

Asset Management Maturity – Current IAM Thinking and Network Rail Case Study

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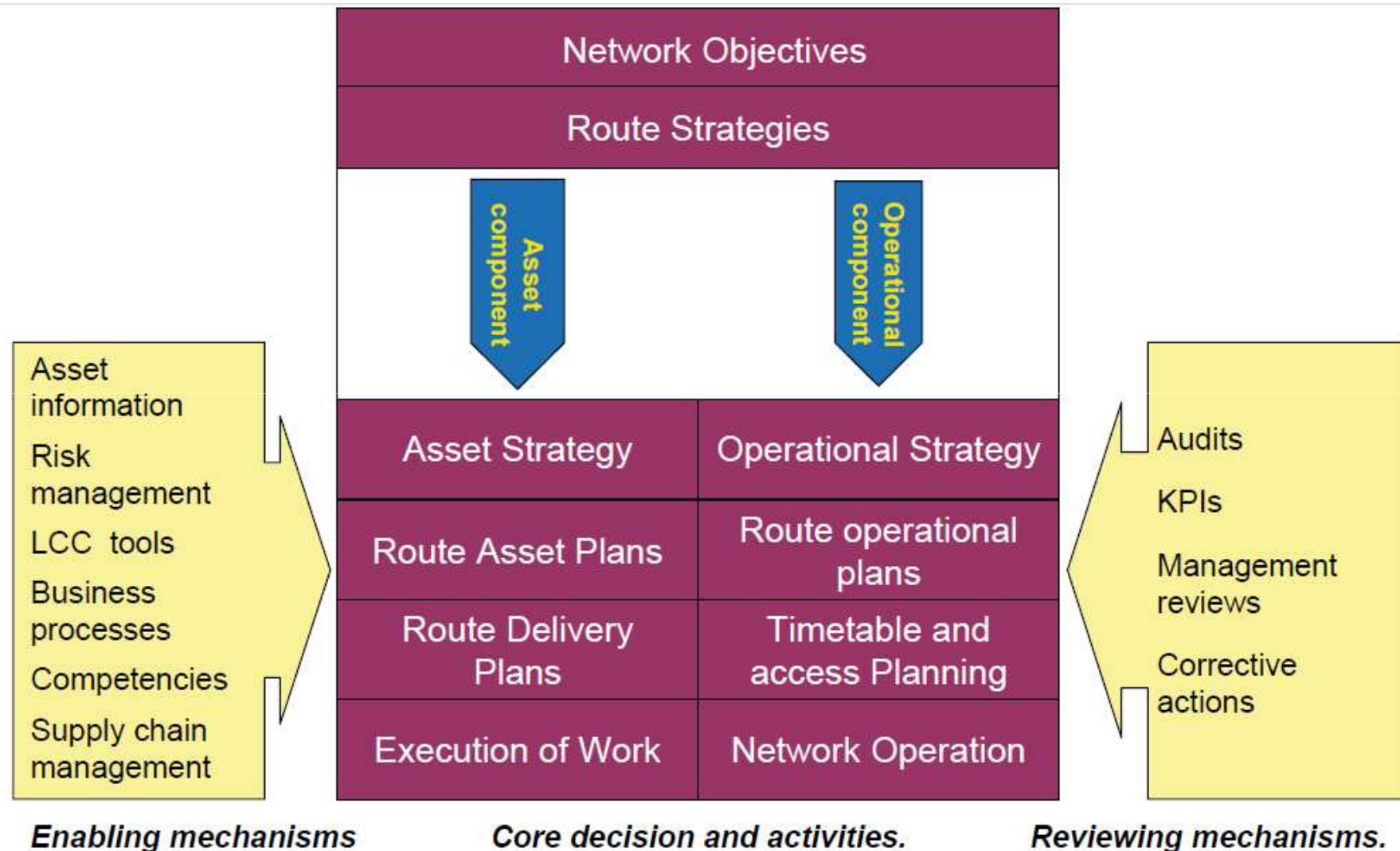
Overview

1. What is Asset Management maturity?
The latest view from the Institute of Asset Management (IAM)
2. Assessing Asset Management maturity:
A case study of Network Rail 2006 to 2013

This presentation is about the assessment of an organisation's overall capability to do Asset Management well



The UIC's 'Guidelines for the Application of Asset Management in Railway Infrastructure Organisations'



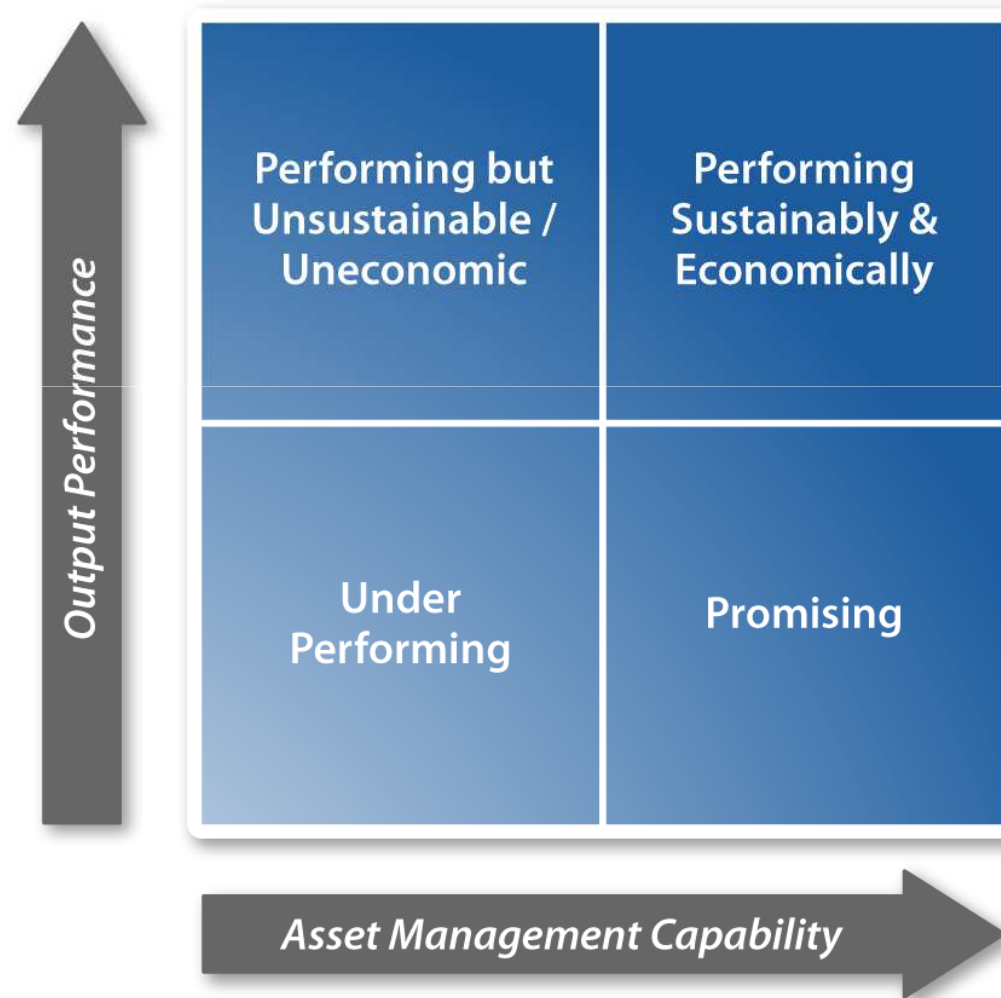
the professional body for
through-life management of physical assets



What is Asset Management maturity?

