

Asset Management Policy

January 2018

Introduction

Our Asset Management Policy was last published in 2014. It is being updated to reflect our commitment to regularly review and improve all of our Asset Management documentation. It should therefore be considered in context with other asset management documents including the latest version of the Asset Management System handbook.

We have made continued progress in our asset management capability since 2014. Benchmarked comparisons show we have consolidated our position as an example of best practice amongst European railways and UK utilities in our strategic planning. Emerging best practice is evident in the areas of competency, asset management planning and life cycle costing analysis. Work continues on improving our asset information, our approaches to sustainable development and adapting to climate change, and furthering the analysis to move towards eliminate, predict and prevent maintenance routines. Embedding the progress and creating an asset management focused culture is vital, if we are to continue to realise further benefits.

This document supports devolution within Network Rail, in particular the transfer of accountability for implementing an effective Asset Management System from the central organisation, to the Route Businesses. This is a fundamental requirement as the Route Businesses commit to align their asset management activities with ISO55001.

Purpose

This Asset Management Policy defines the key principles and requirements which we will apply to the assets. Through this we will make sure that the assets are managed in a way that contributes towards a better railway by delivering the outputs expected safely, sustainably, and efficiently.

The policy plays a key role in creating an overall 'Line of Sight' between our asset interventions and the overall Network Rail objectives. Specifically, it provides the Asset Management Framework and the document hierarchy used to disseminate our overall output and funding specification into both an effective asset management plan, and the associated interventions on the assets.

Good practice alignment

This document has been developed based on good practice guidance from internationally recognised sources. It has been developed to comply with the requirements of the ISO55000 series of standards. The extent of the discipline of asset management has been defined to adopt the 39 subjects within the Asset Management Landscape developed by the Global Forum for Maintenance and Asset Management (GFMAM) and the Institute of Asset Management (IAM).



Asset management definition and aim

We have adopted the definition of asset management as included in the international suite of standards, BS ISO 55000 series (2014):

The coordinated activity of an organisation to realise value from physical assets

Asset management is therefore about aligning the way we manage our assets with our corporate objectives. In the case of Network Rail our principle aim is the delivery of our outputs in a safe and sustainable way, balancing life cycle costing with initial affordability. Our decision making always considers whole system and lifecycle costs and is subject to continual refinement from our experience. We recognise that improvements from asset management arise through long term concerted effort.

Our aim is to meet our obligations in a manner that is demonstrably world class, with capabilities appropriately matched with the needs of ourselves and our industry partners. We recognise that the principles of the discipline of asset management will help us deliver these. This policy defines how we will develop our overall approach to asset management.

We have set targets to guide our work:

- By April 2019 we will provide a benchmark against which organisations throughout the world assess their own asset management capabilities and will hold high quality asset information, readily available and system wide to support the operation of the network.
- By 2024 we intend to extend our use of asset management to achieve industry-wide systems and processes.

Network Rail's vision is to be a trusted leader in the rail industry. Asset management underpins our ability to realise our key purpose to generate outstanding value for taxpayers and customers. It is also fundamental in enabling the delivery of our longer term vision for the railway.

Our purpose (Why we exist)	To generate outstanding value for taxpayers and customers					
Our role (What we do)	A better railway for a better Britain					
Our vision (What we want to do)	To be a trusted leader in the rail industry					
Our strategy (How we're going to do it)	To work with our partners and use our full potential to improve safety, reliability, capacity and value for customers and tax payers					
Our behaviours (How we need to work)	Customer driven	Accountable	Challenging	Collaborative		

To support the wider Purpose, Role and Vision, Network Rail has also published a transformational plan, known internally as the **5Cs**. These are organisational characteristics designed to aid the transformation of Network Rail into a public sector body that behaves like a private sector business. To achieve this aim, asset management needs to support this transformation to make sure we as a business:

- Achieve α relentless Customer focus
- Ensure we are **C**ost competitive and efficient
- Become more Commercial, to attract third party investment
- Instill a Culture that embraces diversity, continuous improvement, efficiency and safety
- Find solutions to the biggest problem facing the railways, 'the lack of **C**apacity to meet growing passenger demand'

