

Resilience First Webinar Summary

‘The Next Infrastructure Review of the UK’ in partnership with the National Infrastructure Commission

Chair:

Basil Scarsella, Chief Executive, UK Power Networks

Speakers:

Bridget Rosewell CBE, Commissioner, National Infrastructure Commission

Cathryn Ross, Strategy and Regulatory Affairs Director, Thames Water

Rachel Skinner CBE, Executive Director, WSP

The National Infrastructure Commission (NIC) recently launched its Baseline Report ahead of the Second NIC Assessment Report, which will be published in the second half of 2023. The Baseline Report identified three key strategic themes for study: reaching net zero, adapting to climate change and reducing environmental impacts, and supporting levelling up across regions. It also identified six national systems to be considered: digital, energy, flood resilience, water and wastewater, waste, and transport. The first phase of the work is a Call for Evidence, which will remain open until 4 February 2022.

Bridget Rosewell CBE: Overview of the Priorities for the Second NIC Assessment Report

Key strategic themes:

- Reaching Net Zero
 - Strong focus on electricity generation. How do we decarbonise and deliver a secure supply, limiting impact on consumers – an issue at the top of the agenda, even before recent price increases. Who will pay – users or the taxpayer?
 - Is hydrogen the answer? If we start with blue hydrogen, is it really feasible to get to green hydrogen? What will be the water requirements? Is a distribution network going to work for HGVs to be hydrogen powered?
 - How are we going to roll out heat pumps – and at what speed can that be achieved across the UK?
- Climate Resilience and Environment
 - How are we going to increase our resilience to extreme weather – particularly in the context of what is, in many places, an ageing infrastructure network, evidenced by landslips on the rail network, floods from sewers, and pipework systems which date back to the nineteenth century?
 - What recommendations should the NIC be making regarding asset condition and maintenance? What is the spend associated with ensuring assets are maintained in a good condition?
 - A consideration of the circular economy will also be important – and what that means for both asset management and whole-life basis.
- Supporting levelling-up
 - The NIC has recently completed a towns study, while a focus on cities was included in the First National Infrastructure Assessment Report.
 - Uncertainty around the long-term response to COVID-19, and whether changes – such as increased homeworking – will be permanent. The NIC is focusing on

behaviour change and scenarios to manage uncertainty rather than looking to a central forecast.

- Ensuring strategies are made at an appropriate level within an overarching framework will be key, facilitating data collection and data transformation of use of infrastructure service.
- Need to think about a surface transport strategy at a high level, which involves thinking about roads *and* rail *and* active travel – not simply roads *or* rail *or* active travel, which is how things tend to work at present.

Next steps:

- Intensive programme of work over next eighteen months, including NIC's own research.
- Need as much input from involved parties as possible to produce an assessment that builds as effectively as it can on everybody's information and creates a successful consensus.
- Encourage everyone to get involved. Call for evidence runs until the 4 February.

Cathryn Ross: The Regulations' Perspective

Business and regulators together:

- Many of the key issues for NIC focus can only be solved by means of companies doing the hard yards in terms of delivery. What regulation needs to be doing is laying the groundwork, enabling and encouraging companies to step up and own these issues to create and co-create the solutions with others, and to deliver, particularly as time is of the essence.
- Key headline: if we are going to be successful in delivering against some of these big challenges that the NIC is setting out – and drive the outcomes that customers and society care about – then we are going to have to steam out every last source of efficiency, creativity, and innovation that we can. Regulation is going to have to get to grips with some of the things that historically it's found rather difficult to do to enable that efficient delivery to happen.

