



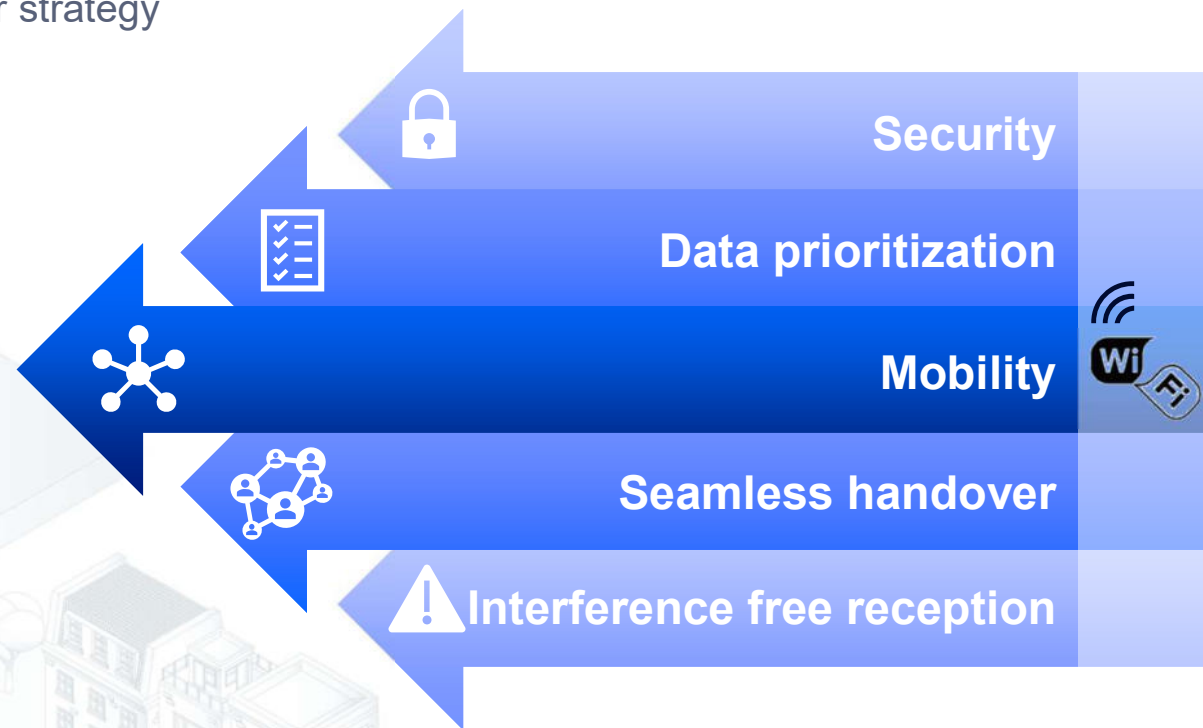
Drones - on a mission for security

European Police Congress, 03.05.2023

Nikolaos Kalivianakis, Director Business Solutions, O₂ Telefonica

Private 5G - The advantages of a private network with O₂ Telefónica

- **"Shared" operating models** according to customer strategy
- **Highest network availability** through dedicated operating processes
- **End-to-end experience exchange** including Global IoT and 5G Device THINX LAB
- Support with **regulatory, standardization,** and administrative issues
- Option to securely combine **public and private networks**
- **Manufacturer-independent** network technology



