



# ERTMS Test Services and Maintenance Solutions



The Railway Certification department of Multitel is specialized in ERTMS testing solutions. It gives support to the certification, provides performance and reliability test solutions to railway industry and offers maintenance solutions, train/track validation and validation support of ERTMS deployment to railway infrastructure managers.

## ■ Test Services and Maintenance Solutions

In the field, the railway infrastructure manager is confronted to problems related to Balise and BTM that could result in train stops with all the consequences on the railway traffic in terms of security aspect, train delays, passenger satisfaction,...

Till now, the railway infrastructure managers replace the suspected material without knowing precisely the cause of the problems.

They have no diagnostic tools in order to verify the good working of their equipment.

This situation leads to a difficult, costly and time-consuming maintenance process



Multitel ERTMS Test Centre

## Frequently asked questions

### How do I know if the balises deployed are still working ?

The Multitel Portable Balise Analyzer gives you the ability to perform analysis of the balise signal directly on the track..

The Analysis results are available in less than 2 minutes!

The Multitel On-Board Analyzer installed on the maintenance train gives you the ability to analyze the balise in a dynamic mode by running along the tracks.

For both Multitel tools, the analysis results are collected in a database used for establishing a corrective or predictive maintenance plan.

### We received in our facilities a new batch of balises that are ready to be deployed. Is there a way to easily and quickly verify the quality of the signal and the telegram of the balise before deployment on the track?

The Multitel Production Test bench gives you the ability to perform automatic and fast analysis of the balise.

It checks the quality of the signal and decodes the message from the balise.

A global test report is automatically created and collected in the database.

### Eurobalises have a lifecycle. How can I predict when the Balises need to be replaced?

Based on the analysis of the collected results in the Multitel database, a corrective and predictive maintenance plans are established.



MULTITEL Portable Balise Analyser

### We suspect that the On-board BTM antenna is malfunctioning. Is there a possibility to perform a diagnosis and eventually to repair it?

Multitel has developed its own tools in order to perform mandatory and specific tests related to Balise and Balise Transmission Module of the Subset-085.

Multitel has also developed specific hardware and software tools to reproduce specific field conditions in its laboratory. These particular tests have highlighted particular RF phenomena and unexpected behaviors of the balise!

## ■ Multitel Expertise

Multitel is in permanent contact with several Railway Infrastructure Managers who report problems of use in the field related to Balise and On-board antennas. This neutral position of Multitel ensures to have the utmost relevant and efficient solutions solving ERTMS problems...

Thanks to its RF expertise and its experience, gained during the testing campaigns of Balise or Balise Transmission Module, Multitel made possible to highlight various balise and BTM antenna problems and to provide specific solutions.

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