#### **Rail and Underground Panel**





Item 6: New Tube for London

#### This paper will be considered in public

#### 1 Summary

- 1.1 The accompanying presentation, attached as Appendix 1 provides an update on New Tube for London programme
- 1.2 The presentation covers the following areas:
  - (a) the timeline for the programme;
  - (b) the deliverables under the programme;
  - (c) current rolling stock designs for the Sub Surface and Victoria lines rolling stock;
  - (d) the Siemens concept design;
  - (e) the New Tube for London design principles; and
  - (f) the next steps for the programme.

#### 2 Recommendation

2.1 The Panel is asked to note the paper and presentation.

#### **List of Background Papers:**

None

#### List of appendices to this report:

Appendix 1: New Tube for London presentation

Contact Officer: Gareth Powell, Director of Strategy and Service Development,

London Underground and London Rail

Number: 020 3054 8196

Email: garethpowell@tfl.gov.uk

## Appendix 1

**London Underground** 

# **New Tube for London Presentation**

**Rail and Underground Panel** 



#### **New Tube for London Timeline**

#### 2011 onwards

- Early 2011, work commenced on the design of the New Tube for London.
- Concept design progressed by TfL in conjunction with industrial designers Priestmangoode, also designed the Pendolino and Voyager fleet for Virgin and the Mercury concept train for HS2.
- Specialised packages: Paul Nulty for Lighting Design and Priestmangoode for Moquette design.

#### October/November 2014

- Launched the public exhibition on 9 October and runs until 16 November.
- Exhibition used to tell the story publically and continue to gather feedback.
- Shortlisted bidders announced.

#### February 2015

Invitation to Tender issued, including design book based on images in this presentation.

#### 2016

Contract Awarded for Piccadilly Line Fleet with Options for Bakerloo, Central and Waterloo & City Lines.

#### 2017-2019

- Design and development of NTfL train for manufacture by supplier.
- Concept Design by October 2017; Preliminary Design by September 2018; Final Design Complete October 2019.

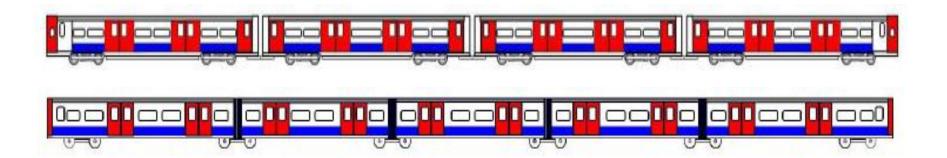
#### 2023

First of the New Tube for London fleets enters service on the Piccadilly Line.



#### **New Tube for London Will Deliver**

- 1. Higher capacity.
- 2. Increased reliability and energy efficiency.
- 3. Saloon cooling for the first time on the deep tube lines.
- 4. All double doorways (see below configuration) and walk-through interiors.
- 5. Capability for higher level of automation.



**Current Sub-surface Rolling Stock Design – Metropolitan, Circle, Hammersmith &** 

**City Lines** 





## **Current Tube Rolling Stock Design – Victoria Line**





# **Siemens Deep Tube Concept – Exterior**





## **Siemens Deep Tube Concept – Interior**





#### **New Tube for London - Design Principles**

- 1. Use of linear colour banding throughout the train creating a feeling of height.
- 2. Considered use of lighting to create a sense of personal space and remove the feeling of clinical sterility use a blend of direct "shafts" and ambient "wash" lighting sources.
- Fixtures and fittings to be high perceived quality materials and techniques pride and a sense of quality delivered through all of customer touchpoints within the train that wear in and not out.
- 4. Consistent spacing, positioning and size of windows and doors to create a constant rhythm and a 'human scale'.
- 5. A strong use of floor patterns, textures and materials.



