Why did we start Epic Blue?

The ability to know the location of responders and their proximity to hazards in real-time

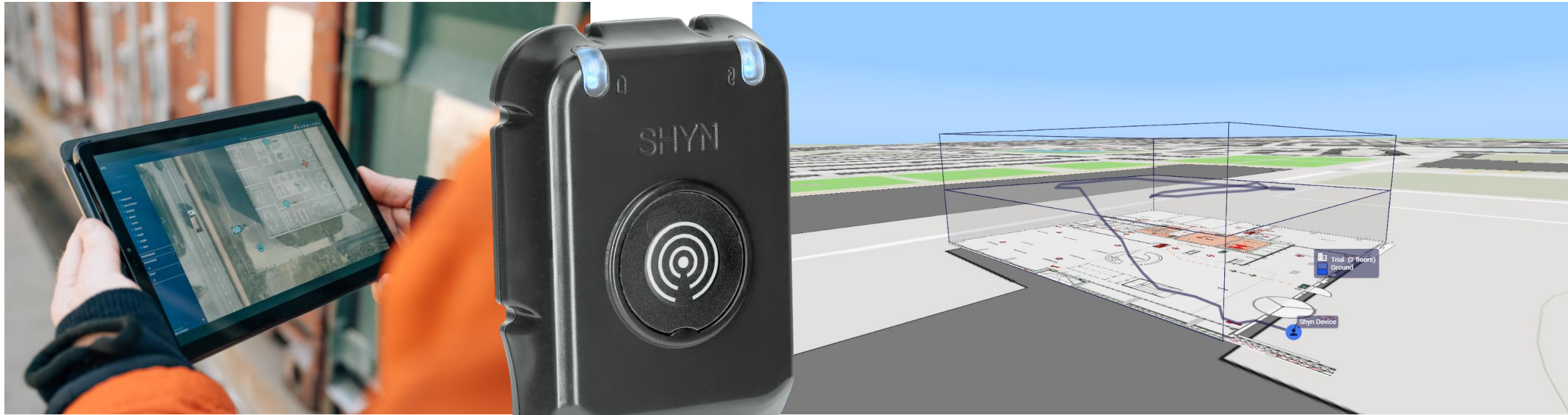*N°1 gap of the Common Global Capability Gaps defined by IFAFRI.*

International Forum to Advance
FIRST RESPONDER INNOVATION
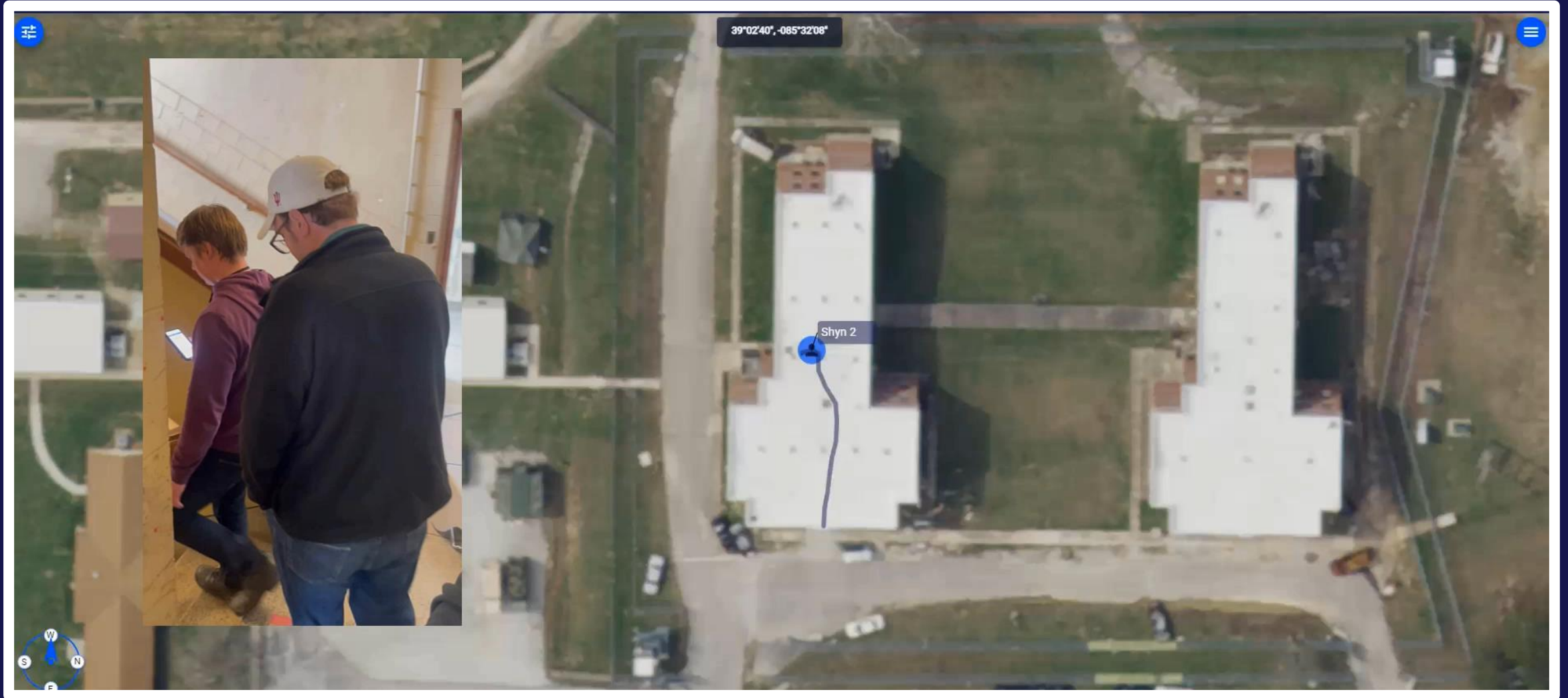
What solution did we come up with?

