

Ricardo to support development of South Korea's Great Train eXpress project

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Ricardo Rail's team will provide system engineering support during construction of Line A of the South Korean capital's planned high-speed commuter rail network, through to planned opening in 2024

Ricardo, which has its headquarters in the UK, has been appointed by SG Rail Ltd –the Special Purpose Company that will finance, design and build the GTX-A railway – to provide multi-discipline engineering and assessment services during the development of Line A of the Great Train eXpress (GTX), the new higher-speed commuter network for Seoul and its surrounding commuter region.

As the first of three standard-gauge lines planned for the new network, 'GTX-A' will extend from Unjeong in the northern reaches of Seoul's commuter region through to Dongtan in Gyeonggi Province in the south of the city.

With just ten stops along its planned route, including the city's main Seoul Station interchange, the line will operate at speeds of up to 180 km/h, allowing end-to-end journey times of just over 40 minutes, more than halving those of the current metro services.

Ricardo will provide system engineering and Independent Safety Assessment (ISA) services to ensure the infrastructure (track and civil engineering) and rolling stock systems (vehicles, communications, signalling etc) are properly integrated and ready to provide a safe and efficient service once operations commence.

System engineering activity will include oversight of integration management, as well as providing expert support on RAMS (reliability, availability, maintainability and safety), noise and vibration, electromagnetic compatibility, interface management. As the appointed ISA, Ricardo's teams will also assess engineering and maintenance system safety against relevant international standards, including IEC 62278/62279/62425.

As the first deep tunnel project to cross the city of Seoul, the project shares many characteristics of London's Crossrail, a project that Ricardo Certification has supported as the appointed Notified Body since 2012.

"Our experts will put in place the exemplary management procedures that will help support this major investment in Seoul's transport infrastructure," commented Seok-Kyun Shin, business manager for Ricardo Rail Korea. "With the technical knowledge and assurance processes we have developed in the UK and elsewhere readily available to our team in Seoul, we can help anticipate the engineering challenges ahead for Line A and be ready to support plans for its interfaces with Lines B and C."

Expected to enter service in 2024 - with lines B and C adding a further 130km to the network by 2027 - the new GTX network will bring significant new rail capacity to Seoul's commuter region.