



# UIC Asset Management Global Conference 2015

## Perspectives on Asset Management

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Working Group**

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*Putting your assets  
on the right track*

## AMWG Members

- Austria (OBB)
- Belgium (InfraBel)
- Finland (FTA)
- France (SNCF)
- Ireland (Irish Rail)
- Italy (RFI)
- Norway (JBV)
- Spain (ADIF)
- Sweden (Trafikverket)
- UK (Network Rail)



# Outline

- What is the motivation for investing time and effort in asset management?
- What activities has the AMWG undertaken and what have we learnt from them?
- What are the prospects for the effective implementation of asset management in European railways?

## What motivates AMWG members?

### Size of investment

#### Network Rail budget 2014-19

<i>Renewals</i>	£12.1 bn
<i>Enhancements</i>	£12.4 bn
<i>Maintenance</i>	£5.3 bn
<i>Total</i>	£29.8 bn

### Importance of output

#### Driver of economic growth

- 1.7bn passenger journeys per year*
- 100m tonnes of freight*
- One of safest forms of transport*
- One of greenest forms of transport*

The ultimate cost – benefit challenge?



One Olympic Games

£9bn



One aircraft carrier

£6bn



100 schools

£1.5bn



20 Superjumbos £4bn

What could you buy for £29.8bn?



Man Utd, Barcelona and Real Madrid

£5.5bn



20 hospitals

£2bn

# Activities undertaken by AMWG

- Achieving a common understanding of asset management
- Comparing costs and performance
- Measuring asset management capability
- Sharing good practices

# Activities undertaken by AMWG

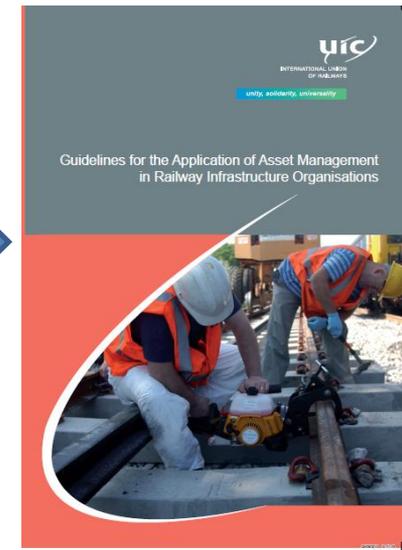
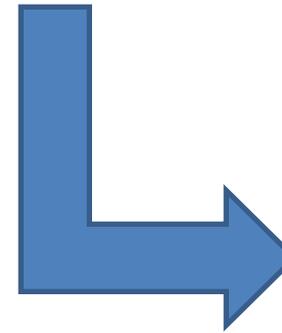
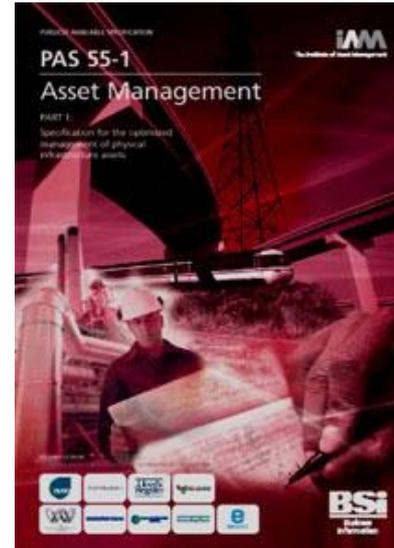
- Achieving a common understanding of asset management
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# Some key questions

- What is the scope of asset management for a railway infrastructure company?
- Who should undertake the role of asset manager?
- Where does asset management sit in the organisational structure?

# Development of AM Guidelines

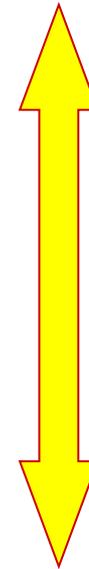
- Initial interpretation of AM for railway infrastructure managers in 2010
- Consistent with PAS 55
- Defined the scope of the asset management system
- It has been a useful reference for AMWG but is now ready for review to align with ISO 55000



