



Multitel
Railway Certification

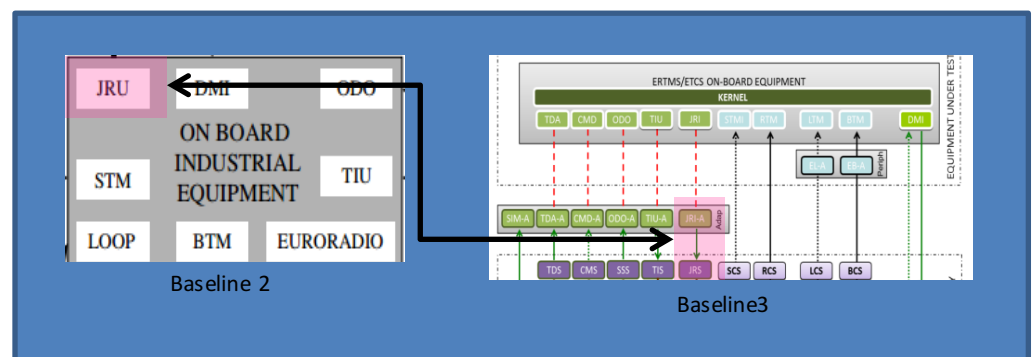
JRU Simulator

Multitel offers hardware and software tools to create a Juridical Recording Unit (JRU) simulator, which is compliant with UNISIG SUBSET-027.



■ Historic: New management of JRU

In the past, the JRU module has integrated into ERTMS/ETCS on-board equipment. ERA (European Railways Agency) has decided to separate JRU module from EVC in baseline 3. The JRU module becomes a separated entity and can be developed separately of EVC.



Changes of JRU management between Baseline 2 and Baseline 3

■ JRU simulator features

The JRU records data from EVC (European Vital Computer – Onboard Unit). It contains all vital information to explain the train behaviour: driver's actions, information received (from balise, or radio), information displayed on the dashboard...

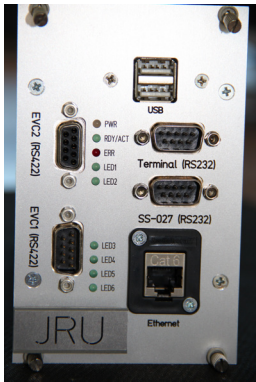
The JRU module is a box separated from EVC. The mode of communication between this entity and EVC is managed by a communication protocol. This protocol allows to record information in SUBSET-027 format for all available versions of the standard.

■ Multitel's JRU simulator

Multitel has developed a JRU simulator to meet the new configuration defined by ERA. This tool is today available for companies who wish to achieve their own tests.

The Multitel's JRU simulator is flexible and can be used alone or with an equipment compliant with protocol communication.

Moreover, the communication protocol can be adapted according to customer's special needs.



Multitel's JRU simulator

■ Compliancy and flexibility

The JRU simulator of Multitel is compliant with a number of JRU units implemented Baseline 2 and Baseline 3 (BL2 and BL3) on the market. This shows that the design of Multitel's JRU simulator is flexible enough to cover a large number of protocols. In other words, it was designed to be easily adapted to new protocols. It supports synchronous as well as asynchronous communications with very strict timing event for unconventional protocols.

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