## **New Tube for London Exterior – Distinctly London Underground**





## **New Tube for London Exterior – Evolution of Current Livery**

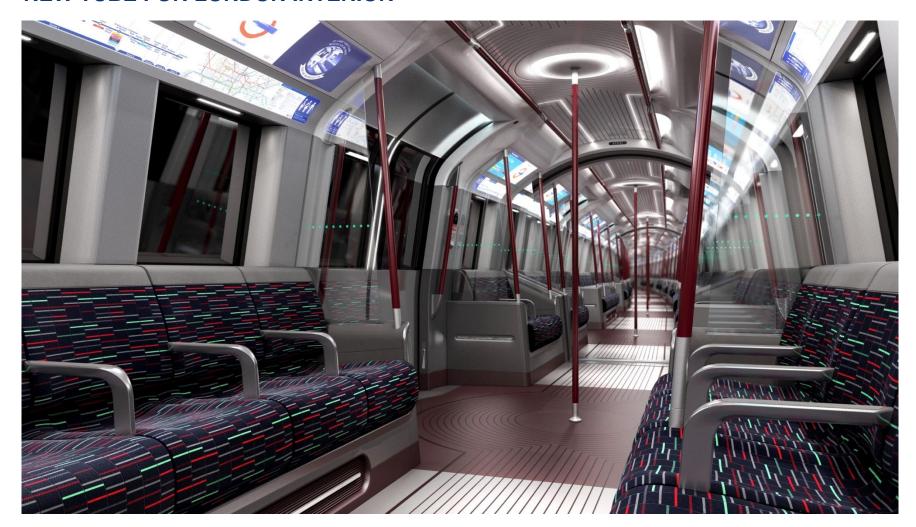


## **New Tube for London Exterior – Platform Edge Doors**



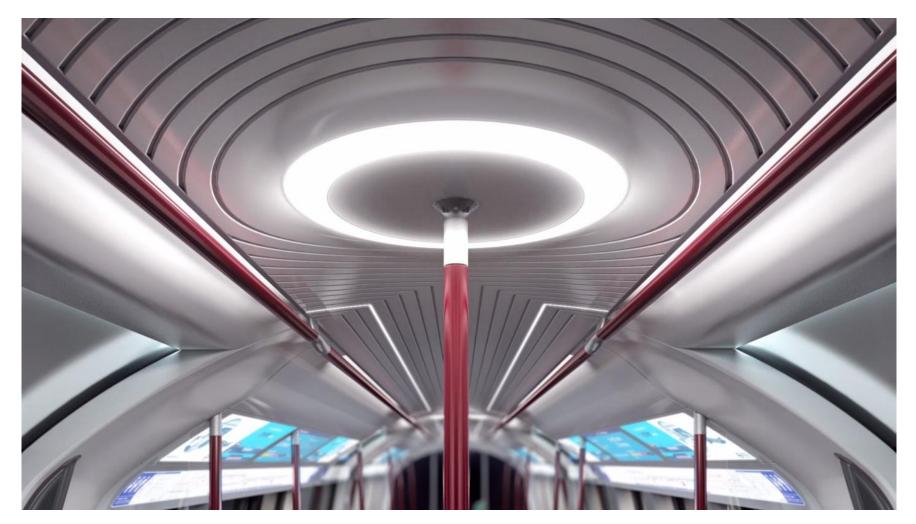


## **NEW TUBE FOR LONDON INTERIOR**





# **Intelligent Lighting Design**





# **Walk Through Carriages**



## **Proportionality of Design**

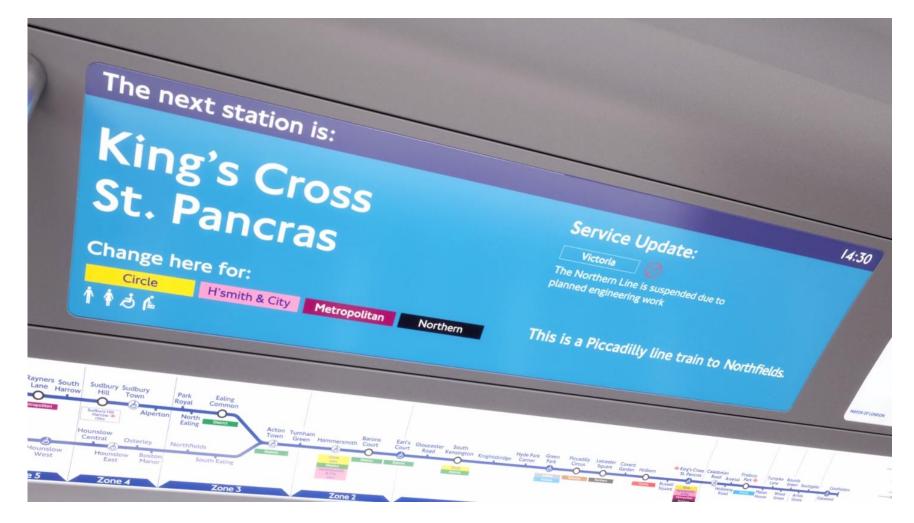




## **Attention To Detail**



## **Innovation And Technology**





# **High Quality Touchpoints**











### **Next Steps**

- Public launch at Kings Cross Northern Ticket Hall, to run until 16 November. This will include the designs presented here today, along with a New Tube for London train model and a 90-second film of the new train design in operation.
- October announce the short-list of bidders eligible for the Invitation to Tender.
- February 2015 Invitation to Tender.
- 2016 contract awarded for Piccadilly Line Fleet with Options for Bakerloo, Central and Waterloo & City Lines.
- 2017 to 2019 TfL to work closely with winning bidder to refine the industrial design for production.
- 2023 first New Tube for London trains enter service on the Piccadilly Line.



# Q and A

