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National Infrastructure Plan 2011 & Infrastructure Cost Review

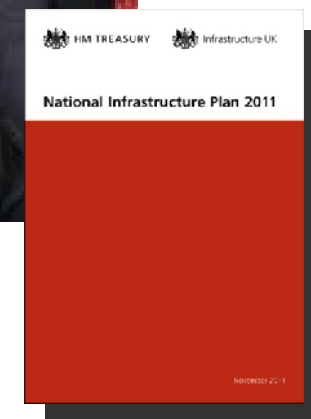
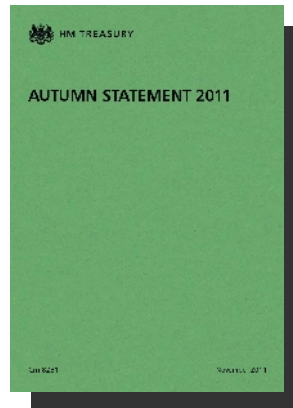
Future Infrastructure Forum

Cambridge University – 18th January 2012

Keith Waller – Infrastructure UK

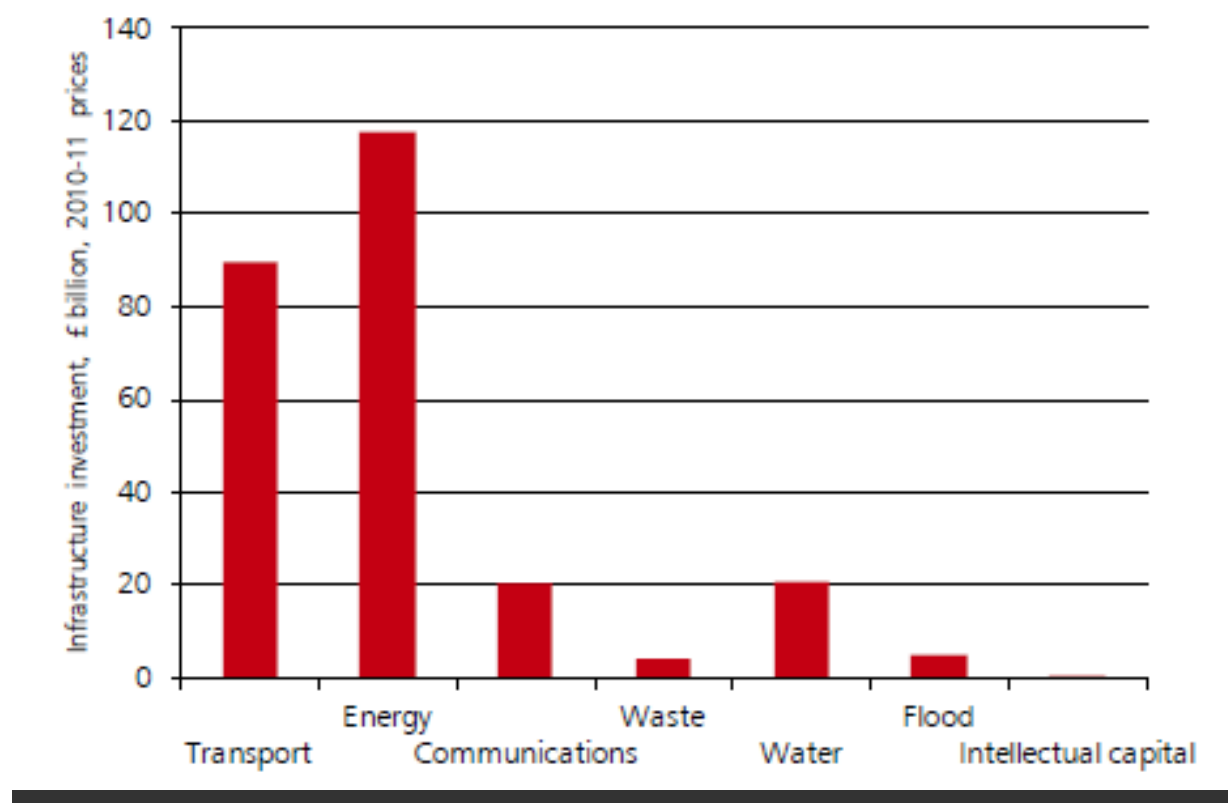


Autumn Statement 2011



UK infrastructure investment pipeline

2010-15 and beyond overall investment in economic infrastructure of around £250 billion across 500 projects and programmes