The three challenges:

- Long-term thinking
 - Incumbent on companies to think some way beyond the end of the next price review and put in place 20-, 30- and perhaps 50-year strategies and plans for their asset base and how they are going to deliver over the long term.
 - Regulators themselves need to be open to change and think about what they can do to encourage long-term planning and facilitate it through the regime e.g. setting longer-term regulatory frameworks for delivery that enable regulators and companies to do some long-term planning and sequencing of asset investment that may be coming along the line.
 - This won't be easy for regulators, given five-year price reviews. But genuine benefit in unlocking more creativity and ensuring that we deliver this investment within an affordability envelope.
- Systems thinking
 - Outcomes we wish to deliver in terms of net zero, climate resilience, and improvement in environmental sustainability cannot be achieved within the sector silos that the current regulatory regime is structured around.

- Need more cross-sector policy statements from Government, for example, on climate resilience, and affordability and vulnerability.
- Innovation
 - While the regulatory toolkit is relatively good at driving productive efficiency, the regulatory regime has struggled with innovation and dynamic efficiency.
 - There has been progress: Ofgem and Ofwat have developed innovation funds – helpful in prompting conversations and catalysing thinking on doing things a little bit differently. And tough targets, too, can play their part in driving change.
 - We need appropriate returns if we want to see more innovation on the part of regulated businesses. Regulatory regime needs to leave efficient upside on the table for businesses to compensate them for the potential downside risk they're taking when they embark on innovation.
 - Regulators need to think a little differently about the evidence base they require from companies when assessing business plans. Doing things differently means no available evidence base. More creativity about how companies might build successful business cases that don't necessarily rest on historical evidence would be useful. Ofwat's approach to allowing companies to innovate in the water production process, using more nature-based solutions, is one such example.

Rachel Skinner CBE: The Sustainability Perspective

Shifting the mindset:

- Three themes for NIC around net zero, climate resilience and levelling-up are exactly the right list – headline topics that have been underrepresented for quite some time.
- These are complex and highly technical issues – and in engineering and infrastructure space we've been guilty of assuming that the more traditional technical work that goes on within the infrastructure sector is perhaps more important. That approach is carrying us into decades of trouble.
- A complete mindset shift is now required in the infrastructure space – towards the circular economy and natural capital in terms of biodiversity and reducing harm, and looking at the energy dimension. This is an 'everyone, everywhere' change if we are going to get anywhere near what we need to do.
- Clear articulation by NIC in the Second Infrastructure Assessment Report of just how far on the wrong side of the sustainability line we really are at the moment across climate/climate resilience/social inequality would be helpful.

From message to movement:

- Message on emissions has now landed – but there is still a significant gap between hearing/understanding the message and taking action on the scale of the challenge. Movement from talking to action is hard to do, especially at pace
- Need to ensure that we don't end up comparing the cost of carrying on as we are with the cost of action: the latter might look big on paper, but the risk of inaction is likely to be increasing exponentially in the future.
- Need to remember that all these key themes are in motion all of the time, all interacting which each other. Collaboration and systems thinking are therefore key.
- The UK's influence is great. If we don't take the opportunity to lead on climate action, then the cost could be far greater than we realise.

Keeping honest:

- We need to do everything we can to avoid greenwashing – or the pretence of action. We need to make the real change together to support against these three strategic areas.

The webinar recording can be found [here](#).

Speakers' Biographies:

Basil Scarsella

Basil Scarsella is the Chief Executive Officer of UK Power Networks, owned by the Cheung Kong Group, which is the largest Distribution Network Operator in the UK, distributing electricity to over eight million homes and businesses across London, the South East and East of England. It has some 6,500 employees in its regulated and non-regulated areas. UK Power Networks has been ranked in the Top 25 Best Big Companies to Work for the years 2015-2020 in the Sunday Times annual list and awarded Utility of the Year in the UK in 2012, 2015 and 2016.

Immediately prior to taking up his appointment with UK Power Networks in 2010, Basil was the CEO of Northern Gas Networks for five years. Northern Gas distributes gas to 2.5 million homes in the north east of England and also falls under the ownership of the Cheung Kong Group. Northern Gas Networks ranked as the most efficient gas network in the UK. Up until 2005, Basil was CEO of ETSA Utilities (SA Power Networks), the electricity distributor in South Australia.