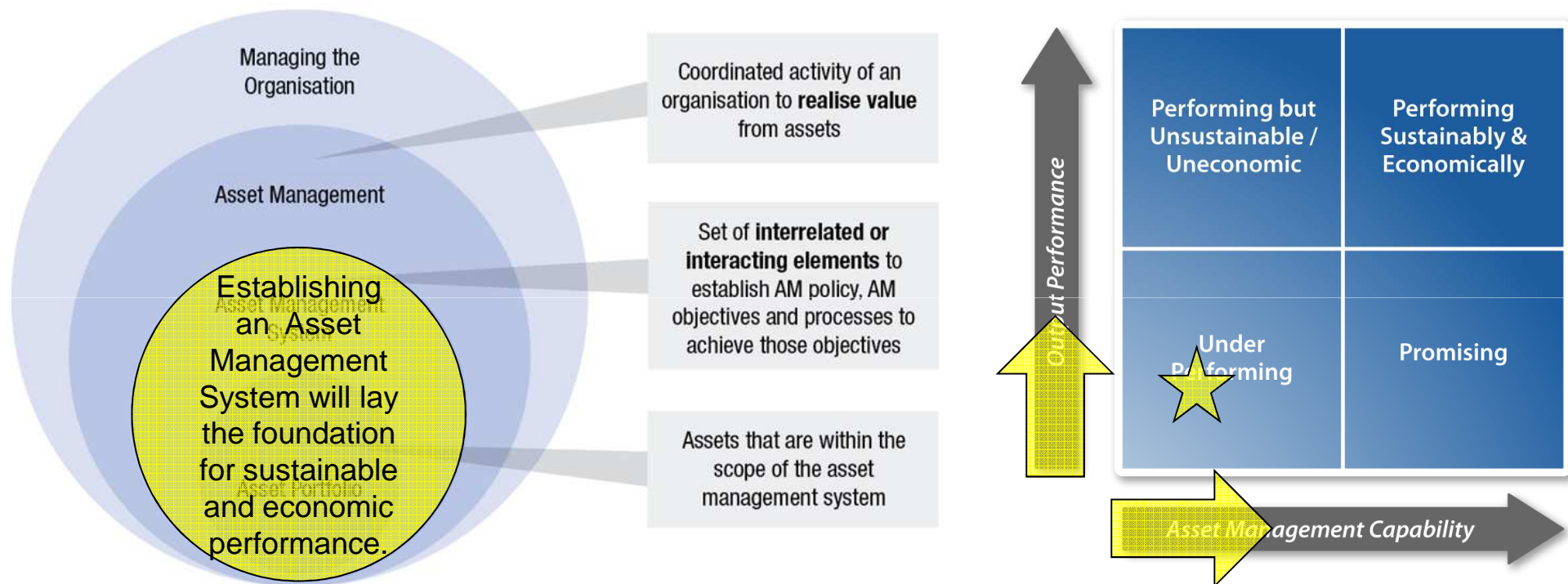
The latest view from the Institute of Asset Management (IAM)

Asset Management maturity is a measure of the capability of an organisation to perform sustainably and economically...



'Compliance' and 'Maturity' – an ISO 55001 baseline

Relationship between key terms

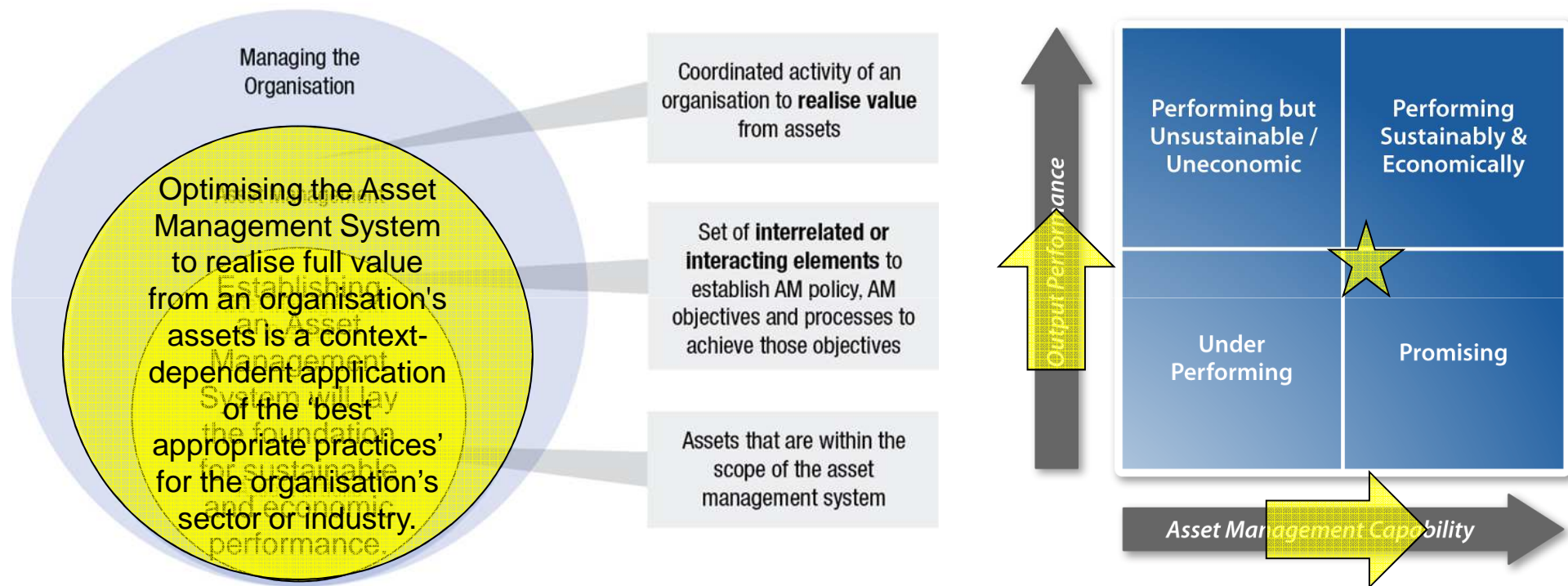


ISO 55002:

'It should be noted however, that compliance with all the requirements of ISO 55001 represents achieving the minimum standard for an effective Asset Management system and should not be seen as the final goal.'

'Compliance' and 'Maturity' – an ISO 55001 baseline

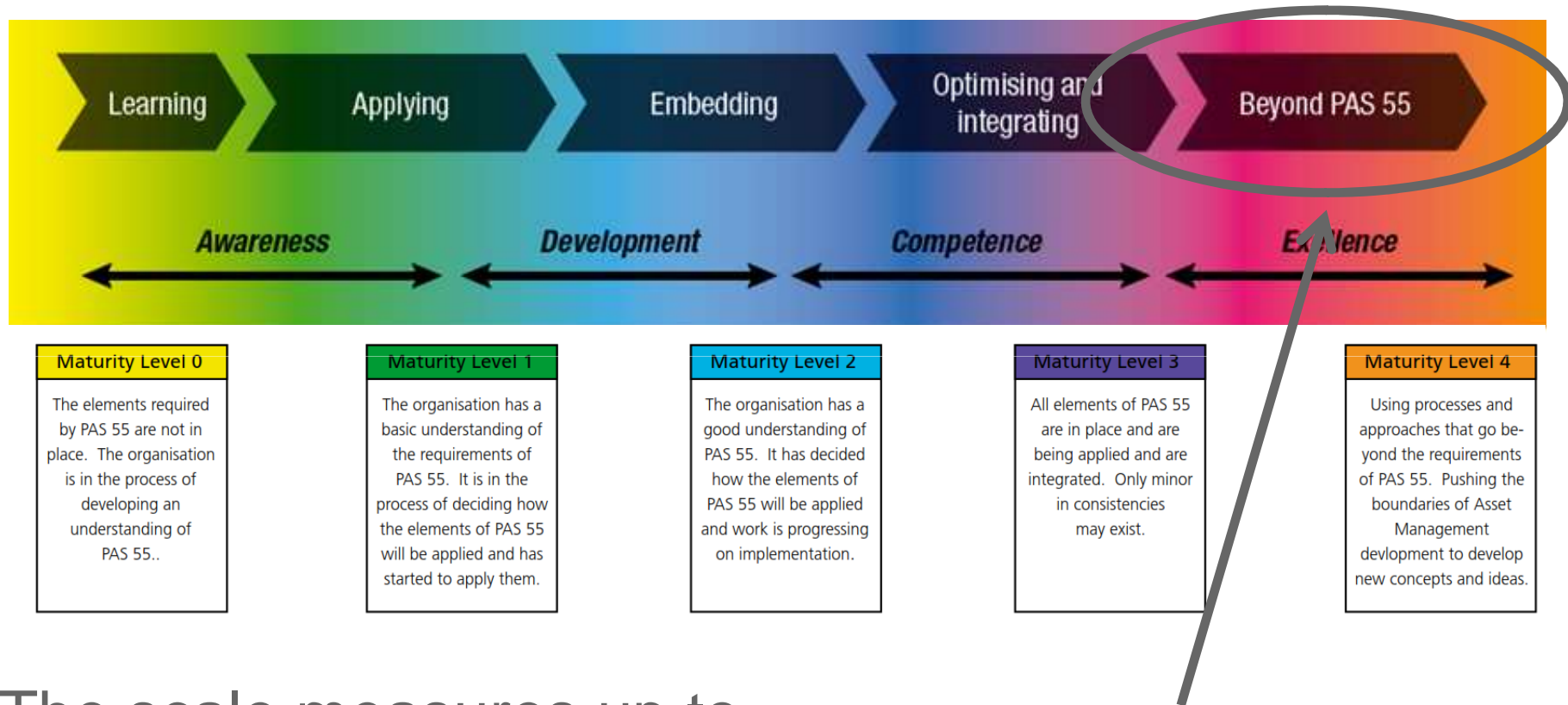
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ISO 55002:

