

# Train Radio Solution

Cab Radio and Train Dispatcher System



**ErvoCom**  
COMMUNICATIONS SYSTEMS

*Quality that connects.*



## Rail certified train radio solution

The compact train communication solution from ErvoCom acts as a communication interface between control center, locomotive driver and passengers. Various subsystems, such as the passenger information system (e.g. PA system) or the intercom system, can be easily connected to the train radio system.

The railway-certified Cab Radio TRS2090 is available in the different technologies analog, DMR, TETRA, P25, NXDN and 4G/5G MCx and can be provided as a single mode as well as a multi-mode solution. Depending on the requirements, the system consists of a combination of a central control unit (ZSE2130) in conjunction to one or two remotely connected human machine interfaces (CoCo2137/CoCo2167/DMI2207). The HMI offers the possibility to connect various accessories, such as handset, gooseneck microphone or loudspeaker, so that the locomotive driver can communicate reliably with the control center and the passengers. The train radio solution was developed precisely for the operational process in rail traffic. Nevertheless, it is always possible to respond to the individual needs of the railroad operator in a customer-specific manner, in order to be able to offer a tailor-made solution for the user menu structures.

In the control center, the Train Dispatcher System TRADIS2167 ensures efficient communication between the dispatcher, the train driver and passengers. The system is operated via a touch-based dispatcher console with loudspeaker, gooseneck microphone and handset. Through the user interface, the dispatcher can select a train number or line and communicate with the drivers accordingly. TRADIS provides several software modules that allow efficient voice and text messaging communications, usage of train running numbers, location based presentation of trains and voice recording. In addition to the communication with the train driver, the TRADIS system solution also offers the possibility to receive emergency calls from the passenger intercom system of the train or to make PA announcements into the train. TRADIS2167 was developed to provide an uncompromising and tailored communication experience for rail operators based on the latest industry standards, with the ability to respond to specific customer requirements.

- **Voice communication between OCC & train driver**
  - Individual calls and group calls
  - Call suspensions and prioritizations
  - Emergency calls
- **Communication from and to the passengers**
  - PA announcements to passengers
  - Emergency call via the passenger intercom system
- **Data communication to On-Board system**
  - Data communication to passenger information system
  - Communication to TCMS
- **System solution specially tailored for railway environments**
  - Various HMI's with application software tailored to the needs of the operator
  - Possibility of high degree of customization if needed
- **Rail certifications**
  - EN50155 & EN45545-2
- **Train Radio Dispatcher**
  - Voice communication to train driver including functional addressing
  - Communication to the passengers via the PA- and intercom system
  - User interface specially developed for the rail environment, incl. geolocation of trains

## References

## System

### Northern Europe

- Roslagsbanan
- Metro Glasgow
- Newcastle upon Tyne

### Central Europe

- SBB CFF FFS
- RhB, SZU, ZB, RBS, AVA
- Tramway du Mont-Blanc
- Arriva Netherlands

