



# Southern Region's Readiness for ISO55001 Alignment

## Targeted Assurance Review

23 June 2021



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# Acronyms and Abbreviations

CP6 - Control Period 6

ORR – Office of Rail and Road

DEAM – Director of Engineering and Asset Management

IAM – Institute of Asset Management

AMS – Asset Management System

TAR – Targeted Assurance Review

# Definitions

Descriptor	Detail
ISO 55001	ISO 55000 is a series of International Standards for Asset Management. ISO55001 defines the requirements for management system for asset management. Therefore, in in this report the international standard is referred to generally as ISO 55001.
Control Period	Control Periods are the 5-year timespans into which Network Rail, works for financial and other planning purposes.
Putting Passengers First	Putting Passengers First (PPF) was a Network Rail internal business restructuring programme which ran from September 2018 – December 2020. It saw the creation of five devolved regional business units within Network Rail to increase route capabilities locally as well as to improve relationships with customers and stakeholders.
Asset Management System	The management system for assets is termed as Asset Management System. It provides a framework to establish asset management policies, objectives, processes and governance, and facilitates an organisation’s achievement of its strategic goals.
Asset Management Capability	The extent to which an organisation has developed its people, processes, technology, leadership and culture in Asset Management to enable the effective and efficient development and delivery of asset management plans and objectives, and their continual improvement.

# 1. Executive Summary

In our CP6 determination we stated that as a minimum, each Network Rail route is required to demonstrate to our satisfaction that it is operating in accordance with the requirements of ISO 55000 (Asset Management Standard) by the end of March 2021.

Following Network Rail's *Putting People First (PPF)* reorganisation with devolution and regional responsibility at the front of its new operating model, ownership of alignment to ISO 55001 now lies with the five devolved regions.

We wanted to seek assurance on Network Rail's devolved regions' commitment regarding asset management improvement and its readiness to demonstrate alignment to ISO 55001. We therefore carried out Targeted Assurance Reviews (TARs) on this subject in each region and this report summarises the status of the Southern region (former South East and Wessex routes).

This assurance review finds that the Southern region has developed an integrated management system that is aligned to ISO 55001 and can demonstrate significant asset management capability implementation. The region is planning to seek certification to demonstrate conformance with the requirements of the asset management standard.

Thus, we accept that the Southern region has met the final determination requirement.

The recent gap assessment undertaken by the region shows that the maturity scores on ISO 55001 elements were predominantly indicating compliance with the requirements of the standard. Additionally, an independent assessment by the accredited assessors commissioned to help the region in its certification process found that the asset management system was developing well with focus on having the system in place by the end of March 2021. The region plans to undertake two readiness reviews in preparation for the ISO 55001 certification audit.

Whilst we are satisfied with the implementation to date, we recommend the Southern region:

- Continue its commitment to the planned readiness reviews for ISO 55001 certification audit and provide an update to ORR on the review findings by October/November 2021.

# 2. Introduction

## 2.1 Purpose

This review was to determine if Network Rail's regions had met the PR18 determination requirement to demonstrate that it is operating in accordance with the requirements of ISO 55000 (Asset Management) by the end of March 2021<sup>1</sup>

This report provides the findings of the TAR carried out in in the Southern region.

## 2.2 Background

Maintaining and renewing the network in the short-, medium- and long-term to meet reasonably foreseeable future demand for railway services is one of Network Rail's key obligations, as set out in its network licence, in accordance with best practice and in a timely, efficient and economical manner.

At the beginning of CP6, the local ownership of alignment to ISO 55001 and commitments rested within each of Network Rail's eight route strategic plans, reflecting the organisation structure as it was prior to PPF.

In the first phase of Network Rail's devolution journey, five new regional organisations were established in June 2019, which took on more accountabilities including the ISO 55001 alignment.

Though the final determination required the routes to demonstrate the attainment of requirements by March 2021, the routes and regions set varying target dates in their strategic plans.

The Southern region is one of the Network Rail's five regional operating units and it covers the geographical area of the previously known as South East and Wessex route.