# Core processes and activities

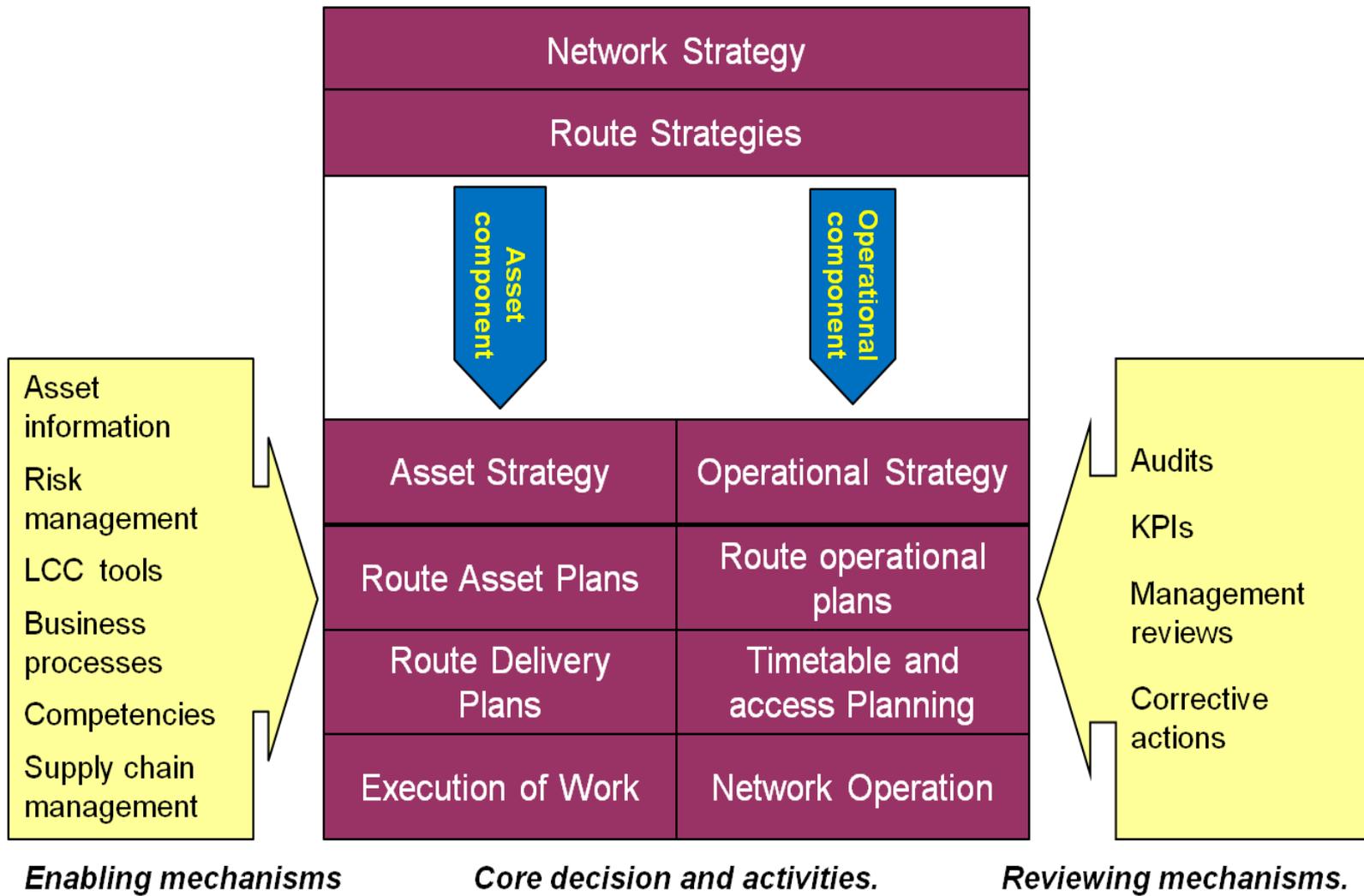
Network Strategy	
Route Strategies	
	
Asset Strategy	Operational Strategy
Route Asset Plans	Route operational plans
Route Delivery Plans	Timetable and access Planning
Execution of Work	Network Operation