Current trends accelerate digitization in industry and logistics

Production of new, digital products



- High personalization
- On-demand production



Highest availability for complex machines



Efficiency and quality assurance pressure in production and logistics

Market effects accelerate Industry 4.0



Global logistics chain



Energy costs and sustainability

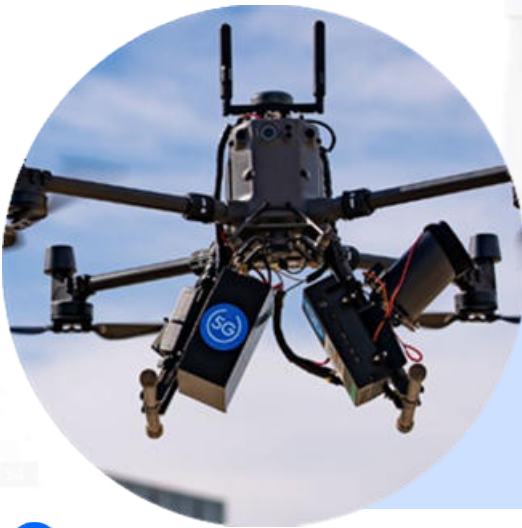


Lack of qualified personnel






Successful partnership of Unmanned Life and o2 Telefónica

Challenge

- 24/7 monitoring of the site by security personnel
- False alarm causes unnecessary sorties
- Transmission of video recordings securely and in real time via a central security system



The advantages

-  **80 x** faster response
-  **35%** savings in operating costs
-  **66%** less working time for monitoring activities
-  **15 x** more resource efficient than manual monitoring
-  Additional inspection of the PV system on the roof

The solution from Unmanned Life:



2 autonomous drones



AI for face recognition



Seamless integration with the command center



Public 5G connectivity

THE SOFTWARE PLATFORM

FOR SEAMLESS ORCHESTRATION
OF AUTONOMOUS ROBOTICS

WWW.UNMANNED.LIFE





Enhance the Entire Ecosystem Through:

ONE PLATFORM

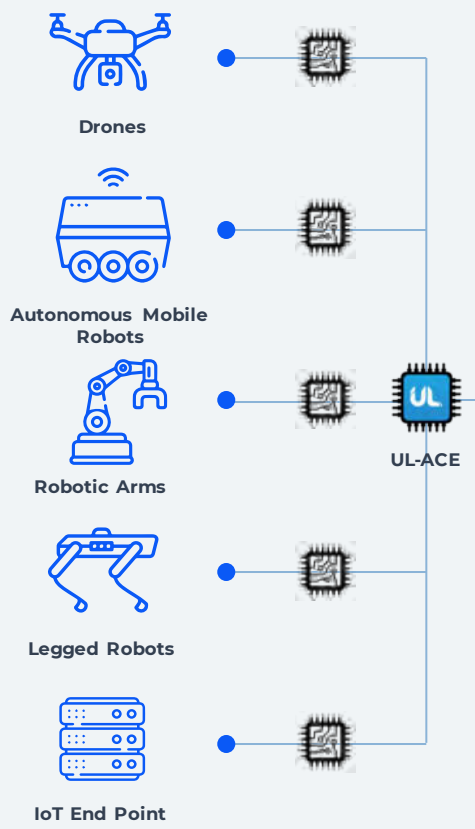
to autonomously deploy, control, and orchestrate fleets of robots and drones