Scope

The framework we use to define the scope of activities has drawn heavily from the ISO 55000 guidance, as covered by this policy is shown in Figure 3:

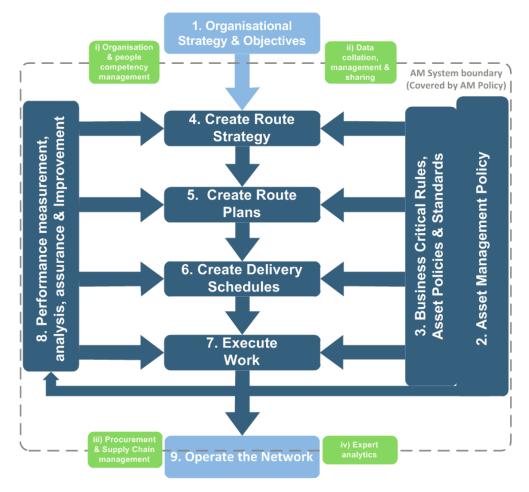


Figure 3, Network Rail's Asset Management Framework

This policy applies to all assets that constitute the operational railway, including those associated with:

- track
- signalling
- civils (structures and earthworks)
- buildings (stations and depots)
- electrical power
- drainage
- telecommunications
- and mobile plant fleet¹

It does not cover non-operational assets such as offices, road fleet or IT equipment.

It also applies to all asset-related activities including inspection, maintenance and renewal of existing assets, design and installation of new assets to enhance the capability and reliability of the network, and the asset data requirements associated with these activities. Finally, the scope of asset management includes relevant infrastructure activities such as capacity planning, and railway operational control and timetabling.

The policy applies to all Network Rail personnel involved in asset management activities, and all relevant suppliers of services.

¹Asset managed nationally by Route Services. All policy statements and principles apply, and are supported by the equivalent strategic and asset management plans.

Corporate outputs are determined as part of the periodic review process. Specific asset condition, capability and route reliability targets, funding and output measures are included in the individual Route Strategic Plans.

The Asset Management Policy, its relationship with other key documents and processes, and key questions/outcomes at each stage are shown in table 1:

	Framework stage	Key questions	Outcome	Accountable business unit	Key supporting documents
3 st	1 - Organisational Strategy and Objectives	What do we want to achieve? Why are we trying to achieve it? What is our funding availability?	Establishing the right objectives and how these relate to specific routes	Executive Committee	Strategic Business Plan
	2 - Corporate policies	What protocols have we established from experience and future foresight?	The principles and mandated requirements applicable to our asset management system	STE	Asset Management Policy
	3 - Rules and standards	Which asset interventions deliver the required performance at lowest whole lifecycle cost?	Best practice advice to guide asset management planning	STE	Discipline- specific Asset Policies
	4 - Route Strategic Plan	What do we need to do in outline? What funding do we need? What outputs should we expect? What capability do we need to achieve it?	The medium term funding and overall activity levels required to achieve the objectives	Route Business	Route Strategic Plan
	5 - Annual delivery plan	What assets? What condition is it in? What do we need it to do and when? How much will it cost? Have we got enough access to the assets and the right resources?	Specific activity and project plans over 1, 3 and 5 years	Route Business	Route Asset Management Plan
Do	6 - Detailed delivery schedules	How will we get it done? What is the detailed design requirement? Have we secured resources?	The annual work programmes - defined maintenance and project plans	Route Business	
	7 - Execution of work	Is the work proceeding as planned? Has new information varied the task?	Delivering the annual programme of work successfully	Route Business	
Review	8 - Performance measurement, analysis, assurance and improvement	How will we make sure we deliver the right outputs and outcomes? How do we deal with emergencies? How will we get better?	Evaluating what we are achieving to derive learning and support continuous improvement	STE	Business Performance Management Framework
Enabler i	Organisation and people competency management	What overarching skills do our people need to operate the asset management system? How can we configure the organisation to ensure asset management objectives are delivered?	Everyone understands the boundaries of their responsibilities Individuals know what part they play in the AMS, and they deliver to a high standard	STE	Competency framework Learning hierarchy
Enabler ii	Data collation, management and sharing	What mechanisms do we need to collate accurate, high quality data? How can we share this in such a way that is both effective and efficient?	Agreed approach to defining data standards Systems that work for the user, both intuitively and completely	STE	Asset Information Strategy
Enabler iii	Procurement and supply chain management	How can we ensure alignment between our procurement systems and our AMS? What do we mandate on our suppliers to better deliver against our asset management targets?	The development of mature capabilities and efficiencies. Transparent relationship between supplier performance, and asset value.	STE	
Enabler iv	Expert analytics	How can we better analyse complex system problems? How can digital technology facilitate the collection to support real-time decision making?	Complex problems are fully analysed and solutions put forward are relevant. Data is collected efficiently, and converted into information that brings real benefit.	STE	Whole Life Cost Manual

