



8 November 2023

SAFETY WEBINAR

Objects left on
the Line

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I'm safer and I know it
// Geolocated Asset Management



INTERNATIONAL UNION
OF RAILWAYS

The Safer Works programme

Right on Track

but

SAFETY FIRST

// Safer-W

since 2020



The Safer Works programme

Life as it is ...

it's complicated

// Safer-W

Worker



Train

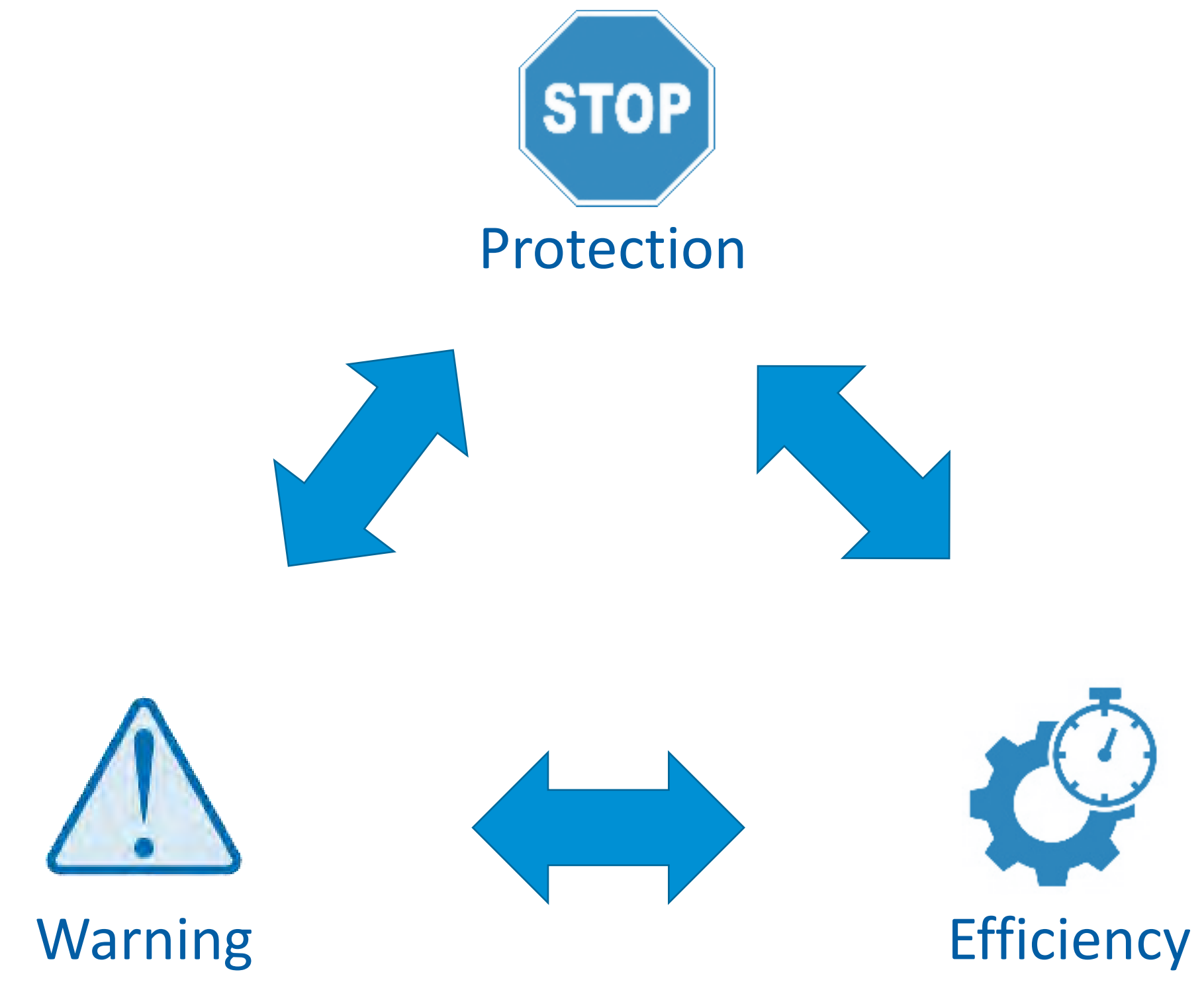
Machinery



The Safer Works programme

// Safer-W

domains



Project portfolio

ATW-Tx
 CMB
 Virtual Fencing

ATWS
 InfraSPAD
 InfrAlert

Prodigis
 Mobile Safety Door
 Safety Protection Integrator

...

The Safer Works programme

// Safer-W

an individual, digital solution to avoid

Objects left on the Line



Warning



Protection



Efficiency

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Business Requests

- 1) Reduce the number of SPADs
Signal
Passing
At
Danger
- 2) Manage Red Panels, left on the Line
Reduce unnecessary delay



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1° Use case – reduce the number of SPADs



warning when approaching a signal

- Driver in an unknown area
- Later on, focus on the job loss of attention



IMPACT
Driver loses his licence



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1° Use case – extension



warning when approaching a level crossing



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2° Use case – manage Red Panels

It happens that they are forgotten after the work has finished (big work zone)



IMPACT

Confusion

Time delay on the network



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2° Use case – extension

Manage Earth Bars

- where
- when
- who



IMPACT

Confusion

Time delay on the network



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3° Use case – make DATA more accurate

