



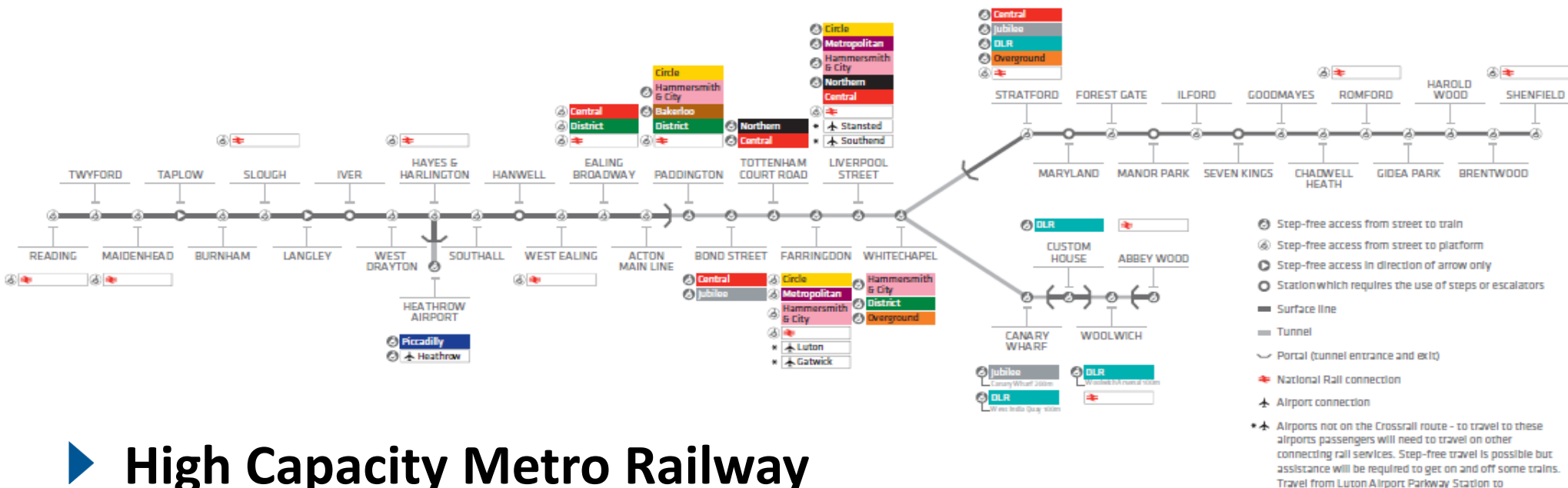
- 08:30 - 10:30**      **Crossrail @ Paddington**
- 10:45**              **Train departs for Reading**
- 11:20 - 12:30**      **Thames Water @ Reading**
- 12:30**                **Coach departs for Maidenhead**
- 13:15 - 15:30**      **Costain @ Maidenhead (lunch from 13:15)**
- 15:30**                **Coach departs for Maidenhead Station /  
train to London**



# ◀ Costain – capital markets day 5<sup>th</sup> November 2014

- ◀ Andrew Wolstenholme
- ◀ Chief Executive
- ◀ Crossrail Ltd

# Delivering benefits



## ► High Capacity Metro Railway

10  
new stations

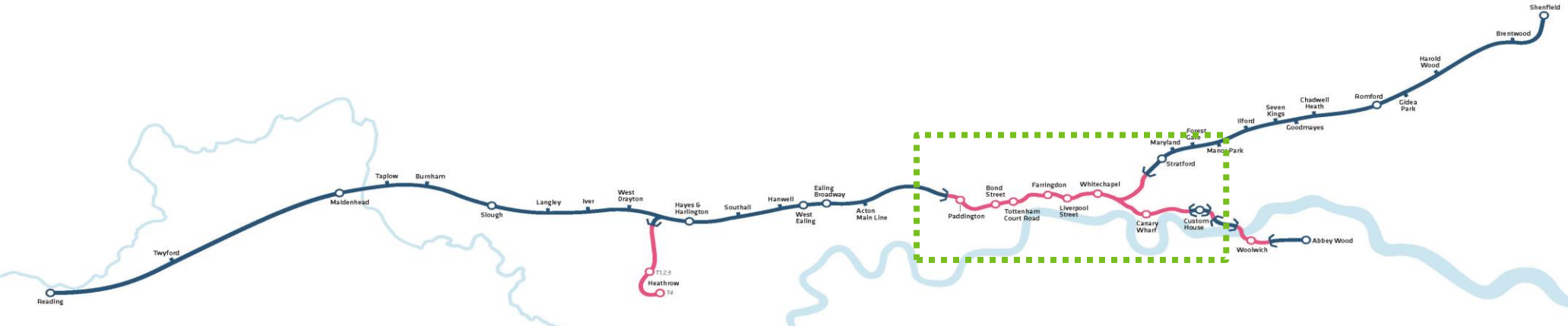
21  
boroughs

40  
connections

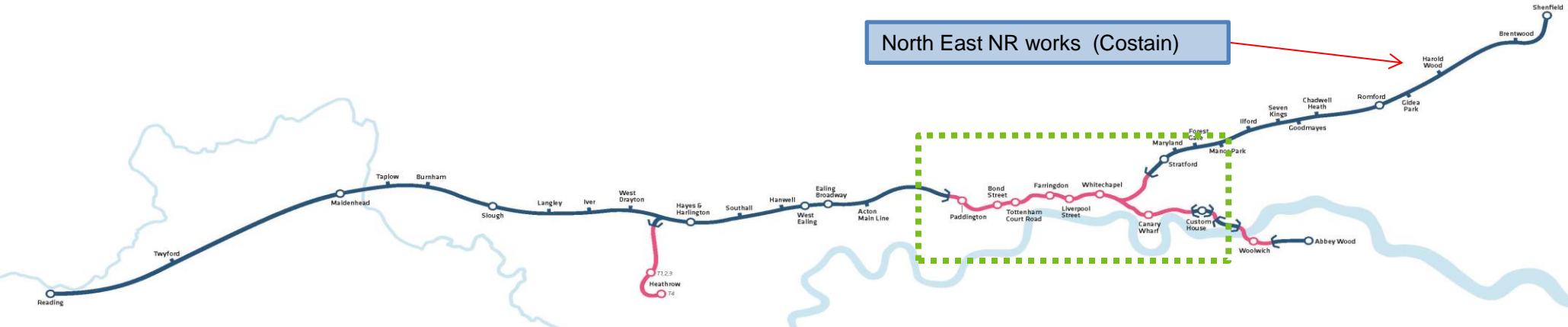
1.5m  
commuters

£42bn  
economic  
benefit

# Crossrail route



# Crossrail route



- Royal Oak Portal (CSJV)
- Paddington New Yard (Costain)
- Paddington Main Works (CSJV)
- Bond Street Station (CSJV)



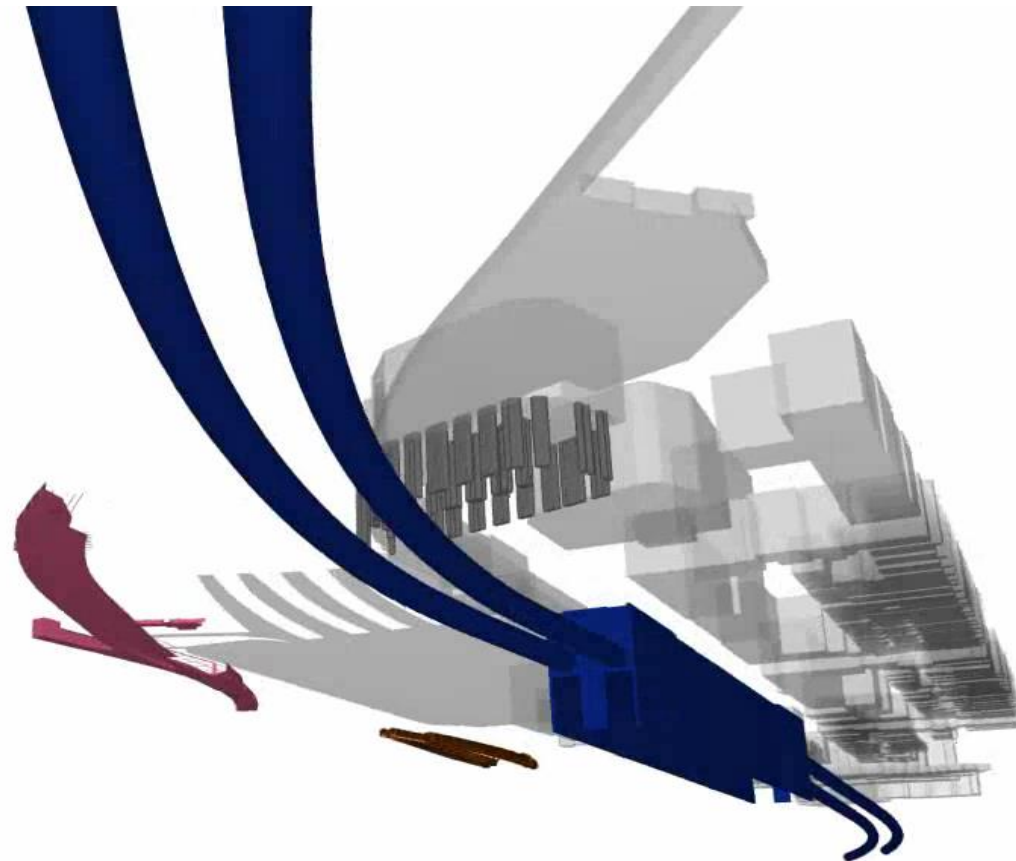
Paddington New Yard (Costain)

Eleanor Street shaft Civils (CSJV)

System-wide, traction power and non-traction power (ATC JV)



