

# About David Waboso

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**David joined Network Rail in June 2016 as Managing Director of Digital Railway, a cross-industry programme to increase passenger and freight capacity on Great Britain's rail network. Prior to this he spent eleven years at London Underground Limited. Whilst at LUL David was Capital Programmes Director, where he led the upgrade of both trains and infrastructure to digital technology. He has worked on infrastructure and train control projects for over thirty years and has previously held senior positions at the Strategic Rail Authority, The Nichols Group and Bechtel Corporation.**

**David a fellow of the APM where he is also currently the President. He is also a Fellow of the Royal Academy of Engineering, the Institution of Railway Signal Engineers and the Institution of Civil Engineers. Before he started his career in Infrastructure David spent a short time as a maths teacher in east London.**



# Project Controls

## E X P O

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## Project Controls Expo – 16<sup>th</sup> Nov 2016 Emirates Stadium, London

### Delivery of Capital Programmes in Operational Environments – some lessons Learnt

**David Waboso**

Managing Director, Digital Railway

*Digital Railway*



**Project Controls**  
E X P O

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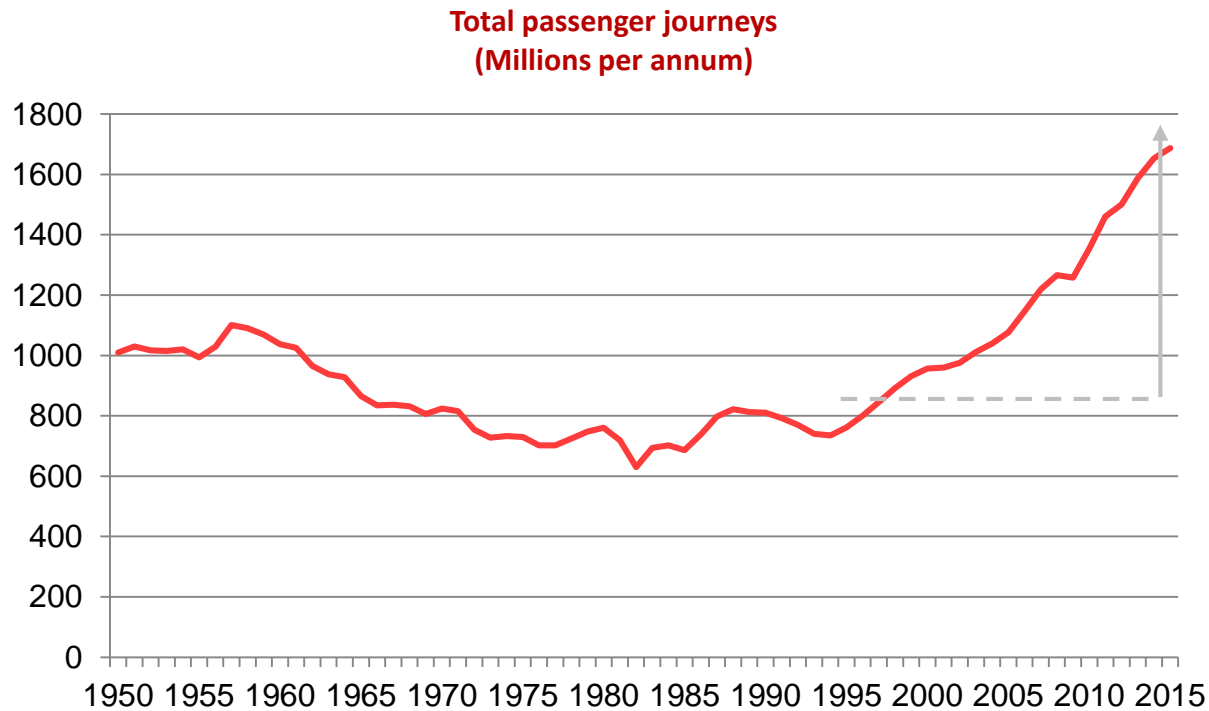
Summary of railway upgrades

Lessons learnt

Some important themes

# Britain's railways are in high demand

Passenger numbers have doubled since 1996 and are set to double again over the next 25 years.