Assets in the database don't always reflect the AS-BUILT situation



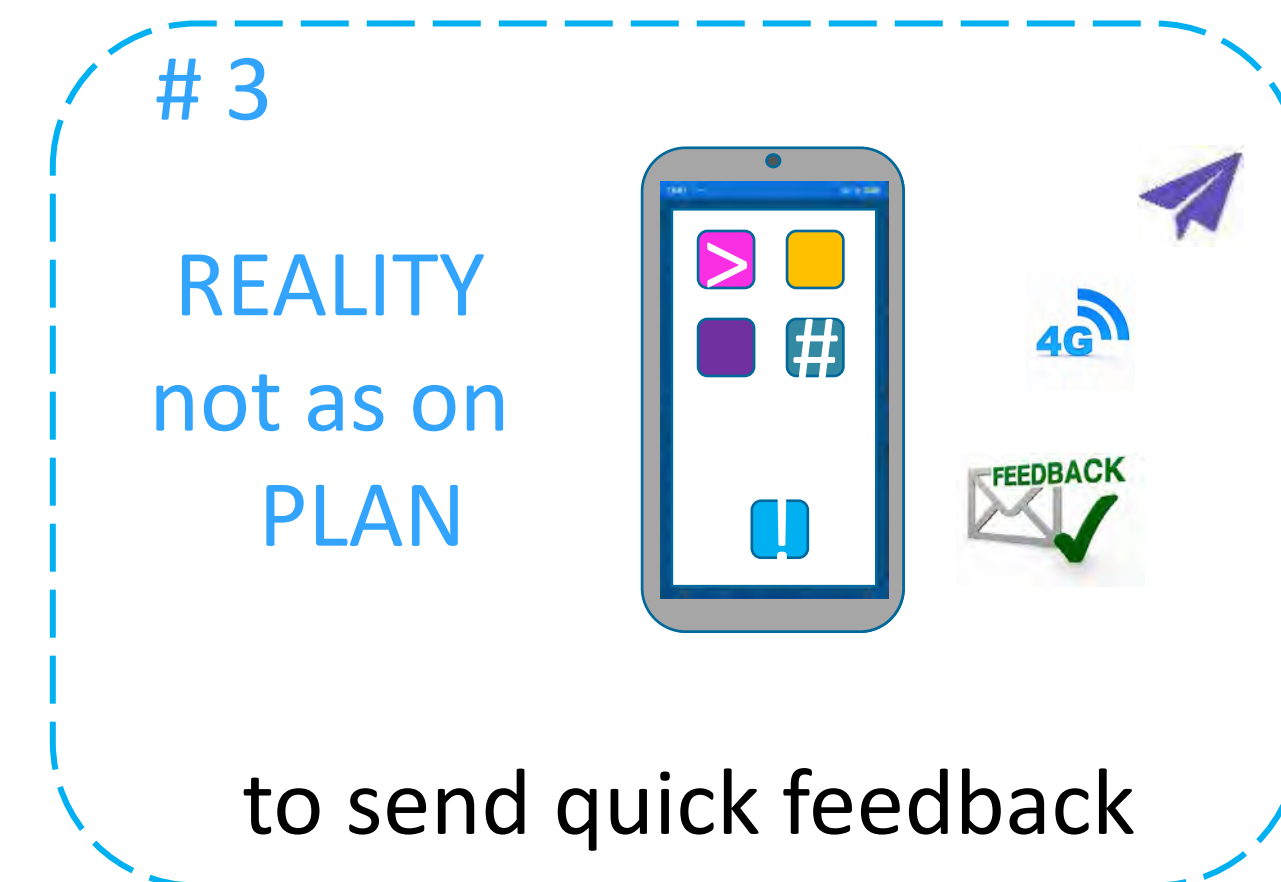
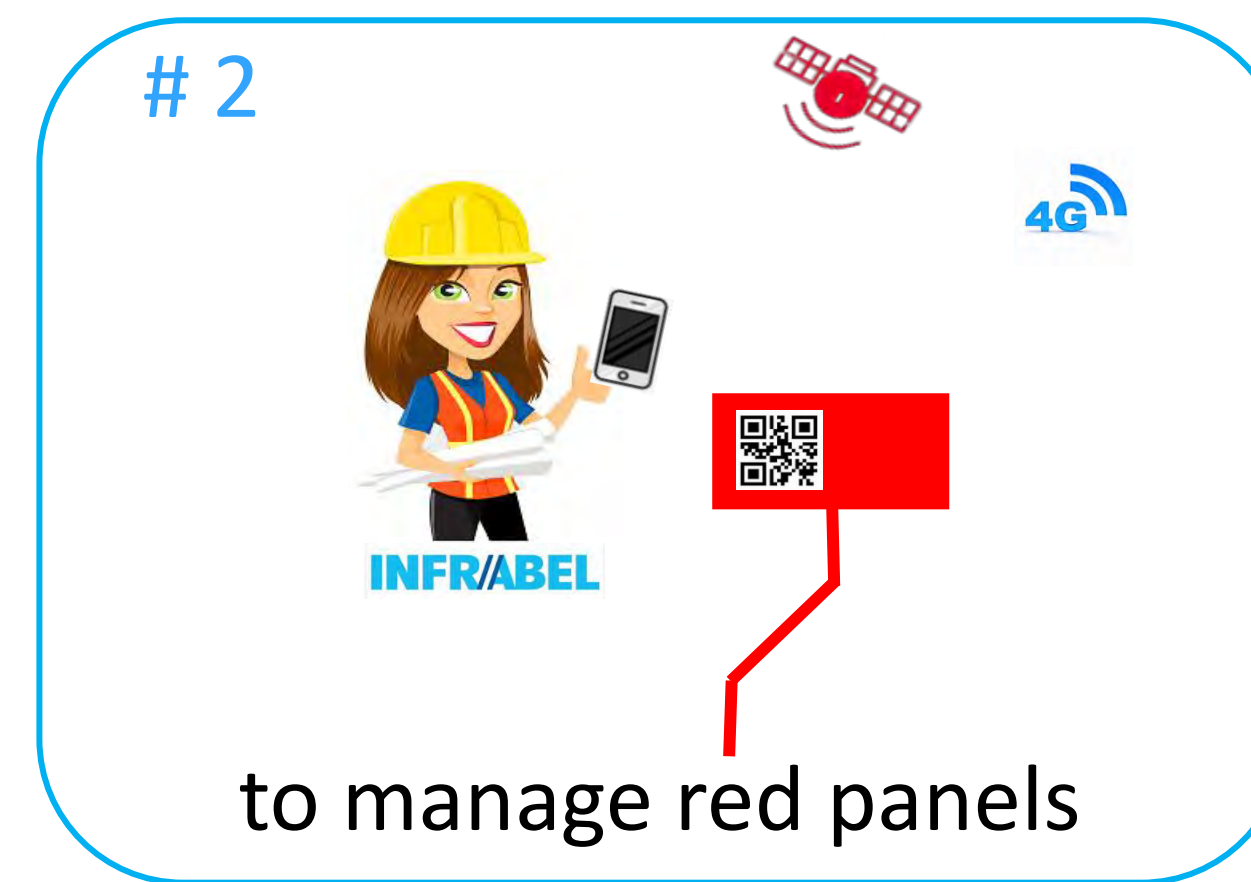
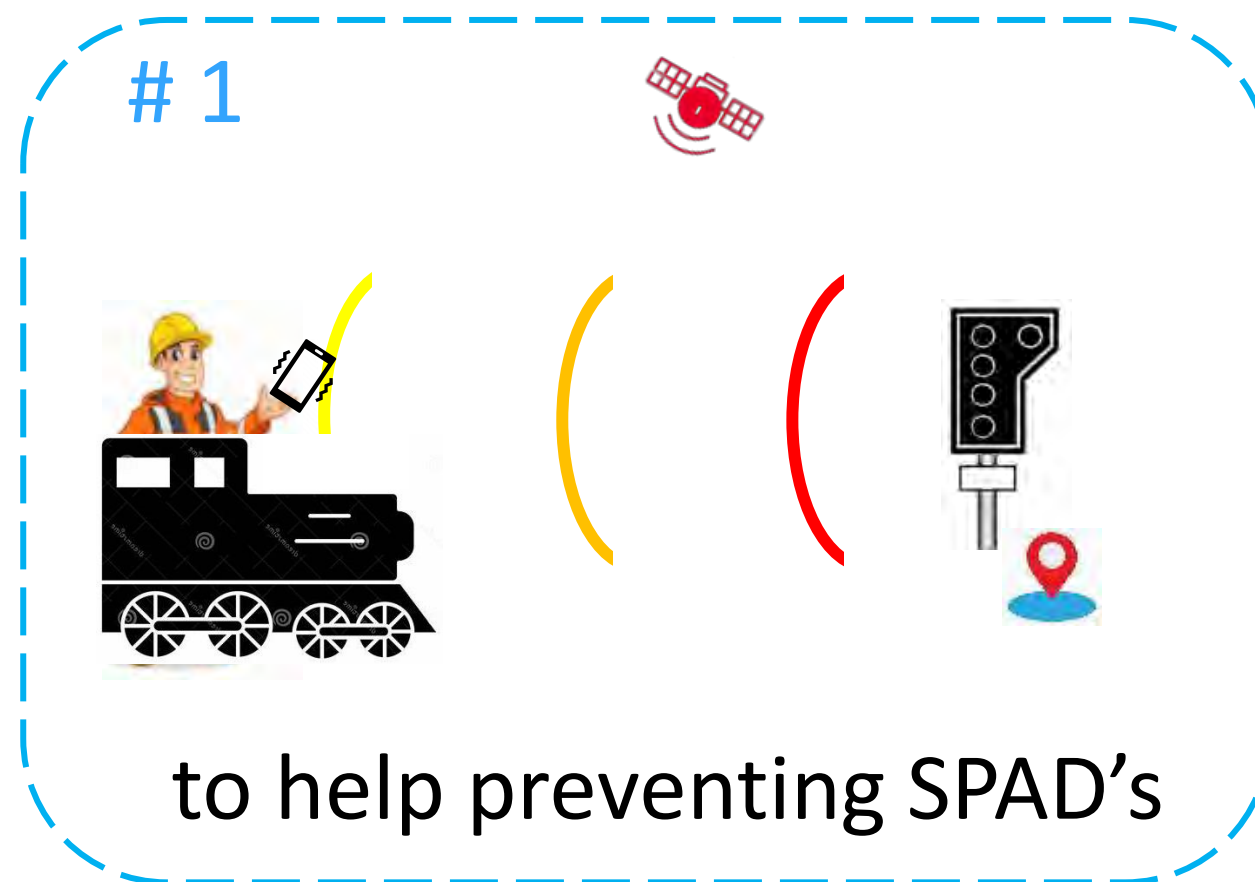
IMPACT
Inaccuracy
Frustration