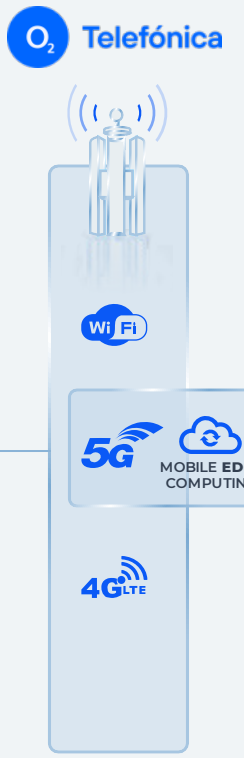


Platform Architecture

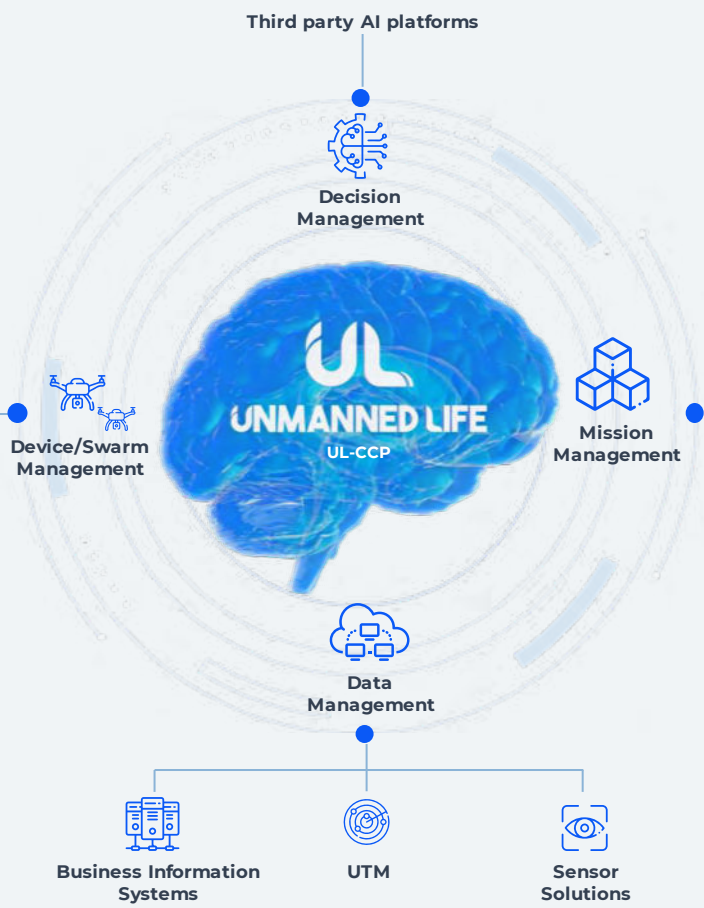
HARDWARE



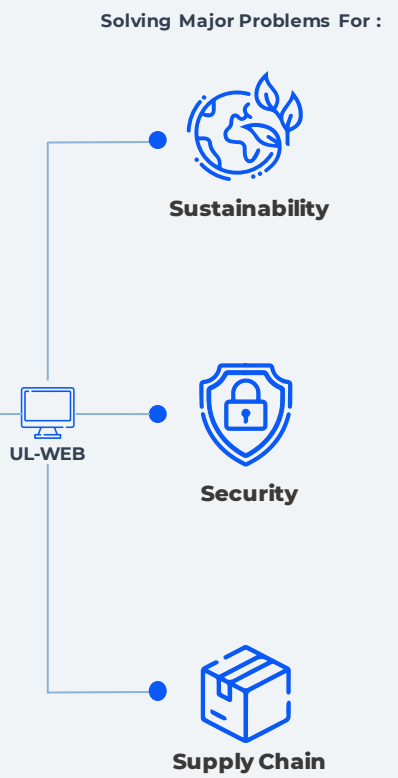
NETWORK



PLATFORM



APPLICATIONS





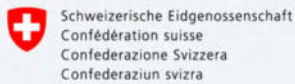
Regulation Proof



We have a **global partnership** with **EU Drone Port**:

European Drone Hub for Testing, **Certification**, Training & **Authorisations**.

We have obtained **permits** in **8 jurisdictions**:



Use cases 5G:



Autonomous drone surveillance
Autonomous Swarm
Telefónica



Mapping and Monitoring
BVLOS
TELUS



Surveillance
BVLOS



Surveillance and Inspection
BVLOS
Autonomous
IBERDROLA



Logistic – Multi-Robotics Operation
BVLOS
Payload dropping
SEAT



Autonomous Security and
Asset Tracking
Swarm
cellnex



Cell tower Inspection
Autonomous
etisalat



Indoor Inventory Management
Autonomous Swarm
Telefónica



Drone Fleet Search & Rescue
Autonomous Swarm
Magenta

Your Autonomous Eye In The Sky

Revolutionizing Security with an Autonomous Drone-in-a-Box application, delivering efficiency and precision

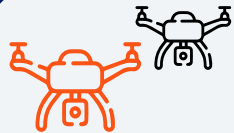


U-SECURITY
By Unmanned Life

U-SECURITY

By Unmanned Life
Your Autonomous Eye In The Sky

Introducing Unmanned Life's cutting-edge fully autonomous drone-in-a-box surveillance product delivers efficiency and precision, whilst seamlessly integrating into diverse settings and systems.