Table 1, Network Rail's Asset Management Framework and its relationship with other key processes

Asset Management Policy statements

This Asset Management Policy is based on a set of policy statements aligned to corporate objectives that reflect company role, purpose and vision;

- 1. We will reduce safety risks for passengers, the public and our workforce
- 2. Activity on our assets will be carried out in compliance with relevant legislative and statutory requirements
- 3. The management of asset related risk will be undertaken in accordance with the corporate Risk Management Policy; and controlled through Network Rail's standards and 'Business Critical Rules'
- 4. Assets, systems and networks will be managed in accordance with sustainable development principles including due consideration of long-term financial, societal and environmental impacts
- 5. The asset management approach will be supported by the Network Rail Technology Strategy. This defines Network Rail's contribution to the wider Rail Technical Strategy
- 6. The asset management approach will be appropriate to the scale and relative importance of the assets and asset systems to achieving the overall organisational objectives
- 7. We will proactively seek structured continuous improvement of our asset management capabilities and activities and assure value for money for customers and stakeholders

Asset Management Principles

In order to deliver these policy statements, Network Rail will apply an asset management system approach, consistent with the requirements of ISO55001 that will form part of a wider Integrated Management System for Network Rail. The Asset Management System will encompass the following principles. We will:

- 1. Ensure that the safe continued operation of all assets is paramount in any decision-making process, and that all infrastructure is managed in a safe manner and within critical limits.
- 2. Undertake asset management in a consistent way working to align organisational and functional approaches to develop a truly integrated approach with a clear 'Line of Sight' linking activities to organisational objectives.
- 3. Manage our assets in a systematic way and one which is in line with the approved asset management system. We will apply this Route, 'asset system' and on an individual asset basis. This management system will adopt the control framework as defined by the Technical Authority in Safety, Technical Engineering.
- 4. Strike the appropriate balance between stakeholder expectations regarding system reliability, risk and cost which will be determined reflecting reasonable requirements of operators and funders including regulated outputs set out in our plans and other commitments. All critical assets will be risk assessed, and records will be kept up to date. Additionally, any risks to operations and maintenance plans introduced as a consequence of other intervention works will be assessed, and controlled appropriately.
- 5. Align all asset management interventions to the principles defined in our asset policies for all operational assets, that set out the major requirements and decision making criteria for the work we do to deliver the required network and route outputs for the funding available; these policies will be continuously improved to:

- Be based on whole life, whole system costs and underpinned by appropriate facts from enhanced asset information
- Define and have plans in place to detail and record the most appropriate approach to asset maintenance, inspection and renewal, supported by reliability, availability, maintainability and safety requirements
- Define a risk-based approach to determining intervention requirements to specified levels of reliability for specified assets
- Define resilience requirements as a specified range of weather conditions, taking account of emerging knowledge of climate change
- 6. Develop technology, tools and methods to support fact-based whole life cycle decisions on maintaining, renewing and enhancing the infrastructure and improving our capability for predicting and preventing failures. These tools will include forecasts of the outputs that are expected as a result of the decisions, including documenting all assumptions made and benefits anticipated.
- 7. Balance the trade-off between efficiency of work through longer possessions with access to the network for the delivery of the timetable.
- 8. Create an environment where our asset management teams are motivated, driven by customer needs, and proud of their work; this will be supported by investment to professionalise our competency in asset management.
- Develop the asset management capabilities of the organisation and our supply chain to an appropriate level of maturity, in order to deliver efficient outcomes for customers and stakeholders including a commitment to share best practice, on lowest first cost solutions.
- 10. Undertake benchmarking to establish best practice and adopt relevant findings through our Asset Management System.
- 11. Provide an annual statement of the outcomes delivered through our asset management, and how these relate to sustainable development.