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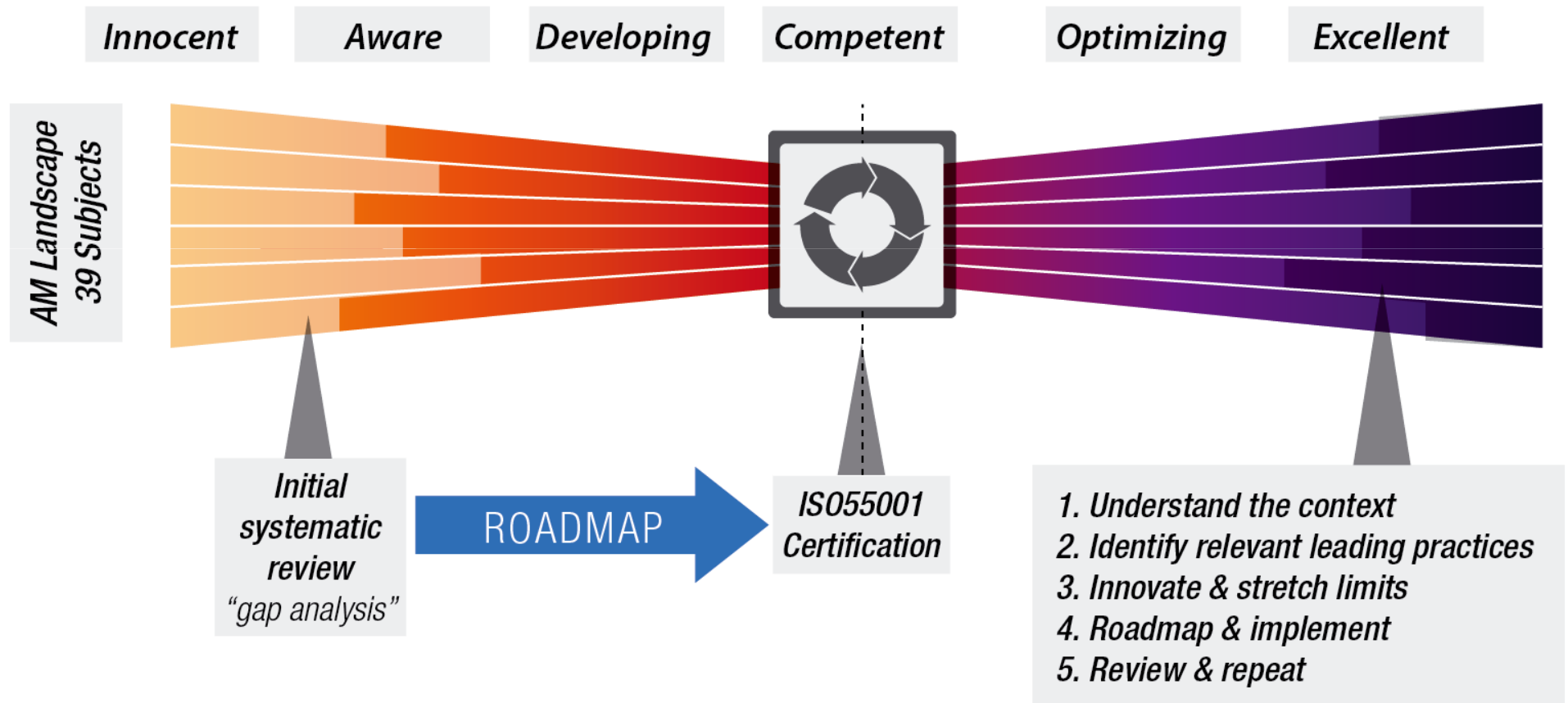
The IAM's current Asset Management maturity scale (PAM)



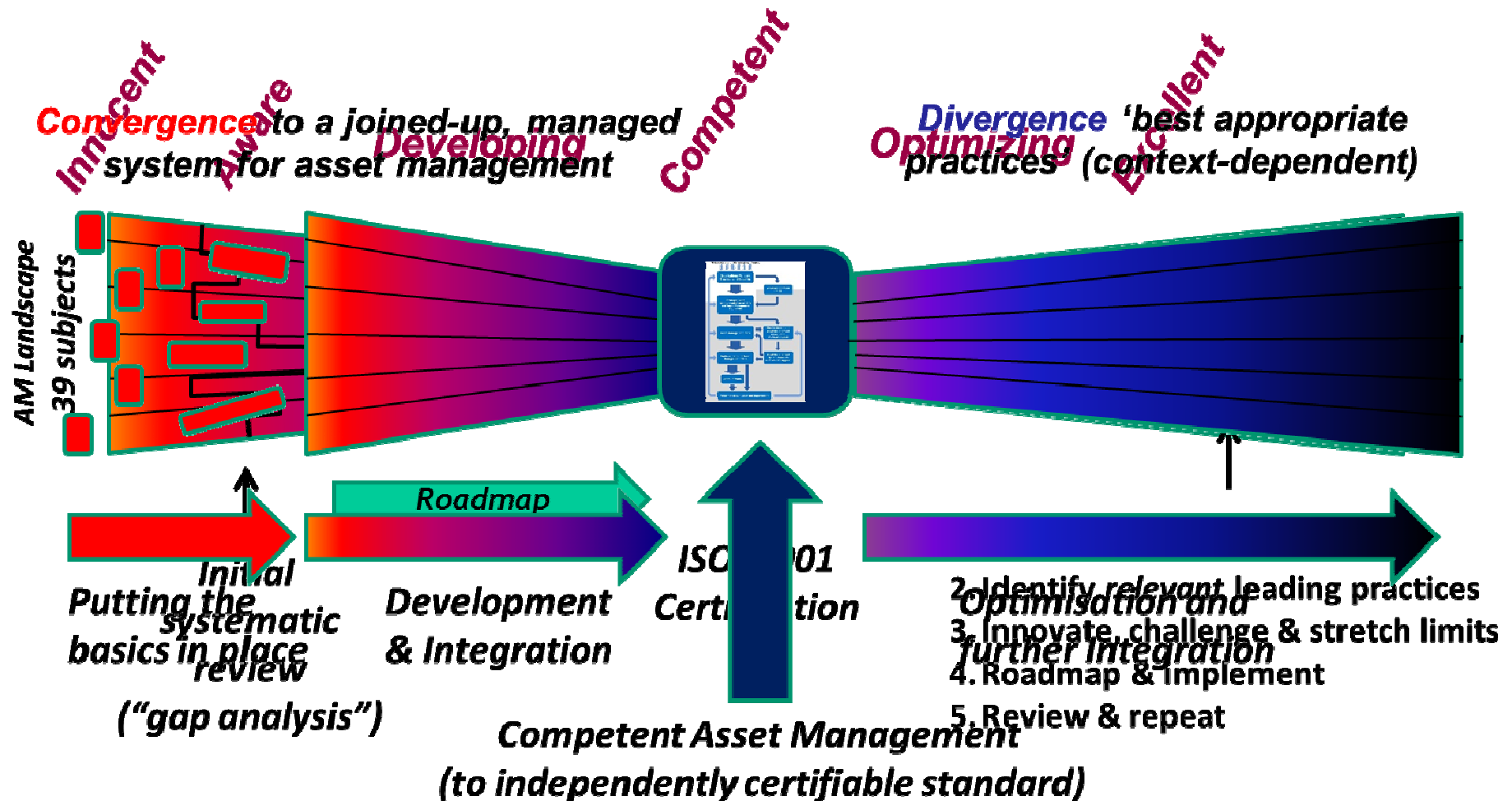
The scale measures up to compliance with PAS 55