Strategy



Implementation

# Completing the framework

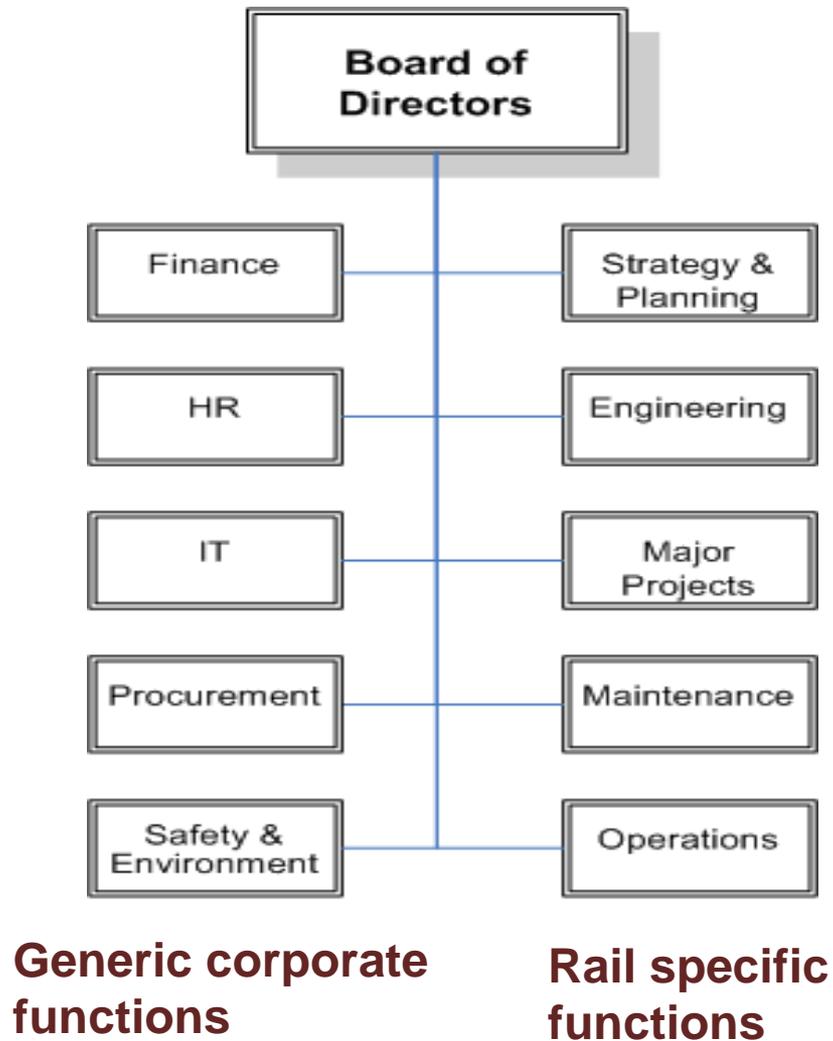


# Who should undertake the role of asset manager?



- No job description can contain all the accountabilities of asset management
- Effective asset management will need a much larger group of people with specialist skills AND an ability to work across functional boundaries

# Where does AM fit in the organisational structure?



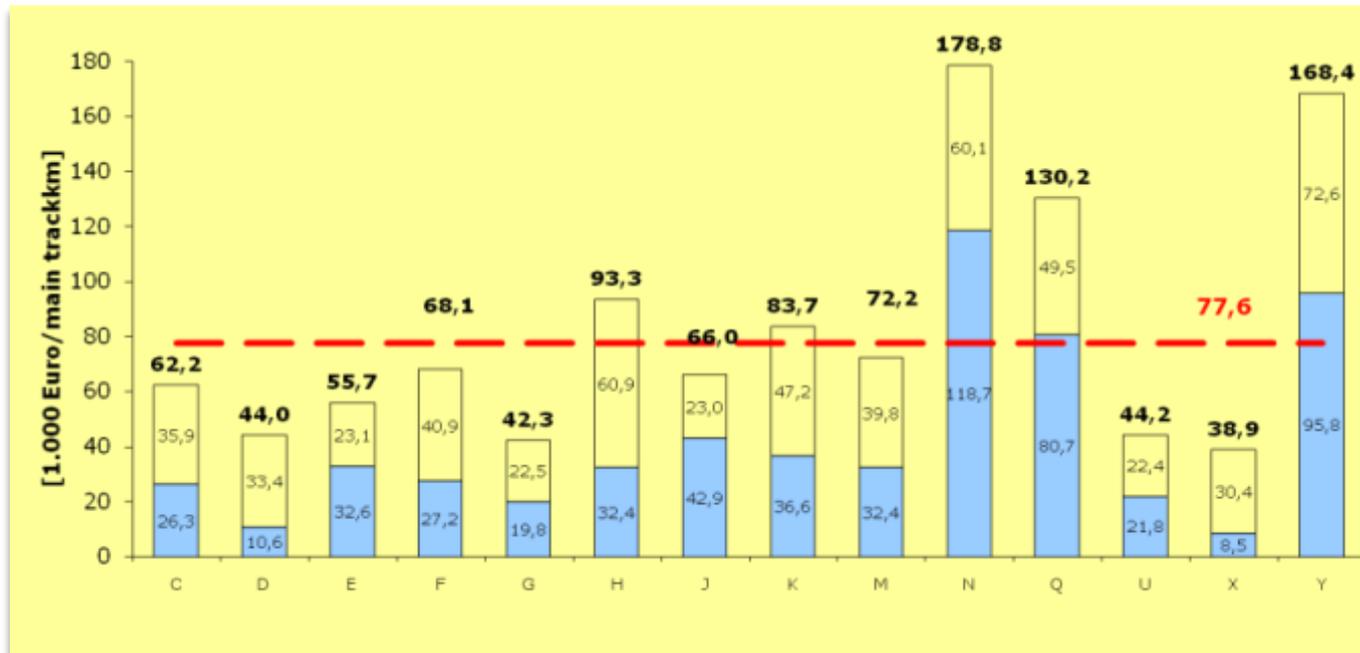
- Asset management activities take place in most functions
- AM is by definition a coordinating mechanism
- Should not be identified with a single function
- There are similarities with other cross-functional disciplines e.g. risk management