The South East route, in its route strategic plan for Control Period 6 (version 3.0) dated March 2019, stated to achieve compliance with ISO 55001 by the end of year 3 of CP6.

The Wessex route has stated to develop its asset management capabilities to ISO 55001 by April 2021.

However, the Southern region's regional strategic plan, produced following the devolution, has committed to achieve compliance with ISO 55001, by year 3 of CP6.

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<sup>1</sup> Clause 2.90 <https://www.orr.gov.uk/sites/default/files/om/pr18-final-determination-review-of-network-rails-proposed-costs.pdf>

Irrespective of a region's chosen approach and own set target, ORR expected the regions to satisfy the final determination requirement by demonstrating the compliance level necessary to achieve equivalence of certification to ISO 55001.

## 2.3 Scope

The objective of the review was to understand the organisation's progress on asset management capability improvement and its current level of alignment with the ISO 55001 requirement, the gaps between the current state and its desired level, planned improvement initiatives and the timescale for its implementation.

To complement the need to improve asset management capabilities, an effective Asset Management System (AMS) need to be embedded to provide a framework for asset management in an aligned and integrated way. This review focused on the fundamentals for effective implementation of AMS by seeking understanding of the following:

- Leadership Commitment
- Current State/Gap Assessment
- Improvement action plan
- Steering & Governance

This review does not formally assess the asset management maturity or validate the alignment to ISO 55001<sup>2</sup>. Rather, it sought to gain insights on the key elements of the AMS that will underpin the region's asset management approach.

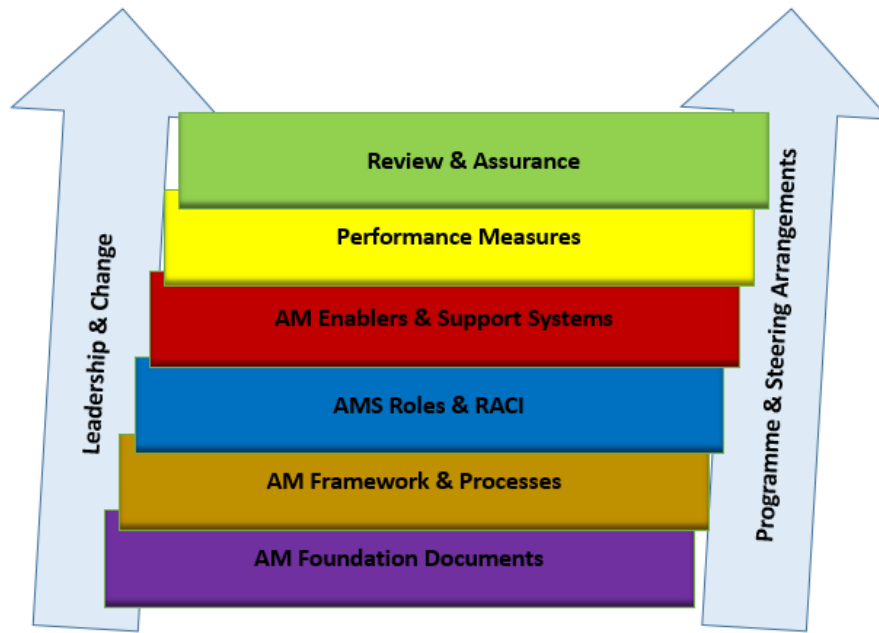
## 2.4 Review Approach

ISO 55001 defines the requirements for a 'management system for asset management'. Asset management in accordance to ISO 55001 means applying a management system approach for managing the assets.

The building blocks of the asset management system and the sequence in which it can be established is shown in the figure below. This review sought to verify whether the region has established the building blocks of the AMS and has defined and implemented the required elements of ISO 55001.

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<sup>2</sup> Network Rail is required to demonstrate that they are working in accordance with ISO55001. This can be undertaken by either a rigorous self-assessment or by use of an accredited organisation.



**Figure 2.1 Typical building blocks of Asset Management System**

The review requested the region to provide a recent gap assessment against ISO 55001, which it used to understand the level of maturity in each element of the ISO55001 asset management system.