But what does this mean?

The IAM's latest Asset Management maturity scale concept



The IAM's latest Asset Management maturity scale concept



The proposed IAM Asset Management maturity scale



Scale	Description	Definition
0	Innocent	The organisation has not recognised the need for this requirement and/or there is no evidence of commitment to put it in place.
1	Aware	The organisation has identified the need for this requirement, and there is evidence of intent to progress it.
2	Developing	The organisation has identified the means of systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.
3	Competent	The organisation can demonstrate that it is systematically and consistently achieving the requirements, and can demonstrate that these are being progressed with credible and resourced plans in place.
4	Optimising	The organisation can demonstrate that it is systematically and consistently optimising its Asset Management practice, in line with the organisation's objectives and operating context.
5	Excellent	The organisation can demonstrate that it employs the leading practices, and achieves maximum value from the management of its assets, in line with the organisation's objectives and operating context.

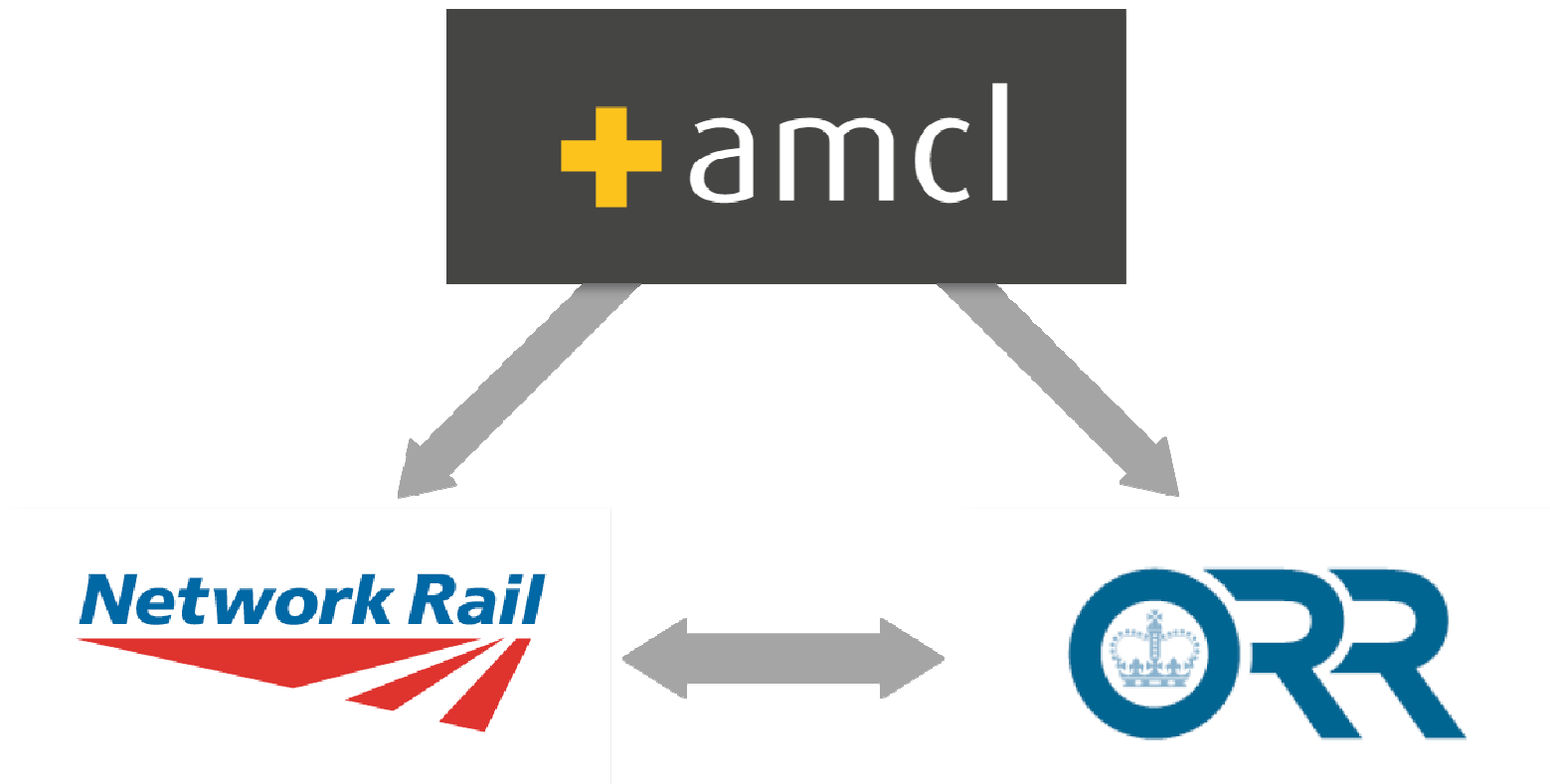
The 'transition' states

Assessing Asset Management maturity

A case study of Network Rail 2006 to 2013



Tripartite Relationship – Control Periods 3 & 3 (CP3 & CP4)




The IAM's Asset Management 'Conceptual Model'



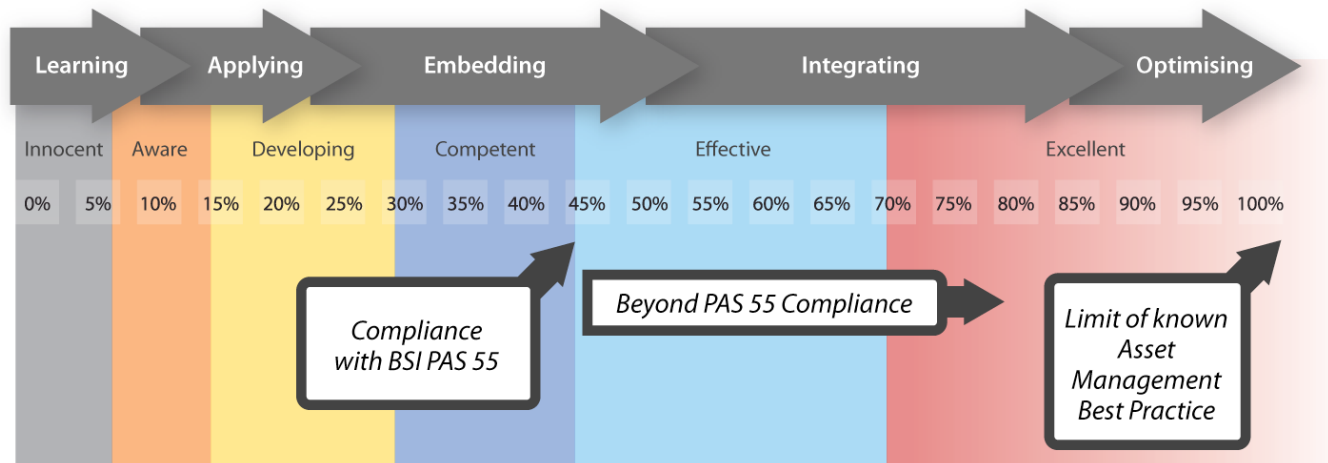
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AMEM Assessment – aligned to the Conceptual Model



