INFR/ABEL

ERA:
ERTMS Congress

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Safer-W
ATW-Tx

Protection Warning Efficency

Since 2017

ATW-Tx
(ZÖLLNER Signal GmbH)

Securing works in a junction

- <u>Portable</u> security system
- <u>Scannable panels</u> indicate the area to be secured
- Automatic <u>connection</u> to the <u>signaling station</u>
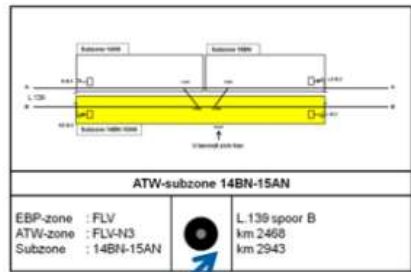- <u>Audiovisual warning</u> when a train passes through

ATW-Tx - premise

Temporarily stop the train

ATW-Tx Device

Auditory and visual **alarm**

ATW-subzone 14BN-15AN

EBP-zone : FLV	L.139 spoor B
ATW-zone : FLV-N3	km 2468
Subzone : 14BN-15AN	km 2943

Subzonetag

Scanable panel

4

Safer-W
ATW-Tx

Protection   Warning   Efficency

What?
System for on-site track workers to block off a work zone and to determine when the tracks can be (temporarily) freed and when a train can pass through

How?
A zone is secured on site with a portable device that scans an RFID code on a panel near the work area.

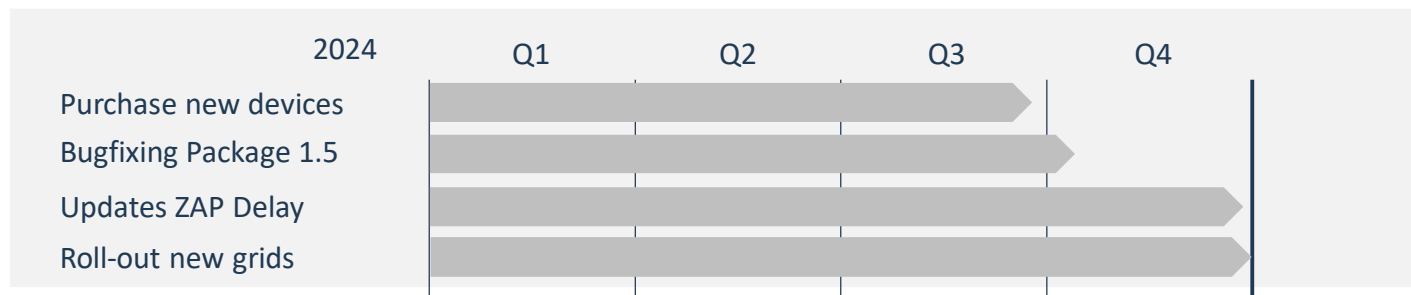| Component	Function
1	Control panel
2	Warning lights (flashing)
3	Speakers
4	Scanner (of the RFID code)

Status
- Currently: + than 90% of junctions
- More than 700 zones in our network
- Roll-out expanded to include large junctions
- In 2024: Package 1.5 & ZAP Delay

Feasibility → Delivery → Roll-out

Planning

2024	Q1	Q2	Q3	Q4
Purchase new devices				
Bugfixing Package 1.5				
Updates ZAP Delay				
Roll-out new grids				

Advantages
- ⊕ Applicable for all types of trains
- ⊕ Set zones
- ⊕ No devices to install in the tracks
- ⊕ Easy to use

Dependencies
- GSM-R netwzork availability
- EBP commissioning - releases
- Improvement of devices via Zöllner

Point of contact

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General steps to be protected with ATW-Tx

1. Scan a subzone in which we would like to be protected with double confirmation

2. Wait until having the message Zone safe

3. The work team can enter in the tracks to begin their work

4. If a train is incoming, the mobile will alert the work team and will be in this state until we let the train pass by freeing the zone --> See next slide.

5. After the train clears the zone, the mobile shows Zone safe and the work team can continue its works.

Demo