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Several Asset Management requests
combined and integrated



in a single mobile application,
using Geolocalisation



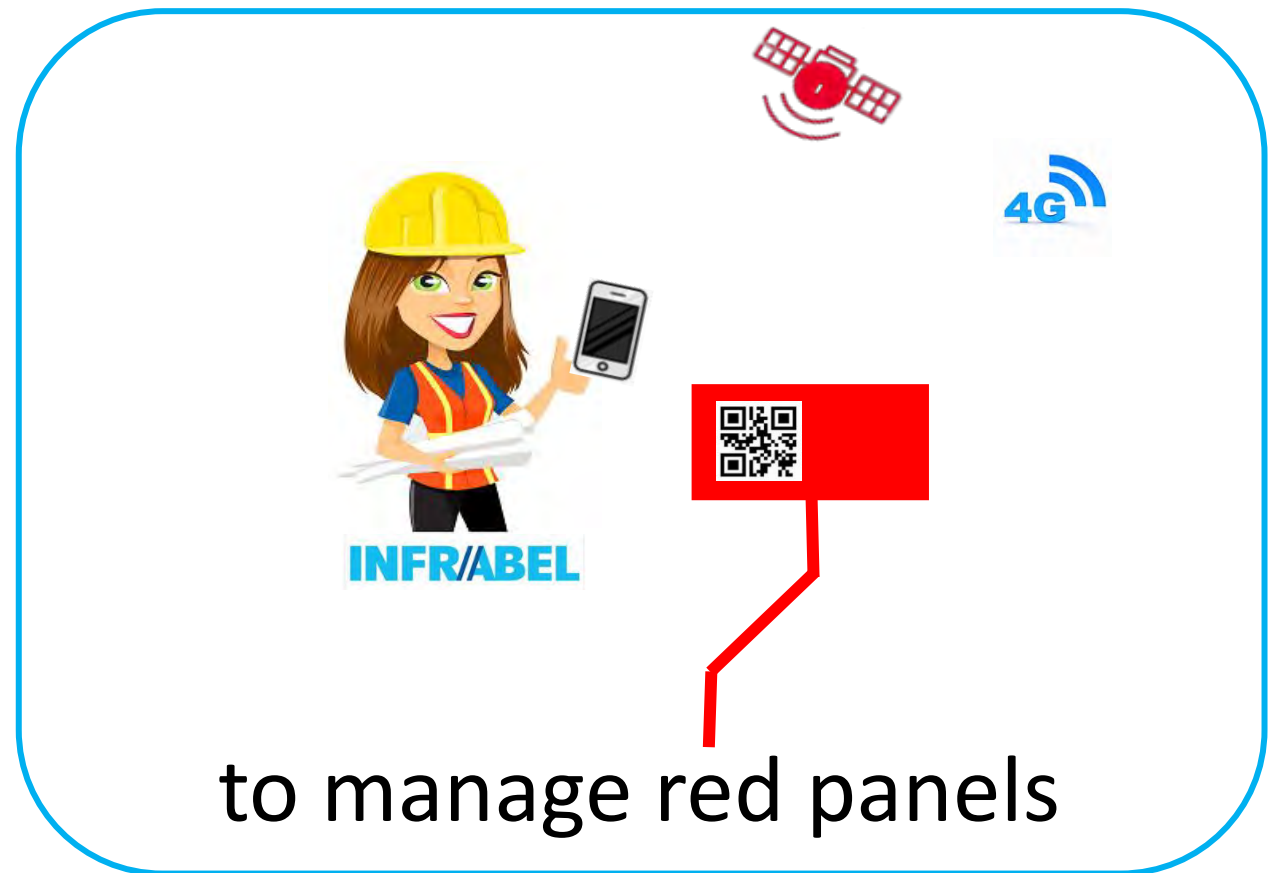
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!infraSPAD is based on the selfscan principle