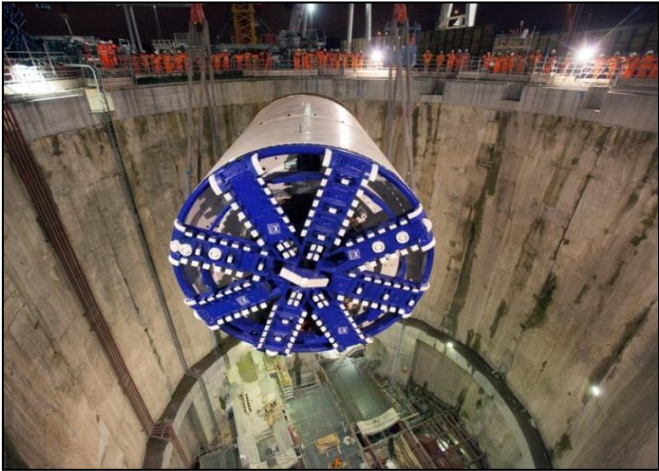
# 42 km of new Tunnels



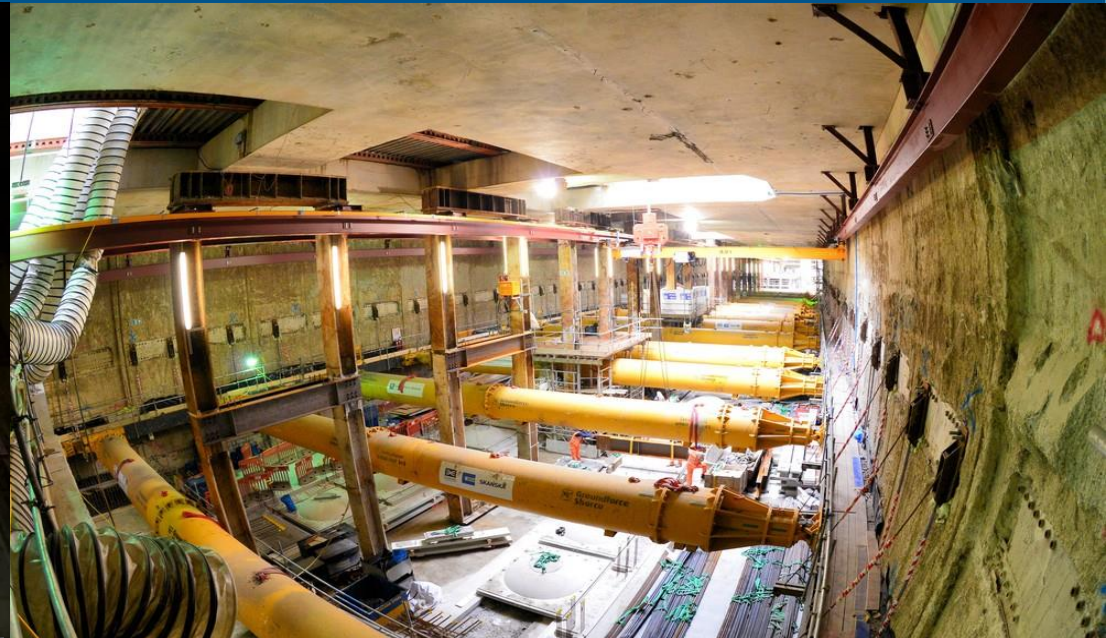
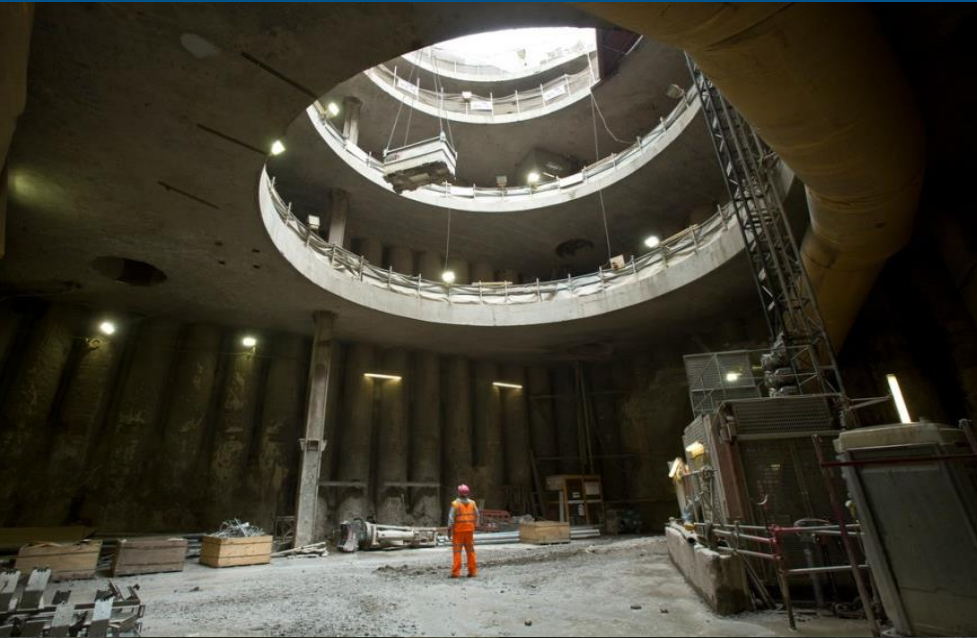
Paddington Station     



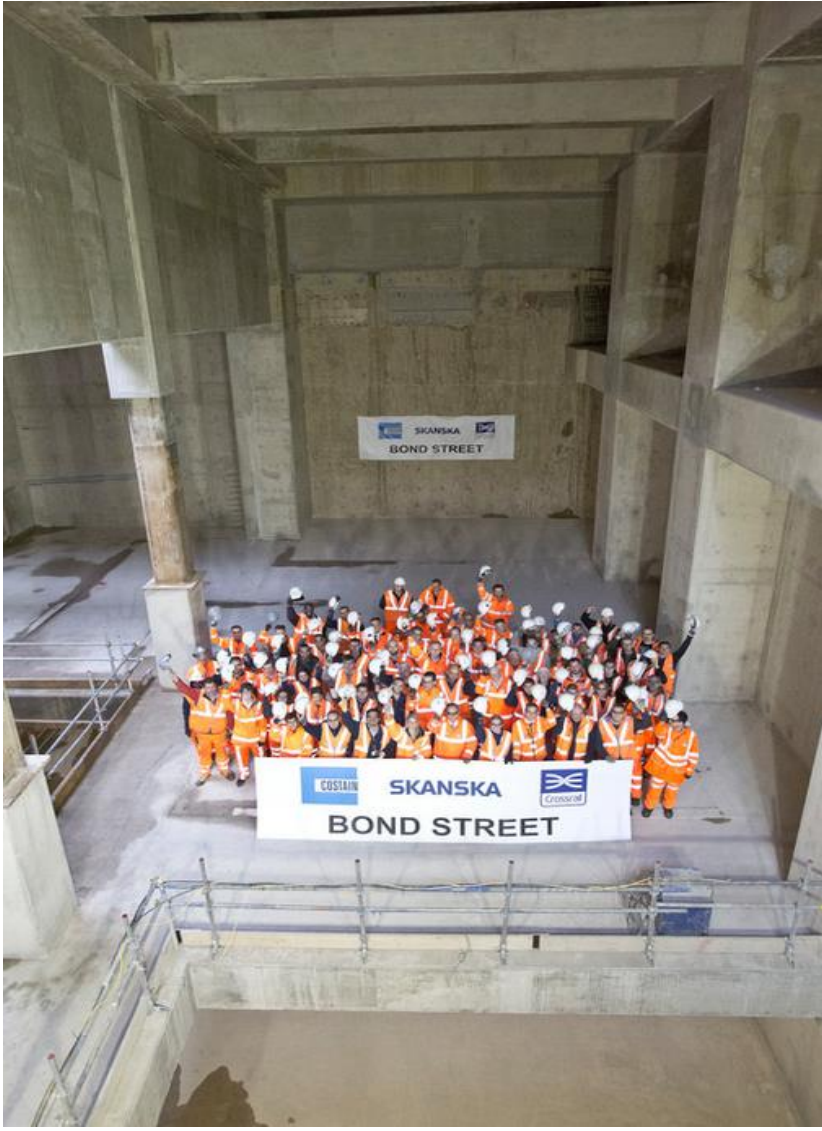
# Managing the tunnelling risk



# Stations 50% complete



# Bond Street



# Paddington



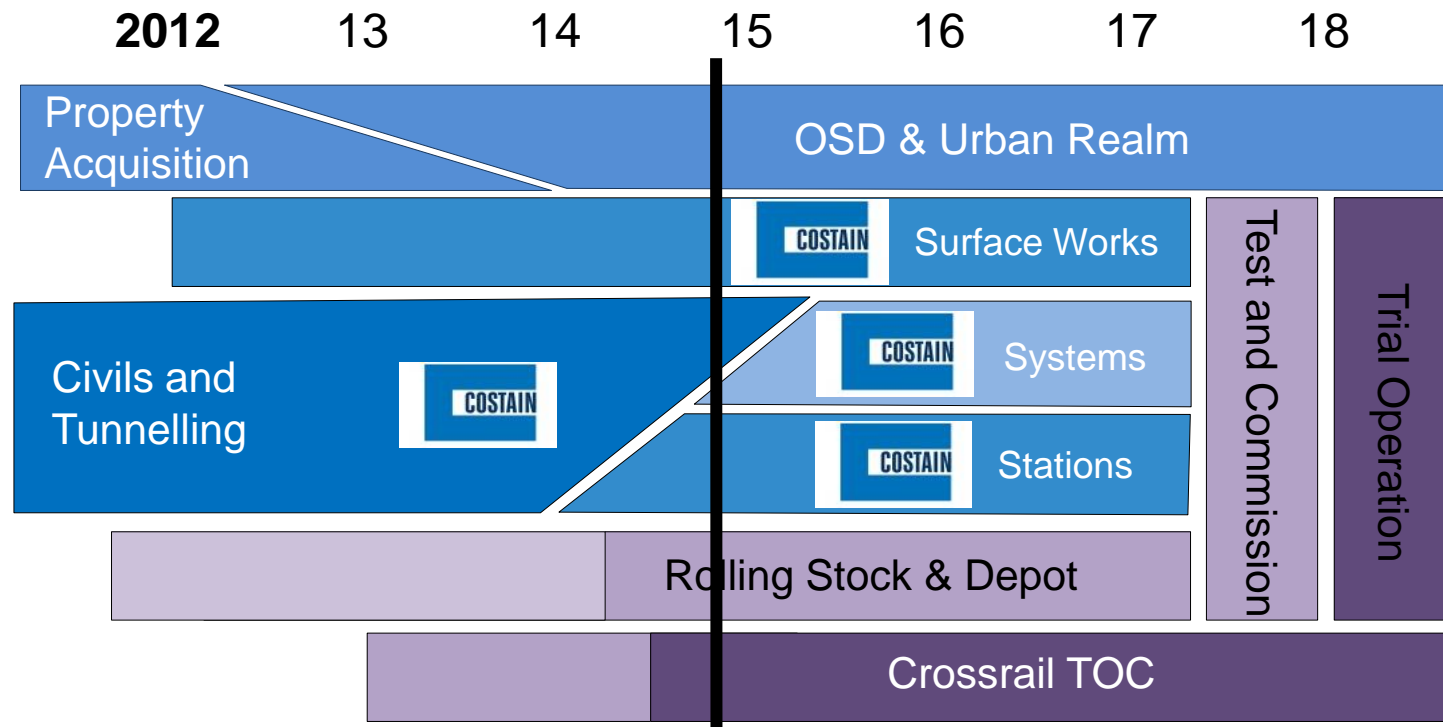
# On time, on budget



# Delivering a railway



# A complex programme



# Sustainability



## Economic

- 75,000 business opportunities
- 97% of contractors based in the UK
- 3 in 5 contractors based outside London
- Over 60% SMEs



## Economic

- £42bn GDP benefit
- Over 1000 operational jobs
- Enable 57,000 new homes
- Secures London's place as a world city



## Social

- 14,000 employed on sites
- Over 55,000 jobs supported in UK
- Over 400 apprentices
- Compulsory HGV driver training



## Social

- 1.5m people within 45 mins of London
- Urban realm designed to complement Crossrail stations & local communities
- A legacy of skills, expertise and experience



## Environment

- 57,000 tonne carbon savings
- 97% recycled excavated material
- 32% of construction material recycled
- Wallasea Island RSPB nature reserve