In setting out to demonstrate the determination requirement, the region has chosen to demonstrate that its asset management is in compliance with ISO 55001. For the context of this assurance review, we used the following guiding criteria<sup>3</sup> to consider the region has attained the final determination requirement: as a minimum, a majority of the elements should be at asset management maturity level 3 (level of compliance with ISO 55001) and no scores below 2.5 (in planning stage). For elements with scores between 2.5 and 3 (in implementation stage), there should be a credible timebound improvement plan.

Southern region's team responsible for the asset management improvement programme was engaged throughout this review. We sought understanding of the current position and the plans for improvement in each of the fundamental elements. Based on the information provided, the key findings of the review are provided in the following section.

<sup>3</sup> Our criteria is aligned to IAM endorsed assessors schedule of requirements for certification decision.



# 3. Findings

## 3.1 Review findings

### Leadership Commitment:

In the CP6 Route Strategic Plans published in March 2019, the South East and Wessex routes committed to developing their asset management capabilities and to improve its asset management processes and arrangements to meet the requirements of ISO 55000.

Following the PPF re-organisation, the region strategic plan that replaced the original route strategic plan, restated the above commitment to regional level.

The DEAM has set out a vision statement to deliver efficient and effective asset management, has appointed key leadership roles and assigned resources for driving Asset Management improvement in the region.

An accredited assessor has been commissioned to support the region for certification to ISO 55001 standard.

The DEAM holds the accountability for the ISO 55001 objective and is the executive owner of the asset management system.

These actions indicate the commitment of the leadership to improve its asset management capability and achieve alignment to ISO 55001.

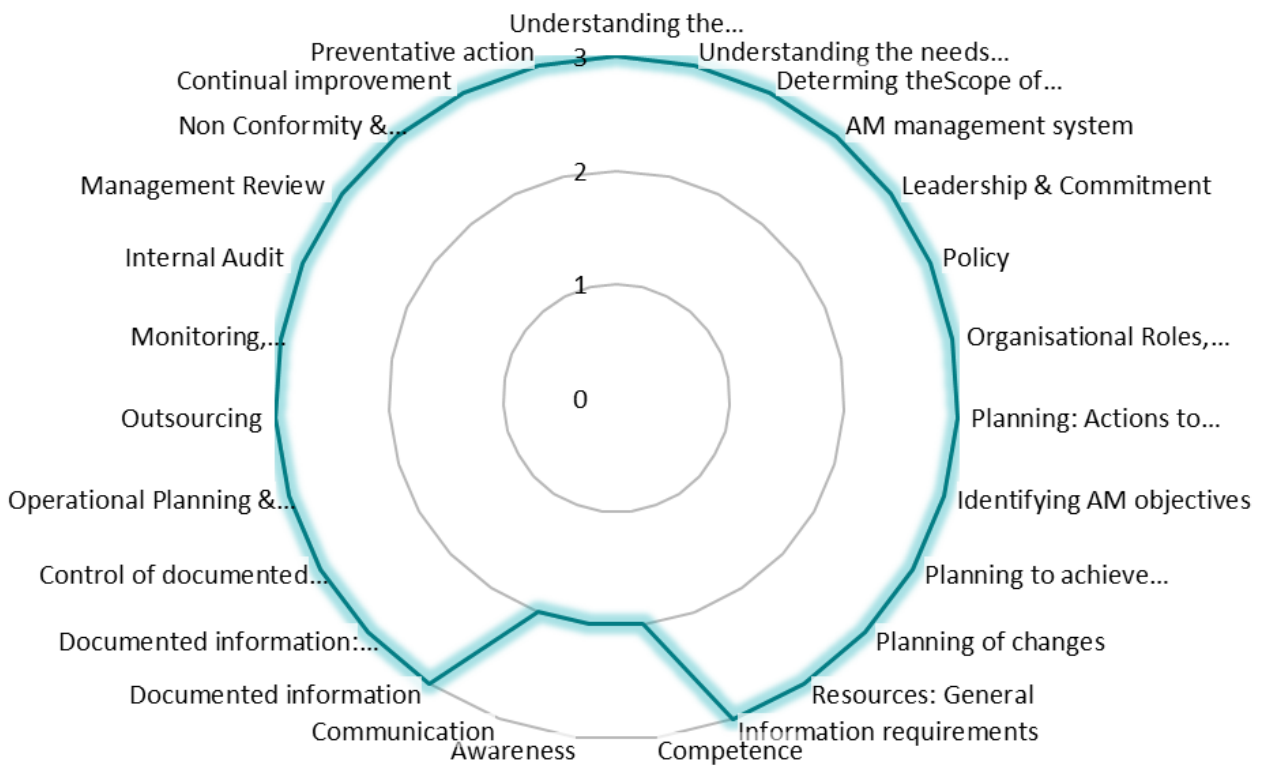
### Gap Assessment:

A recent asset management gap assessment was undertaken in Feb 2021 by an independent asset management assessor. This was a light-touch assessment with deeper focus on certain areas of the standard.

The region's maturity in each element of the ISO 55001 clauses were self-assigned by the region using scores with a scale of 1-3, where a score of 3 denote the minimum maturity level for compliance with ISO 55001.

The maturity scores of the Southern region on 27 sub-clauses of the ISO 55001 are shown on the radar plot below.

\*Note - Southern region has assessed the maturity of its integrated management system against 9 different standards and plotted the maturity scores in a single radar plot. ORR has re-created the radar plot by including only the elements relevant to ISO 55001.



**Figure 3.1 Radar chart showing gap assessment results**

The assessor has stated that from the evidence seen during the assessment the asset management system is developing well with focus on having the system in place by the end of March.

In preparation for the certification audit, the Southern region has planned for the formal assessment process with a two stage assessment in April and September.

### Improvement Plan:

The Southern Region has a roadmap for achieving compliance with ISO 55001 through four stages – build (until March 2021), launch (April – June 2021), maintain (June-Oct 2021) and improve (Nov 21 onwards).

The region has an action for implementing the management system for asset management, which sets out the action needed to achieve compliance to ISO 55001, with defined task lead and target milestone dates.

The timescale for delivery ranges from March 2021 to June 2021, with the majority of the tasks already completed or due to complete by March.

### Steering and Governance:

The progress of the ISO55001 action plan is reviewed through the Southern Infrastructure Board.

The board is chaired by the DEAM and is made up of senior leaders from the route and region.

This meeting provides linkage with other regional and route-level business review mechanism.

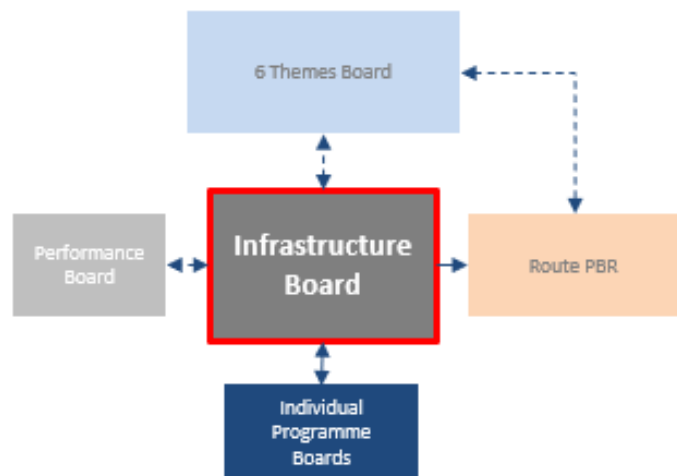


Figure 3.2 Governance Meeting Linkages

### Key elements of the Asset Management System:

The review also sought to understand the building blocks of an asset management system upon which the improvements can be driven.

**Foundation Documents:** The core documents/elements in an Asset Management system are the Asset Management Policy, Strategic Asset Management Plan (SAMP) and Asset Management Plans. The existence of these artefacts is a specific and definitive requirement of ISO 55001.

**Asset Management Policy:** The principles by which the organisation intends to manage its assets are set out in an Asset Management Policy.