Geolocalisation is active on the user's smart device

- The QR-code on the panel is scanned
- The Action-button is pressed
 - Data is sent to the central server
 - Data is visible on the map for all other users

- ▶ Install the asset
- ▮ Remove (temporarily)
- Remove



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!nfracSPAD from the technical point of view

- Own Staff (300+600) users
- Contractors

mobile application

- Secure
- GDPR compliant
- Stable
- Robust
- GPS localisation
- Local MAP data
- QR code reader
- 4G connectivity



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!nraSPAD from the End User perspective

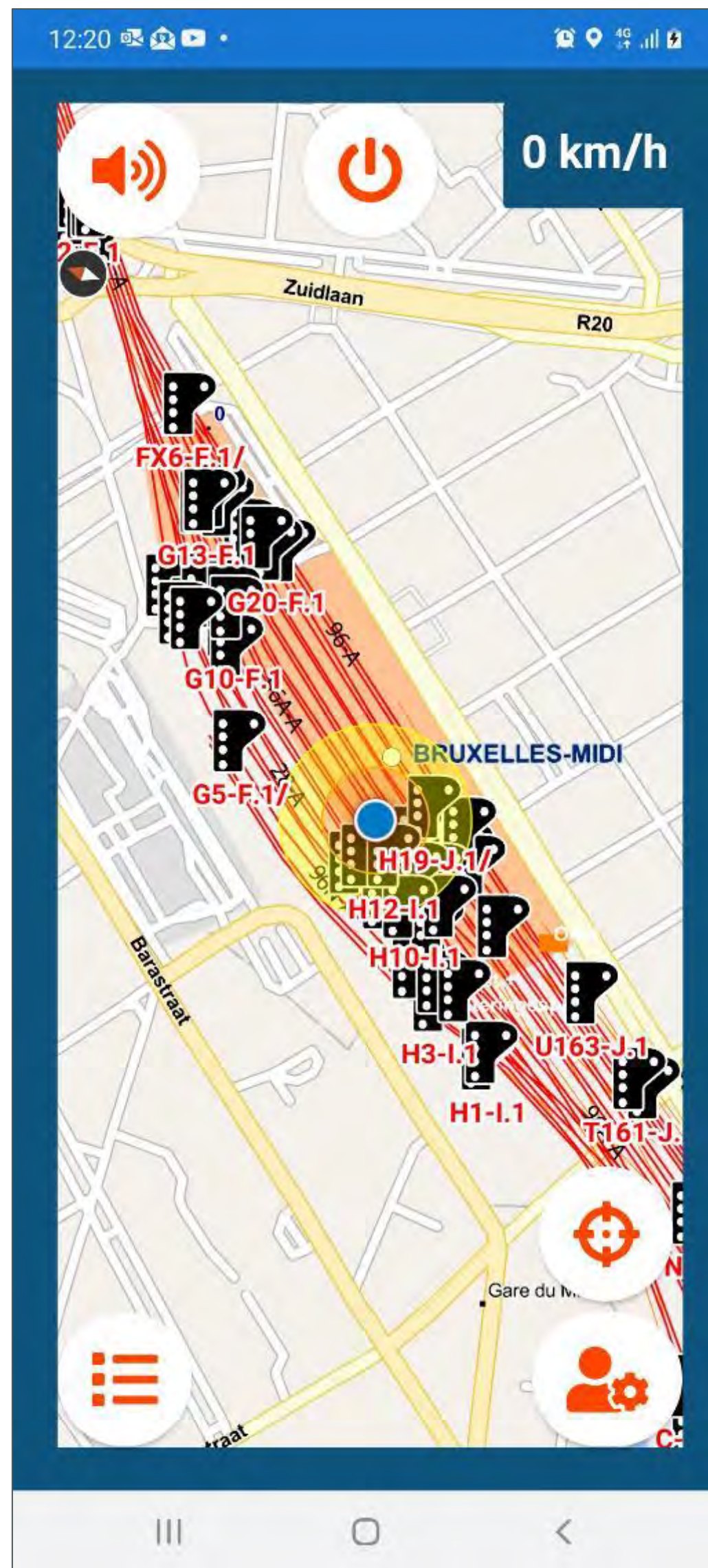
- Own Staff (300+600) users
- Contractors

