FREQUENTIS’ technology prepares Finland for Future Railway Mobile Communications System (FRMCS)

Frequentis’ solution for Finnish Transport Infrastructure Agency (FTIA) enables flexibility and cost savings across the railway communications network

Frequentis has implemented the Unified Railway Communication and Application (URCA) system to fulfil the FTA’s need for a cost saving transitional solution to the future GSM-R replacement. Finnish railway users can now use VIRVE - the Finnish Public Safety digital TETRA radio network - and public mobile networks for all railway-specific communication functionalities, allowing greater flexibility to follow the future evolution of such networks, as well as ensuring less dependency on one specific communication standard.

The Finnish GSM-R network, RAILI, has been used for operational voice communications in rail transport in Finland since 2008. Purchased systems were impending end of their life cycle and increased radio interferences from the commercial mobile networks due to the introduction of new broadband 3G and 4G radio technologies, was the trigger to search for an alternative communication solution. URCA instead uses the Finnish Public Safety Authority’s VIRVE telecommunications network to provide a national rail voice and dispatch system based on Frequentis’ bearer-independent architecture – considered to be the first bearer-independent communication (BIC) solution for rail in Europe.

“We selected the application solution from Frequentis to support us in this transitional replacement of GSM-R and allow communications to continue independently of the radio network technology. This enables us toward our goal for cost savings and efficiency.” Markku Voutilainen, Finnish Transport Infrastructure Authority.

The contract also included voice recording and a special smartphone application, called RAPLI, which also allows the usage of the rail specific functions on the public mobile networks. Train radio has to be TETRA radio based on EU derogation, but all other mobile users can choose between the TETRA or public mobile network.

“The URCA is an end-to-end solution, based on the Frequentis fixed terminal rail voice communication system, FTS 3020. It enables the use of the TETRA based network, as well as public mobile networks, (including broadband networks in the future) with a rail feature-set to provide an entirely new set of
options beyond GSM-R. The FTS 3020 is the ultimate migration platform towards FRMCS.", says Thomas Karl, Frequentis Vice President Public Transport

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About FREQUENTIS

Frequentis is an international supplier of communication and information systems for control centres with safety-critical tasks. These control centre solutions are developed and distributed by Frequentis in the business segments Air Traffic Management (civil and military air traffic control, and air defence) and Public Safety & Transport (police, fire and rescue services, emergency medical services, vessel traffic and railways). Frequentis maintains a worldwide network of subsidiaries and local representatives in more than fifty countries. The company’s products and solutions are behind more than 25,000 operator positions in over 130 countries. With this extensive portfolio, Frequentis is the leading provider of voice communication systems… all making our world a safer place every day!

For more information, please visit [www.frequentis.com](http://www.frequentis.com)

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