Communication

Communication to relevant internal and external stakeholders, service providers and other relevant parties who require knowledge of the Asset Management Policy is via the following mechanisms:

- Available to external stakeholders by inclusion on Network Rail's public site
- Available to our staff through the Network Rail intranet
- Referenced and used as part of asset management training and development programmes

Implementation

The overall Asset Management Framework is defined and controlled by the Asset Management Technical Authority, part of the Safety, Technical and Engineering (STE) Directorate under the leadership of the Safety, Technical and Engineering Director.

The Technical Authority provides guidance on the mechanisms, accountabilities and responsibilities for how this policy will be implemented across the entire network. It also leads on any review process, which will be undertaken in line with established business protocols.

Accountability for the implementation of this Asset Management Policy and related documents rests at Route Business level. The Route Businesses are accountable for implementing a specific and effective Asset Management System, itself based on the generic Network Rail Asset Management Framework. Route Businesses are also accountable for 'sponsorship' of projects to enhance or renew the railway.

Measurement of asset management capability

We will continue to measure our corporate asset management capability through the use of recognised business excellence models. This includes wider benchmarking work with leading rail and other sector organisations throughout the world.

Furthermore, as part of our commitment to achieving our corporate asset management and wider business aims, we will utilise in-house expertise to assess individual routes' asset management performance. In order to build improvement plans and frame any structured continual improvement initiatives, the Business Performance Management Framework will be used to derive learning and to ensure consistency of future approach.

We will develop and maintain all documents required to operate our Asset Management System adopting standard terminology and definitions. The Asset Management System will be used to:

- Document the processes by which our asset management responsibilities are delivered
- Identify key roles and accountabilities
- Identify the mandated asset management competences required for these roles and seek to ensure that our teams meet these capability requirements
- Identify compliance with recognised infrastructure asset management standards, including the ISO55000 suite of documents

Continuous review and improvement

The Safety, Technical and Engineering Director will arrange for the Asset Management Policy to be reviewed with the Network Rail Executive Committee at least once every two years, or when the committee identifies a need to do so.

Each review will include due consideration of:

- Alignment with Network Rail Vision, Strategic Business Plan, wider policies and the risk management framework
- Compliance of Asset Policies with all relevant regulations, laws and accepted best practice
- The 'Line of Sight' created by the Asset Management Policy and the Asset Management System, verified through appropriate assurance review
- Opportunities for improvements in format, communication and implementation of the Asset Management Policy itself
- The rate of progress achieved towards our goal to provide a benchmark against which organisations throughout the world assess their own asset management capabilities
- Opportunities for continual improvement within the Asset Management System
- Alignment with established best practice guidelines, including the ISO55000 suite of documents

Representatives appointed by the Asset Management Technical Authority will undertake a formal annual review of the Network Rail Asset Management System.



Definition of terms

The following items are extracted from the ISO55000 suite of documents and have been complemented by the specific addition of Network Rail documents.

Asset(s): Plant, machinery, property, buildings, vehicles and other items that have a distinct value to the organisation

Asset Information Strategy: the activities Network Rail is undertaking to ensure that our definition, collection and use of asset information meets current and future requirements

Asset management: coordinated activities of an organisation to realise value from physical assets

Asset Management Competency Framework: defines the competencies required to successfully implement asset management

Asset management information: Meaningful data relating to assets and asset management NOTE: Examples of asset management information include asset registers, drawings, contracts, licences, legal, regulatory and statutory documents, policies, standards, guidance notes, technical instructions, procedures, operating criteria, asset performance and condition data, or all asset management records

Asset Management Information System: A system for the storage, processing and transmission of asset management information