mobile application

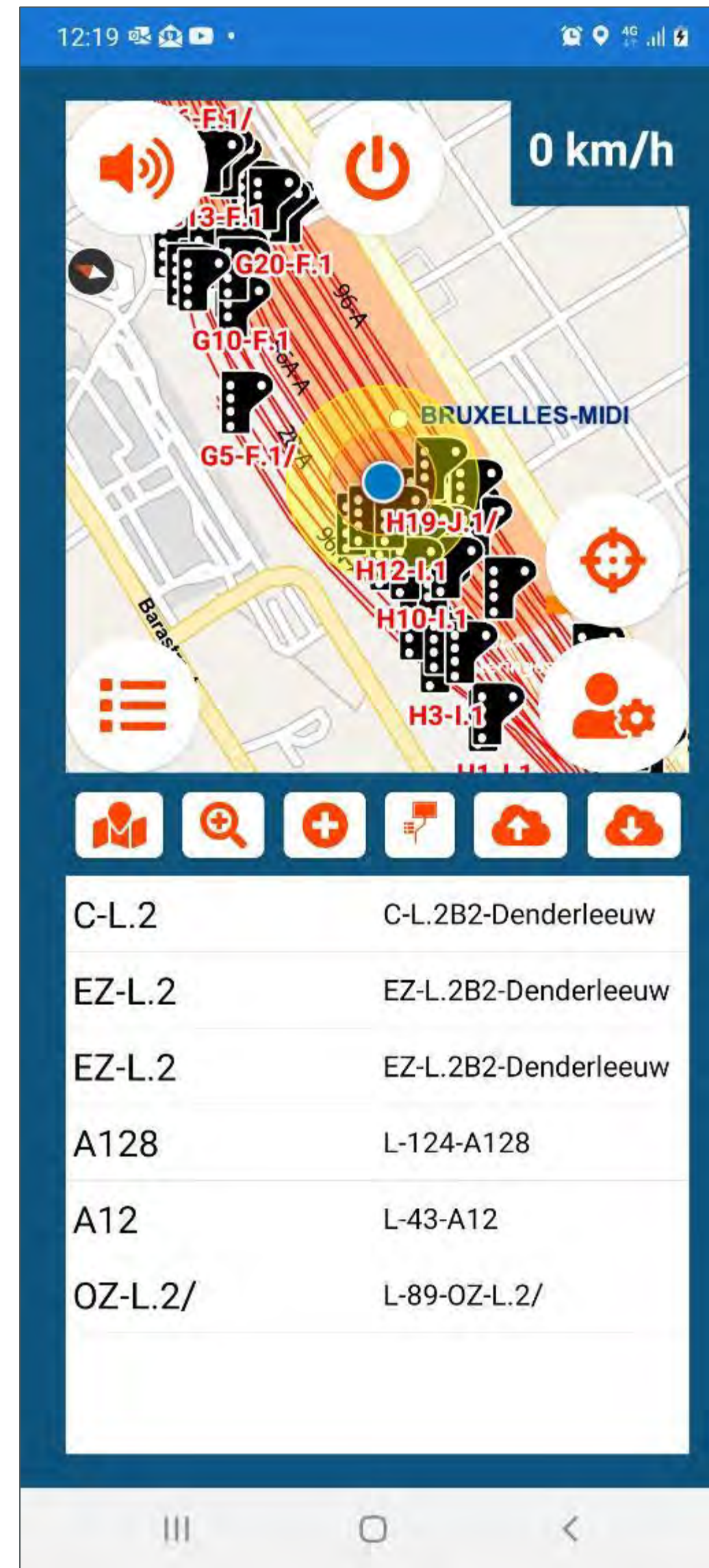
- Quick
- Easy
- Intuitive
- Use at trackside
- Smartphone
- Vibrating wristband