# Activities undertaken by AMWG

- Achieving a common understanding of asset management
- **Comparing costs and performance**
- Measuring asset management capability
- Sharing good practices

# Even simple comparisons are difficult

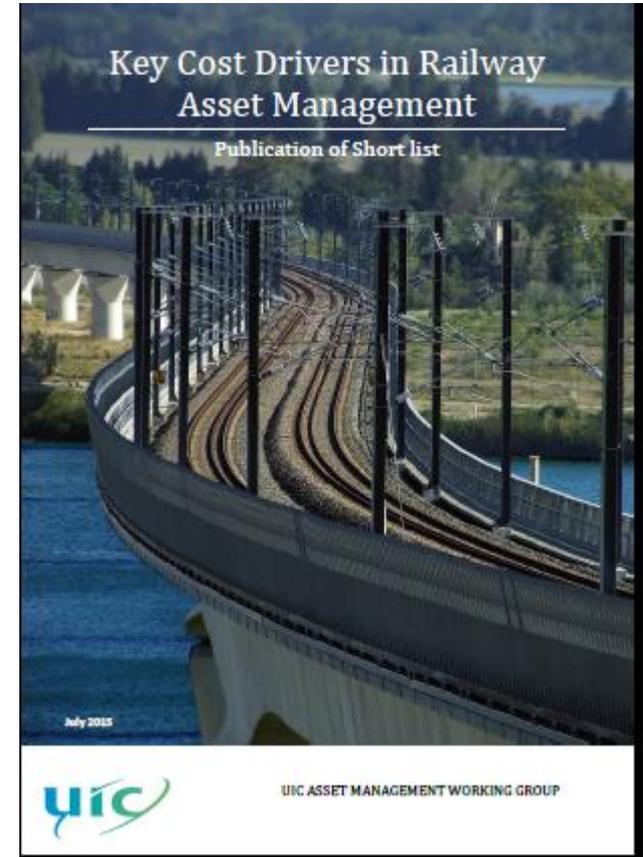
Cost per track km



- UIC LICB has the most comprehensive cost dataset in Europe – 14 participating railways since 1996 (see Frank Zschoche presentation)
- Difficult to normalise to take account of different infrastructure characteristics
- Currently compares only costs, not infrastructure outputs

# Taking a more holistic view

- Better characterisation of cost drivers
  - Cause an intervention to take place  
e.g. degradation due to tonnage, speed
  - Determine how many interventions  
e.g. number of assets
  - Affect the cost of an intervention  
e.g. length of possession
- Inclusion of outputs
  - Safety of passengers, workers, members of the public
  - Punctuality of train services