# We are renewing assets, increasing capacity and improving performance...



...and deploying digital technology  
on busy operational lines and stations

# Some lessons learnt from brownfield sites

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- Operational safety during stageworks
- Understanding asset condition and closures constraints
- Clarity of requirements from users
- Changing technology and training
- Early and full involvement of operator and maintainer
- Recognise application risk
- Manage design and software very closely
- Highly complex programmes (development, brownfield, global suppliers) require special treatment
- Experience matters: the best risk management is good people

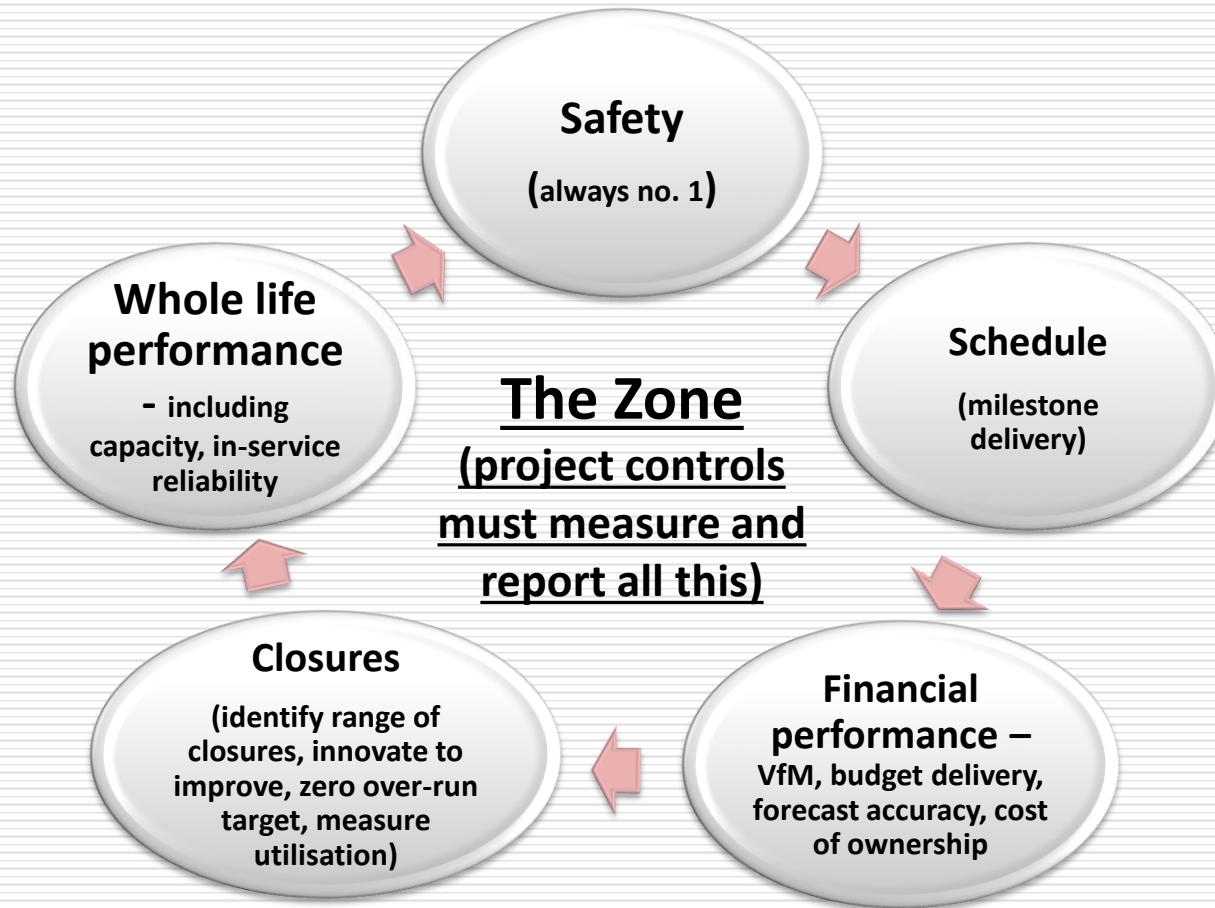


# And we have to do all this efficiently

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- Use of benchmarking – approach and cost
- Measure capability and maturity growth
- Use independent assurance and challenge
- Avoid rework
- Design for whole of life