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map view



list view

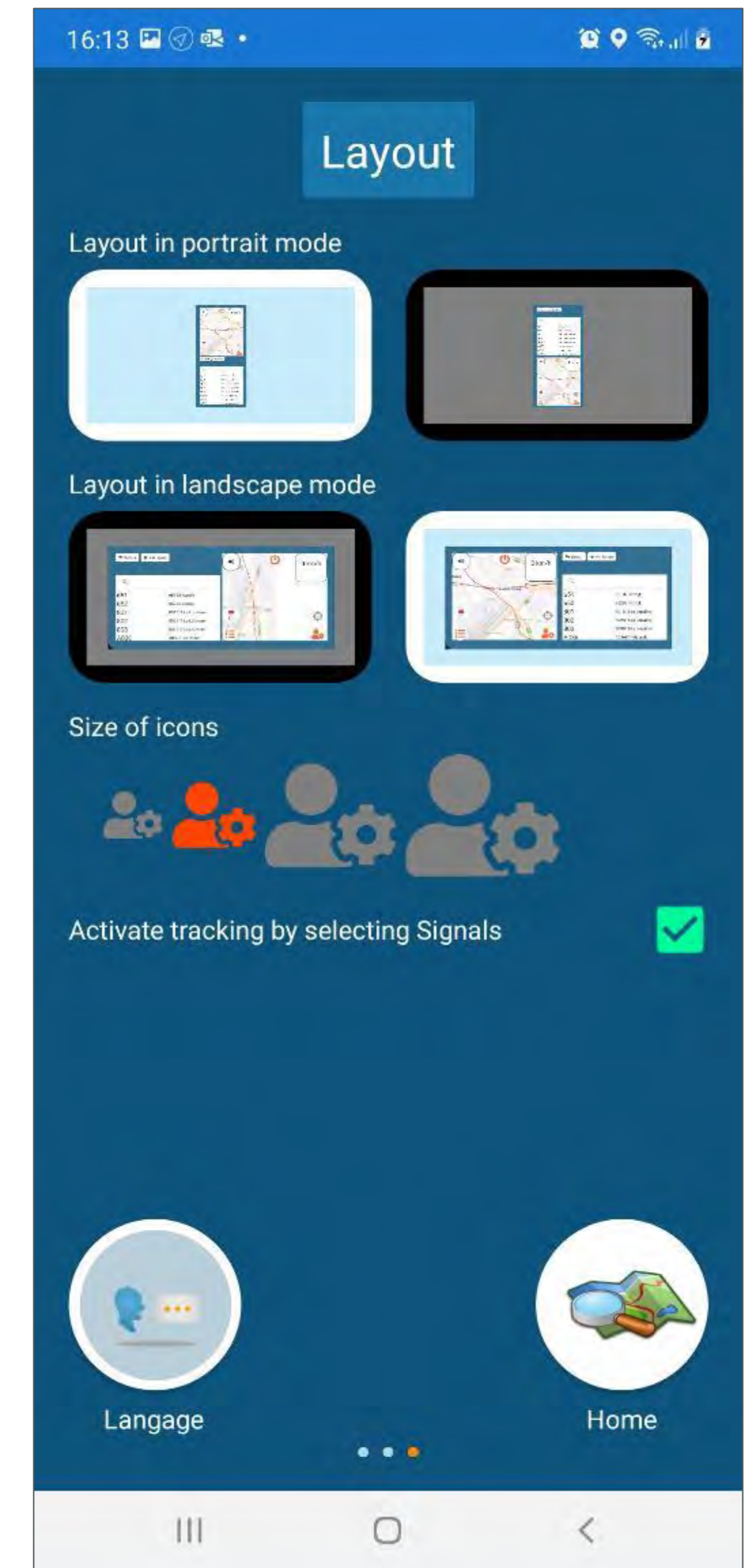