HYPER LOCATION — **AI-driven software to reliably know the 3D location people in GPS-denied environments**

SHYN — **Robust wearable that feeds Hyper Location with high-quality sensor data**

2019 - SHYN V1

- Artificial Intelligence
- Real-time signal fusion
- GPS augmentation
- Anti spoofing
- Indoor Maps

Online Demo
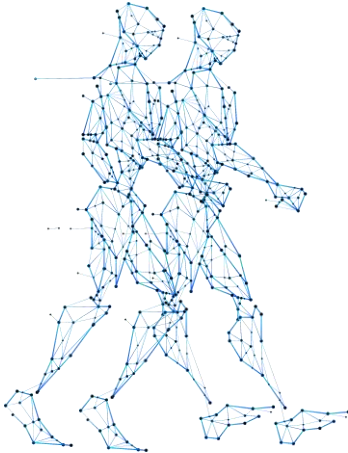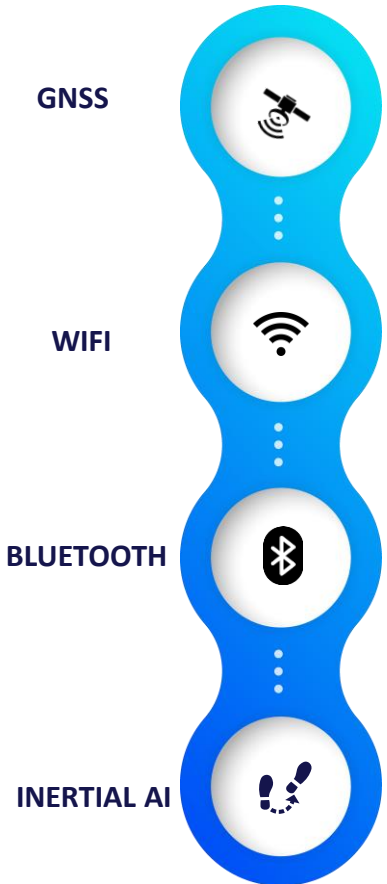
How does it work?

HYPER LOCATION

Continuous fusion of positioning data.

+

Our inertial AI ensures localisation if no GNSS, Wi-Fi or Bluetooth signals are available.

GNSS

WIFI

BLUETOOTH

INERTIAL AI

Capturing location and movement data…

…which our trained AI engine uses to understand the physical motions of people…

…in order to calculate positions.

What solution did we produce for awareness of health hazards?