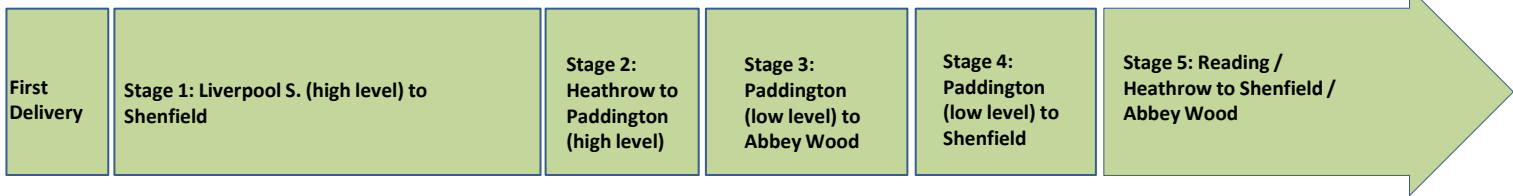
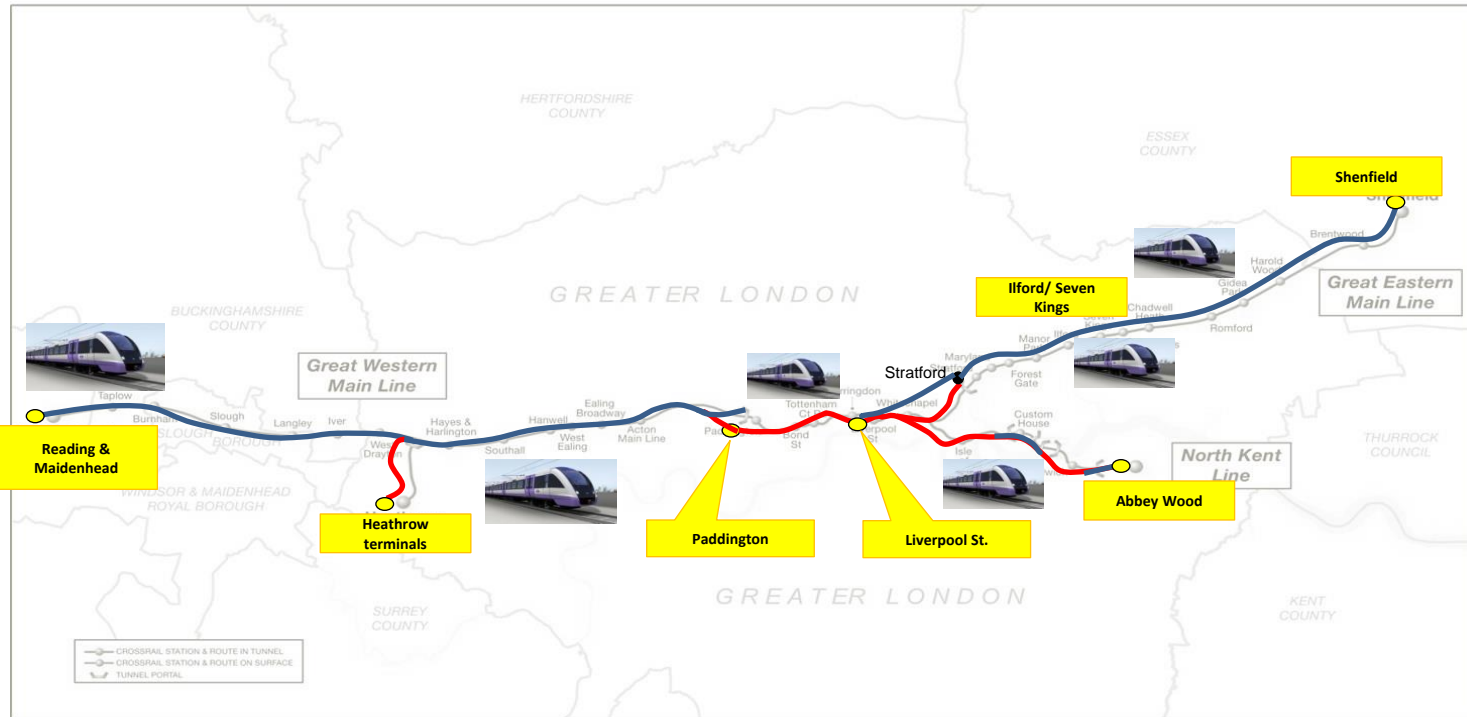


## Environment

- 50% reduction in train noise
- 23% improvement in station energy consumption
- Lightweight trains & regenerative braking



# Delivery Phases



# ◀ Infrastructure - The next 20 Years

## National Infrastructure Plan

- ▶ £375bn Pipeline
- ▶ Energy and transport see the highest investment
- ▶ 40 Priority Projects



Energy



Super-connected cities



Roads



Railways



Ports



Water



Flood defence



Airports

# Moving London Forward



# Costain's involvement with Crossrail

Darren James, Managing Director: Infrastructure

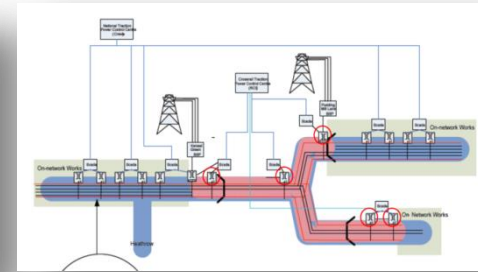
Isabel Coman, Project Director



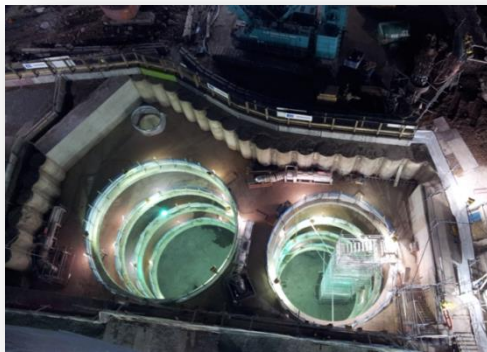
# Costain and Crossrail

- > Key delivery partner on scheme through to completion in 2018
- > Broad range of integrated services including:
  - > Railway systems integration
  - > Power supply
  - > Civil engineering
  - > Utilities
  - > Design and commissioning
- > Extensive & varied involvement over 13 contracts
- > Six projects successfully completed to date

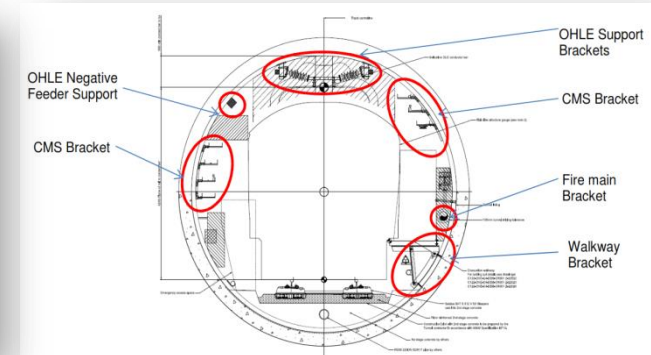
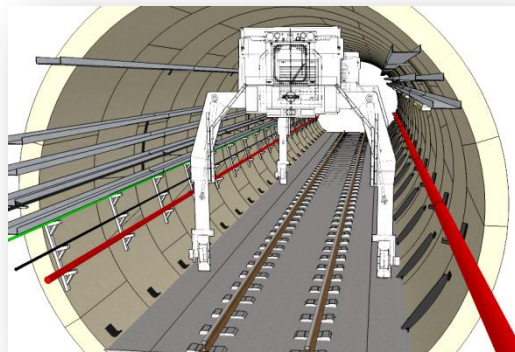
## Traction Power



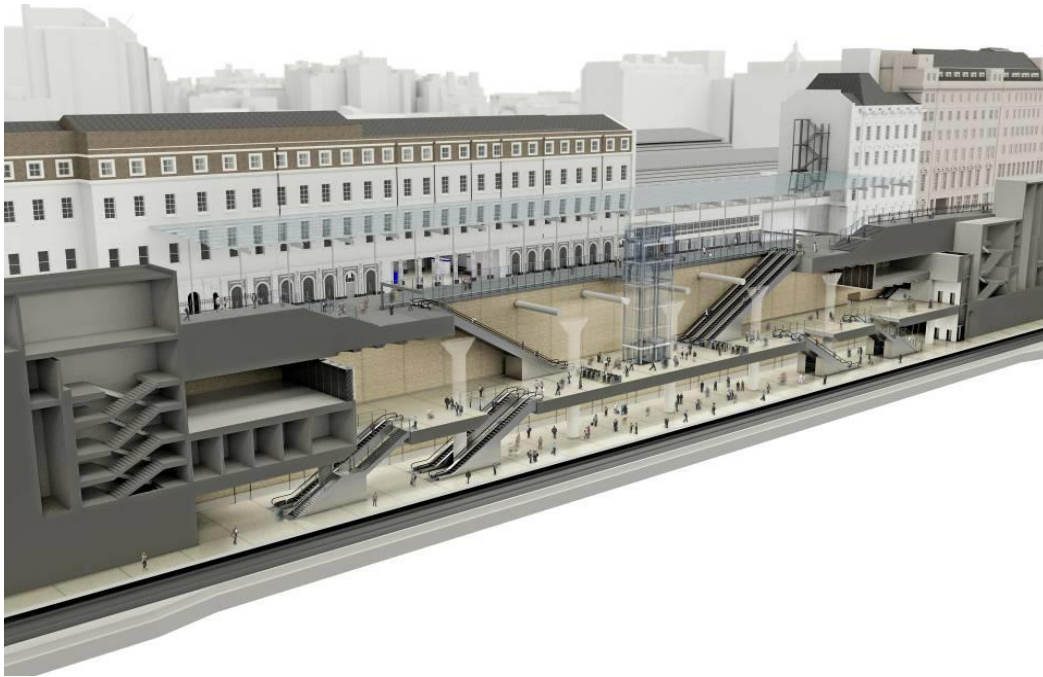
## C412 Bond Street Main Station Works



## C610 Systemwide



# Crossrail Paddington



## Project scope

- Innovative delivery solution: new station within a deep underground 260m x 26m x 32m 'box'
- Station entrance, concourse, ticket office, lifts / escalators to extended platforms to accommodate new, longer air-conditioned trains
- JV with Skanska: c. £300m contract value

## Integral hub for Crossrail

- Inter-connections with mainline, underground, TfL and Heathrow Express services
- Up to 24 trains per hour between Paddington and Whitechapel during peak periods
- Each train carrying maximum of 1,500 passengers

## Construction stats

- 250,000m<sup>3</sup> of spoil; 14,000mt of steel; 170,000mt of concrete; 80,000m of cabling
- Power supply enough for 750 homes
- Ventilation fans moving volume of air equivalent to 1 Olympic pool every 10 seconds