A regional policy has been created and agreed by the executive and signed off by the DEAM.

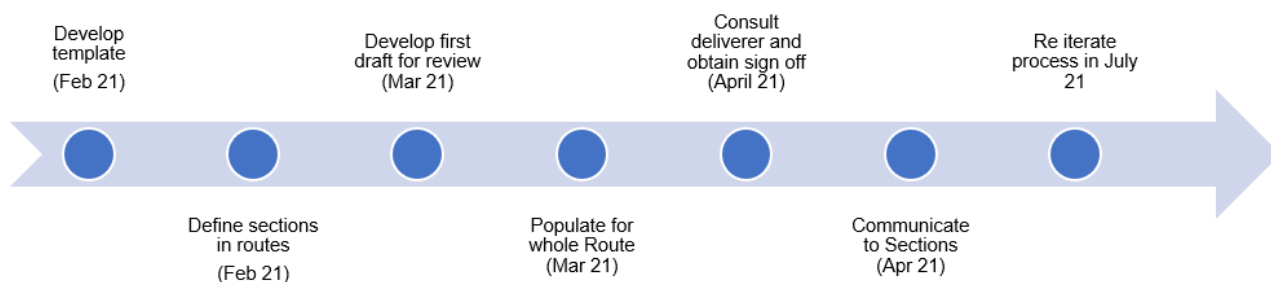
**Strategic Asset Management Plans:** Strategic Asset Management Plan (SAMP) or Asset Management Strategy, is documented information that typically specifies what the organisation aspires to achieve, how and when. The requirements expected from a SAMP may be contained in different organisational strategies, plans and documents.

The majority of the “what” elements – what the Region intends to achieve from asset management activities and by when, are included in the Region Strategic Plan. It covers the organisation context, regional objectives & targets, strategic initiatives and timescales for implementation. It also covers some “how” elements such as stakeholder analysis, delivery strategy and references to existing supporting strategies.

We were informed by the region that the Quality (management system) manual also covers the SAMP requirements.

**Plans:** Asset Management plans are documented information that specify the asset lifecycle needs, financial strategies (capex, opex), resources (information, supply chain etc), timescales along a planning horizon and risks.

The Route Asset Management Plans are currently being redefined and developed for the three routes within the region. The timeline for the RAMP development is shown below.

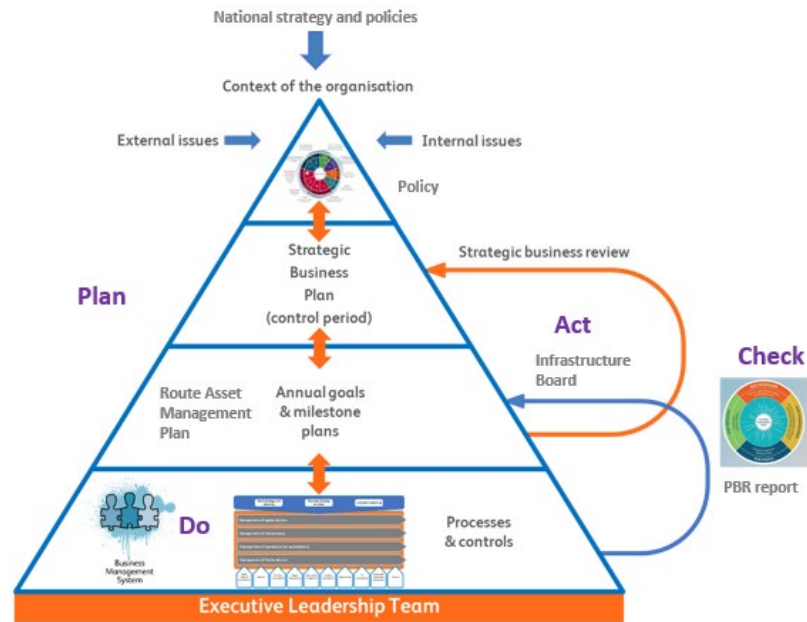


**Figure 3.3 Road for RAMP development**

According to the region, the objective of this plan is to formalise the capital and maintenance delivery works that were identified within the Strategic Business Plan for CP6. Therefore, the planning horizon will only be for the remaining 3 years of the Control Period 6.

