A new approach to Railway Operations

Michael Milner
Rail Operations & Change Consultant

Who is the customer?

Operator  Maintainer  Sponsor
Passengers  Engineer
Stakeholders  Politicians  Media

“A party that receives or consumes products (goods or services) and has the ability to influence between different products and suppliers”

http://www.businessdictionary.com/definition/customer.html
New Tube for London

https://www.youtube.com/watch?v=Z3Q0FZUKHkY

New Tube – New Start

- New Tube for London (NTfL) is culmination of
  - cancelled Piccadilly Line Upgrade (PLU),
  - Remote Train Operation (RTO) and EVO train project,
  - learning from Sub Surface Upgrade (SUP) and
  - benchmarking from worldwide metros

- Scope includes new rolling stock, signalling, control, power and associated infrastructure on four tube lines

- Once in a lifetime opportunity to genuinely understand the needs of the customer and design a railway for them
Who delivers the railway?

Operations & Maintenance Concept

...a single, customer focussed organisation and asset portfolio with common goals and values all towards the delivery of a reliable service...
A new way of thinking about a railway

- All of the geographic estate that supports the delivery of customer service on the line becomes “the railway”
- Create a Railway Control System that controls all aspects of the railway
- Form a Railway Control Organisation which can control assets through the Railway Control System
- Once you’ve got your new railway, it always stays as “the railway” including during engineering windows

Requirements capture

Railway Requirements

Rolling Stock | Signalling | Maintenance | Stations | Comms
Requirements capture

Railway requirements

Rolling Stock
Signalling
Maintenance
Stations
Comms

Further NTfL reading


• Pedantic of Purley (2014) *Upgrading the Piccadilly line: Calling time on Mind the Gap?*  
Summary

- The customer is always right – just not always the same customer and not all at the same time
- Embed operators and “customer” in your team
- Review your work from the outside and look in at how it’ll be used in practice and where the gaps are
- It can be easier to check you’ve got everything there and often more stable if you design the overall end state first and deconstructing it rather than hoping to glue together individual elements

Questions?