Asset Management Objective(s):

- specific and measurable outcome or achievement required of asset system(s) in order to implement the asset management policy and asset management strategy; and/or
- detailed and measurable level of performance or condition required of the assets;
 and/or
- specific and measurable outcome or achievement required of the asset management system

Asset management performance: measureable results of an organisations management of its assets and /or asset system(s)

Asset Management Policy: Principles and mandated requirements derived from, and consistent with, the organisational strategic plan, providing a framework for the development and implementation of the asset management strategy and the setting of the asset management objectives

Asset Management Strategy: Long-term optimised approach to management of the assets, derived from, and consistent with, the organisational strategic plan and the asset management policy, including a high level, long-term action plan

Asset Management System: organisation's asset management policy, asset management strategy, asset management objectives, asset management plan(s) and the activities, processes and organisational structures necessary for their development, effective communication, implementation and continual improvement

Asset Policy: Specified approach, rules and boundaries that provide direction and the framework for the control of specific asset-related processes and activities such as capital investment and maintenance

Asset portfolio: Complete range of assets and asset systems owned by an organisation

Asset system: Set of assets that interact and/or are interrelated so as to deliver a required business function or service

Contingency plans: These confirm how we identify and respond to incidents and emergency situations, including the maintenance of critical activities and services. These confirm competence requirements, arrangements for communication, access to resources and means to revert to business as usual

Critical limits: A maximum and/or minimum value to which a parameter must be controlled to prevent, eliminate or reduce the risks of an undesirable event occurring.

Critical assets: Equipment (assets) which if degraded would affect the safety, reliability and/or operability of a specific route.

Enablers (asset management): Supportive systems, procedures, processes, activities and resources that enable an organisation to operate its asset management system efficiently and effectively

Life cycle: Time interval that commences with the identification of the need for an asset and terminates with the decommissioning and disposal of the asset or any associated liabilities

Maintenance strategy: A defined approach to the undertaking of maintenance including approaches to planning, delivery, outsourcing and improvement priorities, including mechanisms to continuously improve and acquire feedback.

Optimise: Achieve by a quantitative or qualitative method, as appropriate, the best value compromise between conflicting factors such as performance, costs and retained risk within any non-negotiable constraints

Organisation: Company, corporation, firm, enterprise, authority or institution, or part or combination thereof, whether incorporated or not, public or private, that has its own functions and administration

Route Asset Management Plan: Document specifying activities and resources, responsibilities and timescales for implementing the asset management strategy and delivering the asset management objectives. Applicable as either a network wide plan or Route level

Route Delivery Plan: Detailed plan to optimise the delivery of renewals, maintenance and enhancement, grouping works spatially and where complementary in form with the coordination of people, other resources, track access and supplier capability to deliver in the most efficient and effective way

Route Strategic Plan: These define at high-level, requirements now and how these are intended to change over 10 and 30 year timelines for capability, capacity and availability of infrastructure to deliver planned services, aligned to the strategic business plan this incorporates chapters that form a Strategic Route Asset Management Plan (SRAMP)

Strategic Business Plan: Overall long-term plan for Network Rail that is derived from, and embodies, our Role, Purpose, Vision: Key strategic programme themes, stakeholder requirements, objectives, management of its risks and funding requirements for the 5 year regulated control period

Sustainable: Achieving or retaining an optimum compromise between performance, costs and risks over the life cycle, whilst avoiding adverse long-term impacts to the organisation from short-term decisions

Sustainable development: Achieving an enduring balanced approach between environmental responsibility, social progress and economic aspects of activities

Technical Strategy: Identifies the technical barriers that prevent us from achieving our corporate objectives and the R&D activities that will allow us to overcome these. With this Strategy in place, technology will be able to function as a key driver for our business



Related corporate documents

This Asset Management Policy should be read in conjunction with the following:

- Corporate Responsibility Report
- Diversity and Inclusion Policy
- Health and Safety Policy
- Network Rail Strategic Business Plan
- Sustainable Development Policy
- Technical Strategy
- The Network Operating Strategy
- Network Rail Transformation Plan