### Western Europe

- Metro Barcelona
- FGV Valencia
- Mallorca

### Asia-Pacific

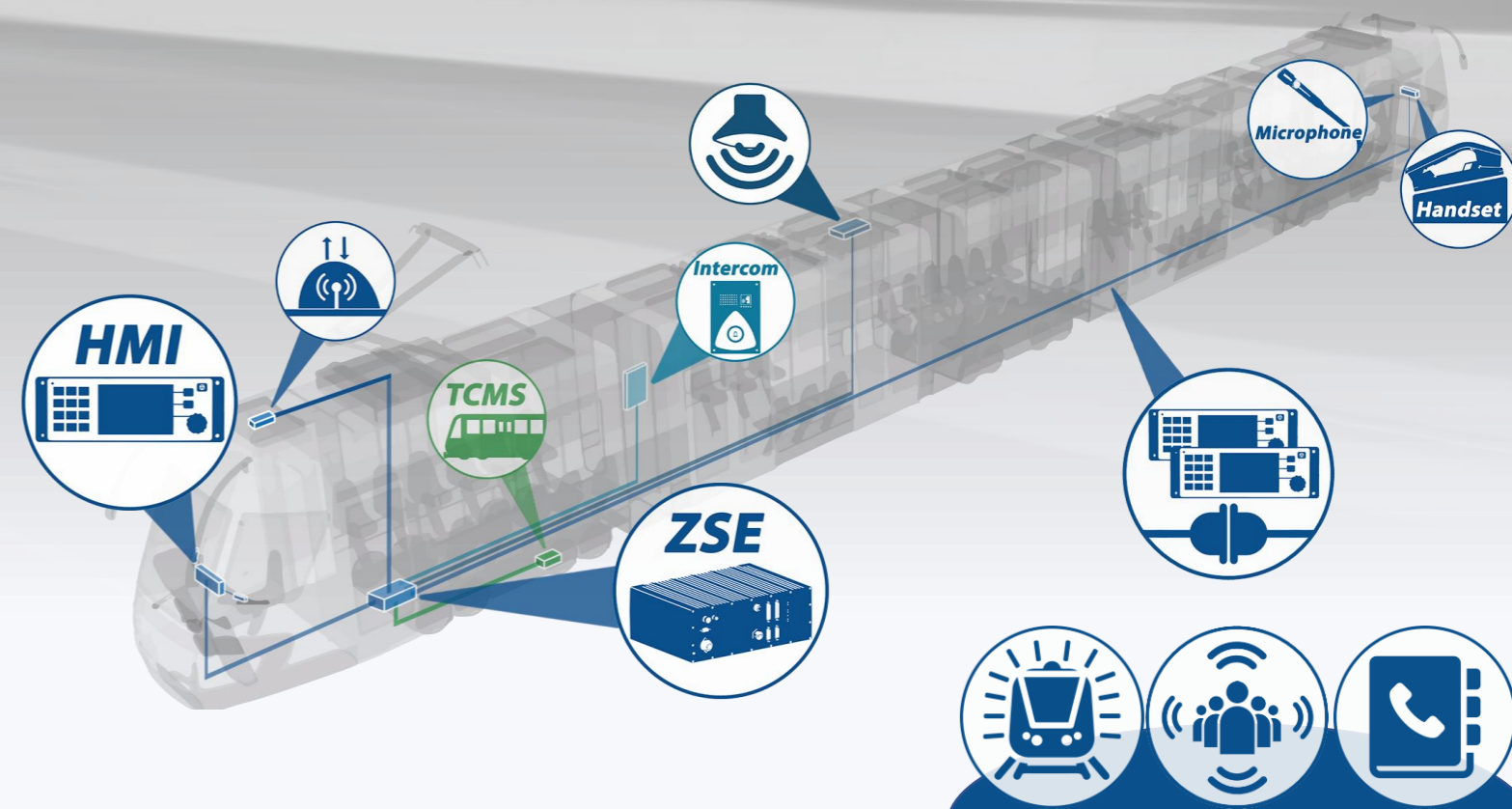
- Jakarta
- Metro Hanoi
- Manila LRT
- Perth

### Middle East

- Marmaray
- Bursaray
- Doha
- Lusail
- Baku

### America

- Amtrak
- Caltrain
- DART
- SBCTA
- Toronto Finch-West
- TEXrail
- Metro Mexico City
- Cochabamba
- Metro Santiago de Chile



# Human-Machine Interface



**COCO2137**

The compact rail-certified COCO2137 was developed specifically for the rail environment and, thanks to its compactness, is particularly suitable for retrofits and for trains with limited space.



**COCO2167**

The CoCo2167 is a cost-optimized operating device that uses proven components and thus offers maximum reliability.



**DMI2207**

The DMI2207 is a 10.4 inch touch HMI and offers all important audio interfaces for reliable communication of the train driver. The product features a capacitive multitouch IPS color display with hardened and anti-reflective cover glass.

# Central Control Unit

**NEXEDGE™**



**DMR 2 MHz Analog**



**ZSE2130 IP20**

As a 3 units high 19-inch device, the ZSE2130 IP20 central control unit is perfectly suited for new trains that provides a rack. The device has various interfaces, as well as the possibility to connect two HMI's.



**ZSE2130 IP65**

The waterproof IP65 variant of the ZSE2130 is mainly used in trains where space is limited or in countries with high humidity. Due to the dust resistance of the device, it is also ideal for retrofit projects.

# Central Control Unit – MCx



**CCU2190 IP40**

The CCU2190 integrates the latest MCx radio standard based on 4G and 5G. The device is housed in an impressively compact casing whilst still delivering all important railway features including the use of up to two HMI's.

# Train Dispatcher



**TRADIS2167**

The Train Radio Dispatcher System TRADIS2167 is a modern communication system for the control center and ensures efficient communication of the dispatcher with the locomotive driver and passengers.