ERTMS Unit:

The ERTMS Unit enables the Agency to fulfil its role of System Authority for the European Rail Traffic Management System (ERTMS).

ERTMS includes the European Train Control System (ETCS), and the Railway Mobile Radio System (RMR, this is the voice and telecommunication system for the railways). The <u>Technical Specifications</u> <u>for Interoperability</u> (TSI) for the subsystem Control Command and Signalling (CCS) are the legal framework defining the requirements for the implementation of the ERTMS; they make reference to the detailed specification documents available in the <u>dedicated pages</u> of the Agency website.

ERTMS relies on data communication and data processing systems, for which detailed requirements are laid down. The life cycle of such systems, taking account of technological evolution, introduction of new functionality and improvements from return of experience make the life cycle of those systems considerably faster than most other subsystem in the railway. A dedicated Change Control Management process is in place for the ERTMS specifications, to ensure that the experts of the Sector and of the Agency can process efficiently and timely the requests for changing the detailed technical requirements.

A key element of the interoperable digital railway system is RMR, the Railway Mobile Radio communication system. The development of 5G technologies represent an opportunity to phase out the existing GSM-R system. One of the key activities of the unit is to define the requirements for the future radio communication system for the railways (FRMCS).

The core competences in ETCS and RMR are available to the Agency for the different activities, notably to deliver Vehicle Authorisation and ERTMS Trackside Approval projects, as well as the coordination in the field of research and cybersecurity.