

5GRAIL paves the way to the Future Railway Mobile Communication System (FRMCS)

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FRMCS answers to following elements of strategic importance for the future of the railways:

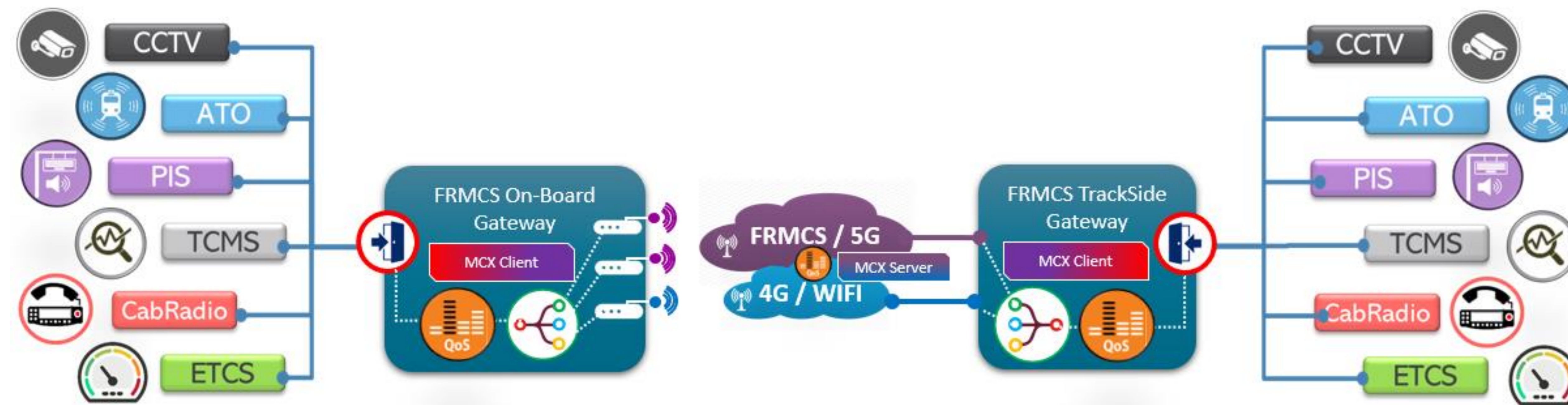
- Obsolescence of GSM-R system (based on 2G radio technology), which is a key component of the European Railway Traffic Management System (ERTMS), a long-life successful border-crossing interoperable system. It supports critical applications, deployed on more than 120.000Km in Europe and 250.000 worldwide.
- Being a 5G technology, it is an enabler of Railways Digitalization, answering to an ever-increasing need of transmitting and receiving increasing amounts of data, supporting introduction of ATO, On Board Video, Intelligent infrastructure, Preventative maintenance, etc.
- 5GRAIL is a critical step of FRMCS introduction, delivering prototypes especially for On-Board, tested in Lab and Field.



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TOBA (Telecom OnBoard Architecture)



- ❖ 5GRail started on the 1st of November 2020, and will finalise on the 31 October 2023.
- ❖ 5GRail consortium is working on prototyping the entire FRMCS ecosystem by developing and testing the first prototypes based on the first set of FRMCS specifications (also called FRMCS V1)
- ❖ The Project is advancing well. First prototypes of the On Board FRMCS are available, including FRMCS 1900 MHz modules and other 5G frequencies enabled ones, and entered in Lab Testing phase.

