



Worksite Protection

ZÖLLNER Signal GmbH

Evolution and Innovation in Warning Systems in France

Since the introduction of cable-based warning systems (known in France as DAAC and commonly referred to as 'Autoprowa') on major worksites in 2004, automatic warning systems have undergone significant development.

ZÖLLNER has been part of this innovation by developing the mobile radio warning system MRWS (or in French: Dispositif d'Annonce Portatif radio, short DAPR) in the early 2010s, which has since become the most widely used solution today.

The cable-based system is still used more frequently for large-scale operations or major engineering structures, whereas the MRWS, originally designed for smaller worksites, has gradually become a standard. Its versatility and high level of safety has enabled it to replace previously used methods (both human warning chains as well as technical solutions) in France and across Europe.



The ZPW126-10 is part of the newest generation of collective warning devices. The SIL4 device combines acoustic warning signal and visual reminder LEDs in one robust structure, stackable for easy handling and logistics. The ZPW126-10 can be used as part of a warning system built alongside the track or, as shown here, be easily attached to construction machinery like this excavator to accommodate noise peaks.

What's New in France?

Mandatory use of MRWS

To improve the safety of personnel working on railway infrastructure, SNCF has mandated the use of the MRWS starting in 2027 whenever warning systems are required to protect workers from hazards related to train traffic.

MRWS for Mobile Worksites

In France, personnel working on mobile construction sites are often additionally equipped with a two-way radio, which enables the safety supervisor to stay in contact with the lookouts positioned along the track.

Together with a partner, ZÖLLNER has developed a solution that combines two-way radio communication and positioning functionality within the MRWS.

The safety supervisor (known in France as the ASP) enters the required distance to each lookout, which is then automatically transmitted to their devices. If the specified distance is not maintained, an alarm is triggered simultaneously on both the ASP's device and the device of the respective lookout. In addition, the ASP can monitor the real-time position of every lookout on a map. This ensures that the sighting distance is never shorter than the defined minimum.

Thanks to continuous distance monitoring and automatic warning alerts, lookouts can focus entirely on observing rail traffic without having to constantly check their distance, thereby improving both safety and operational efficiency.



Distance monitoring in real-time ensures that the required distances between lookouts and the safety manager are maintained at all times, even while moving

Modular, Failsafe, the Perfect Fit – The MRWS at a Glance

The ZÖLLNER MRWS consists of modular components, including core elements such as the ZFS-10 transmitters and the ZRC-10 or ZPW-12 control units. Depending on the type of worksite, users can choose from warning devices for vegetation control, mobile worksites, fixed worksites, or worksites using onboard warning devices on vehicles.

Flexibility through Radio Transmission Technology

Since the system is based on state-of-the-art radio technology, users can quickly adjust configurations in real time according to operational needs. Audible and visual warning devices can be added or removed as required.

Stronger Together

Safety Starts with Proper Training

For more than 30 years, ZÖLLNER has been the leading provider of automatic warning systems across Europe,

committed to enhancing safety on railway worksites. With products such as the MRWS (DAPR), we create ideal conditions for protecting track workers and enabling safe operations. However, technology alone can only provide a certain level of safety. Achieving the highest possible safety standards requires well-trained personnel – both in the planning phase and in the field.

Experts Training Experts

Drawing on decades of experience, ZÖLLNER offers a comprehensive range of training programs tailored to the specific needs of railway infrastructure companies and contractors.

In France, we have been delivering training courses since 2004 in accordance with SNCF requirements. All of our trainers are highly qualified technicians with extensive hands-on field experience, ensuring that participants benefit from both technical expertise and practical knowledge.

Training certification is based on both a theoretical assessment and a practical hands-on exercise. Courses are conducted primarily at ZÖLLNER France's training facilities. To provide even greater flexibility, an e-learning module will soon be introduced, allowing participants to complete part of the training remotely before attending a practical session with the equipment.

We Stay by Your Side

We support operators in developing a thorough understanding of the system and help companies strengthen their expertise and operational capabilities. The ZÖLLNER France team remains available to provide advice and assistance, both on-site and by phone, backed by a free 24/7 support and service hotline.



Maximum safety for every worksite

The ZÖLLNER team is here to support you
every step of the way!



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