



The Innovation programme held its second celebration event. The focus was to recognise, celebrate and thank our innovators and innovation champions across the whole of Crossrail, and we announced the winners of the H&S competition. [redacted] offered a welcome address, with keynote speakers from [redacted] (Costain) and [redacted] (Skanska). The event was over subscribed, out of the 80 invites sent, around 100 people turned up, including a mix of SMEs, Innovation champions from various contracts across Crossrail, heads of innovation from industry, as well as CEOs from industry bodies such as InnovateUK.



Innovate18 represented Crossrail at a DfT Science Advisory Council Workshop on the subject of Intelligent Infrastructure and Conditioning Monitoring, where we participated in the workshops, and provided an overview of the Programme, and plans for transition to an industry Innovation model.

We are engaging with MPA and KTN to discuss options for governance and stewardship for the industry Innovation model. An extraordinary Crossrail Innovation Working Group (CIWG) is scheduled in late November, to share and discuss ideas. The intention is to start testing and trialling the proposition in January 2016.

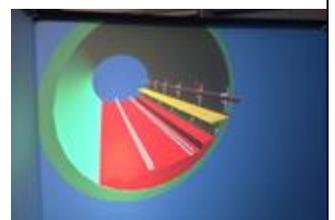
We continue to see a lot of innovation activity, with System Wide in particular generating increased numbers of ideas. In addition, we are in the final stages of securing contributions from [redacted] and [redacted], and [redacted] have confirmed their intention to join, [redacted]

KPI SCORE (Period 8): P7:: (35%) **33%** The KPI Score is calculated in the following manner:
$$\frac{(\text{Published} + \text{Implemented})}{(\sum \text{Ideas} - (\text{Invalid} + \text{Duplicate}))}$$

3D Move



The 3D move AR/VR trial is now fully under way at West Ferry Circus. This comprises 2 key activities: Research by Reading University and Imperial College around use of the technology in Design Reviews, an invitation to other areas of the business to explore additional uses, e.g. Health and Safety, training, works briefings, handovers, etc. A number of models have already been uploaded, including visualisation of the Maintenance Walkway, to support design options analysis.



Sensor 'Pit Stop' Workshop

We are working in collaboration with the Digital Catapult to host a 'Pit Stop' around use of sensor technologies. This will be a full day Open Innovation event. Participation from Academia, technical experts from our Tier 1 suppliers, and specialist providers of sensor related technologies has been secured. The Pit Stop will deliver a number of collaborative workshops which will explore potential solutions around maximising opportunities from existing or planned deployments, opportunities to improve efficiency of stage deliveries, and opportunities for data analytics based on the data that will become available.

Drones Progress



After a very successful day of flying the drone (UAV) at Old Oak Common depot, lots of useful footage, and understanding of the potential of using drones was uncovered, e.g., inspecting a crane in use in real time, inspecting it for any issues during the lift. The footage also provided updated site layout, highlighting walkways, and potential logistical pinch points. We trialled the point cloud scanning capability of the drone, and whilst the result proved that it could be done, the software was not quite ready to allow useful interrogation or integration of the data into BIM models or other surveying uses. Further use of the drones is now being planned with potential further training of new pilots in early 2016.