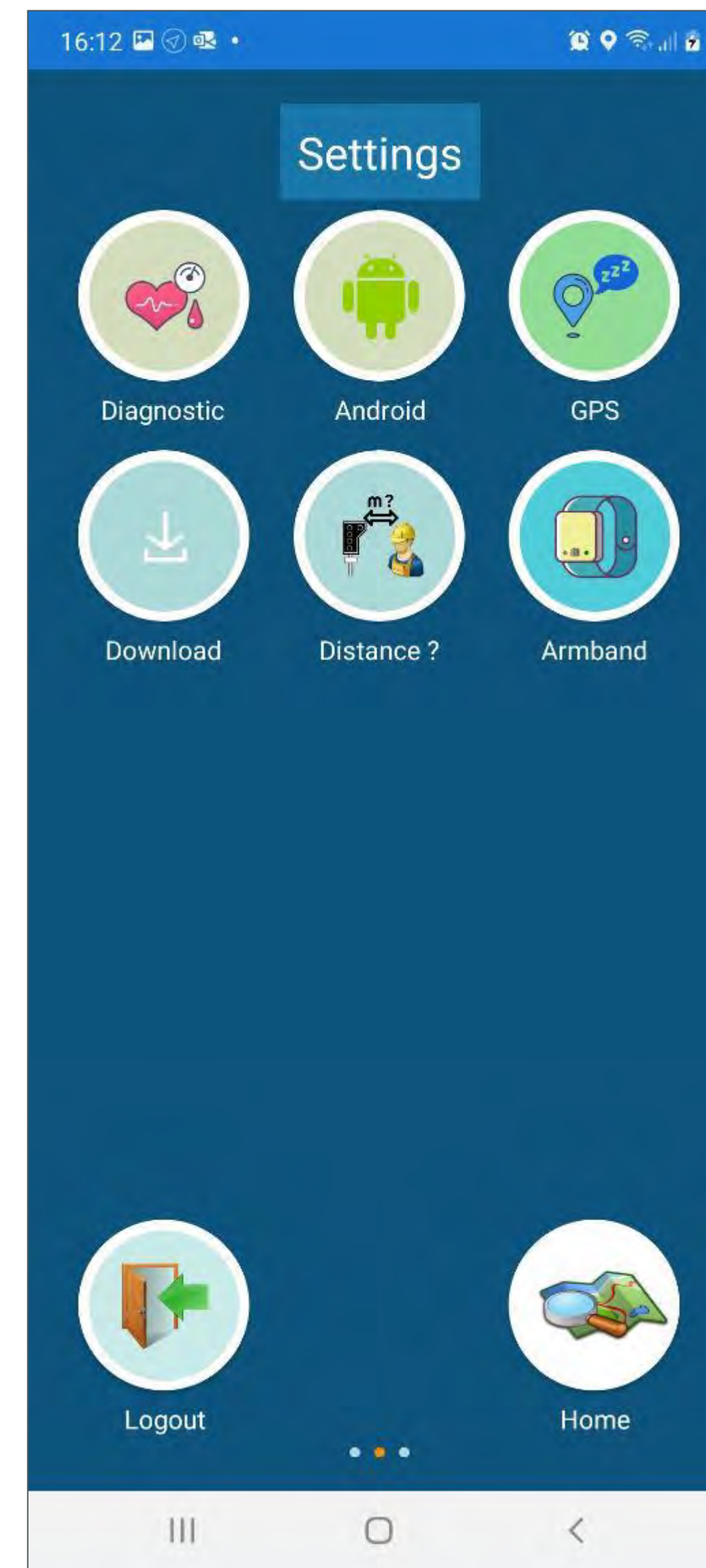
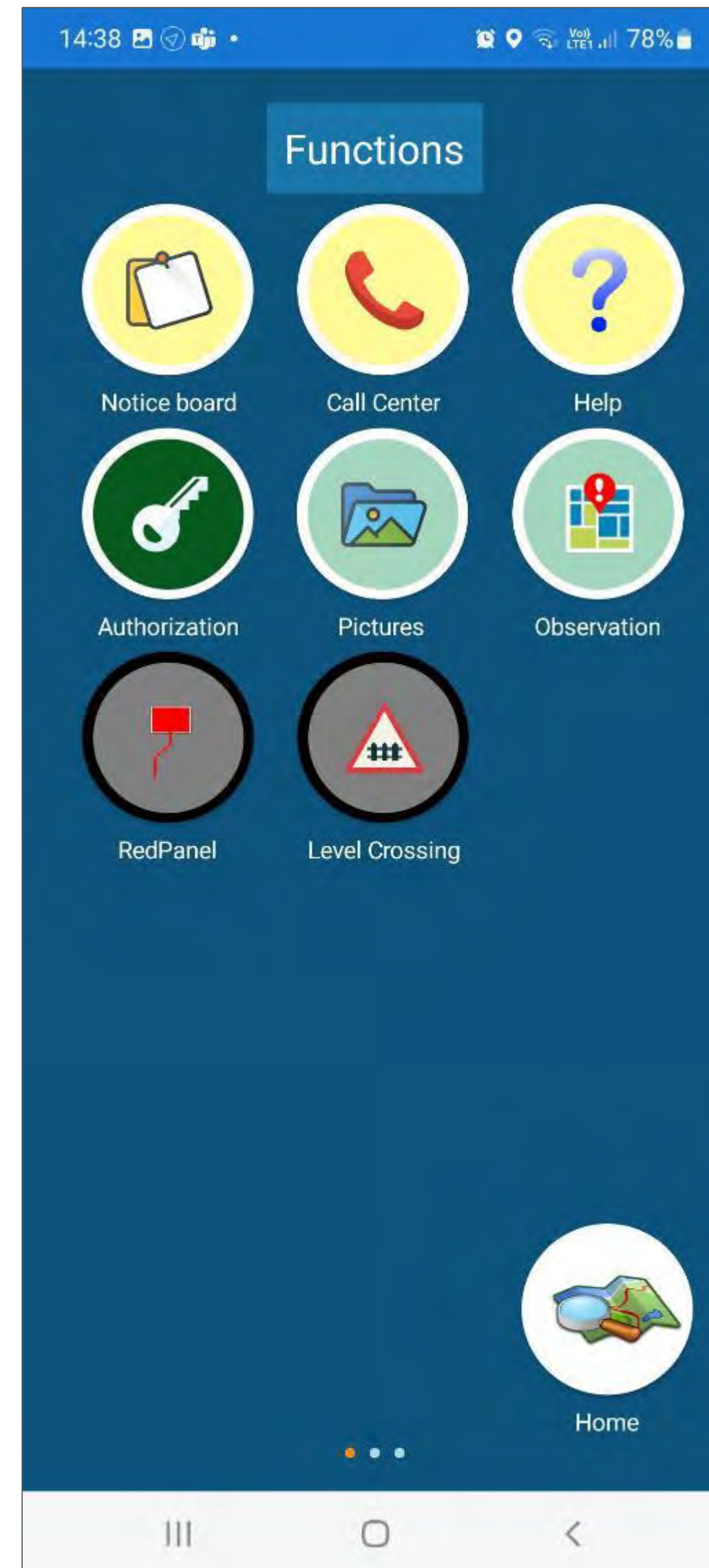
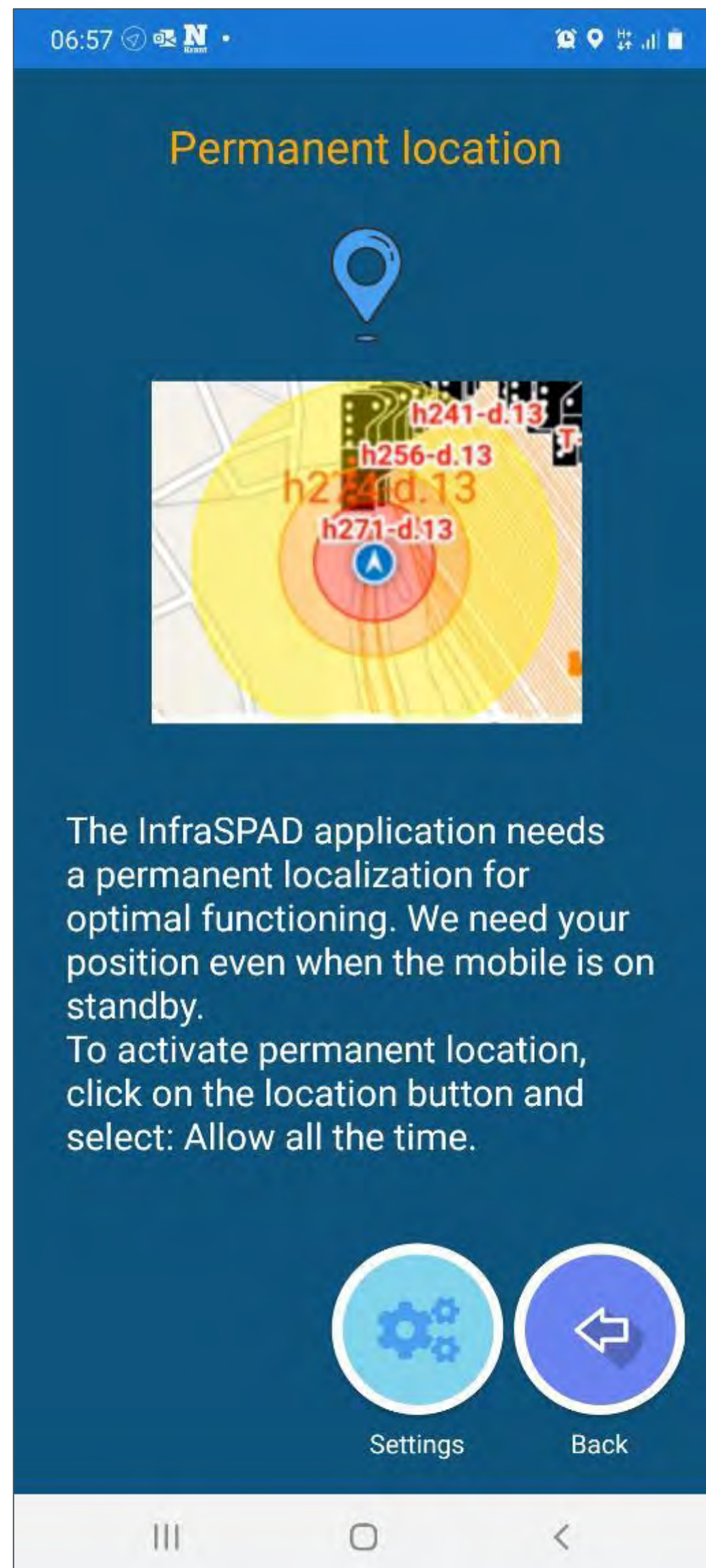