# Safety Briefing



# En route to Reading

Darren James, Managing Director: Infrastructure





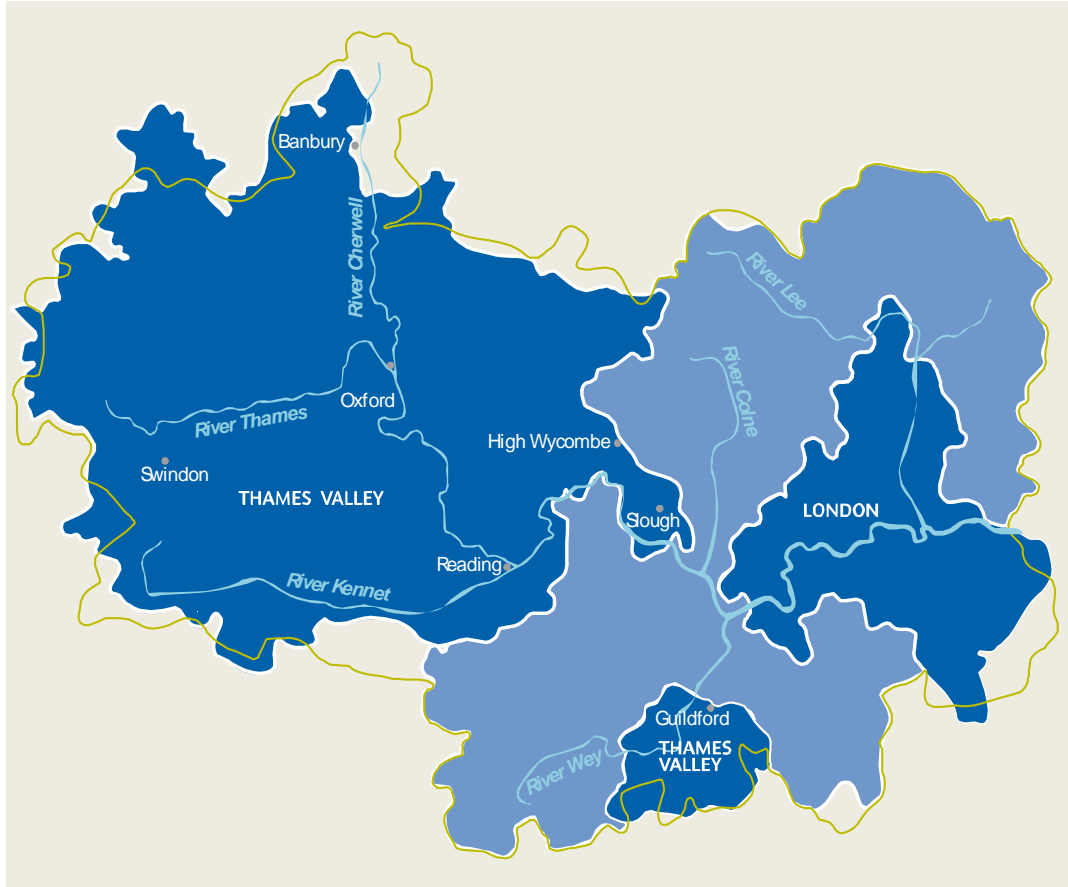




# Delivering AMP6

Martin Baggs – CEO Thames Water

# The UK's largest water and sewerage company



- 14 million wastewater customers
- 9 million water customers
- 66,500 miles of sewer network
- 2,600m litres of water supplied a day

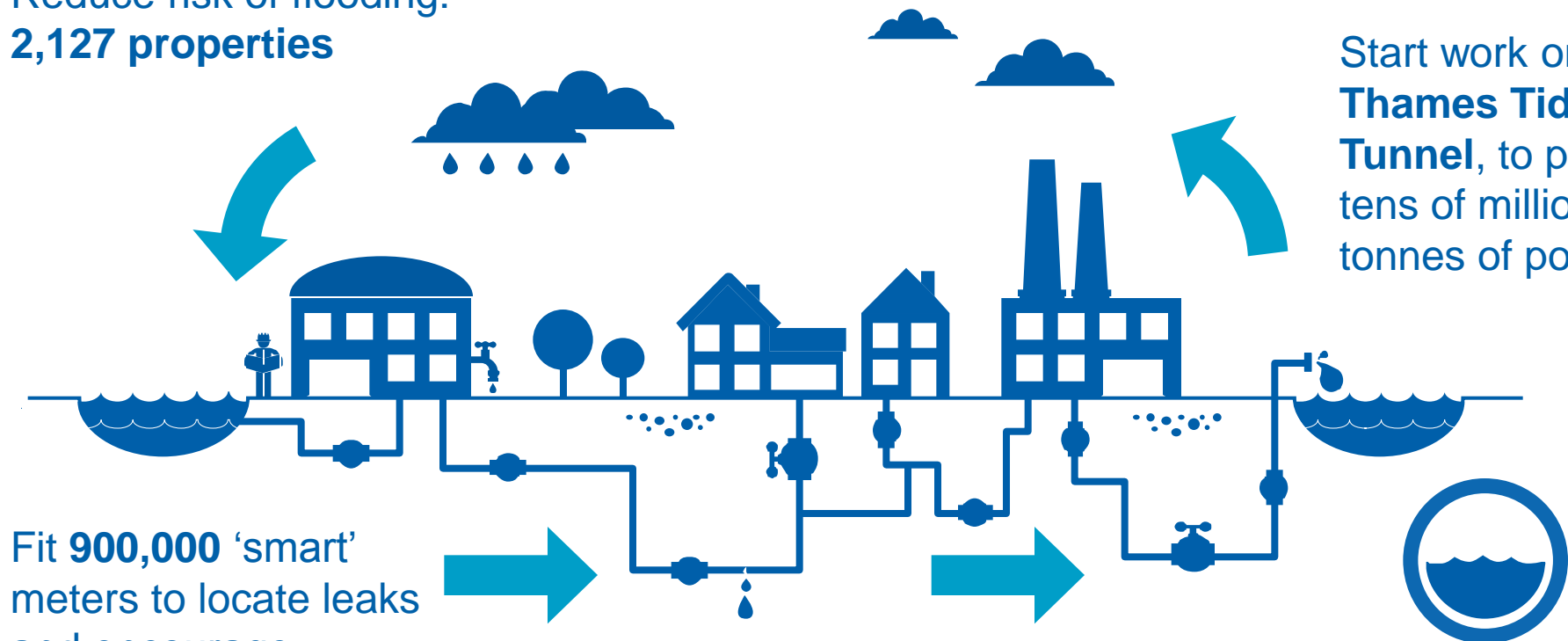
**Biggest investment programme in the industry: Totex of £8bn over five years**

# Our five-year plan for 2015 – 2020: £8.0bn of Totex

## Highlights

Reduce risk of flooding:  
**2,127 properties**

Start work on  
**Thames Tideway  
Tunnel**, to prevent  
tens of millions of  
tonnes of pollution



Fit **900,000** 'smart'  
meters to locate leaks  
and encourage  
customers to save  
water

Reduce leakage by **59 million litres** per  
day. Replace more than **900km** of water  
mains

# Our aims and approach



Our aims haven't changed:

- The very best in health and safety performance
- Delighting our customers
- Delivering exceptional value for money

It's our approach that's changed:

- Innovation
- Sustainability
- Collaboration

# Our AMP6 strategy

- **Implement the largest alliance in the water sector, to deliver £2.0bn – £2.5bn of investment across 923 needs.**
- **Develop ground-breaking partnerships which fully align with the delivery of the Thames Water outcomes.**
- **Fair risk and reward that reflects Thames Water performance and is shared – providing tremendous opportunity to our partners.**
- **Embed a true partnership that aligns through all levels and departments of Thames Water.**
- **Embed our strategic alliance partners within our company-wide transformation programme.**
- **Potential for up to 12 years of work, with an ability to innovate and challenge beyond AMP6.**

# Our strategic alliance partners

Best industry team to deliver major infrastructure



Costain (CVA JV)

Veolia (CVA JV)

Atkins (CVA JV)

Skanska (SMB JV)

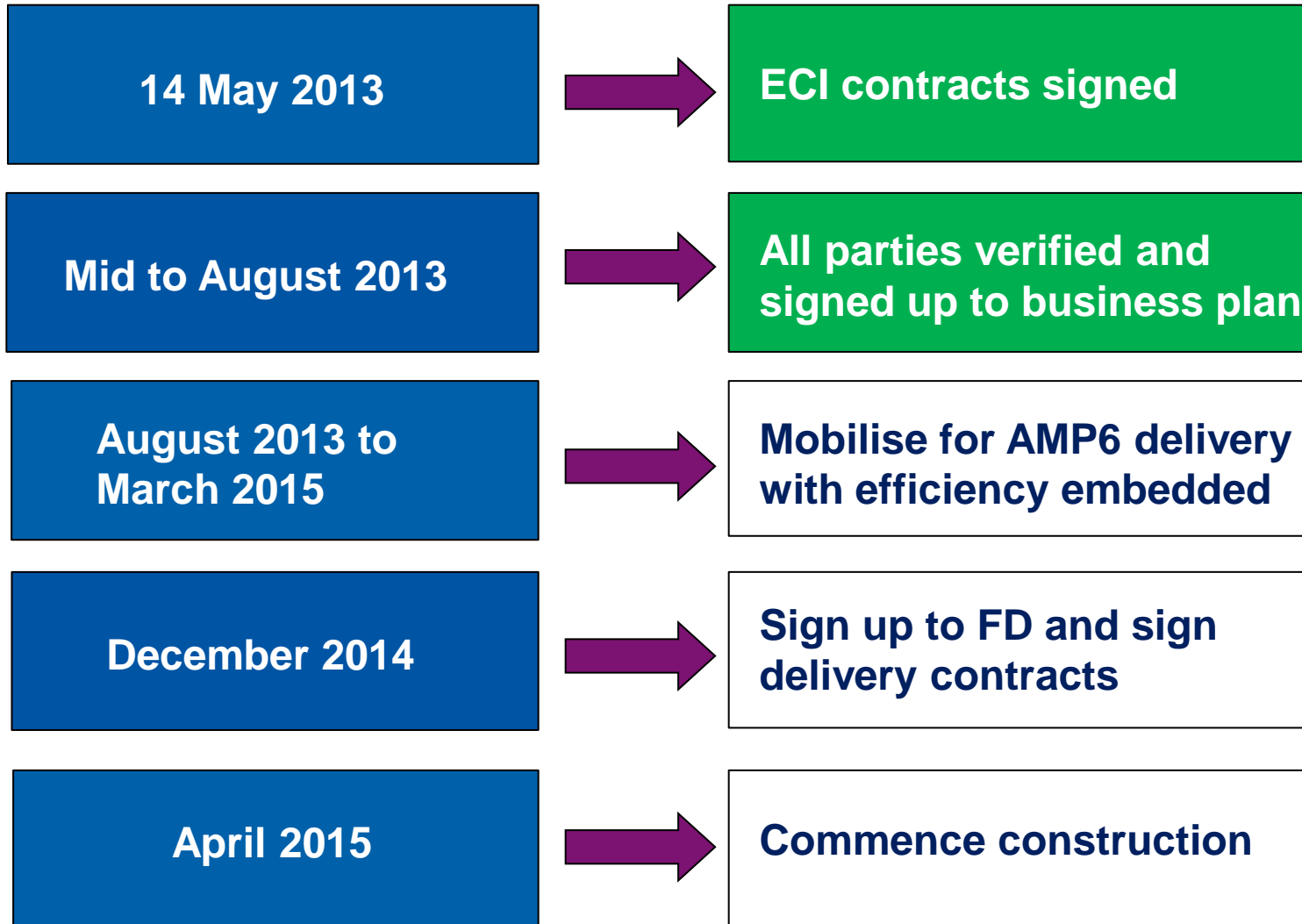
Balfour Beatty (SMB JV)

MWH (SMB JV)