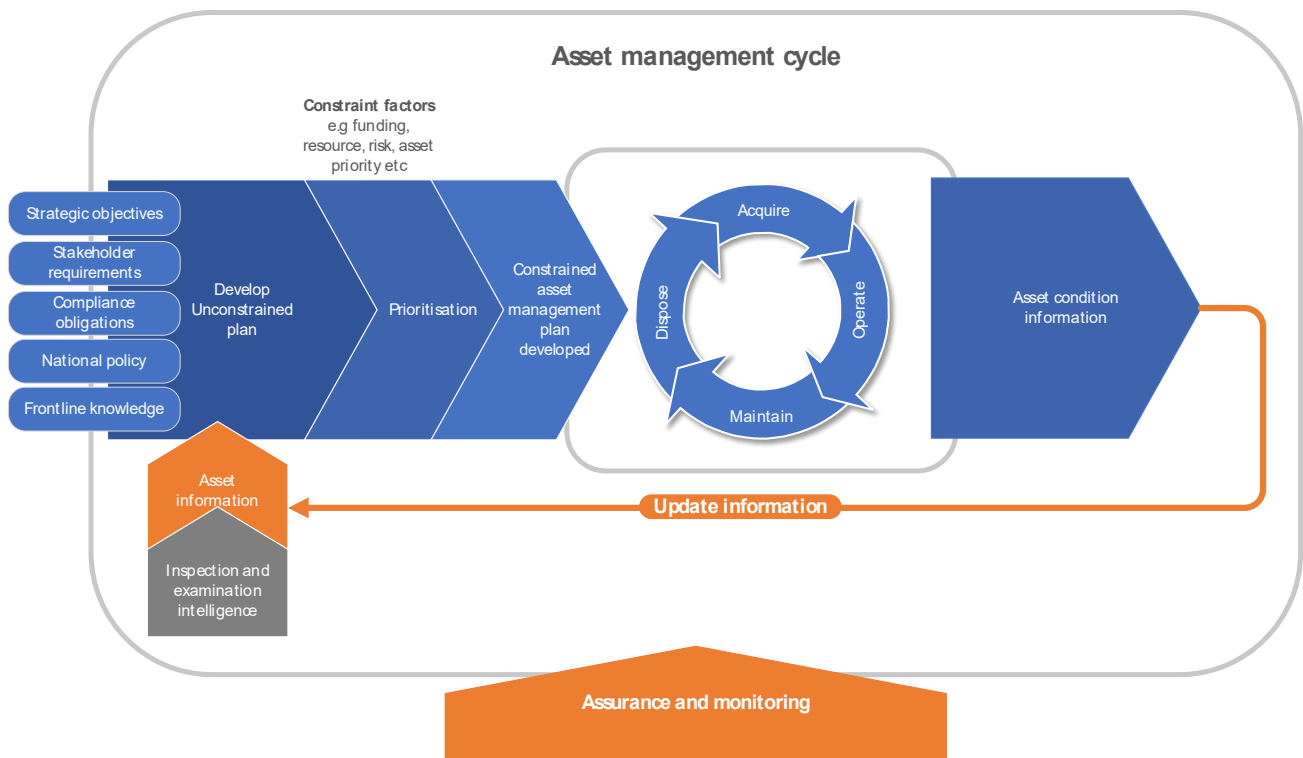
**Framework and Processes** – Asset management system is a documented, process-centric approach to how an organisation will manage its asset to achieve its strategic objectives. ISO 55001 requires organisation to plan, define, implement and control the processes needed for the asset management system.

The Southern region has established as Asset Management System framework and it illustrates the alignment between organisation objectives, key planning documents and asset lifecycle activities.



**Figure 3.4 Southern region’s asset management framework**

The region has mapped its asset management system model which shows the core and enabling functions required for its asset management.



**Figure 3.5 Asset management system operating model**

The region has identified key processes required for the asset management system, including the existing and desired ones.

