# GSM-R, ERTMS and FRMCS Monitoring

Monitor and troubleshoot trackside telecoms, signalling and interlocking systems continuously





Actively test, monitor and troubleshoot your railway networks with confidence.

#### The ERTMS Environment

Signalling networks need to be monitored, managed and maintained as failures cause expensive delays and passenger frustration.

Because ERTMS networks are complex environments, they present many challenges and issues, including:



Watch our video to learn more

- GSM-R and rail telecoms coverage needs to be available at all times, all across the network
- Therefore, any monitoring system needs to operate 24/7 and to evaluate all the complex systems interactions (GSM-R/5G Rail/ETCS/IXL)
- The monitoring system must also identify root causes, when anomalies occur, quickly and accurately
- And all the data collected needs to be retained for a sufficient period of time to:
  - Ensure that network upgrades can be properly tracked
  - Perform appropriate rollbacks, in the case of a malfunction
  - Score KPI and SLA performances and identify trends for predictive maintenance
- Provide statistics to third parties (such as Rolling Stock operators), so they can measure their own KPIs

Our solutions enable operators and equipment vendors to test and measure ERTMS rail telecoms and interlocking networks for true end-to-end signalling performance.

## The Importance of Passive Monitoring

With so many constant interactions between the rail telcoms, signalling and interlocking systems, it's vital that every communication can be traced from end-to-end.

The EVOIA Assure dashboards make this easy. You can check all internal and external KPIs and SLA performances.

## **Introducing EVOIA Assure**



Using scanners, responder units and other monitoring hardware, EVOIA Assure enables signalling data streams from the trackside and on-board units to be collected in real-time from a wide variety of network and train equipment.

This allows it to provide a comprehensive end-to-end view of GSM-R, 4G, 5G and FRMCS rail telecoms, signalling and interlocking network status.

From an overview of the results, you can click on the dashboard and drill down to investigate individual issues, quickly and easily.

EVOIA Assure is suitable for technicians at all levels, including troubleshooters, network operations managers, RAN and core network technicians, application services engineers, mission critical network manufacturers, and more.



#### **EVOIA Assure Includes:**

- Probes, responder units and other monitoring hardware to test and measure the quality of the communication network systems
- Powerful software tools to compile, collate and analyze the data from both passive monitoring and active (drive) tests

#### **EVOIA Assure Features Include:**

- Dedicated rail telecoms/ERTMS asset management platform
- Access network, core network and signalling subsystems data collection and analysis
- 24x7 supervision
- Tracing and signaling data storage for many years
- Customizable analytical tools
- Wide range of configuration support, from light portables to heavy-duty rack-mounted clusters
- Software compatible with GSM, GSM-R, GPRS, LTE, and 5G
- LTE, 5G, ETCS and A-ABIS Protocols

## Contact Us to Learn More or Request a Demo



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