- 
Asset Management Strategy & Planning
 - 1.01 Policy & Strategy
 - 1.02 Demand Analysis
 - 1.03 Strategic Planning
 - 1.04 Asset Management Plans
- 
Whole-Life Cost Justification
 - 2.01 Opex Evaluation
 - 2.02 Capex Evaluation
 - 2.03 Asset Costing & Accounting
- 
Lifecycle Delivery
 - 3.01 Asset Creation
 - 3.02 Systems Engineering
 - 3.03 Maintenance Delivery
 - 3.04 Resource & Outage Management
 - 3.05 Incident Response
 - 3.06 Asset Rationalisation & Disposal
- 
Asset Knowledge
 - 4.01 Asset Information Strategy & Standards
 - 4.02 Asset Information Systems
 - 4.03 Asset Knowledge & Data
- 
Organisation & People
 - 5.01 Contract & Supply Management
 - 5.02 Organisational Structure & Culture
 - 5.03 Individual Competence & Behaviour
- 
Risk & Review
 - 6.01 Risk Assessment & Management
 - 6.02 Sustainable Development
 - 6.03 Weather & Climate Change
 - 6.04 Review & Audit

AMCL's AMEM Asset Management maturity scale



The maturity scale has six maturity states as follows:

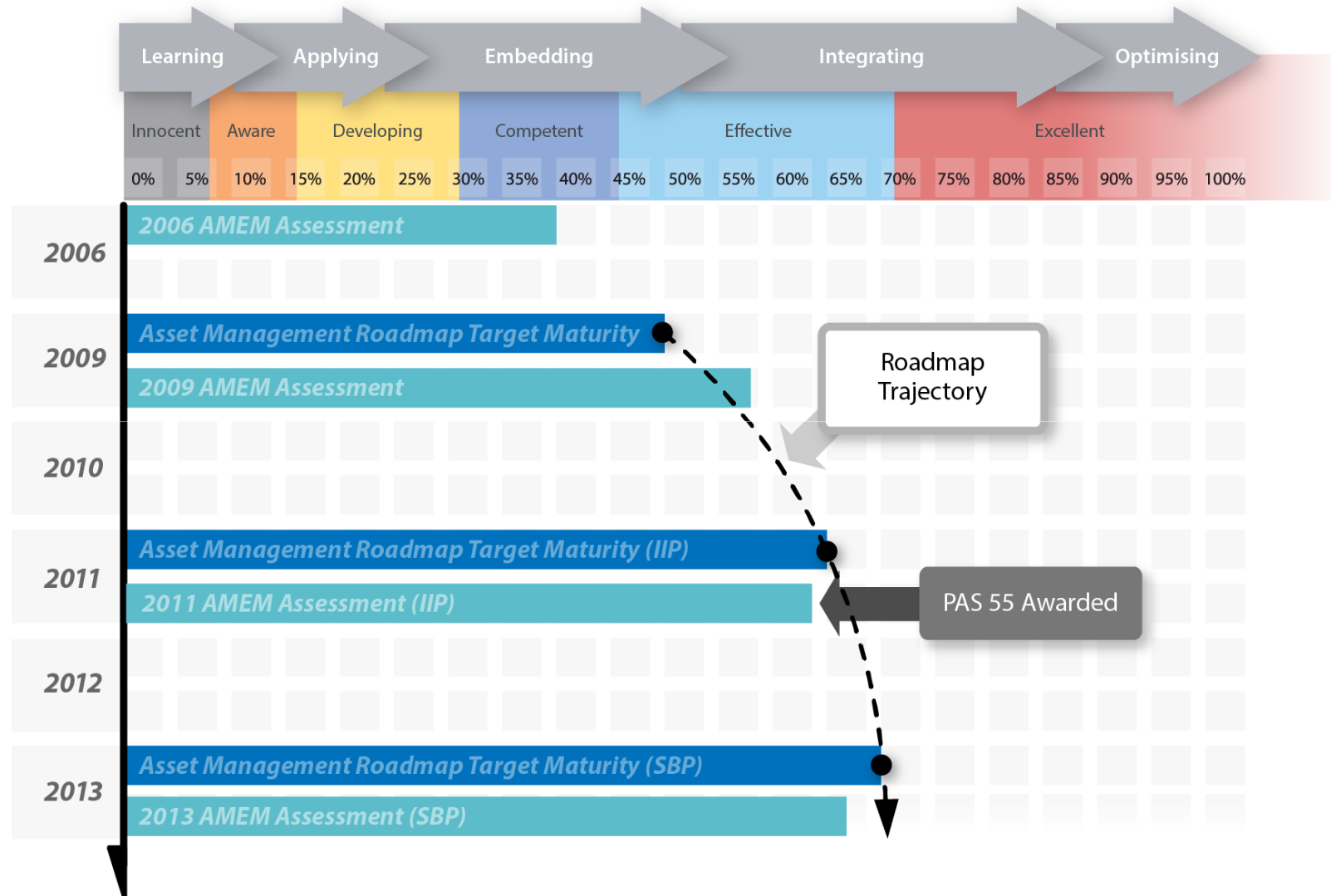
1	Innocent	The organisation is starting to <i>learn</i> about the importance of Asset Management activities
2	Aware	The organisation is aware of the importance of the Asset Management Activities and has started to <i>apply</i> this knowledge
3	Developing	The organisation is developing its Asset Management Activities and <i>embedding</i> them
4	Competent	The organisation's Asset Management Activities are developed, <i>embedded</i> and are becoming effective
5	Effective	The organisation's Asset Management Activities are fully effective and are being <i>integrated</i> throughout the business
6	Excellent	The organisation's Asset Management Activities are fully <i>integrated</i> and are being continuously improved to deliver <i>optimal</i> whole life value