MWH UK

IBM

# Key alliance milestones – on track





# Building for 22<sup>nd</sup> Century London



**Thames  
Tideway Tunnel**



Creating a cleaner, healthier River Thames

# Introducing the Thames Tideway Tunnel

**A major UK infrastructure project with an estimated cost of £4.2bn**

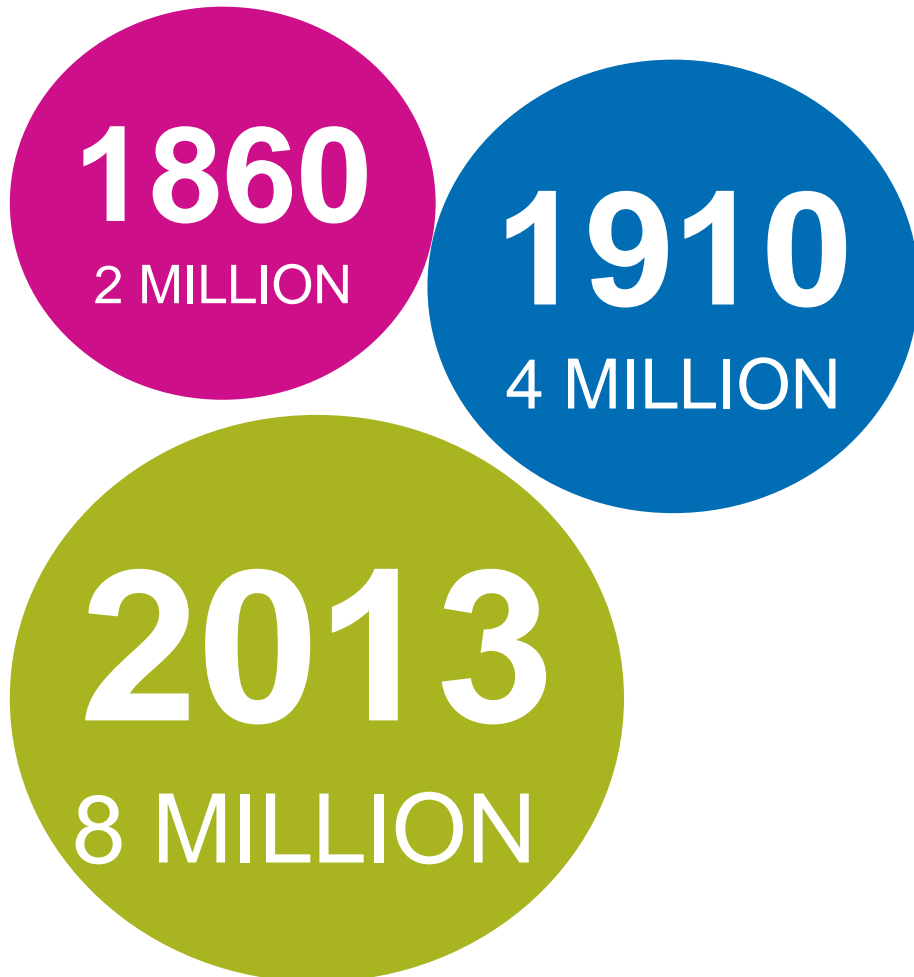
**Vital to London's future and a priority for the Government and Ofwat**

**Financed by private sector investors and benefiting from an enhanced regulatory framework and Government support**

**Competition launched 2014**

# Why does London need the tunnel?

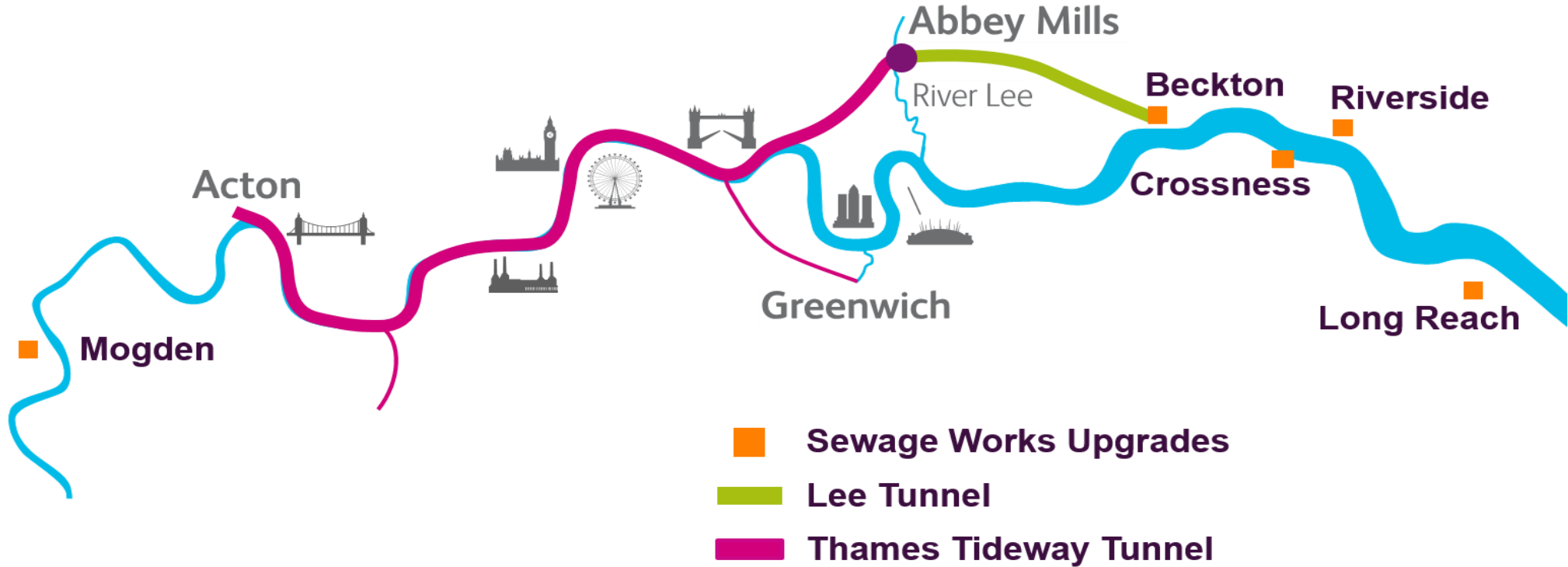
Population increase in London in the last century...



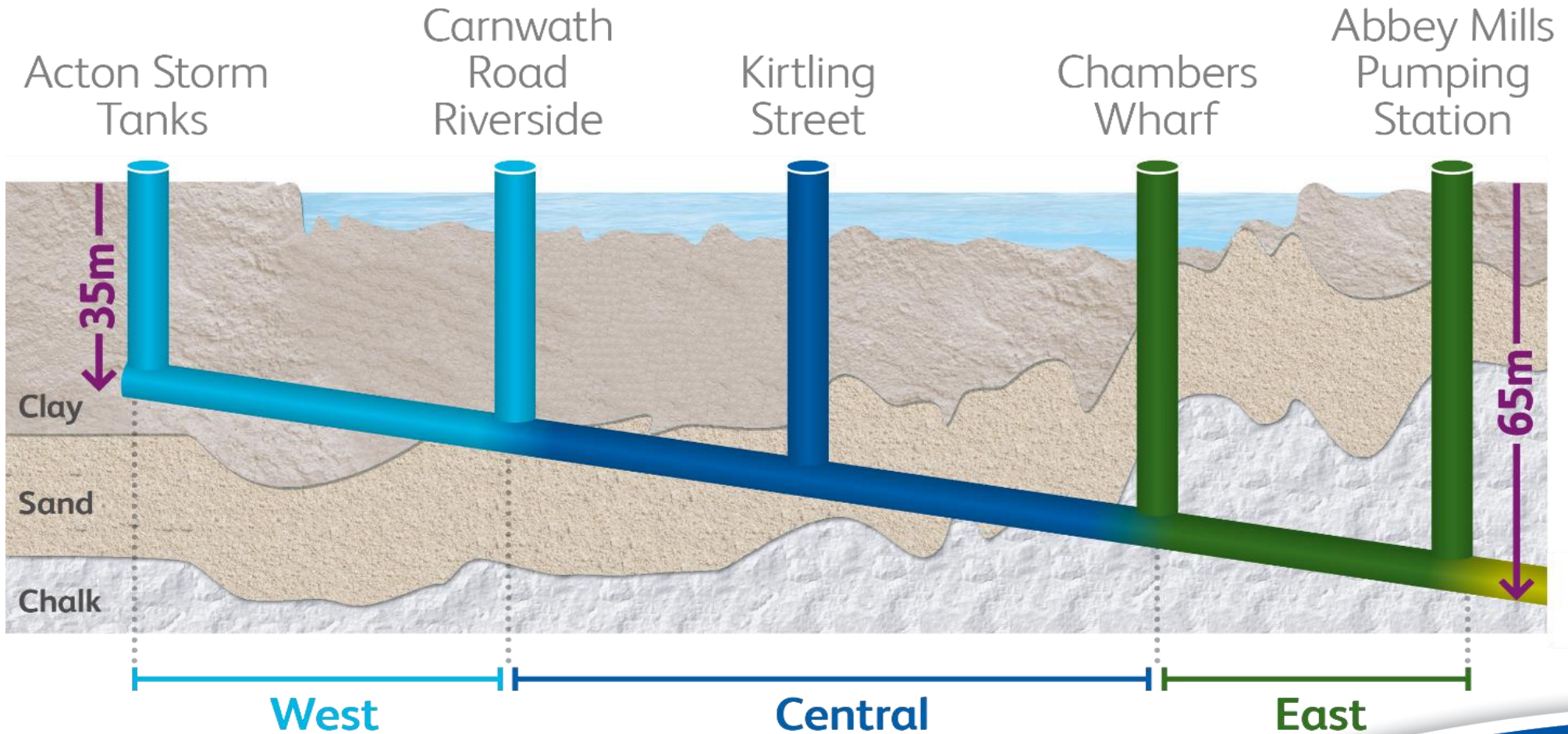
... creating two problems:

1. Overloaded sewer network; discharging into the river via Combined Sewer Overflows (CSOs)
2. Overloaded sewage treatment works; discharging directly into the river after rainfall

# London Tideway Improvements



# Geology



# World class construction companies

## West

- Bam Nuttall, Balfour Beatty, Morgan Sindall JV
- Costain, Vinci, Bachy JV
- Dragados, Samsung JV
- Ferrovial Agroman, Laing O'Rourke JV

## Central

- Bam Nuttall, Balfour Beatty, Morgan Sindall JV
- Costain, Vinci, Bachy JV
- Ferrovial Agroman, Laing O'Rourke JV
- Skanska, Bilfinger, Razel Bec JV

## East

- Bam Nuttall, Balfour Beatty, Morgan Sindall JV
- Costain, Vinci, Bachy JV
- Bouygues Travaux Publics
- Hochtief, Murphy JV

