



UNIVERSITY OF LEEDS

EPSRC Network on Future Infrastructure Forum

FIF2 Day 2

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FIF Aims

- EPSRC, the academic community and other stakeholders should look to identify and invest in the key research challenges in ground and structural engineering, formulate a shared vision for these challenges, and communicate this vision strongly
- A new vision of the shape of tomorrow's construction industry by providing a roadmap of research priorities in the ground and structural engineering sectors which will lead to firm proposals for innovative research aimed at revolutionizing how we procure, design and deliver major infrastructure projects.
- Identify specific areas of focus and research projects which could be instigated immediately to precipitate this transformation. It will promote a total rethink of the fundamental approach to design, challenge established norms and stimulate innovation in construction.

NIP1 and NIP2

- Improve infrastructure performance
 - Improving the performance, capacity, connectivity and environmental impacts of the UK's transport networks including maintaining the status of the UK as an international hub for aviation;
 - Achieving a secure, diverse and reliable energy supply for the UK while reducing the carbon intensity of electricity generation at least cost to consumers;
 - Maintaining the security and performance of the water and sewerage system while reducing its environmental impacts;
 - Mitigating the impacts of flooding and coastal erosion as part of a well-managed, coordinated and affordable risk management system; and
 - Reducing waste sent to landfill, increasing recycling rates and moving towards a zero-waste economy
- Innovative business models around infrastructure interdependency

Progress

- Complete
 - Status of UK research in geotechnical and structural engineering
 - An international perspective
 - Identify key areas
 - Whole life value?
 - Asset management?
 - Design and procurement?
 - Structural engineering?
 - Geotechnical Engineering?
- In progress
 - Industry priorities

Today's Actions

- Complete industry perspective of research challenges
- Working groups to
 - Step 1
 - Understand the challenges of sustainability in a low carbon economy which is knowledge based
 - Identify what will make a step change in the performance of the infrastructure
 - Step 2
 - Start developing the research questions
 - Identify what actions are needed to solve those questions
- Agree the actions over the next three months

Finally

In 2020 what will make you feel proud that you were here on the 17th January 2012 and what you did made a change?