Timescales to date

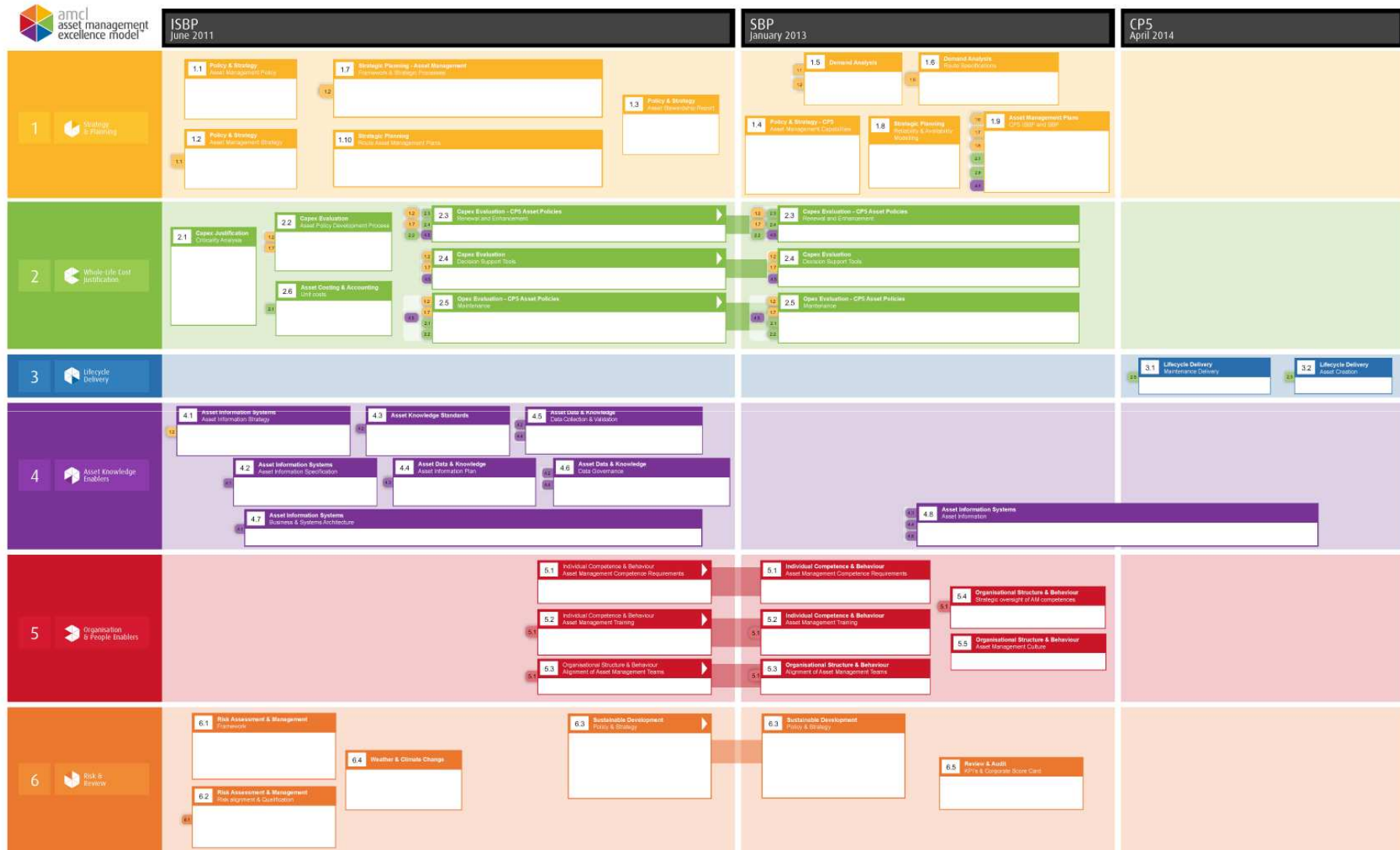
- **2006 – Initial assessment – mid CP3**
- 2007 – Development of ‘Asset Management Vision’
- **2009 – CP4 entry assessment**
- 2010 – Development of ‘Asset Management Roadmap’ to help Network Rail identify the key actions required to deliver sustainable improvements in asset management capability
- **2011 – Initial Industry Plan (IIP) assessment**
- **2013 – Strategic Business Plan (SBP) assessment**



Asset Management Improvement Roadmap Trajectory



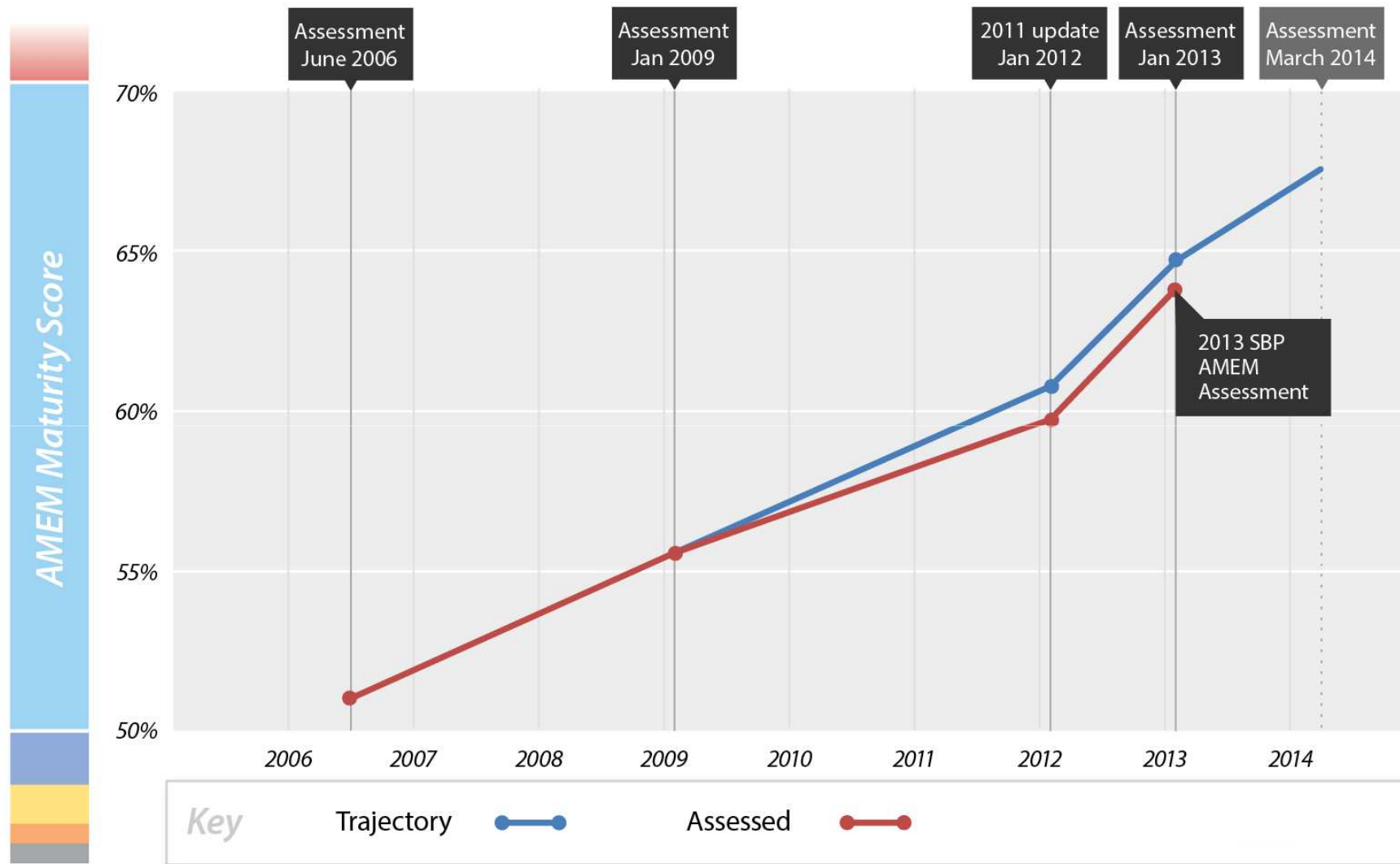
The Asset Management Improvement Roadmap



