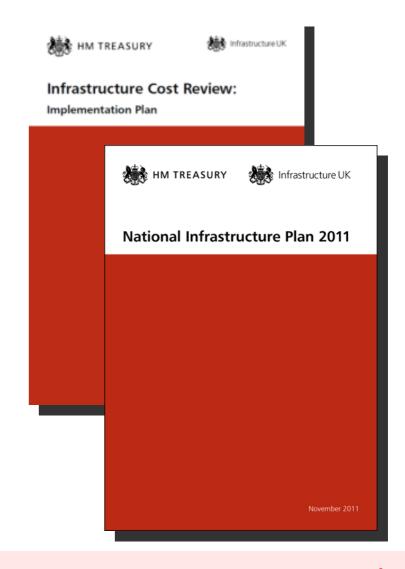


National Infrastructure Plan 2011 & Infrastructure Cost Review

Future Infrastructure Forum

Cambridge University – 18th January 2012

Keith Waller – Infrastructure UK



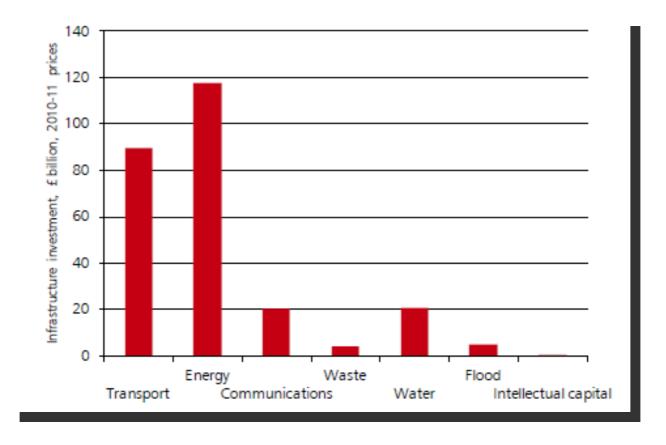
Autumn Statement 2011





UK infrastructure investment pipeline

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



Michigan (1994) - Michigan (19

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

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The vision – performance and cost analysis

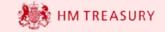
 In general, performance has risen but so have costs

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

 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	V		•	
Ports	→	V	^	
Electricity	^	^	^	•
Gas	^	^	•	→
Communications	^		^	
Water and sewerage	↑	^	↑	↑
Waste	^	^	^	
Flood risk management	↑			↑

Source: HM Treasury analysis.



Microsoft Microsoft National Section (Microsoft Information of the 2011)

The vision – long-term ambitions for each sector

Transport



Energy



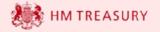
Communications



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

Environmental networks

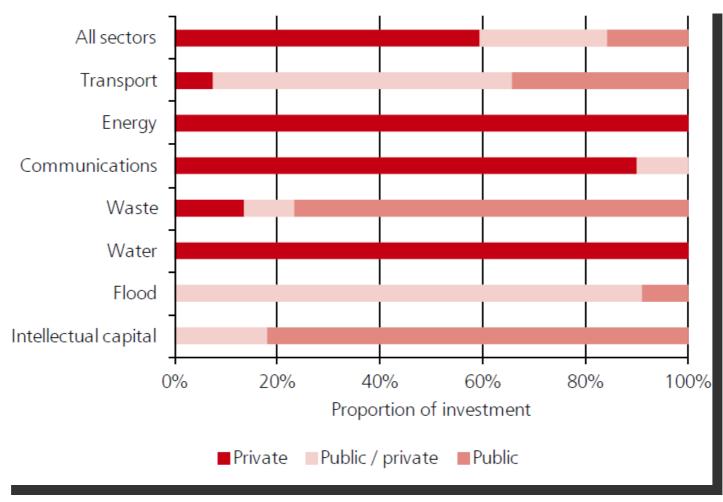




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Funding and financing – public /private investment

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





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

Iransport				
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 201 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)			

My northister My name of the 2011

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.







