

cn-mobility

The Future of Real-Time Information Systems

Real-time information systems are essential for improving passenger satisfaction, operational efficiency and safety in the rail industry, writes Thomas Auner, CSO and Partner, cn-mobility.

Today, train operators and passengers alike expect instant access to accurate, up-to-date information to ensure smooth journeys and a seamless customer experience. Whether it's updates on delays, platform changes or service disruptions, real-time communication has become a necessity – not just for convenience, but also security and trust.

This evolution in expectations demands modernisation, and **cn-mobility** is at the forefront of these advancements. **Our vision** is a world in which travelling by train is a pleasure for everyone.

By prioritising software intelligence and leveraging open interfaces, our solutions ensure flexibility, scalability and compatibility across rail systems. Gone are the days of relying on proprietary hardware and exclusive communication protocols. Instead, our approach integrates cutting-edge technologies to meet the dynamic needs of today's rail networks.

Until recently, cn-mobility's solutions incorporated components from various hardware manufacturers. However, we decided to no longer wait for others to improve their products, but instead take action ourselves. We brought in-house a team of highly experienced engineers, which has enabled us to develop our own complete audio solution. This was launched in February.



*Thomas Auner
CSO and Partner, cn-mobility*

Rethinking Audio Technology

There's always been this antiquated idea that you need a separate device for each purpose, but we see things differently. With this in mind, our team developed the InnoCom PD audio amplifier, which can be supplied in combination with a driver intercom, saving hardware and costs.

Our multifunctional electronic announcement system device (amplifier and cab unit) enables seamless integration of multiple audio components for easy communication between staff and passengers.

Until now, you had to buy what was available – there was nothing to configure, to choose or to expand, which is why we created a highly modular and flexible design for our amplifier. This can be configured to individual

InnoCom PD – One Device, Many Functions

- **Reliable power supply:** the configurable and redundant power supply guarantees a reliable power supply in a wide voltage range from 24V to 110V, which increases flexibility and safety in various application scenarios.
- **Built-in fail-safe:** interruption class S2 (10 ms) in accordance with EN50155 ensures that short power interruptions are bridged without system failure, which increases operational reliability.
- **Flexible ethernet-network:** the configurable redundant ethernet network enables a reliable and adaptable network connection that meets the requirements of modern communication systems.
- **Versatile I/O configuration:** the 10 galvanically isolated and configurable I/Os offer flexibility when adapting to specific application requirements, whether as digital inputs, 24V outputs or push-button inputs.
- **Digital inventory:** with the digital type plate, you not only have the ability to retrieve important information remotely at any time, but also to transfer this directly to an ERP system. This makes service, troubleshooting and inventory more efficient and fully digital. The seamless connection to your company systems saves time and resources, while at the same time optimising your processes.
- **Meeting the ‘right to repair’:** in line with the EU-Directive 2024 / 1799, which will be a law in each EU member state by the end of 2026, each part can be easily replaced.

requirements, as well as easily repaired. Furthermore, the device can be completely dismantled, maximising recyclability and improving sustainability.

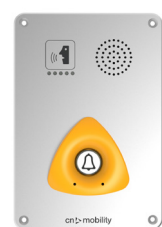
The InnoCom Product Range

Our InnoCom PI intercom was developed to create an optimal interface between passengers and staff.

It offers advanced echo, noise and interference cancellation to ensure clear communication, especially in demanding environments, in addition to a maximum speaker output transmission of 16kHz (standard: 8kHz). The frequency response is also linearised, which significantly improves speech intelligibility.

The intercom station includes a redundant network

cn-mobility products



connection and power supply, and to add more flexibility, an external power supply without power over ethernet (PoE) is optional.

A feature we're particularly proud of is our Auracast standard, which we've integrated into our passenger intercoms. Auracast is a relatively new Bluetooth derivative that offers people with hearing impairments the opportunity to listen to an Auracast stream. This might be for announcements from the passenger information system, the train driver or even from the control centre, via a modern hearing aid or headphones.

An added benefit to Auracast is that it works wirelessly, so you don't have to lay a complex inductive hearing loop in a vehicle.

Find Out More!

If you'd like to find out more about cn-mobility's solutions and how they might benefit you, please visit www.cn-mobility.eu or email sales@cn-mobility.eu.

The logo for cn mobility, featuring the letters 'cn' in a bold, black, sans-serif font, followed by a red triangle pointing to the right, and the word 'mobility' in a bold, black, sans-serif font.

InnoCom PI – Understandable and Precise

- **Solid and sustainable:** stainless steel housing significantly extends the service life of the components and thus contributes to the conservation of resources. The modular design enables easy maintenance and targeted replacement of individual modules.
- **Digital inventory:** with the digital type plate, you not only have the option of accessing important information remotely at any time, but you can also transmit this directly to an ERP system, making servicing, troubleshooting and inventory more efficient and completely digital.
- **Customisable colours:** the audio interface has a customisable colour scheme and pattern selection for the LEDs, which can be adapted to individual preferences or requirements.
- **Meeting the 'right to repair':** in line with the EU-Directive 2024 / 1799, which will be a law in each EU member state by the end of 2026, each part can be easily replaced.