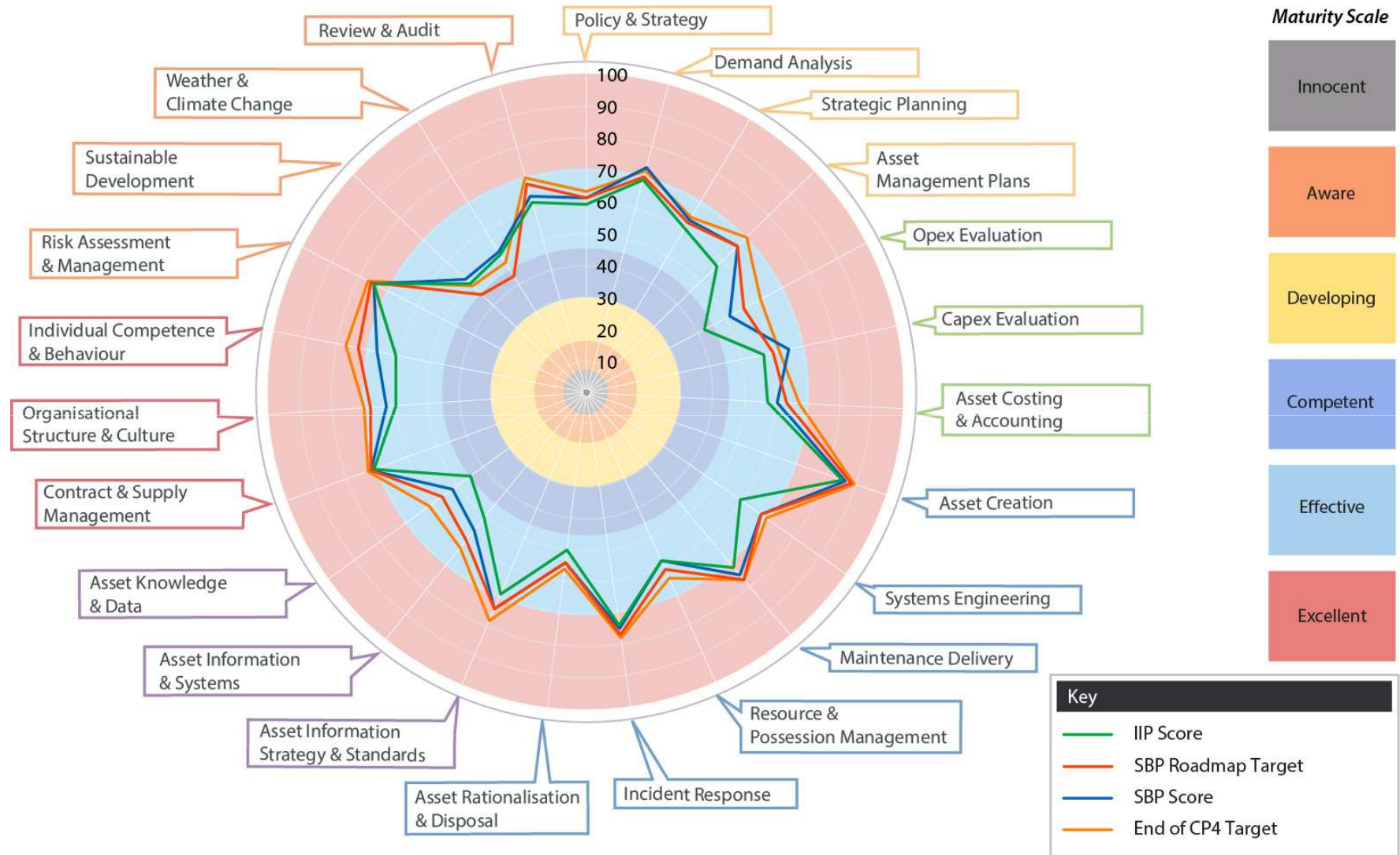
Setting Specific Targets

	<i>Network Rail as assessed 2009</i>	<i>Network Rail as assessed at IIP Update</i>	<i>AMCL Roadmap Target for SBP</i>	<i>Network Rail as assessed at SBP</i>
<i>Strategy & Planning</i>	56.3%	61.2%	64.7%	65.8%
<i>Whole-Life Cost Justification</i>	47.3%	51.9%	59.7%	58.7%
<i>Lifecycle Delivery</i>	64.8%	66.3%	70.5%	69.2%
<i>Asset Knowledge</i>	51.7%	55.0%	63.5%	60.9%
<i>Organisation People</i>	63.0%	64.0%	71.1%	67.3%
<i>Risk & Review</i>	49.5%	59.4%	58.1%	60.8%

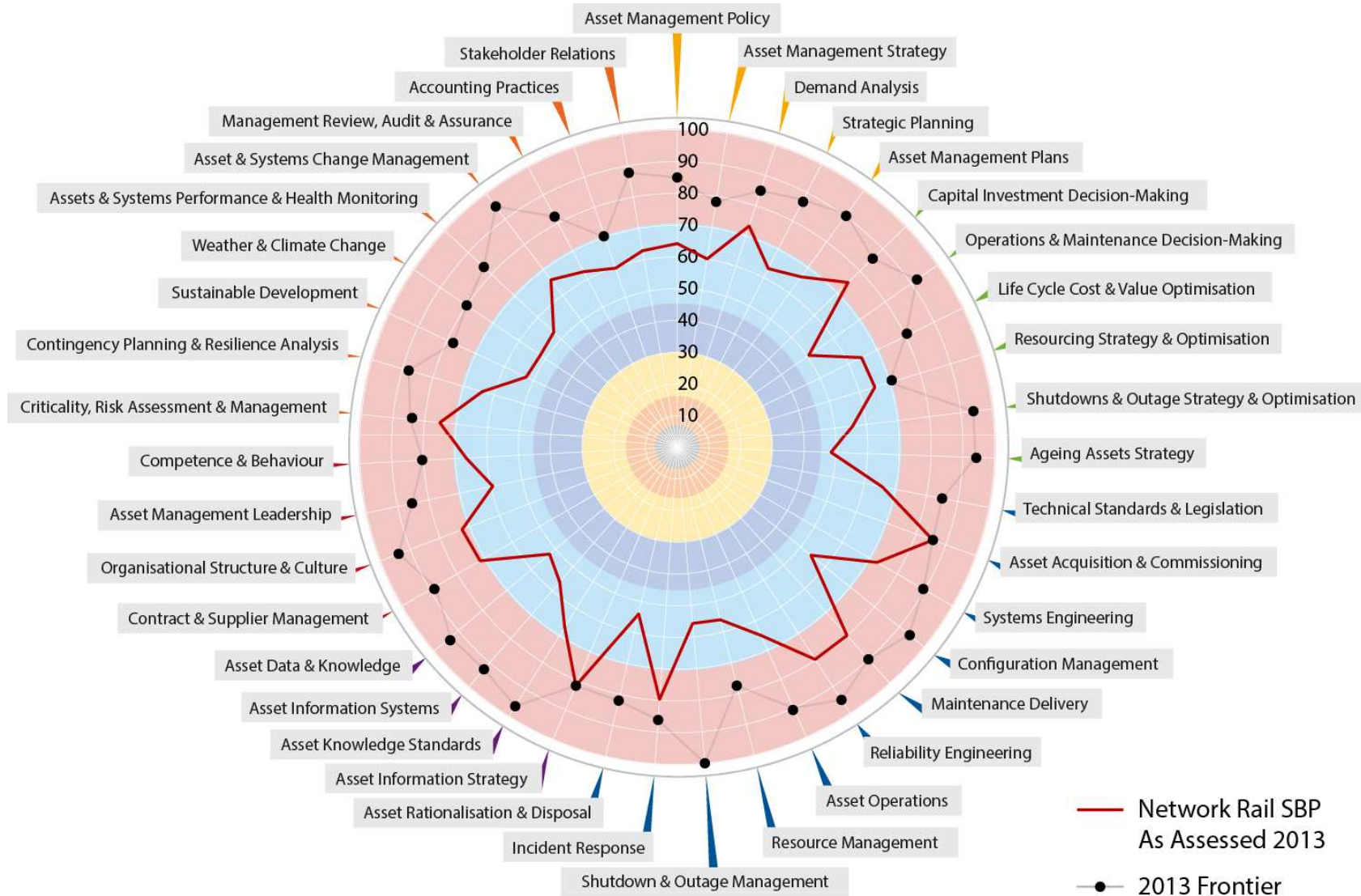
Overall Trajectory and 'gap analysis'

