

HS2 announce 2022 winners of competition to drive best practice

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HS2 Ltd has announced this year's winners of a competition to share insight from Britain's largest construction project with the wider UK infrastructure industry.

The HS2 Learning Legacy initiative sees the publication of lessons learnt from across the project, including good practice and innovation. It is supported by a range of industry partners, including the Institution of Civil Engineers.

The five winners of the 2022 Technical Paper competition are:

Driving efficiency and sustainability in material reuse through GeoBIM (Mott MacDonald, Vinci Construction Terrassement Grands Projects and Balfour Beatty) – This paper outlines how to use Building Information Management to drive efficiency and sustainability in terms of reuse of materials.

Reducing emissions in construction through Non-Road Mobile Machinery Retrofit (HS2 Ltd, Balfour Beatty VINCI, Imperial College London and Eminox) – This report addresses how to reduce emissions and keep existing machinery in use for longer and extend the utility of the embedded carbon

and the financial investment in those assets.

Designing with landscape maintenance in mind (HS2 Ltd) – This paper takes a balanced and pragmatic approach to landscape design and consideration for future maintenance.

Euston Bridge 7 Mitigation Works Design and Construction (Arup, Skanska and HS2 Ltd) – This paper brings together structural design, geotechnical analysis and construction solutions that were applied to mitigate the impacts of tunnelling on a fragile bridge on the approach to Euston station.

Streamlining Utilities Ground Movement Assessments (Arup) – This paper outlines how to improve reliability and speed-up decision-making backed by data.

The winning submissions have been published on the dedicated learning legacy website at – <https://learninglegacy.hs2.org.uk/>

Congratulating the winners, HS2 Ltd's integration director, Giles Thomas said: "Major projects like HS2 do not happen in isolation – we build on the experience and lessons learned from previous projects and rely on the wider industry to deliver.

"That's why I'd like to thank everyone who has contributed to our Learning Legacy project – and particularly our five winners for sharing their insight and experience from across the design and early stages of the project."

The awards were given out at an event at the Institute of Civil Engineers in central London on Friday 11th November.

They are amongst 28 new Technical Papers that will be published following the competition covering a range of topics including Design Engineering & Architecture; Environment, Digital Engineering; Health & Safety and Occupational Health & Wellbeing.

New Learning Legacy papers are published every year, including technical papers and case studies, and there are now over 150 resources on the website. HS2 is also partnering with industry to disseminate the learning through events and engagement as well as academia to share real life case studies with post graduate students.

The project builds on similar initiatives at London 2012, Crossrail and Thameslink London Bridge project – but HS2 is the first project to start early in the project lifecycle enabling the capture of learning from the early projects stages such as procurement, initiation, design and enabling works.

Mark Hansford, director of engineering knowledge at the Institution of Civil Engineers, said: "Congratulations to all the winners of the Technical Paper competition. The ICE is always looking to collaborate with those who are on the same path as us, and our partnership with HS2 Learning Legacy is an outstanding example of that.

"I look forward to working with today's winners and many of the other contributors to this initiative to bring

their insights and experience to a wider audience.”

In order to ensure that that the information can benefit as much of the industry as possible, HS2 Ltd is working with the following industry partners to disseminate the lessons learnt:

- Association for Project Management (APM)
- British Occupational Hygiene Society (BOHS)
- Chartered Institute of Building (CIOB)
- Institution of Civil Engineers (ICE)
- Institute of Occupational Medicine (IOM)
- Institution of Engineering and Technology (IET)
- International Council on Systems Engineering (INCOSE UK)
- Major Projects Association (MPA)
- Permanent Way Institute (PWI)
- Rail Industry Association (RIA)
- Royal Institute of British Architecture (RIBA)
- Society of Occupational Medicine (SOM)
- Supply Chain Sustainability School

All learning legacy papers and resources will be published on the website learninglegacy.hs2.org.uk and two books of technical papers, published by ICE, will also be launched.