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National Infrastructure Plan - overview

- A vision for the UK's infrastructure
 - Extensive performance and cost analysis
 - Long-term ambitions for each sector
- Funding and financing infrastructure *investment*
 - New approach to private investment
 - New investment worth £2.7bn
- Focusing on delivery
 - Prioritising major projects through a new Cabinet Committee
 - Bringing down costs in planning and through the Infrastructure Cost Review

The vision – performance and cost analysis

- In general, performance has risen but so have costs

Sector	Evolution of performance since 2005	Evolution of cost since 2005
Major roads	↑	↑
Rail	↑	→
Airports	↓	↑
Ports	↑	↑
Electricity	↑	↑
Gas	↑	↑
Communications	↑	↓
Water and sewerage	↑	↑
Waste	↑	↑
Flood risk management	↑	↓

- In the transport sector, reliability and asset condition have improved, but congestion has increased

	Capacity access and availability	Asset or capacity utilisation	Service quality and reliability	Asset condition
Major roads	→	→	↑	↑
Rail	↑	↓	↑	↑
Airports	↓	--	↓	--
Ports	→	↓	↑	--
Electricity	↑	↑	↑	↓
Gas	↑	↑	↓	→
Communications	↑	--	↑	--
Water and sewerage	↑	↑	↑	↑
Waste	↑	↑	↑	--
Flood risk management	↑	--	--	↑

Source: HM Treasury analysis.