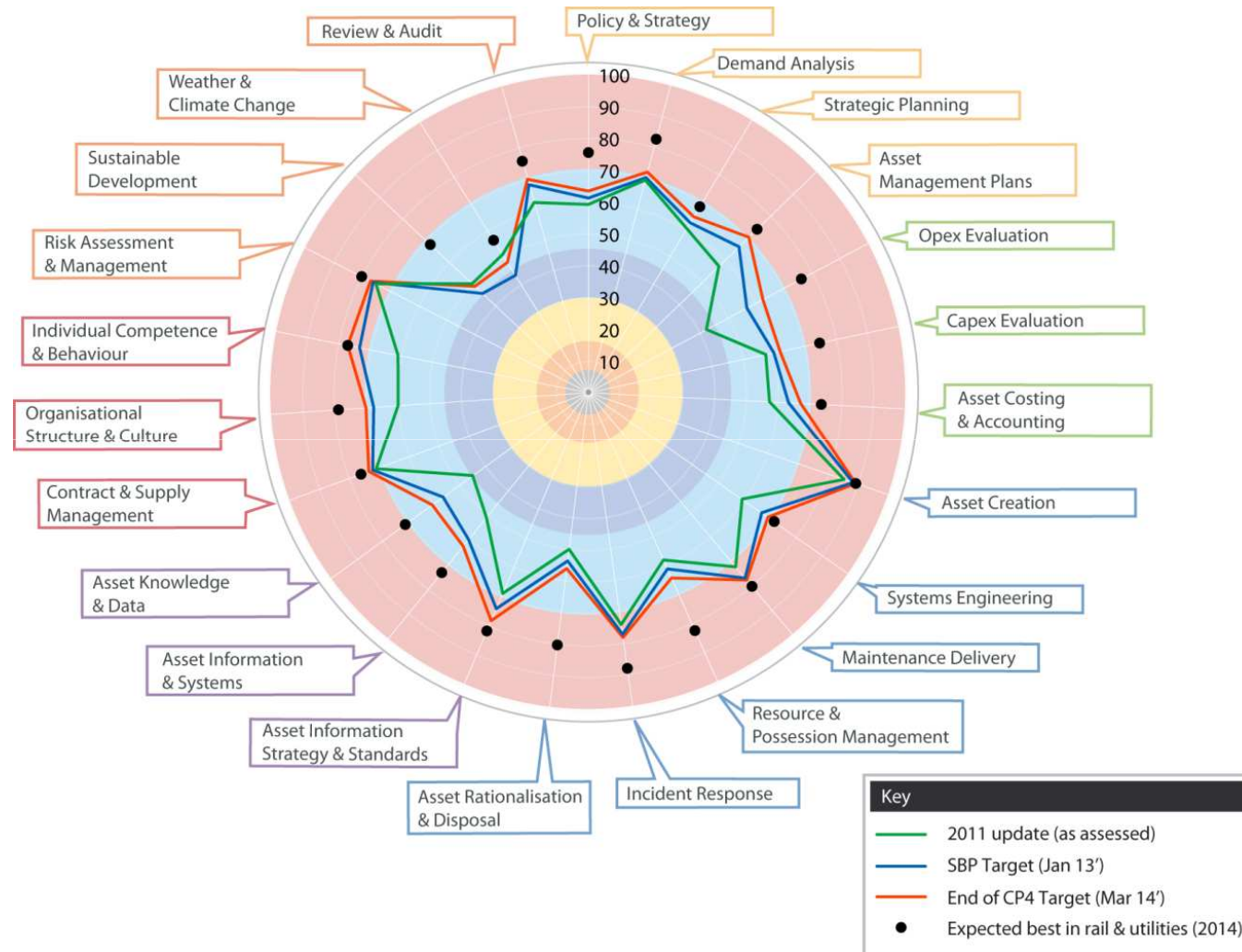


Regular Progress Monitoring

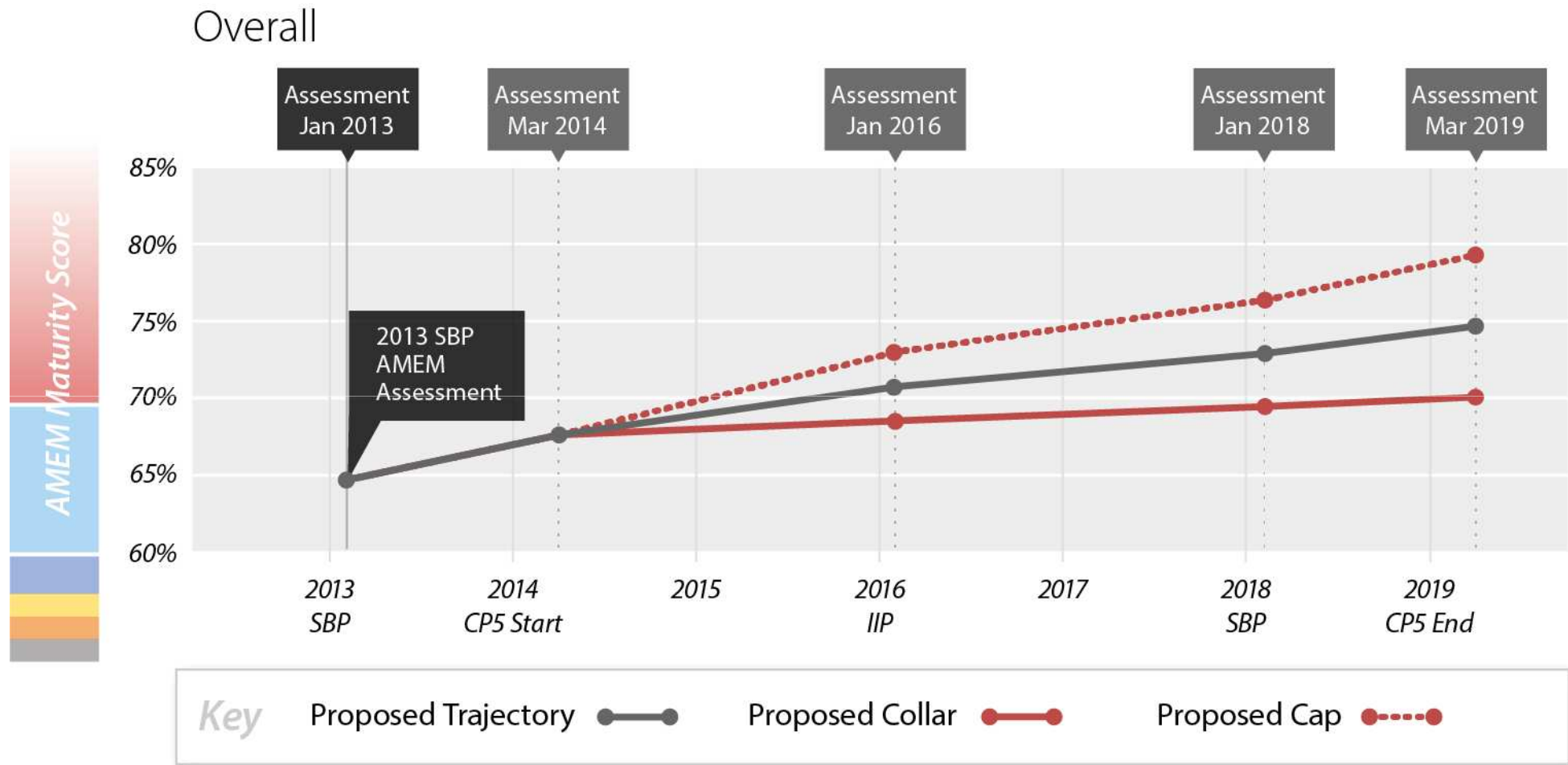


Network Rail Latest Results and current 'frontier'





Proposed 'Cap & Collar' Trajectory for CP5



Summary

- The development of Asset Management capability is being increasingly well defined through the IAM's work
- Compliance to PAS 55 or ISO 55001 sets a foundation on which Asset Management 'excellence' can be achieved
- Asset Management 'excellence' is a context-dependent application of relevant best practices within an industry or sector, which an organisation can demonstrate with respect to its peers
- Network Rail has demonstrated significant improvement in its Asset Management capability since 2006 and is now ready to innovate, challenge and stretch its capabilities through CP5



Asset Management Consulting Limited