share signal list



alert configuration

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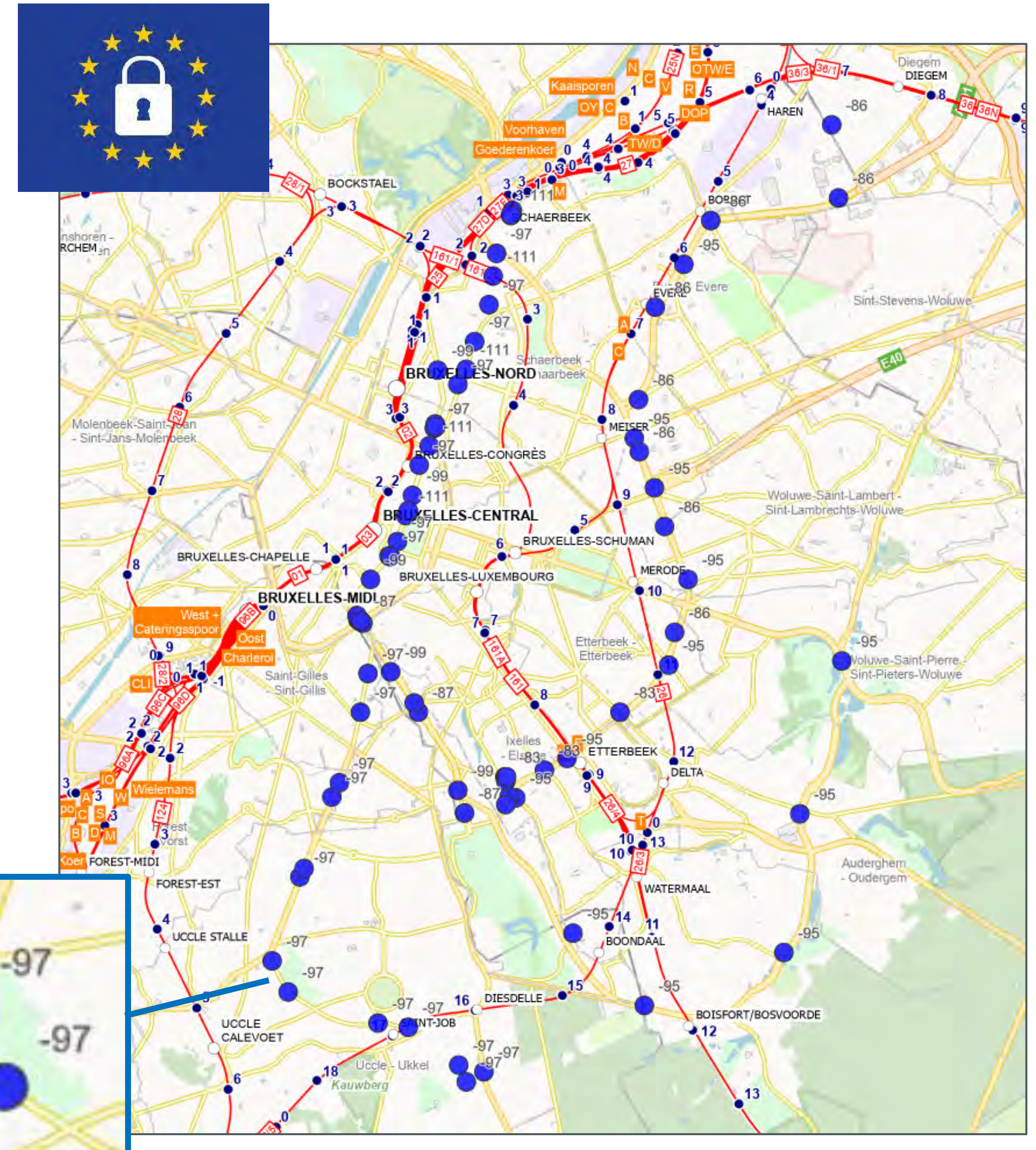
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Additional built-in features

for analysis purposes
GDPR-compliant data

mobile application

- 4G coverage & quality monitoring
- GPS coverage
- usage statistics



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Next Up

Situational Awareness

- Precise geolocalization, (10..20 cm)

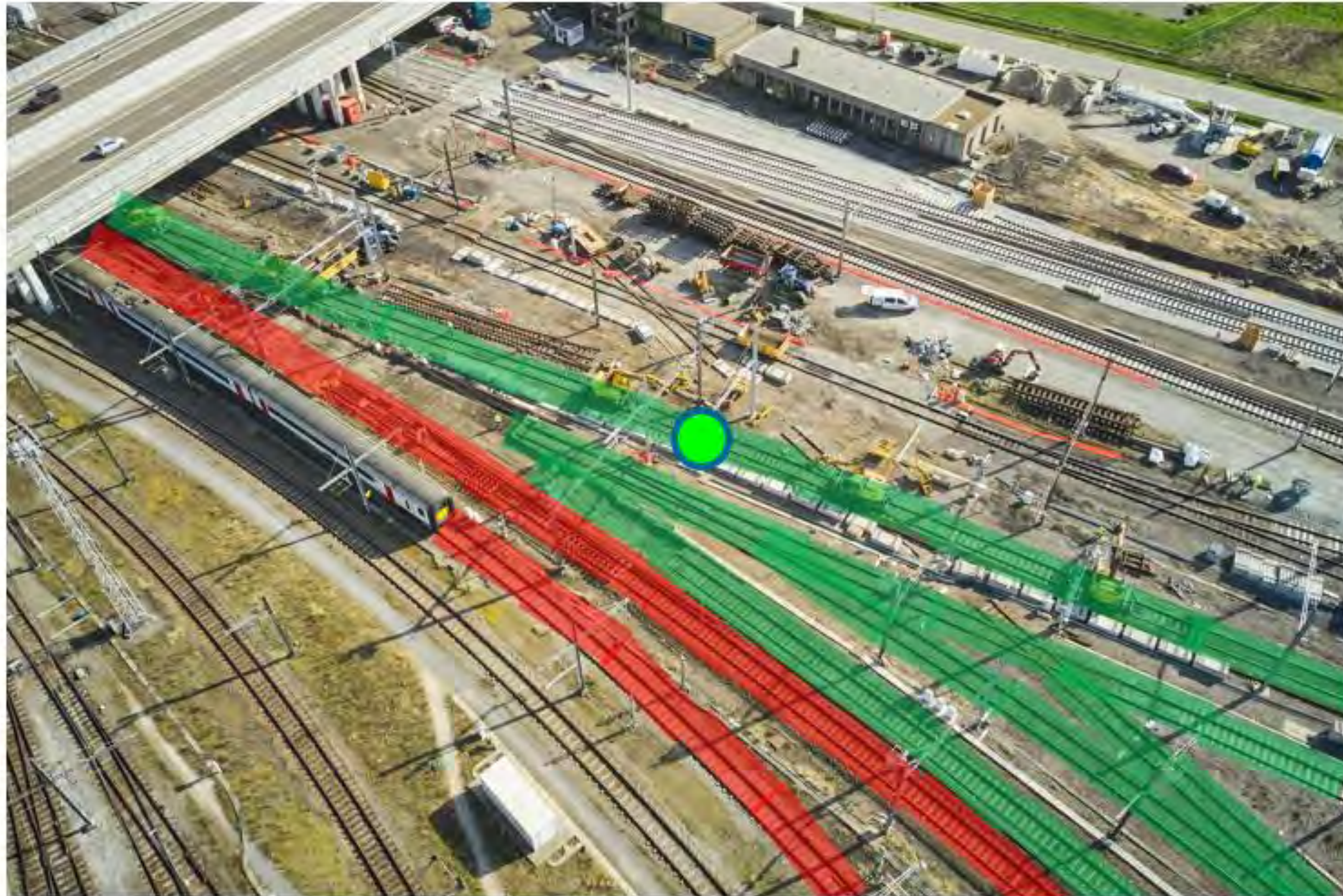


- Augmented reality



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Plan-view



Real-view



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Wrap Up

Geolocalisation

- Assets
- Machinery
- Workers

& Digitalisation

are a key features
in modern
Railway Safety



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