The vision – long-term ambitions for each sector

Transport



Energy



Communications



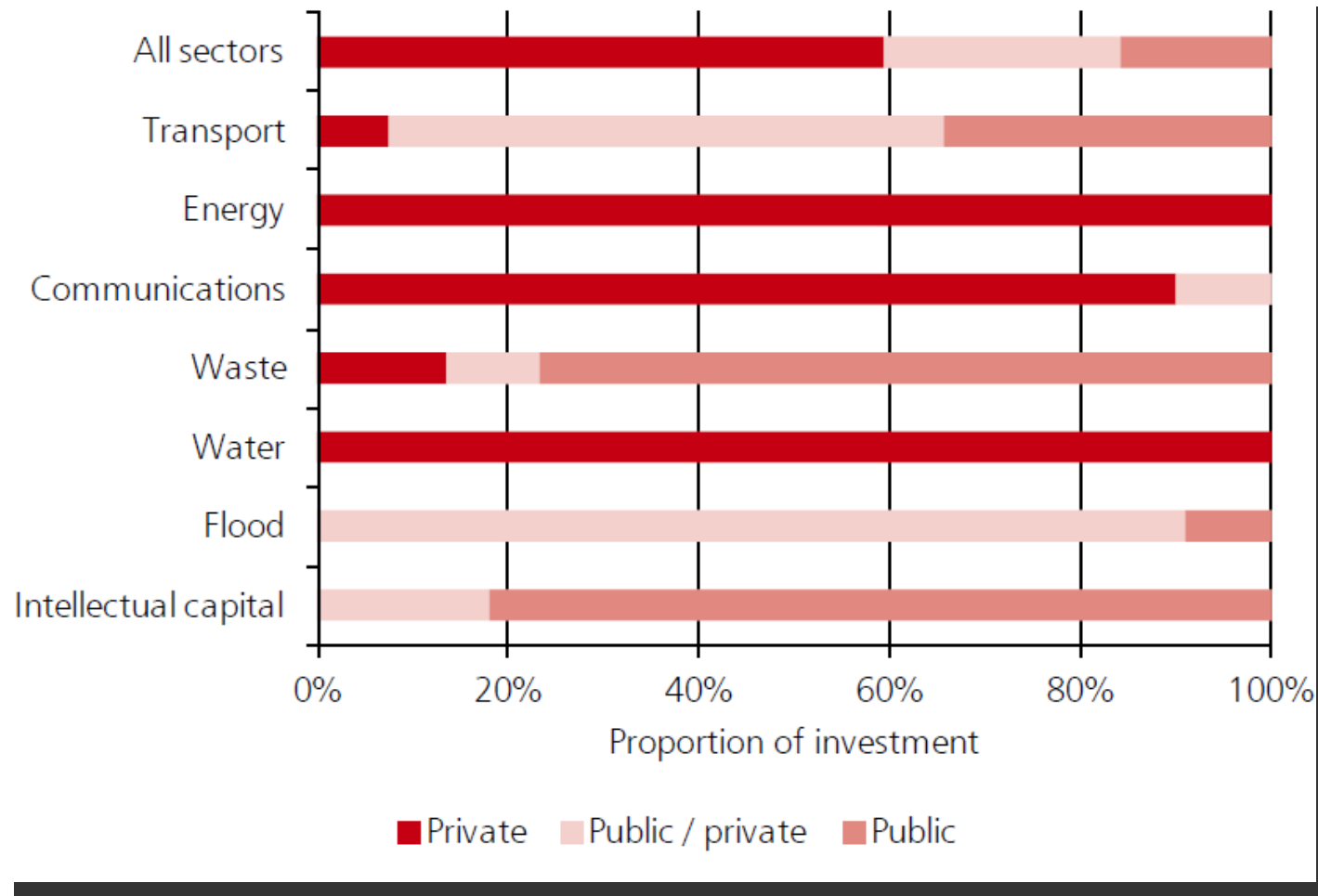
Environmental networks



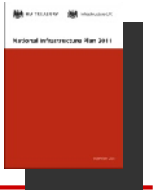
Note: this is a selection from the fuller list of ambitions in the National Infrastructure Plan

Funding and financing – public /private investment

Most UK infrastructure investment is already led by the private sector



Source: HM Treasury analysis.



Funding and financing – public / private investment

The Government is taking a new strategic approach:

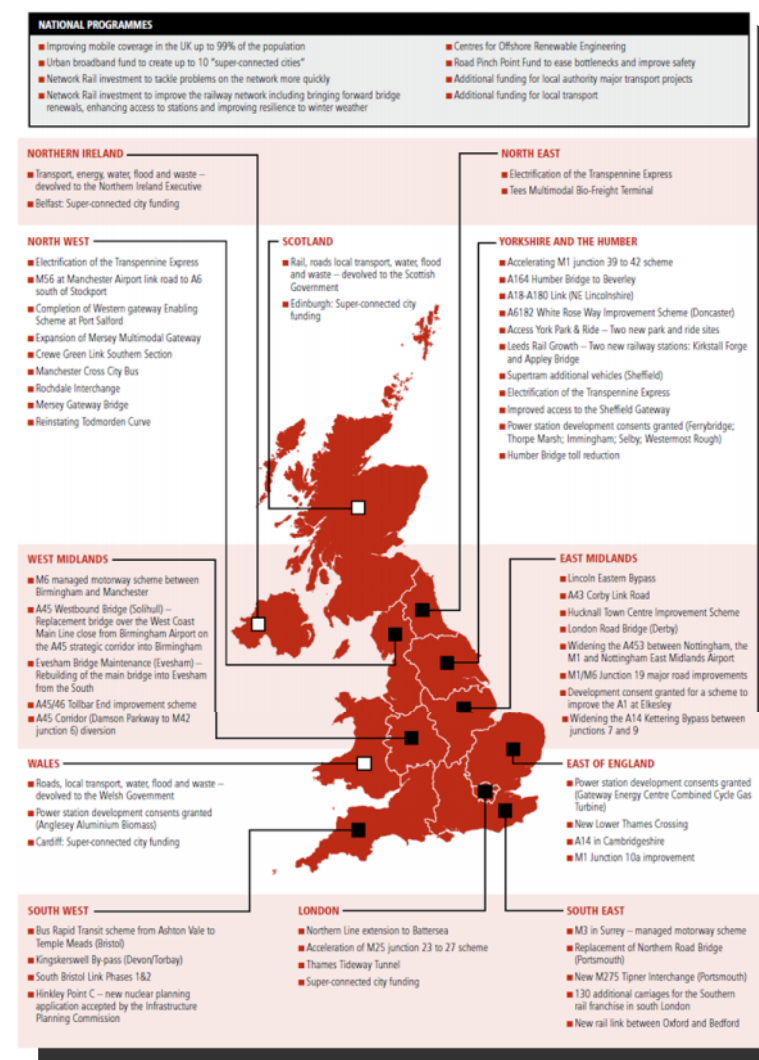
- new investors
- new sources of revenue
- more flexibility for local authorities
- using guarantees

Source: HM Treasury analysis.



