

# The Signalling Company and Try and Cert introduce Silicon Valley best practice into European ETCS development

## *Silicon Valley for rail*

Keen to bring key innovations on the market and to keep a pioneering spirit, The Signalling Company has decided to **run 24/7, 365 days per year test campaigns on its ETCS Onboard software, in compliance with official ERTMS Interoperability test sequences.**

This models a well-known Silicon Valley best practice in the software industry called [Continuous Integration](#). Continuous integration allows the ETCS Onboard software to be continuously tested, to detect interoperability issues earlier, and to fasten the Baseline upgrade process. In traditional settings, ETCS test campaigns take months and involve a large team of engineers.

To guarantee the success and quality of these test campaigns, The Signalling Company decided to partner up with the key player Try and Cert. This joint-venture between Laboratoire ERTMS France (LEF), CERTIFER and Belgorail is the first ERTMS Accredited Laboratory to propose a technical infrastructure enabling Continuous Integration and ‘software in the loop’ testing according to official ERTMS Interoperability test sequences specified in the Subset-076 standard.

Software in the loop testing avoids the need to send ETCS onboard hardware to the laboratory, and instead uses a cloud to test the ETCS Onboard software.

## *Seismic shift in business model*

Among other things, TheSignallingCompany proposes a new business model for ETCS Onboard including a fixed-price insurance against all future ERTMS Baseline changes to its customers. This represents a seismic shift for European Railway Undertakings: as their ERTMS investments will no longer be open-ended, RUs will actually know before they make the investment, how much it will cost to keep system up to date and functioning in the decades to come. In the current business models operated by incumbents, RU’s sign a blank check.

The key technology behind such a radical business model change is the ERTMSFormalSpecs (EFS) modelling language, a Domain Specific Language that allows the production of an immediately executable model of the ERTMS specifications, without any intermediary code generation, manual or automated. ERTMS Solutions, one of the shareholders of TheSignallingCompany, has developed since 2010 a Subset-026 compliant EFS model its Subset-076 automated test suite.

## *Timing*

The Continuous Integration will start with ETCS Onboard software in the loop continuous testing from 2020 to 2022, followed by Certification tests using TheSignallingCompany ETCS Onboard hardware from 2022 to 2023.

The ‘software in the loop test’ campaign starts this summer.

*End of press release*

*About The Signalling Company*

We are building a better ETCS onboard solution, to make the signalling system of the future cost-effective, flexible and future-proof.

The Signalling Company is the result of a joint-venture between two Belgian companies: ERTMS Solutions, an industry leader in railway testing, maintenance and systems integration, and Lineas, the largest private rail freight operator in Europe.

*About Try & Cert*

Try & Cert offers laboratory and certification tests on ERTMS interoperability components. Try & Cert is made up of three members who combine their expertise to synergistically produce certification services in the rail sector:

- an accredited laboratory: the ERTMS France Laboratory (LEF)
- two accredited Notified Bodies: Belgorail and Certifer

Try & Cert is member of the ERTMS Accredited Laboratory association, grouping CEDEX, DLR, Multitel, Try & Cert/LEF and RINA.



Contact us at [info@thesignallingcompany.com](mailto:info@thesignallingcompany.com) if you want to be part of this story, be it as a customer, an employee or a partner. It all starts now.



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