GUARDIAN

Advanced positioning technology for fast emergency response

╳ HYPER LOCATION

True Alert system for any type of risk

- <u>Manual</u>: Panic button,
- <u>Automated</u>: Fall detection, Man-down, Danger Zone alerts
- <u>Location-based</u>: Geofences, Missed ETA, Toxic Exposure, Visitor Access

Continuous optimalisation to reduce false alert overload

Modular capabilities to increase efficiency and user experience

- First Responders – Construction & Production– Utilities – Visitors – Security – Workplace Violence - Correction facilities

"The most advanced Worker Safety application in the market"
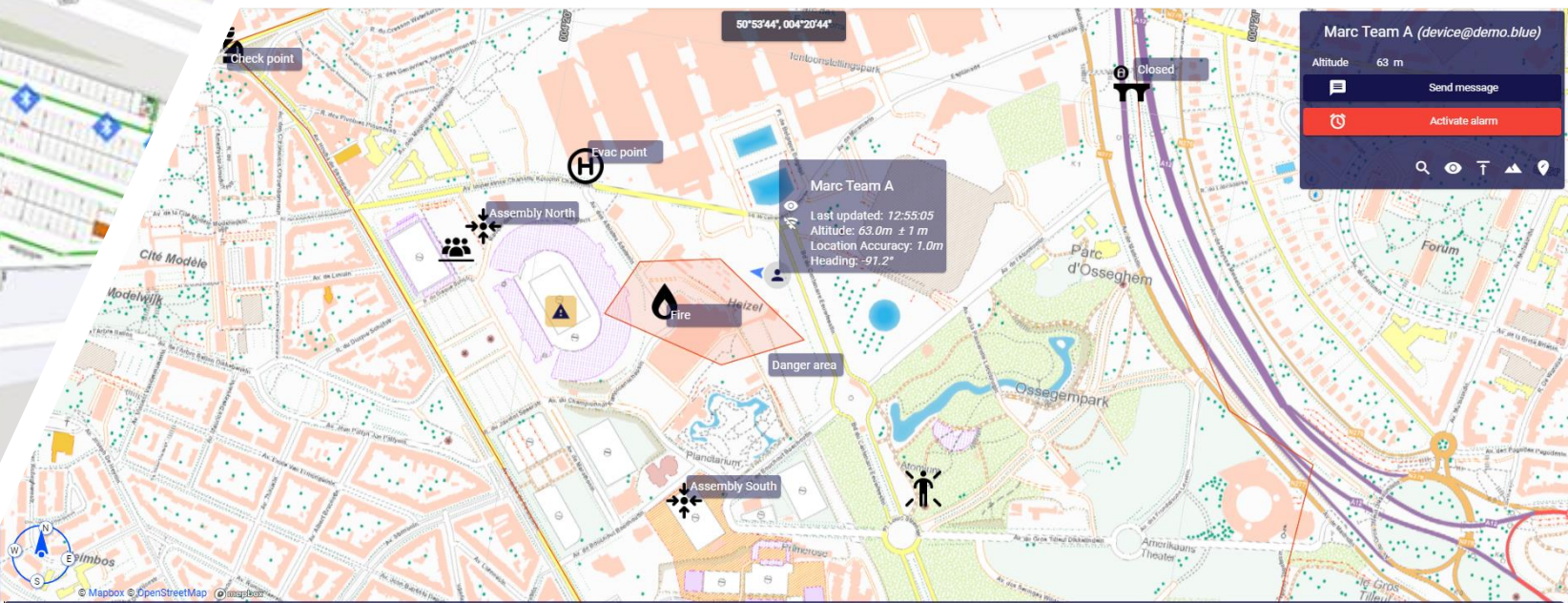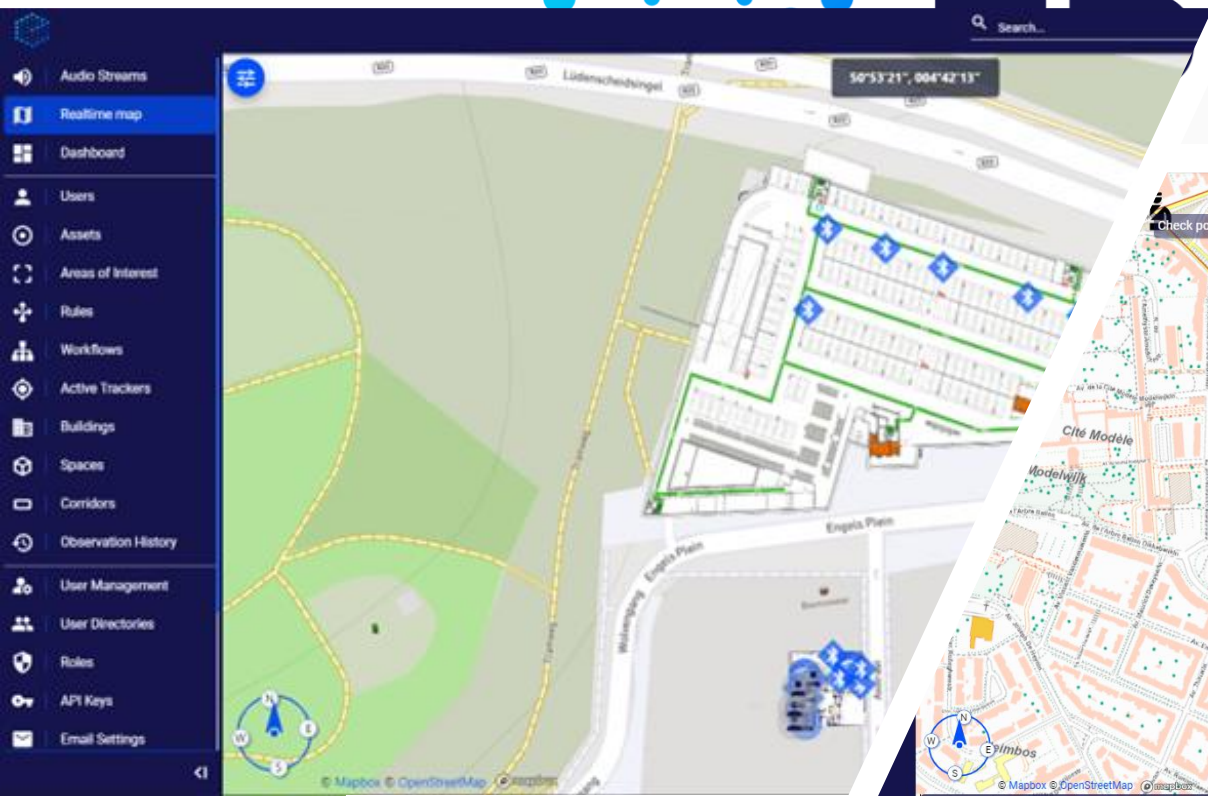
John Meiresone – Fire Chief