Basil holds a degree in Economics from the University of Adelaide and is a Certified Practicing Accountant. He is a Life Member of Football Australia and former Member of the Executive Committee of FIFA. He received the Australian Sports Medal in 2000 and in 2003 became a Member of the Order of Australia (AM), for services to sport.

Bridget Rosewell CBE

Bridget Rosewell CBE is an experienced director, policy maker and economist, with a track record in advising public and private sector clients on key strategic issues. She has worked extensively on cities, infrastructure and finance, advising on projects in road and rail and on major property developments and regeneration. Bridget has been a member of Commissions looking at the future of public services, city finance, the North East economy, the City Growth Commission and the London Infrastructure Commission. She has also served as Chief Economic Adviser to the Greater London Authority (2002 to 2012) and her book, 'Reinventing London', was published in 2014. Bridget lives in the East Midlands and is Chair of Atom Bank, based in Durham. She is also founder and Senior Advisor of Volterra Partners and Chair of the M6 Toll Road. She was appointed CBE in December 2018 and is also a Fellow of the Institution of Civil Engineers.

Cathryn Ross

Cathryn Ross is Strategy and Regulatory Affairs Director at Thames Water. She is responsible for shaping and embedding a strategy to ensure that Thames Water delivers for customers, communities and the environment. She is an experienced regulatory and competition economist and has worked across a number of different sectors advising on economic, regulatory and competition issues.

Before joining Thames Water, Cathryn was Group Regulatory Affairs Director at BT Group and responsible for developing and implementing BT's regulatory strategy across the group, covering regulation in the UK and beyond.

Prior to that, Cathryn was Chief Executive of Ofwat, the independent economic regulator for the water and wastewater sector in England and Wales. She successfully saw through the delivery of a new strategy for Ofwat, focussed on a vision for the sector of trust and confidence in water and wastewater services, and transformed the regulator in order to deliver this. She led the 2014 price review and played a key role in the opening of the non-household retail market in England to competition.

Rachel Skinner CBE

Rachel Skinner CBE is an Executive Director at WSP, where she now leads on corporate responsibility and government relations, having previously led its transport business. In 2020-21, she served as the 156th President of the Institution of Civil Engineers and she is a Patron of Women in Transport (a notfor-profit), having been one of its founding board members since 2005.

She is a Fellow of the Royal Academy of Engineering, a chartered engineer and a chartered transport planner. Rachel chairs the Carbon stream of the Infrastructure Client Group (ICG) and served two years as an Infrastructure Commissioner for Scotland from late 2018.

In 2016, Rachel was listed as one of *The Telegraph's* inaugural UK Top 50 Influential Women in Engineering; in 2017 she was named the Most Distinguished Winner and Best Woman Civil Engineer at the Women in Civil Engineering Awards, and in 2019 she was confirmed by the Financial Times as one of the UK's Top 100 Women in Engineering.

Rachel has authored, scripted and hosted publications and films on topics including "Shaping Zero" about net zero carbon for infrastructure, "Making Better Places" on place-making and future mobility, and before that about digital technology and its potential for infrastructure, industry innovation and collaboration. She is regularly invited to give keynote conference presentations and to chair international and national industry events.

Rachel was awarded a CBE for services to infrastructure in the 2022 New Year Honours list.

Robert Hall

Robert Hall is the Director of Strategy of Resilience First. He was previously the Director of the Security & Resilience Network at London First. Before joining London First in 2013, he was Director of Resilience at G4S Risk Management Consulting. Robert has worked in the risk, security and resilience arenas in both the public and private sectors for many years.

He has held senior positions in two FTSE100 companies that specialise in financial services and manufacturing. He has also been Head of Analysis at a national intelligence agency and Managing Editor of security titles at an international publishing company. In 2000, he founded and managed an international forum on global security and law enforcement for senior executives in government, business and academia.

Robert spent his early career in the military before moving into the commercial world. He has written and presented extensively on strategic risk and security issues.