The Charter commitments

The Charter aims to change behaviours and working practice for infrastructure delivery. Government will seek to change behaviour to:

- provide improved transparency and certainty around the infrastructure forward programme;
- group projects into more efficient longer-term programmes with clear outcome based objectives;
- encourage innovation and allow for earlier and integrated supply chain involvement through improved competition and procurement processes;
- seek the best whole life outcome rather than seeking the lowest cost for a given specification;
- select supply chain partners on the basis of their ability to deliver innovative solutions set against transparent and affordable cost targets and long-term outcomes;
- develop appropriate client technical expertise and intelligent commissioning capability and make better use of infrastructure data to support decision making and the setting of cost targets; and
- create the environment for industry to invest in new technologies and skills improvement to deliver greater outcome-based efficiencies.

Government will look to industry and its leaders to:

- 1. improve the industry's coordination and communication with Government;
- be proactive in supporting Government and infrastructure clients to develop and implement new models of procurement and other means to reduce costs and remove wastage;
- develop long-term strategies to invest in innovation, training and improve safety, productivity and skills; and
- promote industry collaboration and joint venturing as a means to improving efficiency and growth.

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His charter has been disableded to complement rather than recision her practice such as the 2012 Commission Commissions, the Fair Charter and other more conditions and other than

Measures of success

Give a west will ended these objective and believine of the age into the public sector and where appropriate will well-with industry, applicably let the not please will a lift and as an another, to an analysis had walled incharacterion.

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int developmen

This Charter has been developed by Government with the support and and distance of the following organisations. These registerations are minimal to working with following medit to involve and record on implementation of the Charter access develope industry.









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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:

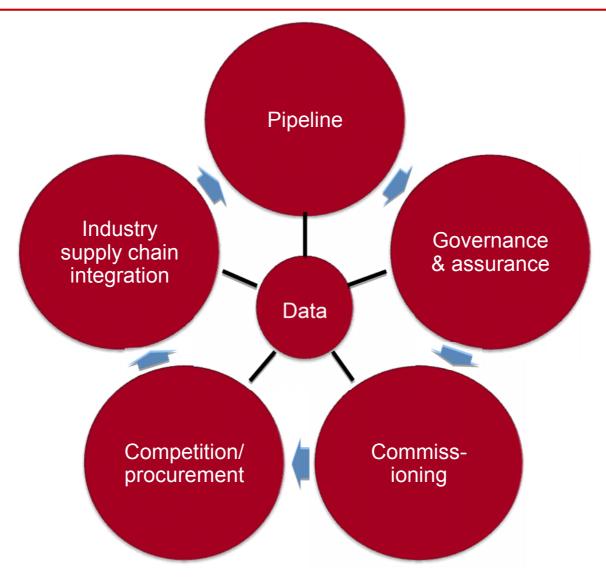
- publish rolling medium term pipelines for its forward procurements
- •utilise the visibility of the pipeline and improved strategic dialogue with suppliers
- make better use of pre-procurement dialogue with suppliers at all levels
- make a presumption against the use of competitive dialogue where it 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?

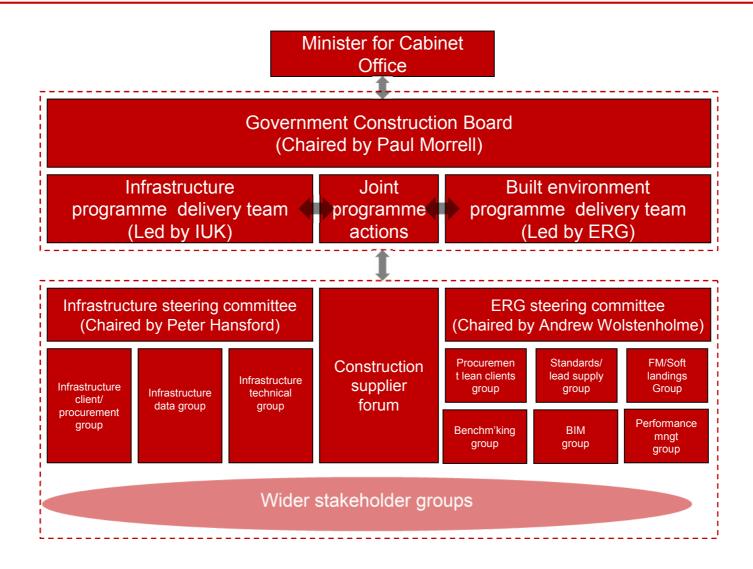
Manuscraft Cell Forces suit Report

Focusing on delivery – Future Cost Review outputs

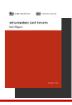




Focusing on delivery – collaborative approach



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