

ETCS and GSM-R compatibility tests

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From 1 July 2021 an application for a vehicle type authorization requires a proof of compliance with at least one ESC/RSC type (selected by an applicant). In case that no chosen ESC/RSC type is confirmed, the designation ESC-EU-0/RSC-EU-0 will be entered into a permit along with an uncoded restriction. It means that this vehicle is not allowed to operate on railway lines equipped with ETCS.

Compatibility tests are additional checks for ETCS and GSM-R systems. These tests are necessary to achieve the highest level of confidence in technical compatibility of on-board equipment with individual trackside elements of the system. These checks are the basis for further harmonization of subsystems. For the ETCS system these are ESC tests, during which the compatibility of on-board equipment with trackside elements of the ETCS system is confirmed. For the GSM-R system these are RSC tests, which are to prove the compatibility of cabin radio or EDOR with the GSM-R trackside devices.

ERTMS - as a uniform standard of train running control safety devices - is a basis for building a single railway area of the European Union. The implementation of the system leads to an increase of competitiveness of rail transport while increasing safety of traffic. Compatibility tests should help to achieve these benefits by ensuring smooth interaction between on-board and trackside components of the system.

Detailed information on the scope of responsibilities during ESC/RSC tests, deadlines and the consequences of failing to conduct ESC and RSC tests can be found on our website in [ESC & RSC tests](#) section (Polish version only).