- Have clear roles for client and delivery teams
- Involve contractors early
- Create opportunities for third party financing and funding
- Ensure interfaces understood and incentives are aligned
- Manage risks at the appropriate level
- Specify at output level allowing supply chain to innovate
- Manage to out-turn not tender cost

# Delivering all this is truly world-class





# Importance of project Controls

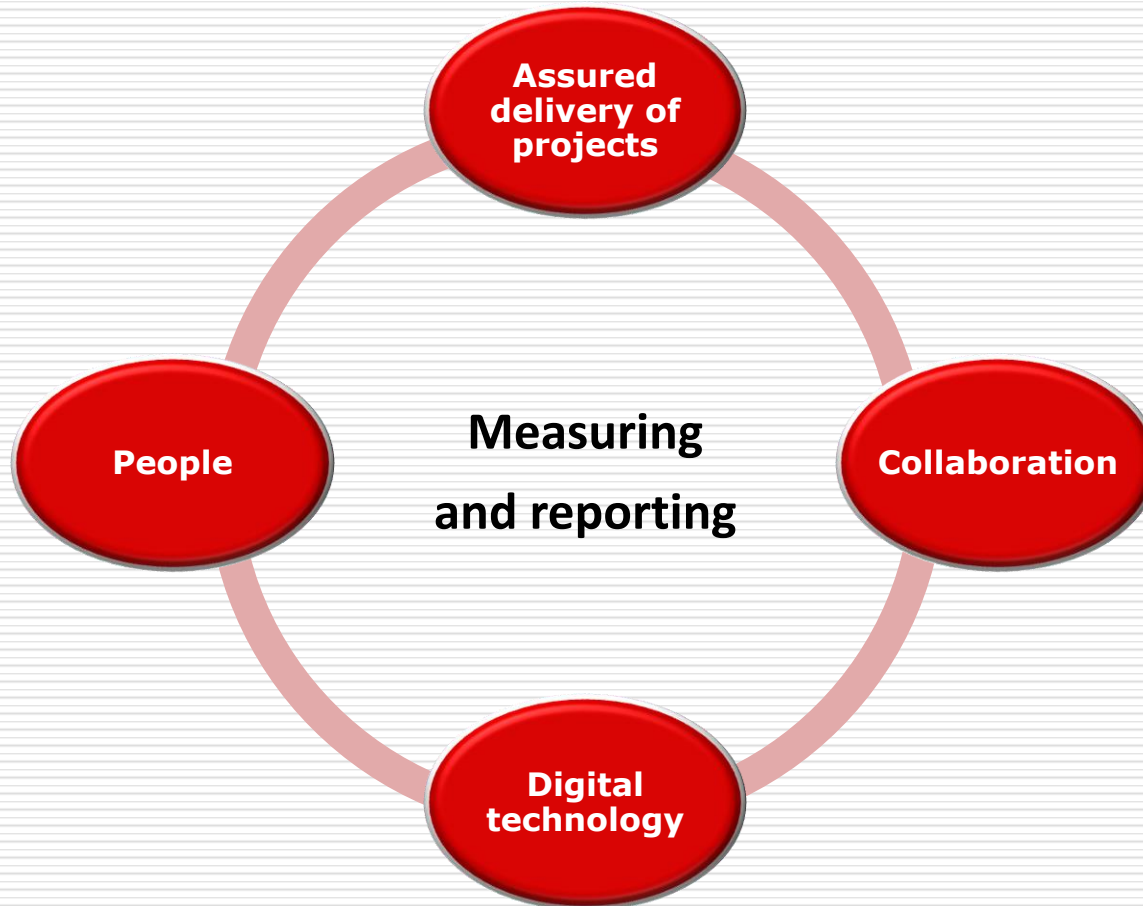
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- The radar screen/dashboard for running a project or programme
- Provides connectivity between senior management and frontline of delivery
- Must provide controls for creative activity and people change
- And PMO's are critical for large portfolios where “air traffic control” view is needed

# Four important themes:

Assured delivery of projects;  
Collaboration; Digital technology; People

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# It's a great time to be building a career in programme and project management.