OXAND report for UIC AMWG  
Final draft July 2015

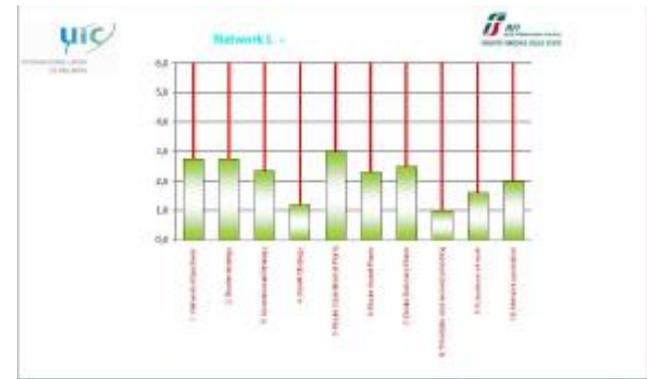
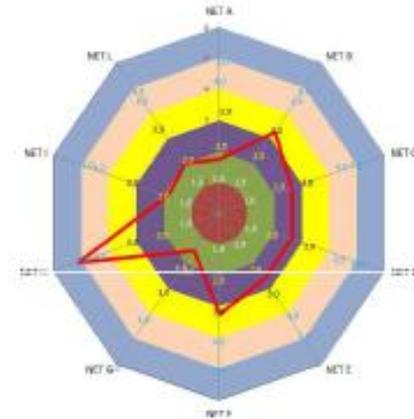
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- **Measuring asset management capability**
- Sharing good practices

# UIC Asset Management Maturity Model

- Based on core processes in UIC Asset Management Framework
- Enables self-assessment by AMWG members
- Supports initial comparisons between companies
- Can be adapted to ISO 55000
- **See presentation by GianPiero Pavirani**

10. Network operation



# Activities undertaken by AMWG

- Achieving a common understanding of asset management
- Comparing costs and performance
- Measuring asset management capability
- **Sharing good practices**

# AMWG good practice examples

Asset Information System	
Maintenance management	
Track M&R planning	
LEAN implementations	
Asset degradation models	

LCC Tools	
Bridge inspection quality	
Asset Strategies and KPIs	
Timetabling and access planning	
Asset data management	

# Looking forward

- What is the motivation for investing time and effort in asset management?
- What activities has the AMWG undertaken and what have we learnt from them?
- **What are the prospects for the effective implementation of asset management in European railways?**

# Status of AM in European railways

- Lots of evidence of good practice in specific areas of asset management
- Majority recognise asset management as a worthwhile discipline
- Few if any railways driving asset management from the top
- Formal adoption of asset management very limited
- **What are the reasons and what can be done about it?**



# Barriers to embedding asset management

- Until recently, there has been a lack of a global standard
- Benefits of adoption difficult to isolate and quantify – business case difficult to justify
- Little perceived difference between asset management and company management – scope too big
- Long term commitment - limited potential for quick wins

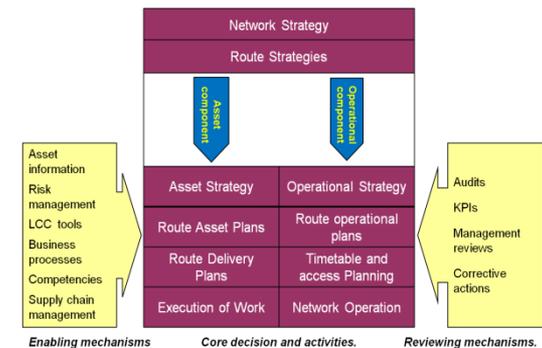
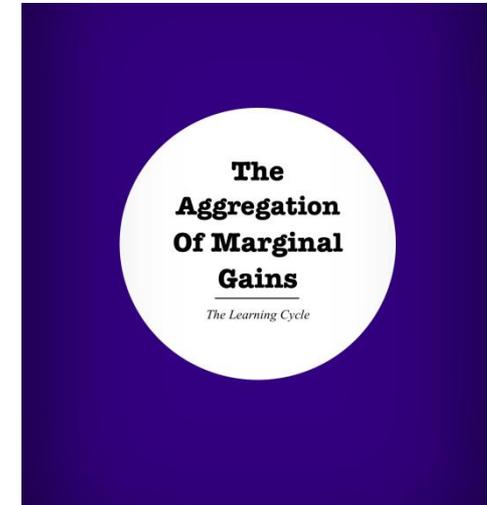


# What the AMWG can do

- Make ISO 55000 practical to implement in our own organisations **(See David McLeish presentation)**
- Support the development of the LICB framework so that it becomes a trusted comparator of costs and performance **(see Frank Zschoche presentation)**
- Help railway organisations assess their maturity in asset management based on ISO 55000 **(see Gian Piero Pavirani presentation)**
- Collect and publish case studies from rail and other sectors to support the business case for asset management improvements **(see Tim Kersley presentation)**

# Conclusions

- The anticipated revolution in asset management hasn't happened and probably won't
- The case for asset management in railways is still strong
- Progress can be best made through marginal gains and aligning activities
- Asset management provides the best framework for directing, prioritising and coordinating improvements





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Thank you