Funding and financing – new investment

- £1 billion on roads
- £1.4 billion on rail
- £170 million on local transport
- £100m on broadband



Note: around £1 billion of the investment in railways is funded by Network Rail.

Focusing on delivery – prioritising major projects

- The Government has identified 40 projects and programmes that are of national significance and critical for growth
- A new Cabinet Committee, chaired by the Chief Secretary to the Treasury, will tackle poor coordination and planning and regulatory hold ups to ensure delivery

Transport	
Roads	
Highways Agency programme in construction – pre 2010 Spending Review	New Lower Thames crossing
Highways Agency managed motorways programme – Spending Review projects	Mersey Gateway Bridge
Highways Agency trunk road improvements programme – 2010 Spending Review projects	Local transport projects – funded at or before 2010 Spending Review
Highways Agency – Autumn Statement package	Local authority major transport schemes – development pool projects
Alternative approaches to resolving issues along the A14 corridor	
Public transport	
Crossrail	Reading upgrade programme
Thameslink	High Speed Two (subject to consultation)
Rail infrastructure and rolling stock enhancement	Northern rail connectivity (Liverpool-Newcastle including Northern Hub)
East Coast Main Line	Intercity Express Programme
Great Western Electrification	London Underground investment programme
Kings Cross Station improvements	Northern Line Extension to Battersea
Airports	
Gatwick capital investment programme	Heathrow capital investment programme
Ports	
Ports – container terminal projects	Ports – renewable energy projects
Local infrastructure funding programmes	
Growing Places Fund	Regional Growth Fund
Energy	
Electricity generation – new nuclear investment	Electricity generation – wind energy investment
Carbon Capture and Storage investment	Electricity and gas transmission and distribution investment
Electricity generation – gas investment (CCGT)	Smart meters
Electricity generation – biomass investment	
Communications	
4G mobile auction and rollout	Fixed broadband investment – private and public
Rural mobile coverage	Urban broadband fund
Water and sewerage and flood risk management	
Thames Tideway Tunnel	Flood and coastal erosion risk management programme (including Thames Estuary 2100)



Focusing on delivery – efficiency and innovation

- **Reforming the planning system**

The Government will:

- reform statutory consultees
- speed up the consenting system
- rebalance the consenting process
- build more flexibility into planning
- review the Habitats & Wild Birds Directives

- **Implementing the Cost Review**

The Government has:

- published the construction and infrastructure pipelines
- committed to streamlining procurement processes and better engagement with suppliers
- Started piloting Project Bank Accounts
- started driving out duplication and redundancy in technical standards

Focusing on delivery - Infrastructure Cost Review

- National benchmarks and industry indices constantly place UK in upper quartile of peer group comparables on construction costs
- Project benchmarking:
 - HS Rail costs at least 23% higher in UK
 - Major stations as much as 50% more expensive
 - Roads 10% higher but potential for greater efficiencies
 - Tunnelling contract costs comparable but overall project costs higher
- Best practice examples – suggest savings of 15% to 20% achievable.



Focusing on delivery – improving public procurement

The Government will implement a package of measures that incorporates best practice from the EU and private sector to:

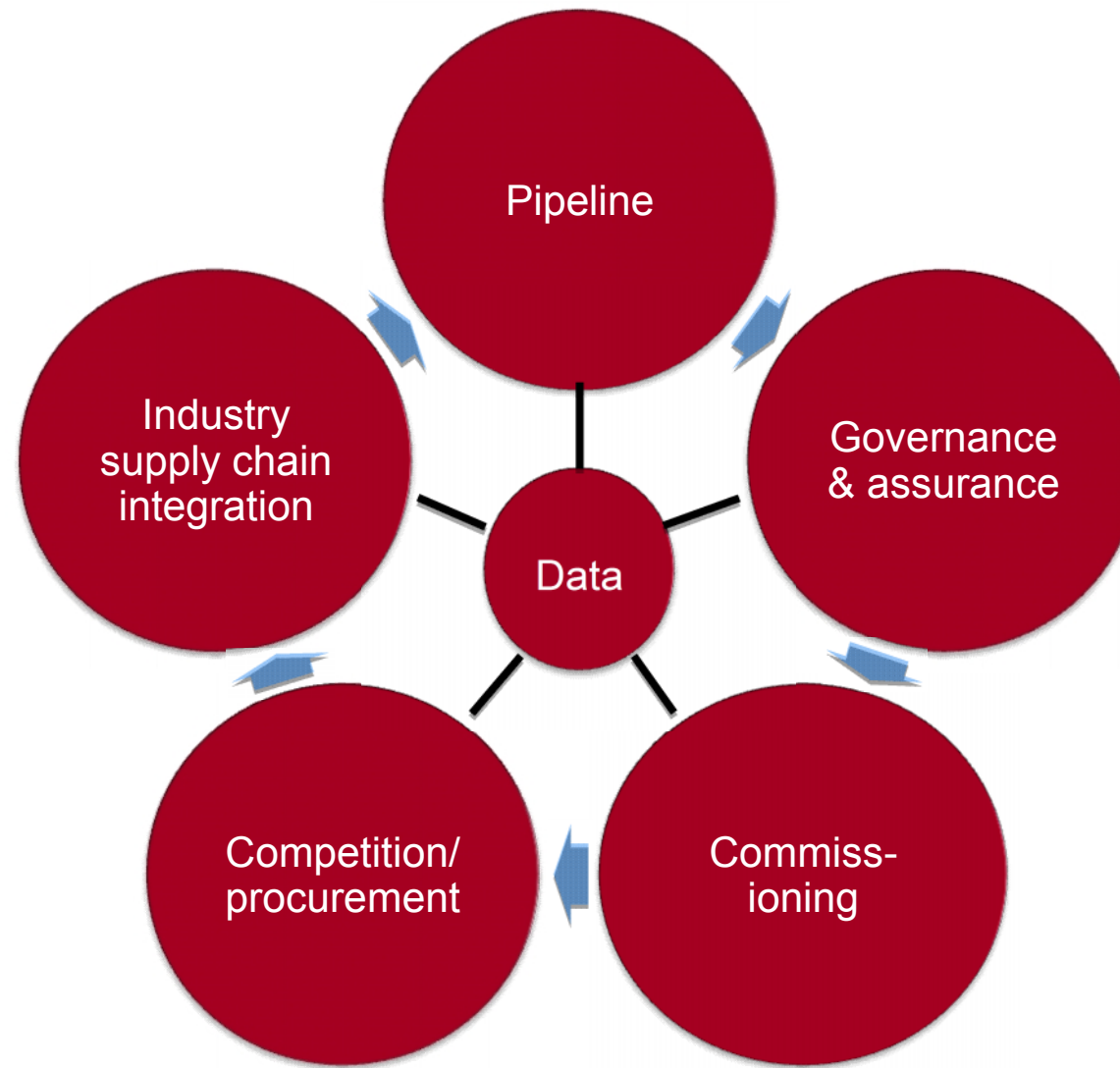
- publish rolling medium term pipelines for its forward procurements
- utilise the visibility of the pipeline and improved strategic dialogue with suppliers
- make better use of pre-procurement dialogue with suppliers at all levels
- make a presumption against the use of competitive dialogue where it cannot be demonstrated that it offers the best value for money route
- implementing LEAN sourcing principles from January 2012
- Review of the Private Finance Initiative (PFI).