Construction projects in city region set to generate £13bn



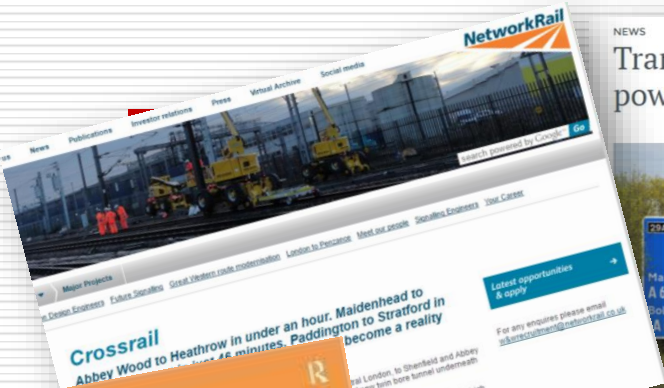
Heathrow begins spending on building third runway  
It is estimated 2,700 jobs will be created through the process of investing millions into the airport's supply chain.



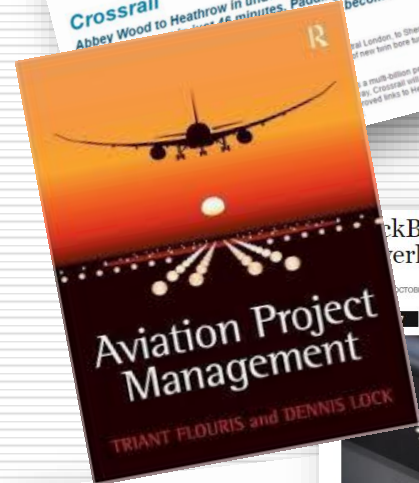
NEWS  
Transport for the North applies for devolved powers



Andy Walker  
28 October 2016  
Twitter Facebook LinkedIn  
Topics  
Devolution



Crossrail  
Abbey Wood to Heathrow in under an hour. Maidenhead to Stratford in 26 minutes. Paddington to Stratford in 15 minutes. Heathrow to Heathrow in 15 minutes.



BlackBerry's Next Move Is in the Wireless Car Industry



BlackBerry will work with Ford to use its software in automated vehicles.

BlackBerry (BBY +0.07%) has signed a deal to work directly with Ford Motor (F -1.49%) to expand the



UK Business & Economy  
UK construction PMI in growth territory for first time since May  
Fast FT

NEWS  
HS2 will be built, says transport secretary Chris Grayling



Andy Walker  
13 October 2016  
Twitter Facebook LinkedIn  
Topics  
HS2

Transport secretary Chris Grayling has reiterated the government's backing for HS2 and pledged that

HM Government  
Charter for the National Infrastructure Commission  
The Charter articulates the government's commitment to the National Infrastructure Commission (NIC). It sets out the NIC's purpose and its remit, and also sets out the balance of outputs, accountabilities and duties. The Charter also sets out the balance of responsibility between the government and the NIC.  
The government is fully committed to a National Infrastructure Commission which will make independent recommendations and provide the best possible advice on national infrastructure priorities. The NIC will be required to carry out its work in accordance with the remit and the terms of reference for specific studies set by the government. In all other respects, the NIC will have complete discretion to determine independently its work programme, methodologies and recommendations, as well as the content of its reports and public statements.  
Remit and purpose  
The NIC is a permanent body which will provide the government with impartial, expert advice on major



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