



Speakers

Stephen Dance, Head of Delivery, Infrastructure & Projects Authority (IPA)

Sadie Morgan, Commissioner, National Infrastructure Commission (NIC)

Graham Dalton, Chief Executive, Defence Infrastructure Organisation (DIO)

Steven Carden, Member of Management Group, PA Consulting

Mark Williams, Director, PA Consulting

Infrastructure Summit 2017

The BSA, in partnership with Associate Member PA Consulting, held its fourth annual Infrastructure Summit bringing together government agencies, suppliers, and infrastructure investors to discuss topical issues facing the industry.

This year's Summit, the first since the Brexit vote and held on the same day as the 2017 Queen's Speech, took place against the backdrop of a much changed political scene. Yet as BSA Chief Executive Mark Fox noted in his opening remarks, there is also continuity amidst the uncertainty as major projects continue to progress and government places infrastructure at the heart of economic growth. Attendees gathered to discuss the current challenges and opportunities for the development of infrastructure across the UK, and its role in meeting the country's productivity, connectivity and skills needs.

UK Infrastructure: Delivery and Design

Stephen Dance, Infrastructure and Projects Authority (IPA), kicked off proceedings. The second phase of HS2, the Industrial Strategy and Northern Powerhouse, and other large civil engineering contracts demonstrated there was ongoing commitment to investment that promotes growth. He outlined the different parties involved in deciding, and delivering, national infrastructure needs. The independent National

Infrastructure Commission (NIC) had a role in advising on long-term need; the Treasury's determined affordability and prioritisation of projects; and the IPA helps government deliver effectively and efficiently in reality. The challenge with infrastructure pipelines, he said, is therefore striking the appropriate balance between ambition and affordability.

Stephen was asked by the audience about the relative absence of infrastructure measures in the Queen's Speech and whether delays on major decisions such as Heathrow expansions could risk a loss of investment. He replied that the Queen's Speech concerns the legislative programme for parliament and there is a substantial pipeline of infrastructure not requiring legislation in this parliament, but the speech does include the next phase of HS2. Connectivity through infrastructure was a key part of addressing the UK's productivity gap versus other countries but there had to be a 'package approach', incorporating other aspects such as skills and digitalisation, to truly close the gap. He also reiterated that IPA was committed to providing a stable pipeline of projects, emphasising the ongoing development of new social infrastructure in schools and hospitals.

The second speaker, Sadie Morgan of the NIC and HS2 Design Panel Chair, talked about the work of the NIC and shared a few of her insights on the role of design in infrastructure. She began by saying that big, ambitious projects were 'back in vogue' despite continuing austerity but also noted that with challenges from a rising population to climate change, the UK simply cannot afford to cope without adequate modern infrastructure. A strategic vision, combining proper structure with clear leadership and governance, was required to tie together all the different infrastructure strands: from water and transport to waste and energy.

The NIC vision is for the UK to have world class infrastructure for the next generation that is high quality, resilient, affordable and sustainable. Its assessments will provide an opportunity to deliver a holistic look at the UK's long-term needs, and set out how they can be met. To achieve the ambition, the UK would have to prioritise long term investment over short term wins, make full use of new technology, and be innovative in its approach to finance and funding. Turning to design, Sadie said that getting this right at

the outset of a project, particularly during within procurement, was key to creating good, lasting infrastructure. Design is about problem solving, not simply aesthetics.

The Changing Infrastructure Landscape

PA Consulting's Steven Carden was the next to speak on the subject of the 'Internet of Things' (IoT). Noting that by 2030 there would be 30 billion devices connected to the internet he laid out how the IoT could improve connectivity and productivity. He cited the potential of remote asset management for infrastructure, which will allow businesses to understand from a distance what is happening with their infrastructure and make intelligent decision based on the data they are receiving. The IOT also has the potential to transform businesses altogether. Other examples of how data gathering is having a tangible business impact included the 'smart' boilers developed by Baxi and the sensors fitted on JCB vehicles which enable their fleet to be monitored remotely.

New Delivery Models (NDMs) were the next topic of the Summit. Mark Williams described how by changing their culture and governance structure, organisations can drive transformation, sharpen delivery focus and also secure newfound 'freedoms and flexibilities'. The presentation covered the typical reasons for why public sector bodies have historically chosen to adopt NDMs and the three main categories they tend to fall under. He concluded by citing different case studies that PA had been involved with and the benefits derived from them, including how moving the Royal Parks from an executive agency of the Department for Culture, Media and Sport (DCMS) to a charitable public corporation helped to develop a clearer strategic vision for the organisation.

Steven Carden returned to discuss the circular economy. With global landfill waste set to triple by the end of the century, a rising population, and a finite level of natural resources, it is increasingly important for businesses to take a sustainable approach to service provision. Currently, organisations largely work in a 'linear, take-make-dispose' fashion. This will need to change to a model that is predicated on re-use and extracting maximum value from by-products. There is a strong business case for a circular economy, particularly in the built environment where, for instance, 10-15% of building material is wasted during construction. However the benefits will only be seen if there is real change delivered across supply chains.

Infrastructure in Defence

The final speaker was Graham Dalton, Chief Executive of the Defence Infrastructure Organisation. Detailing his background working across various types of infrastructure, from social to economic, he noted that defence was categorised differently. Defence infrastructure is unique in having no regulator or a clear economic business model, and the normal drivers therefore do not apply. Graham gave an overview of the scale and diversity of the defence estate in which the UK military lives, works, trains and deploys from. The estate's needs ranged from construction and infrastructure to hard and soft facilities management to support the Armed Forces.

He spoke about the MoD's current strategy to reduce the overall size of the estate by a third by 2040 and some of the challenges and opportunities in trying to deliver this goal. Noting the tight fiscal climate, he explained some of the difficulties associated with PFI initiatives in the sector, while also saying that the security considerations in defence infrastructure put some constraints on the ability to transform services through more open software or technology such as the IoT. On the other side, the reform presented opportunities for DIO to reconfigure its budget in a positive way and proactively change its role from being a 'landlord' to a professional services business.

Question & Answers

Topics raised during the Q&A session included the future of funding streams from the European Investment Bank in light of Brexit and the challenge of prioritising design in the context of high costs; the importance of future contracts focussing on value for money rather than cost alone (i.e. CAPEX plus OPEX, not just CAPEX); the pace of digital change; and the attractiveness of the UK for infrastructure more generally. Cost and risk were cited as two possible reasons why the IoT and digital transformation in infrastructure had yet to take off in the ways anticipated but all panellists felt that it would be vital in the long-term to boosting productivity. The panellists also said that both government and industry had to be louder advocates for the benefits of new infrastructure in a way that made the UK more attractive both to those who want to invest and work here from abroad but also for younger generations too.