As part of Network Rail’s nation-wide roll-out of the Governance, Risk, Assurance and Improvement (GRAI) framework, 16 core business process areas have been identified for the organisational governance and assurance. Some of these core processes may overlap within the scope of the AM system.

In addition to the core processes, the region has defined local processes relevant to their region.

It has developed a platform to document the processes, process users, key accountabilities and also includes a feedback mechanism.

***Roles & RACI:***

Following the transformation to the Regional operating model, the Region has set out the key business areas and its interface, organisation structure and accountabilities for the entire organisation.

The engineering and asset management structure under the DEAM will manage policy, strategy, assurance and provide technical leadership.

Key roles and their responsibilities are defined and documented in the oracle system.

**Information:** *A vital element of effective asset management is decision-making that is evidence-based and data-driven, hence sufficient, fit for purpose information is required to be maintained.*

Information requirements was one of the main focus areas in the independent gap assessment commissioned by the region. The assessor has observed that the information requirements have been determined in line with the data governance framework, policy and improvement targets, using a comprehensive approach.

The region has a data management framework in place that is aligned to ISO 8000 (Data Quality) standard.

The region has an asset data portal for inventory information and asset integrity dashboards for performance data.

We were told by the HASP that an Asset Information Strategy is under development.

### **Competence & Awareness:**

The region intends to adopt the national Asset Management Competence Framework (AMCF).

It has undertaken asset management competency self-assessment by developing a questionnaire using Microsoft Forms. It has a provision for a peer review of the self-assessment.

A number of initiatives have been undertaken and are planned to improve asset management awareness at levels of the organisation.

**Measurement and Improvement:** *This section seeks to ensure appropriate processes, tools and indicators are in place to enable the monitoring and measurement of the asset condition/performance, delivery of the plans, achievement of objectives and effectiveness/improvement of the asset management system.*

### **Monitoring:**

The currently available KPIs predominantly tend to be lag indicators on asset (performance/condition) and asset management performance (objectives, targets, service level, delivery etc).

It is not clear if the region has developed a suite of measures with a mix of lag and lead indicators to monitor the asset health and effectiveness of the asset management system.

### **Audit & Assurance:**

The region intends to develop an integrated assurance plan, which we think will rationalise the assurance activities for greater efficiency.

### **Management Review:**

There is a robust management review arrangement in place, covering performance, delivery, risks, audits etc. It is guided by the Better Together Southern Framework that maps forums, frequency and terms of references.

The scope of the management review needs to ensure that it covers all aspects of the asset management system.

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# 4. Conclusion and Recommendations

## 4.1 Conclusion

This assurance review finds that the Southern region has developed an integrated management system that is aligned to ISO 55001 and can demonstrate significant asset management capability implementation. The region is planning to seek certification to demonstrate conformance with the requirements of the asset management standard.

The recent gap assessment undertaken by the region shows that the maturity scores on ISO 55001 elements were predominantly indicating compliance with the requirements of the standard. Additionally, an independent assessment by the accredited assessors commissioned to help the region in its certification process found that the asset management system was developing well with focus on having the system in place by the end of March 2021.

Our assessment of the asset management system, based on the information shared by the region, revealed that building blocks of the asset management system are in place or in an advanced stage of development. We observed good documentation of its integrated management system.

The two aspects that bind the asset management system together are Leadership & Change Management. The review found that leadership and governance is in place to address the elements of direction, oversight and control to guide the development and operation of Asset Management System.

Throughout the journey a level of project management will be required to make sure it all happens in a logical, efficient and effective order. The steering arrangements and road map for maturity were all clearly evident and satisfactory.

On the basis of this assurance review, we conclude that the Southern Region has met the determination requirement. However, it needs to maintain its ongoing commitment to the planned readiness reviews with a view of submitting to a certification audit.

## 4.2 Recommendations

Based on the findings and conclusion, the following recommendations are offered to the DEAM of the Southern region:

**Readiness Review Update:**

The region is required to continue its commitment to the planned readiness reviews for ISO 55001 certification and provide an update to ORR on the review findings by October/November 2021.



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