**MORGAN  
SINDALL**

**SAMSUNG**

**ferrovial**

**LAING O'ROURKE**



**bam  
nuttall**

**COSTAIN**

**SKANSKA**

**HOCHTIEF**

**Balfour Beatty**

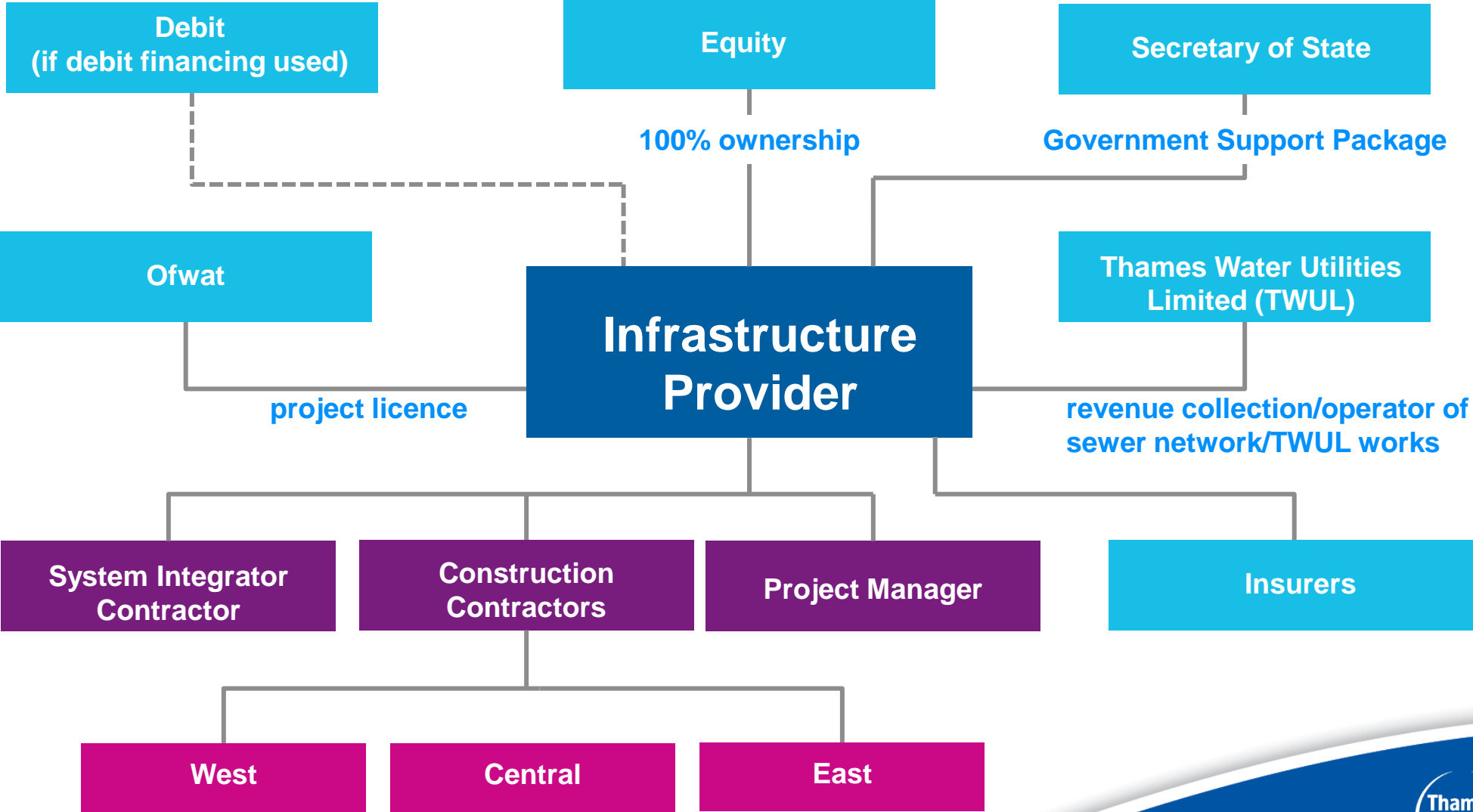
**MURPHY**

**RAZEL-BEC**  
FAYAT

**DRAGADOS**

**VINCI**

# The IP at a glance



# Investment highlights of the IP

## **A unique opportunity to invest in a new UK regulated utility company**

- ~£1bn equity opportunity

## **Bespoke regulatory framework reflecting project specific features, based around familiar building blocks**

- cost of capital bid by investors and fixed up until project acceptance
- investment remunerated during construction – revenue flowing from Licence Award and dividend yield during construction

## **Government Support Package will further protect investors**

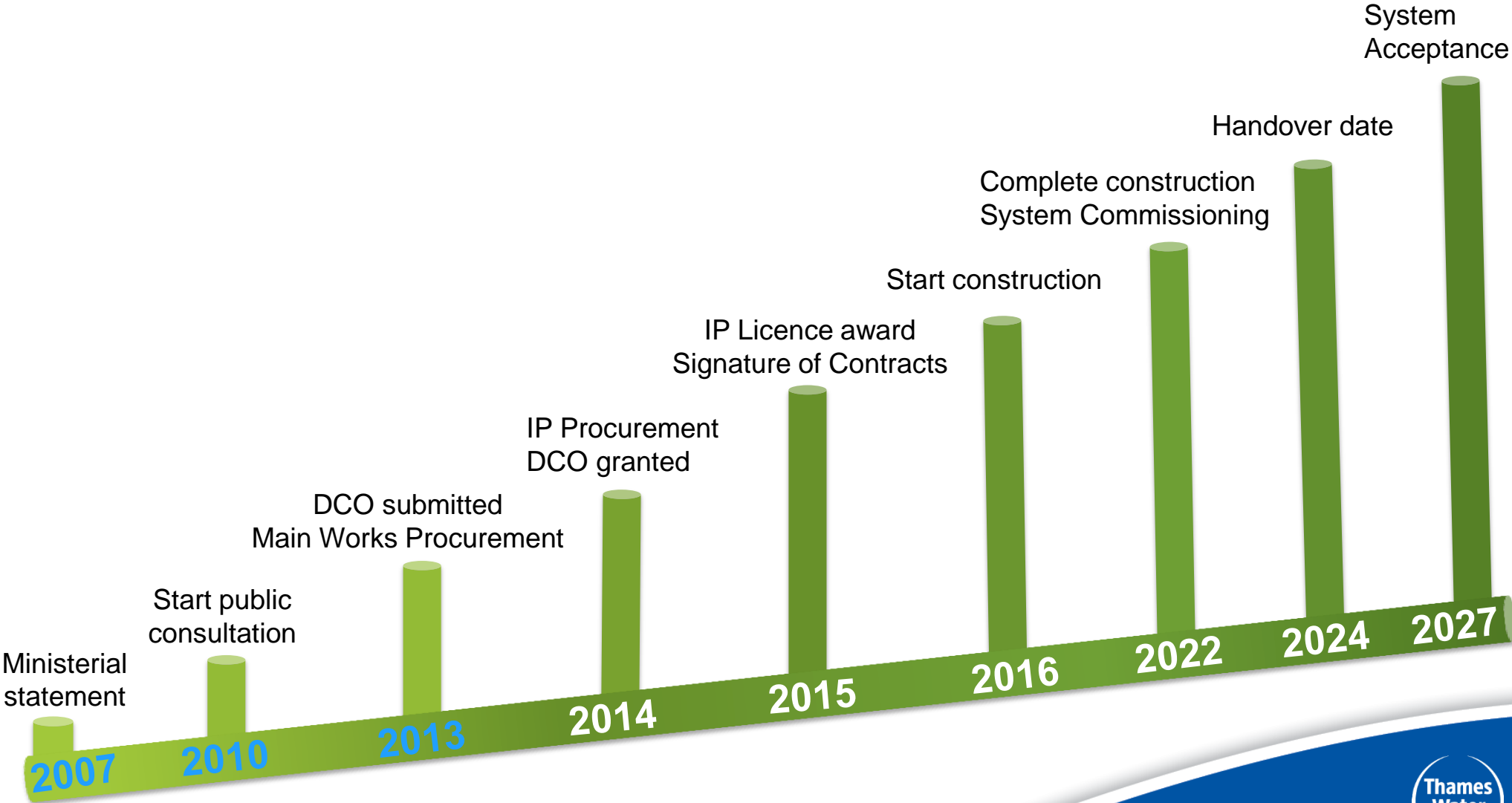
- sharing / mitigation of exceptional risks
- total investor funding requirement capped at pre-defined maximum

## **Investors do not need to bring project delivery expertise**

- an experienced project team, project manager and management team will be transferred to the IP at Licence Award



# Timetable



# Legacy

## Environment

- Dramatic reduction in discharges – from more than 50 to only three or four in a typical year

## Health and Safety

- Three Zeros commitment
- Introduce leading lorry and cycling safety initiatives

## Economy

- Use river transport to remove 90 per cent of spoil
- Engage local businesses and SMEs

## People

- Over 9,000 direct and indirect jobs
- 1:50 apprentice and 1:100 ex-offenders

## Place

- Three acres of new foreshore
- Enhance Thames Path

# Physical legacy



Blackfriars:  
before



Blackfriars:  
after



# Costain's involvement with Thames Water

Alex Vaughan, Managing Director: Natural Resources

Graham Keegan, Chief Operating Officer:

Thames Water AMP6 Framework



# Introduction to eight<sub>2</sub>O: The Thames Alliance



*Creating better results together*



eight<sub>2</sub>O



# Leading the changing approach in the water sector



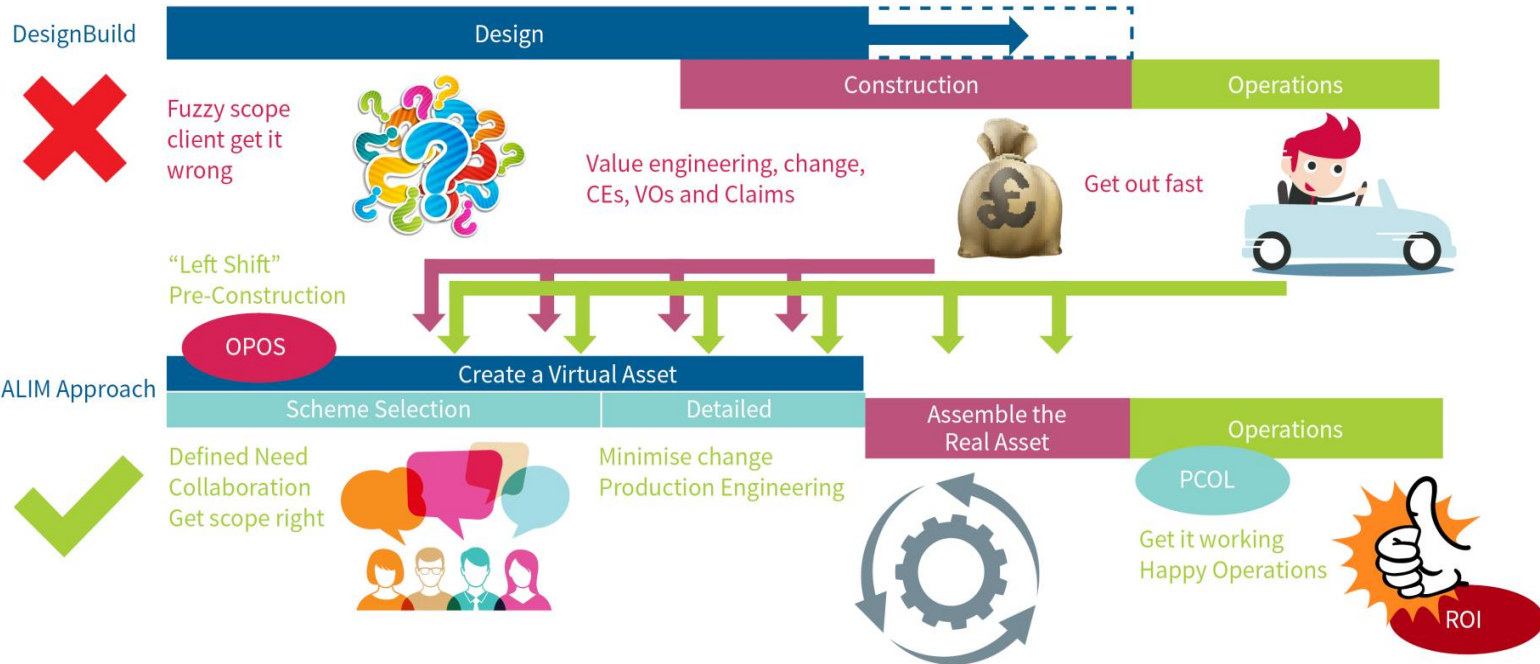
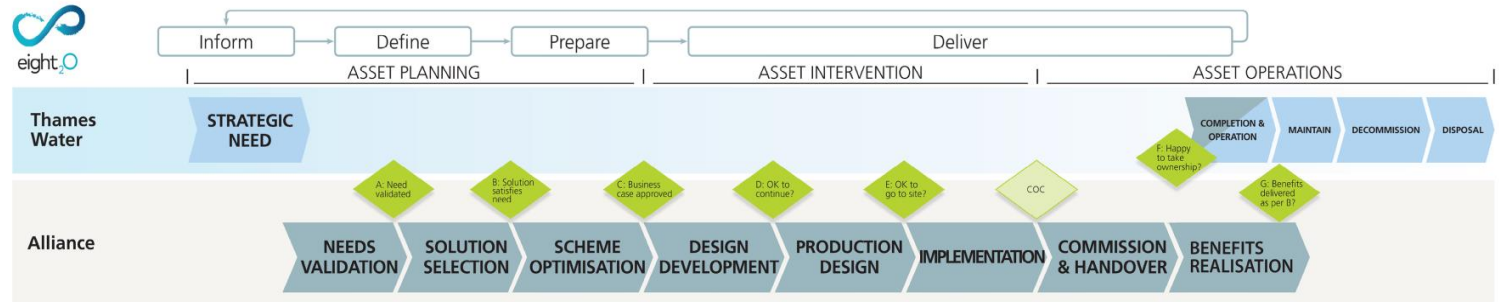
## The Challenge

