work	█	█	█	█								