

Innovative Partner Awarded Contract to develop Very Light Rail trackform

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The Coventry Very Light Rail project is about to embark on a new adventure, investigating how to create a low cost trackform for the light rail carriages already in development, thanks to £1.5m funding from West Midlands Combined Authority (WMCA), secured by CCC. This project aims to revolutionise affordable public transport in towns and cities.

So far in the Coventry Very Light Rail project, Engineers from WMG, University of Warwick have worked with TDI to design a battery-powered light rail vehicle for Coventry City Council. The long term objective is that it will become an autonomous vehicle that can hold 50 passengers and work like the London Underground system, where there is no timetable and people can hop on and off.

The vehicle will be lightweight in design using a multi-material approach. Due to being battery-powered there will be no overhead power supply, which is both costly and unsightly

However researchers are now about to embark on their next venture of the VLR project, as they have received £1.5m via CCC to develop a low cost trackform for light rail. Engineers at WMG will work with Coventry City Council and a major French civil engineering company – Ingerop Conseil et Ingénierie.

The ultimate goal of the track project is to design an affordable trackform that can be easily removed and

will reduce impact on utilities, saving hundreds of thousands of pounds digging up roads and moving gas, electric, telecommunication and sewage systems, which is currently the process for building traditional tram systems.

Dr Darren Hughes, Associate Professor at WMG, University of Warwick, said: “The Coventry light-rail project brings together advanced technologies from a number of sectors to deliver a low-cost environmentally-sustainable public transport solution.

“Now that the vehicles have been designed it is time to look at the track they will run on, and with the help of Ingérop Conseil et Ingénierie, we will make it as affordable and environmentally friendly as possible.”

Councillor Jim O’Boyle, cabinet member for jobs and regeneration said: “Our plan for Very Light Rail has the potential to transform the way people travel. It will be delivered at a much lower cost than traditional trams, a hop on, hop off service part of the green revolution and of course its innovation born in Coventry.

“While the development of the vehicle is progressing well, we also need to innovate in the development of the track and that’s exactly what Ingérop will be able to help with. Experts in this field we will be setting them the challenge of designing track that that can be laid much more quickly and therefore much more cheaply than traditional track.

“Very Light Rail is a really exciting project. Another innovative first for Coventry and this is another important step in its delivery.”

Philippe-André Hanna, Director for International Transport in Ingérop said: “We are delighted to join the team for the Coventry Very Light Rail. This project is an absolute need for small and medium cities who want to have a modern, carbon-free, rail-based system and cannot afford it today. After the R&D phase, our real goal as on all our projects around the World is to put in place the most sustainable urban transport system for Coventry and many more cities in Europe.”

Tim Hackett, Infrastructure Director at Rendel Ltd said: “We are really excited to be part of this project with our colleagues from Ingérop having already worked together successfully on some high-profile and complex rail projects. We look forward to collaborating on this innovative and technologically game-changing project, providing support from our new West Midlands office.”

Photo credit: TDI