- > 923 needs into customer benefits
- > Minimum programme size of £2.2bn over 5 years and growing
- > A further five years into AMP7 in our gift
- > Deliver efficiency challenge set by the regulator
- > Totex and outcomes



# Delivering value for Thames Water

## Asset Management Contract



- > Fully integrated with our customer
- > Incentivised to perform against regulatory standards
- > We are using innovation and technology to drive efficiency
- > We are connected from regulator to customer



# Welcome & introductory comments

Tony Bickerstaff, Finance Director



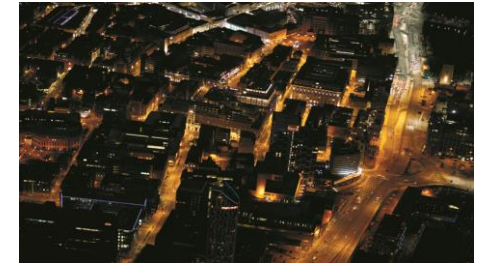
# Engineering Tomorrow: unique and well-positioned strategy



## Working with customers to meet essential national needs

- > Costain is the UK's engineering solutions provider with a unique focus on the major customers meeting national needs in energy, water and transportation.
- > Our customers are large organisations that need solutions to their complex business challenges
- > We are a trusted delivery partner that collaborates strategically at all levels with our customers in long-term relationships
- > We use our customer understanding to create and deliver innovative engineering and technology led integrated services across the full life cycle of an asset
- > Strategy driven both organically and by acquisition

Ensuring the lights stay on...



...maintaining a safe and secure water supply...



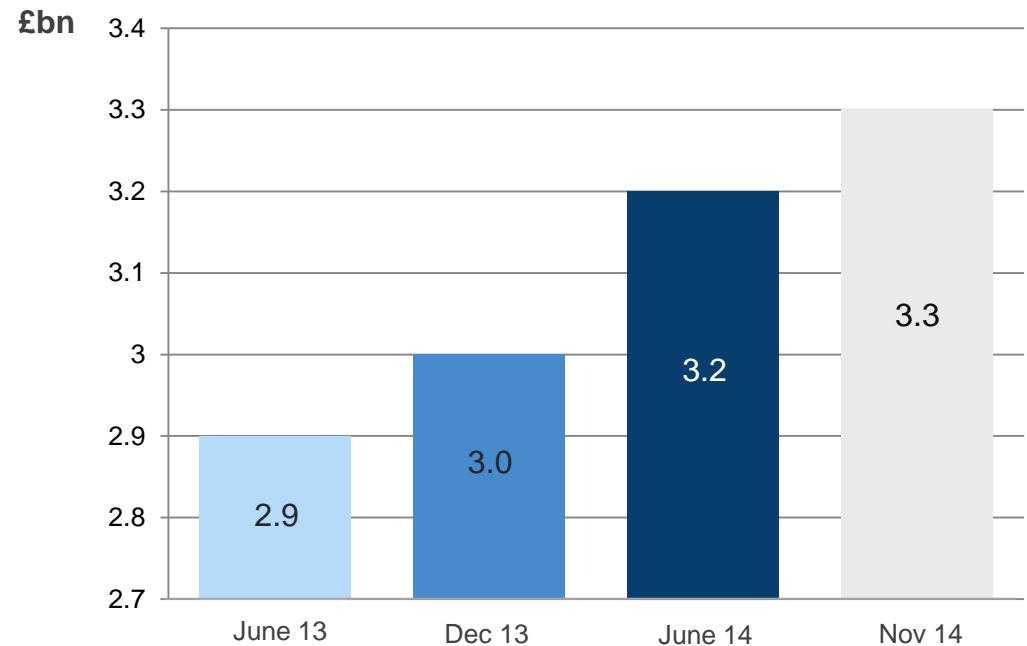
...improving transport infrastructure.



**Generating and delivering innovative, value-driven solutions**

# This morning's IMS

- > Trading in line
- > Strong, record order book: £3.3bn
  - > Over £900 million of revenues secured for 2015 (2013: over £700 million secured for 2014)
  - > Good long-term visibility with over £2.2 billion of revenues secured for 2016 and beyond.
  - > Comprises over 90% repeat order business
  - > Tendering activity remains high





# Significant investment providing opportunities in targeted sectors

**COSTAIN**

Sector



Priority area for the government to stimulate economic growth and to meet future demands for an additional 225 million passenger journeys and 355,000 more trains per year.

Estimated investment per annum

**£17.5bn**

Network Rail CP5 (2014-19)

**£38bn**

Estimated cost of HS2

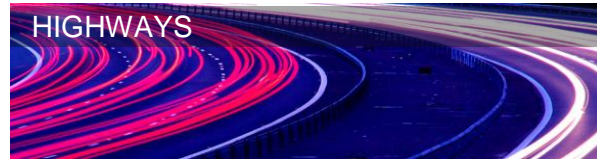
**£43bn**

Investment

Market Position

- Redevelopment contracts for Network Rail, including London Bridge and Reading
- Awarded two contracts on National Electrification Programme
- Several Crossrail projects including C610 Systemwide main works and consultancy to HS2
- Delivering multi-disciplined services for Network Rail

Customers



UK road networks are under significant pressure, with longer average delays and a 19% increase in road traffic forecast from 2015-2025 (Source DfT).

Estimated investment per annum

**£6.3bn**

Investment in enhancements and maintenance of national and local roads

**£28bn**

- Leading supplier to Highways Agency - 3 MACs, Managed Motorways, Traffic Technology framework
- Technology Frameworks for Welsh Government
- TfL framework including Hammersmith Flyover
- M6 link for Lancashire County Council



Securing the UK's future energy needs while meeting carbon reduction commitments and coping with an ageing infrastructure.

Estimated investment per annum

**£3.9bn**

New energy infrastructure by 2020

**£110bn**

- Strong platform established
- Major contract partner award with EDF on Hinckley Point C nuclear power station
- Frameworks with UK Power Networks and National Grid



# Significant investment providing opportunities in targeted sectors



Sector



**OIL & GAS**

Significant activity in UK upstream market driven by investment in offshore deep drilling and optimisation of mature assets in the North Sea.

Investment

Estimated investment per annum

**£27bn**

UKCS: New field development and brown field projects (per annum)

**£13bn**

Market Position

- Upstream advisory, design and FEED offering Midstream contracts with Perenco and Centrica
- Downstream – Total LOR, Phillips 66 and OPA

Customers



**WATER**

Committed spend continues in the UK water market as a result of rising environmental standards and continued threat of water scarcity.

Estimated investment per annum

**£11bn**

Implementation of AMP6 (2015-20) (based on AMP5)

**£21bn**

Thames Tideway (2016-2022)

**£4.2bn**

- Major player in water sector
- Thames Water, Southern Water and Severn Trent AMP6 programmes secured
- Scottish Water Shieldhall contract secured



**NUCLEAR PROCESS**

Government is committed to safely decommissioning and cleaning up civil nuclear sites in the UK.

Estimated investment per annum

**£6bn**

Estimated cost to address the UK's nuclear waste legacy

**£50bn**

- Delivery of the UK's largest decommissioning contract – EvapD
- Magnox 10 year decommissioning framework



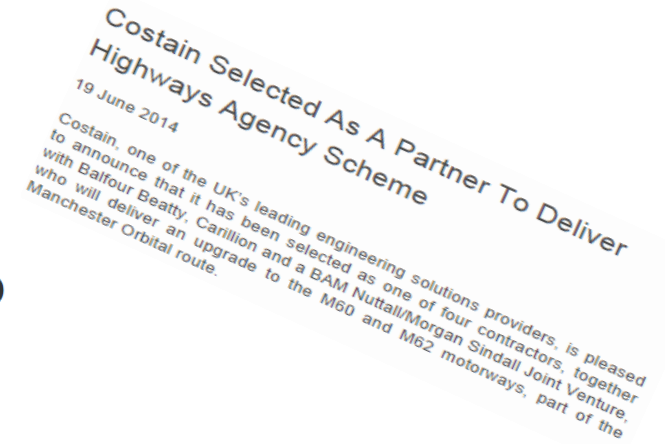
# Clients are awarding longer term, larger contracts and extensions



Costain's order book rises to £3bn thanks to Hinkley Point and Crossrail

Costain joint venture wins £300m Crossrail fit out job

2 April 2013 | By Vern Pitt



Galliford Try, Atkins and Costain win £180m Liverpool water job

11 June 2012 | By Vern Pitt

Home » News » Water

**Costain-Vinci JV wins £86M Scottish Water tunnel**

2 October, 2014 | By Will Mann



# A unique formula for success

Darren James, Managing Director: Infrastructure





# Focused on requirements of major customers

## Simple business model to deliver innovative integrated solutions

- > Unique focus on major customers
- > Customer aligned divisional structure
- > Central resource allocation to prioritise and optimise asset deployment
- > Target longer-term, larger contracts and extensions, incorporating a broader range of services



