



## **6. Lessons Learned Update**

**Crossrail 2 Programme Board**

**12 April 2018**

## 1. Introduction

The paper updates the Programme Board on steps that the Integrated Project Team (IPT) is taking to draw on experience from recent major UK construction programmes.

## 2. Background

The use of learned lessons has been a key component of the IPT's work since inception. The senior management team working under the Managing Director contains experience from many major programmes, part of which is illustrated in Appendix 1. In addition to the organic application of this knowledge, during the course of 2016 the IPT met with those working on live programmes, most noticeably the original Crossrail. The knowledge gained was compiled in the paper *Lessons Learned for Crossrail 2*, which has become a key resource.

Over the course of 2017, the IPT held internal lessons learned workshops to draw out useful knowledge from assembly of the revised Strategic Outline Business Case and engineering in support of the Autumn Revised Proposition. In addition, focussed engagement was carried out to obtain advice on specific topics, such as meeting with HS2's benefits lead. Network Rail has also carried out internal engagement to identify useful lessons, including sessions with members of staff involved in the delivery of the original Crossrail, and is monitoring the completion of implementation actions.

## 3. Management of Lessons Learned

The IPT is moving to formalise its application of lessons learned, with a view to becoming best-in-class in the respect of knowledge management. The team is moving to adopt a lessons learned approach similar to its risk management practices, with lessons formally assessed and recorded in a master register. The assessment considers the scale of the potential opportunity from implementing each lesson, together with the probability of doing so successfully. Through this assessment, implementation of lessons may be prioritised.

The prioritised and tracked completion of implementation actions will be complemented by the development of a knowledge repository, to be populated as the IPT and successor CR2 organisations review past work and identify key learning points.

## 4. Live Workstreams

The IPT Controls team faces three immediate workstreams to launch the revised approach.

The Lessons Learned Register has been created, with approximately 400 line-items captured from various previous sources. The opportunity-assessment of the lessons is now in progress. To speed the launch of the new approach, in the first instance



lessons are being prioritised for implementation based on their utility in mitigating the most-pressing development programme risks.

The second item of work in hand is a series of ongoing lessons learned workshops with Crossrail Ltd directors and senior managers, prompted by the release of the *Economies of Experience* report by Robert Jennings. (This series of workshops has been referenced in previous Programme Updates issued to the board.) Appendix 2 lists the completed and pending workshops.

The third item of work, still pending, is to build on the above engagement with Crossrail Ltd by carrying out similar workshops with other project organisations. The Network Rail component of the IPT has approached the Thameslink programme, and contact will be made with HS2, particularly in respect of Hybrid Bill experience.

## **5. Next Steps**

It is planned to deploy the first version of the prioritised Lessons Learned Register during by the end of May 2018. Introduction of the remainder of the approach, including the internal knowledge portal, will follow during the summer.

## **6. Appendices**

- A. Major Project Experience of IPT Senior Managers
- B. Planned CRL Lessons Learned Workshops



## Appendix A: Major Programme Experience of the TfL IPT Senior Management Team (Draft)

[illegible]

## Appendix B: Completed and Pending Lessons Learned Workshop with Crossrail Ltd

Date / Location	Title	CRL attendees	CR2 attendees
Wed 7th February 55 Broadway	Hybrid Bill Passage	Simon Bennett, Head of Learning Legacy (Consultation and Petitions Manager)  Rob Paris (Head of Sustainability and Consents)	Chief of Staff, Programme Planning Manager, Senior Consultation & Engagement Manager, Consents & Environment Manager, Growth & Development Strategic Manager, Principal Planner, Head of Scheme Design.
Thurs 8th February Canada Square	Design: Standards and Optioneering	Simon Wright, Programme Director  Chris Sexton, Technical Director  Chris Binns, Chief Engineer  Julian Robinson, Head of Architecture  Rhys Williams, Head of MEP Engineering  Troy Easthorpe, Stations Delivery Director  Colin Gainsford, Systemwide Delivery Director	Head of Scheme Design, Head of Engineering (Outgoing), Head of Engineering
Thurs 8th February Canada Square	Tunnel Access and Construction Logistics	Simon Wright, Programme Director  Bill Tucker, Central Area Delivery Director	Head of Scheme Design, Head of Engineering (Outgoing), Head of Engineering
Fri 23rd Feb Canada Square	Human Resources / Management	Valerie Todd, Talent and Resources Director  Dawn Barker, Head of HR	Business Operations Manager, Chief of Staff, Senior HR Business Partner
Thurs 19th April Canada Square	On-Network Technical Interface-High Level Meeting	Matt White, Surface Delivery Director  Paul Richardson, Service Delivery Manager Crossrail (RfL)  Ben Wheeldon, Programme Director (NR)	Head of Crossrail 2 [Network Rail], Head of Scheme Design, Programme Engineering Manager
Mon 23rd April 55 Broadway	Communications	Sarah Allen, Head of External Affairs  Peter MacLennan, Head of	Strategic Communications Advisor, Communications Trainee, Chief of Staff, Senior Consultation Manager, Communications Manager

		News	[Network Rail]
Wed 25 <sup>th</sup> April 55 Broadway	Contractor Procurement and Performance	Paul Grammer, Commercial Director  Richard Palczynski, Programme Controls Director  David Morrice, Contracts Director	Head of Commercial & Controls, Commercial Manager, Contracts & Commercial Manager, Head of Commercial [Network Rail], Risk/Value Lead
Wed 25 <sup>th</sup> April 55 Broadway	Contractor Procurement and Performance	Paul Grammer, Commercial Director  Richard Palczynski, Programme Controls Director  David Morrice, Contracts Director	Head of Commercial & Controls, Commercial Manager, Contracts & Commercial Manager, Head of Commercial [Network Rail], Risk/Value Lead
TBC	On-Network Technical Interface	Matt White, Surface Delivery Director  Paul Richardson, Service Delivery Manager Crossrail (RfL)  Ben Wheeldon, Programme Director (NR)  Phil Clayton, Manager of Engineering (Railway Systems)  Jonathan Osgood, Head of Signalling  Andrew McIntosh, Head of Concession Management	Mass-team from TfL/NR CR2 group; 15 attendees proposed.
TBC	Property Acquisition	Ian Lindsay, Property Director  (plus Geoff Bailey and Harry Younger from TfL Property)  Mark Glaysher, Head of Consents & Environment [Network Rail]	Head of Scheme Design, Property Consultant, Head of Business Case, Principle Planner, Senior Surveyor [Network Rail], Senior Programme Development Manager [Network Rail]
TBC	High-Level Contractual Approach	TBC	Head of Commercial & Controls, Programme Planning Manager, Head of Crossrail 2 [Network Rail], Programme Manager [Network Rail], Head of Scheme Design