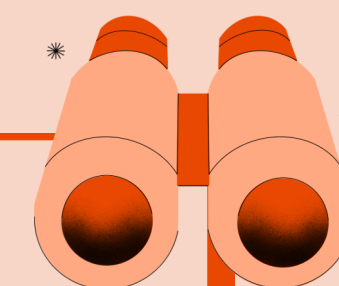




do you know

what does  
ESC  
means?

and what is  
its impact?



let's find out



[www.ertms.net](http://www.ertms.net)

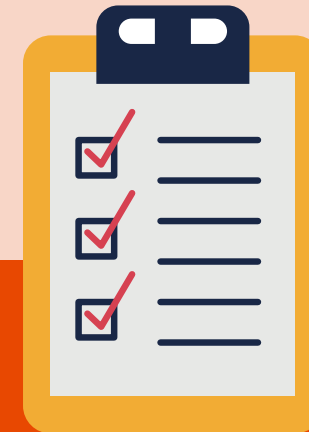
# WHY ESC (ETCS System Compatibility)?



Different national methods existed to verify compatibility between ETCS onboard and trackside systems.



In 2016, the Test & Validation working group was created to harmonise these methods.



The group established a single, unified approach as the final quality check before a vehicle enters service.

ESC

This approach was integrated into the CCS TSI and became effective in 2019 as ETCS System Compatibility (ESC), unfortunately involving additional assessment and a link to the authorisation process.

## ...BUT WHAT IS THE ESC IMPACT?

- ESC has delivered some **progress - greater transparency on route access requirements** and some exemplary implementations to show for it.
- However, many challenges exist and cannot be ignored - **inconsistent implementation across countries, unnecessary assessments and links to authorisation are making ESC cumbersome and expensive.**
- Constant updates to ESC checks and types add **significant effort** for infrastructure managers.

## PROCESS (SHORT-TERM)

- Decoupling of ESC from authorisation
- Reduction of diversity of the ESC processes among IMs and countries
- Acceptance of ESC reports by one entity only

## STABILITY OF THE ETCS SYSTEM SPECIFICATIONS (MID-TERM)

- Harmonisation of operational rules and trackside engineering. For us, this is the most important element to eliminate ESC

## ON-BOARD CROSS ACCEPTANCE (SHORT-TERM)

- Cross-acceptance of ESC evidence across all vehicle types
- Cross-acceptance of all subsequent product versions of the ETCS on-board
- Mitigation of poor availability of test laboratories or tracks for field tests through different approaches for collecting ESC evidence

## Let us clear something up

ESC is a **quality check** - full stop. Before any ETCS on-board goes live on a real line, proof of that check needs to be in place.

What ESC is **not** - and this distinction matters - is a **substitute for safety, certification, or authorisation**. Its lane is route compatibility, and route compatibility alone.

**The problem?** Today, that boundary is not being respected. And that is something we need to fix.