·e·esa

ARTES DEMONSTRATOR
<u>Online Article</u>

umicore

GUARDIAN

Incident Management

Incident

Plume

1st Aid

3 Bellestraat - Google Maps

google.com/...

Gmail   beta.SAM.gov | Wor...   ESA   Other bookmarks   Update

3 Bellestraat
Antwerp, Flanders
Google

Street View - Sep 2020

Open Google Street view
New Alert
Extract Buildings
Create
F [3, 11]

rminal
al 510)   Deldo Autobanden N.V
I-RENTAL

Google
Image capture: Sep 2020   © 20

Emergency
supervisor@demo.blue,...

Urgently need medical supplies   13:02:57

supervisor@demo.blue
We'll prepare a package for you   13:04:06

what eta?   13:04:40

supervisor@demo.blue
We got your current location.   13:04:58

supervisor@demo.blue
About 15'. OK?   13:05:12

Demo Ex 1 (1d90)
3.00 m
Demo Ex 2 (1d81)
3.00 m
P 004769
2.00 m
Meeting Room Wifi
P 00815F
3.00 m
Demo Ex 3 (1d96)
3.00 m
Storage

Audio Streams
Realtime map
Dashboard
Users
Assets
Areas of Interest
Rules
Workflows
Active Trackers
Buildings
Spaces
Corridors
Observation History
User Management
User Directories
Roles
API Keys
Email Settings

Search...

Lüdenscheidsingel
50°53'21", 004°42'13"
Engels Plein

© Mapbox © OpenStreetMap

Marc Team A (device@demo.blue)
Altitude   63 m
Send message
Activate alarm

50°53'44", 004°20'44"

Check point
Closed
Evac point
Assembly North
Marc Team A
Last updated: 12:55:05
Altitude: 63.0m ± 1 m
Location Accuracy: 1.0m
Heading: -91.2°
Fire
Danger area
Cité Modèle
Modelwijk
Parc d'Osseghem
Ossegempark
Plandarium
Assembly South
Forum
Amerikaans Theater
Le Gros

© Mapbox © OpenStreetMap

EPIC BLUE

Michael Ilsbroux

Michael.Ilsbroux@epic.blue