

Fugro wins Network Rail contract to deliver gauging survey and 'digital twin' of Scotland's Railway

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Fugro has been awarded a contract to survey Scotland's entire rail network and provide Network Rail with a holistic gauging database that includes clearance data from the track to lineside structures, platforms, objects, and the train-to-train passing interface. The routewide gauging Geo-data will support the continued safe passage of trains operating on the network and facilitate the introduction of new rolling stock.

The project started at the end of April and will survey approximately 2,750 route kilometres, spanning 93 different route sections and 638 station platforms. The use of Fugro's train-mounted RILA monitoring system will remove the need for surveyors to be on or near the track during data collection and thus deliver a clearly defined health and safety benefit. It will also afford unrivalled speed of survey data acquisition.

Engineers and asset managers will be able to view simultaneously acquired video and RILA data in a desktop environment served through an intuitive and secure web portal which integrates 2D and 3D data

to provide a 3D representation or ‘track twin’ of the railway corridor. This is particularly pertinent to Scotland’s Railway as much of the network covers remote, difficult-to-access areas. The track twin will enable a range of engineering, asset management and maintenance applications, including track ballast quantity and distribution, earthworks, and vegetation management. It will also support the design of future electrification projects, an important part of the Scottish Government’s commitment to decarbonise Scotland’s rail passenger services by 2035.

Rikkert Wienia, Fugro’s Rail Manager for Europe and Africa, said: “We are delighted to contribute to this valuable network resource that supports effective clearance assessment and risk management. Our RILA technology will provide Scotland’s Railway with complete up-to-date asset Geo-data to meet their gauging requirements and offer the possibility of using the same data for a range of other engineering and asset management applications.”

Photo credit: Fugro