Over 90% repeat orders



**Essential capabilities and attributes**



# Wide range of integrated services



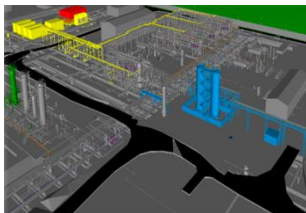
Smart motorways



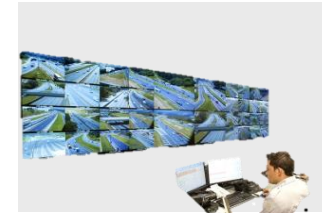
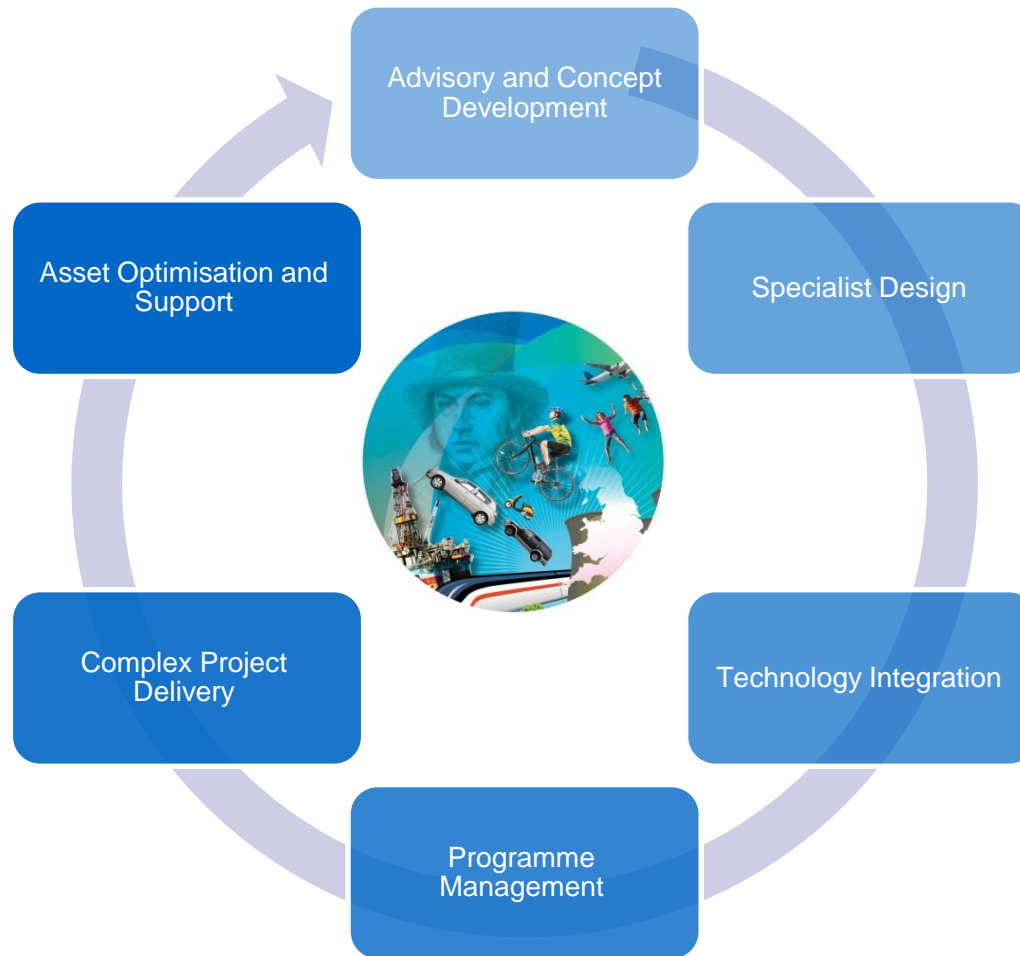
Managing Mobicloud to improve site efficiency



Reading railway station



Perenco Dimlington



Advising clients on asset enhancement



Cutting the cost of carbon capture



Advising on HS2

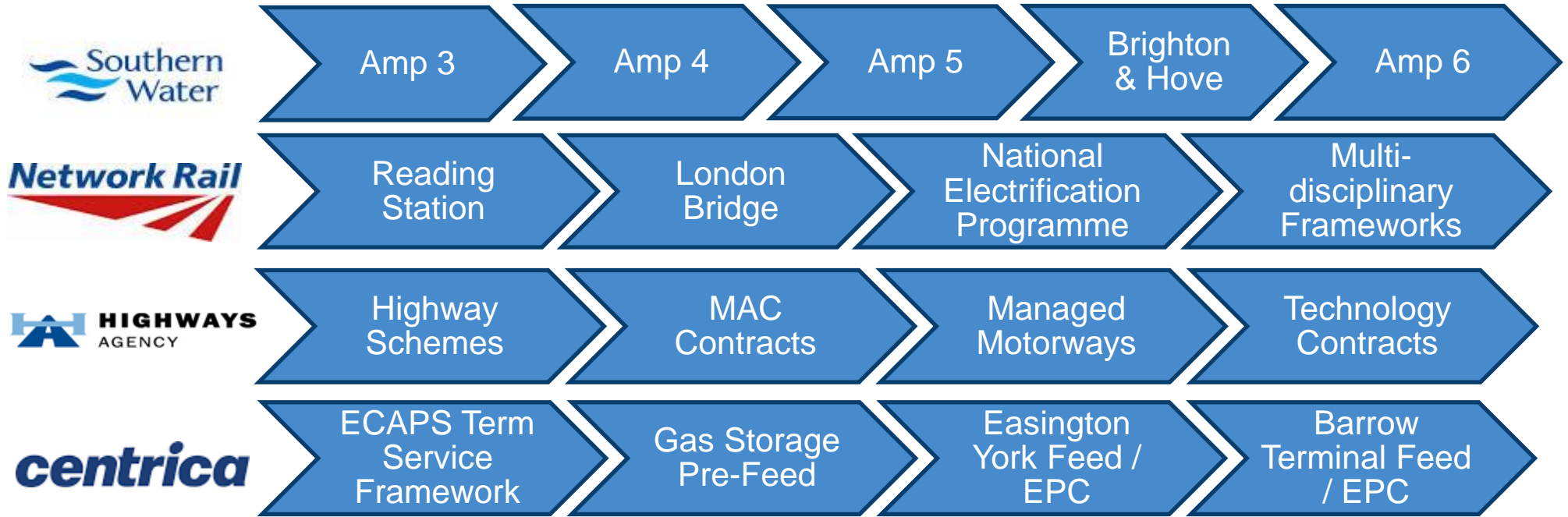


Centrica Barrow

# Reputation for excellent delivery...



Long term relationships with 90% repeat orders on the back of excellent delivery



## ...and award-winning work



# Delivering results



# Driving innovation and technology throughout our services



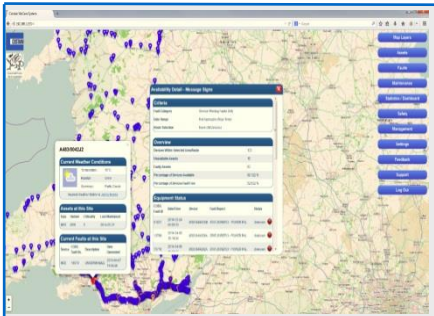
MARIO



TaKaDu



Carbon Capture RECAP Absorber Column Design



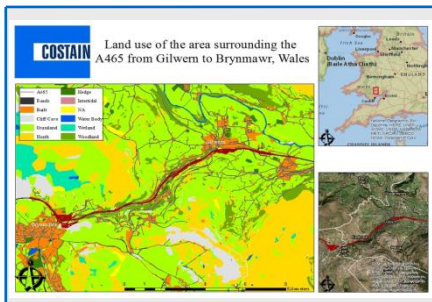
COamp Asset Management Platform



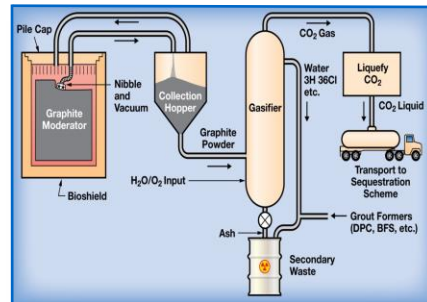
Building Information Modelling



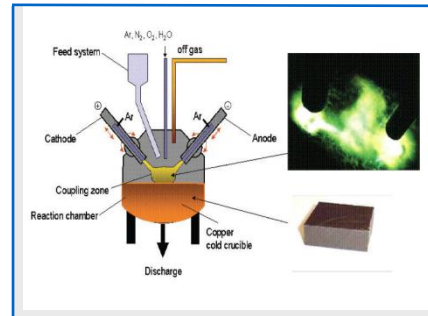
Wireless Monitoring



Geographical Information Systems



Nuclear waste management graphite gasification



Plasma Waste Vitrification



ESDAL – Electronic Delivery Service For Abnormal Loads

# Strategic level collaboration

Co-located teams

Open relationships

Shared targets



Perenco Dimlington



EDF Hinkley

Combined team

Common objectives



Evap D



London Bridge

Strategic alliance

Business transformation



Eight<sub>2</sub>0



Managed Motorways

Collaboration, common objectives, complex solutions, target cost contracts, long term relationships

# Collaborative contracts

- > >90% of order book on a target cost basis
- > Early Contractor Involvement (ECI) appointment
  - > Professional services basis
  - > Full understanding of scope
- > Fee agreed (overheads and profit) as a % of cost
- > Target Cost agreed
  - > Part of customer's overall budget
- > Shared incentivisation mechanism agreed
  - > Pain / Gain, milestone and alliance bonuses
- > Cost reimbursed on a monthly basis
- > Target cost adjusted for any changes outside agreed scope
- > Increased visibility over longer-term margins at lower risk





- > Senior Process Engineer
- > MEng (Hons) Chemical Engineering with Industrial Experience (2008)
- > Shortlisted for The Young Chemical Engineer In Industry Award (2014)

## Bradwell FED Treatment Project

- > Contributed to the development, commissioning and optimisation of the innovative dissolution process for waste management
- > This will have an enormous commercial, safety and environmental impact
  - > Significantly Reduces Waste Treatment Time
  - > Reduces Demand on Long Term Storage Capacity
  - > Reduces Radiological and Process Hazard



# James Bulleid

- > Highways Technology Director
- > MEng (Hons) Engineering and Management, CEng (MICE), Prince2, ILM5
- > IMechE Best Student Award, ICE President's Commendation, CECA Young Engineer of the Year, Construction News Rising Star of the Year, NEF Innovator of the Year

## Highways Technology

- > In-House team of Seventy Five technology experts
- > Five major contract wins
- > Software Development, Service Provision, Maintenance, Capital Works (Installation and Commissioning)



- > Design Manager
- > Chartered Civil Engineer (2010)
- > Association of Project Management Professional (2014)

## Hinkley Point Nuclear Power Station – Marine Works

- > Managing the design for the marine works contract to construct the tunnels required to provide cooling to the power station.
- > A critical piece of infrastructure to ensure future electricity supplies are met
  - > 7% of UK power generation once operational
  - > 10million tonnes of CO2 saved per year compared with coal
  - > Power generation for 60+ years



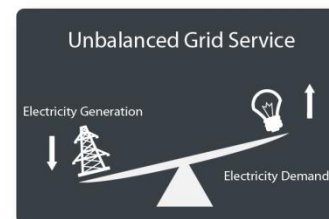
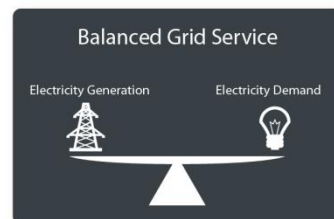
# Claire Baker

- > Sustainability Solutions Manager
- > BSc Physical Geography with Music from Keele University (2009), MSc Climate Change Management from Birkbeck , University of London (2012 – Part Time), Associate Member of the Institute of Environment Management and Assessment, Member of the Energy Institute
- > Shortlisted for Young Sustainability Executive of the Year (2014)

## Sustainable Solutions, Power Sector

- > Development and implementation of *COdemand* which is a range of innovative demand response services available to our Customers that unlocks new revenue by managing assets in a smart way and helps the National Grid meet their critical balancing requirements
- > Development of an Energy and Carbon Advisory Service to enable customers to significantly reduce energy and carbon consumption through management and innovative technologies. Though using the information and intelligence gained through this service Costain will be able to develop further engineering solutions.

**nationalgrid**  
THE POWER OF ACTION



**COdemand**

# Focused on requirements of major customers

## Simple business model to deliver innovative integrated solutions

- > Unique focus on major customers
- > Customer aligned divisional structure
- > Central resource allocation to prioritise and optimise asset deployment
- > Target longer-term, larger contracts and extensions, incorporating a broader range of services



Over 90% repeat orders



**Essential capabilities and attributes**



# Q&A



# Summary

Andrew Wyllie, Chief Executive





# Costain Group PLC

## Meeting National Needs

5 November 2014