Building on the Pipeline – Opportunities for Improvement

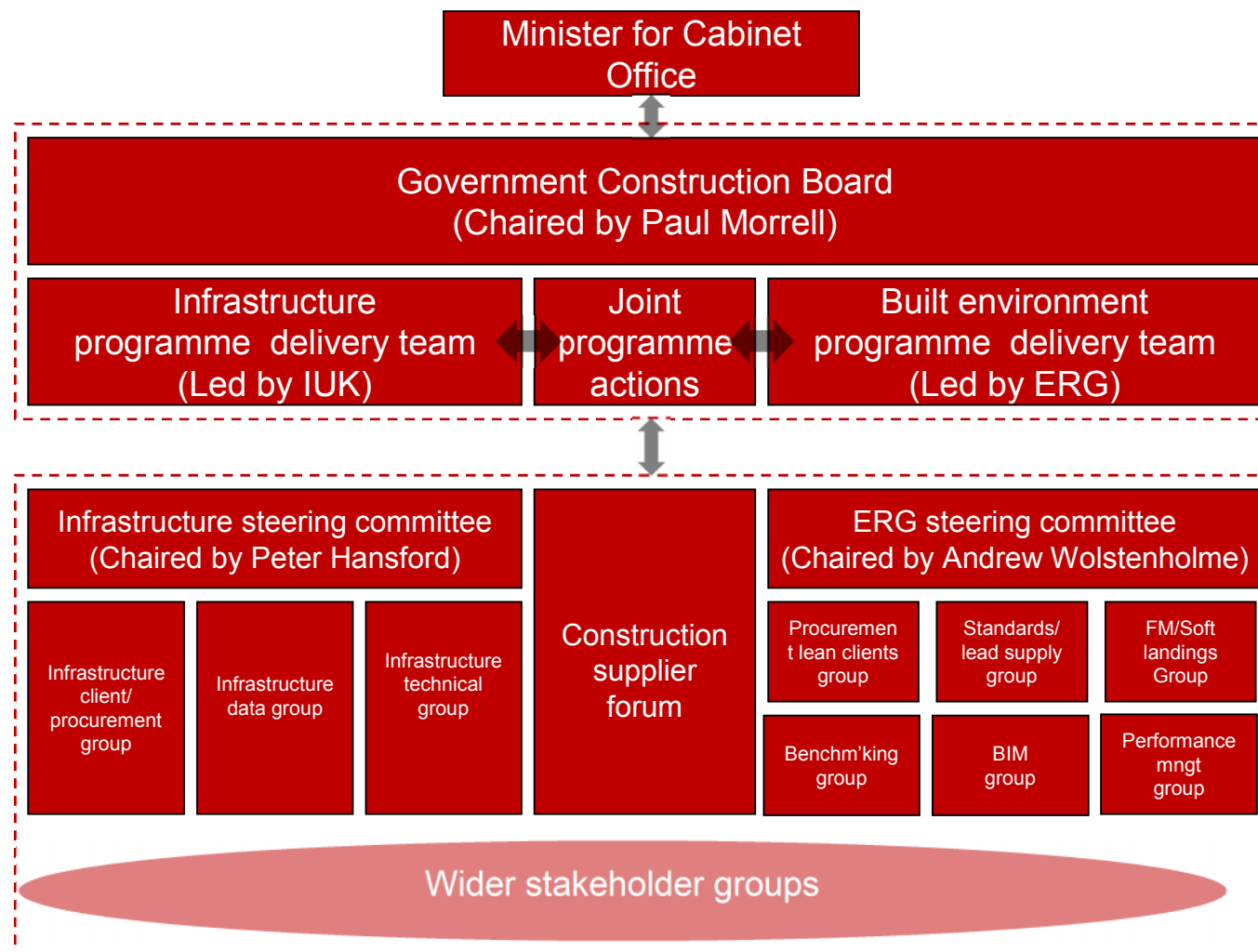
- Having published the infrastructure pipeline – what next?
- Commitment to improve the procurement process
- Real opportunities to use the pipeline to:
 - Identify capability and capacity gaps
 - Invest in skills and products
 - Develop cross-sectoral approaches and solutions
 - Build standard products to solve common problems, off site manufacture, BIM
- Requires a better partnership between government, academia and industry
 - How best to develop a sustainable process for the partnership?



Focusing on delivery – Future Cost Review outputs



Focusing on delivery – collaborative approach





Links

National Infrastructure Plan

www.hm-treasury.gov.uk/national_infrastructure_plan2011.htm

Infrastructure Cost Review

http://www.hm-treasury.gov.uk/iuk_cost_review_index.htm