**Drone Fleet
Orchestration**



**Autonomous
Surveillance Missions**

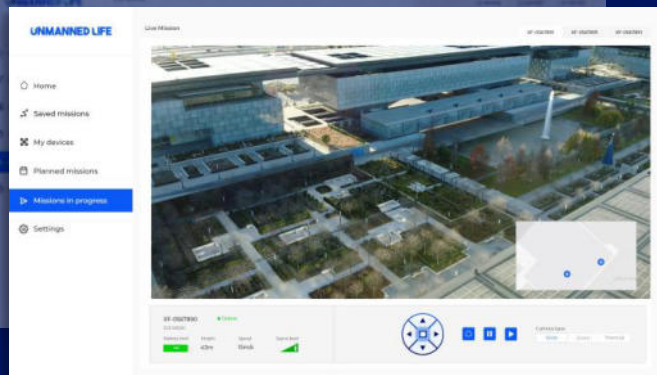


**24/7
operations**

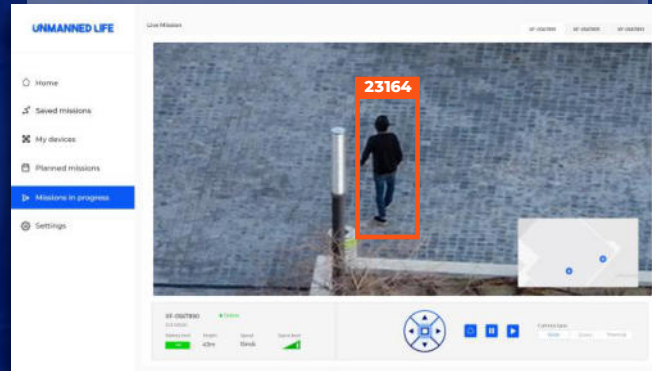
WIDE VARIETY

OF USE CASES

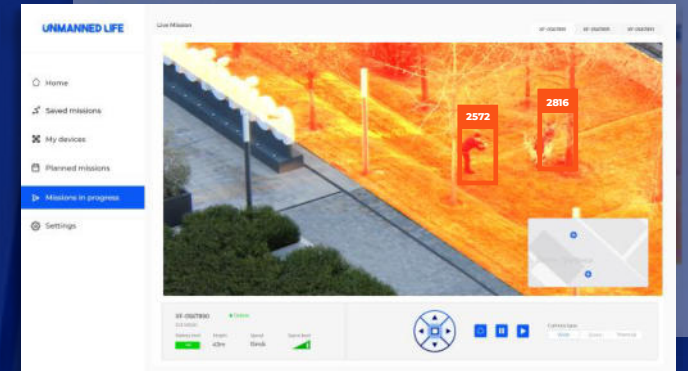
WHAT WE DO



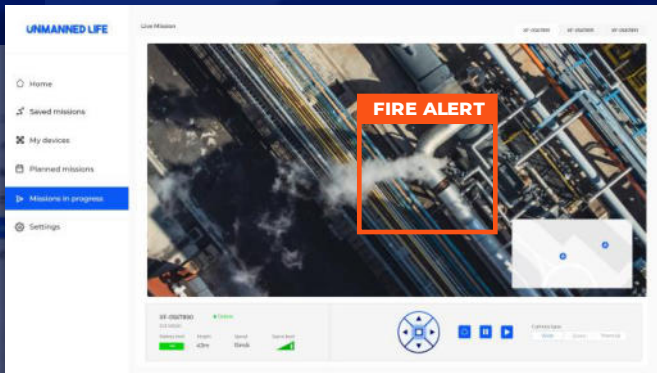
SITUATION AWARENESS



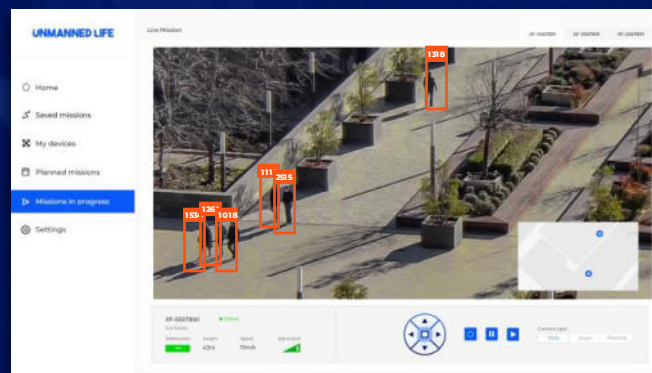
INTRUSION DETECTION



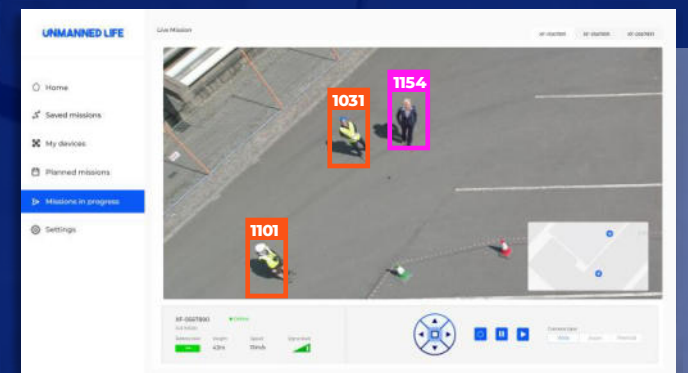
MONITOR KEEP-OUT AREAS



FIRE DETECTION

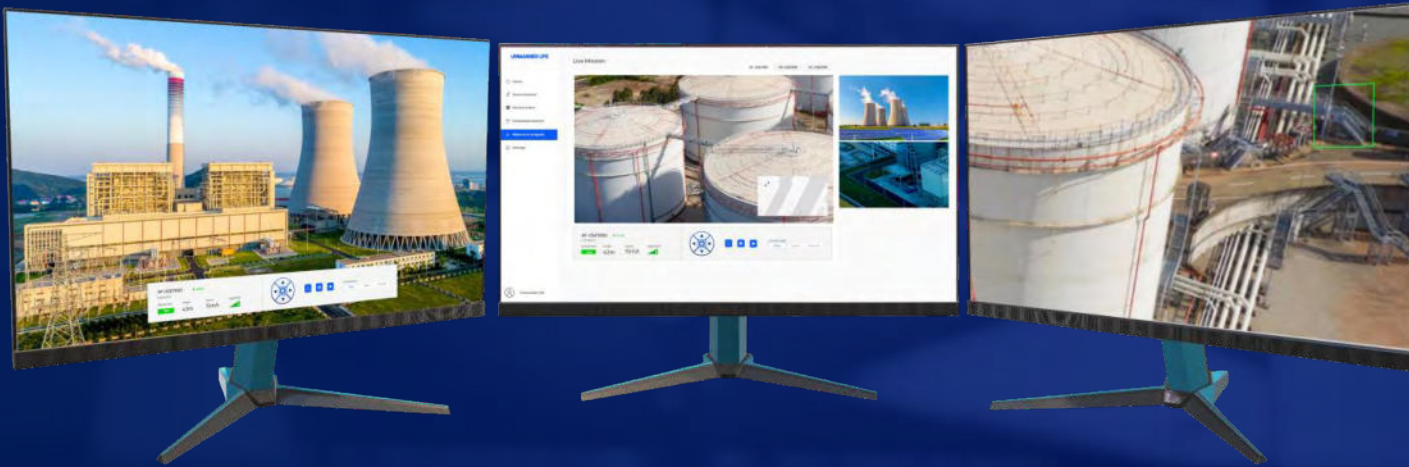


PEOPLE TRACKING



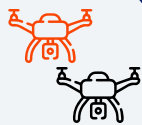
PPE COMPLIANCE

UNPARALLELED SECURITY CAPABILITIES



BVLOS Ready

Operations can be conducted remotely, regardless of the distance



Swarm Orchestration

Coordinating teams of autonomous drones to work together for security rounds



AI-Powered

Autonomous decision-making through AI for advanced analytics



Network Agnostic

Ensuring seamless connectivity, regardless of the type of on-site network



Secured Data Flows

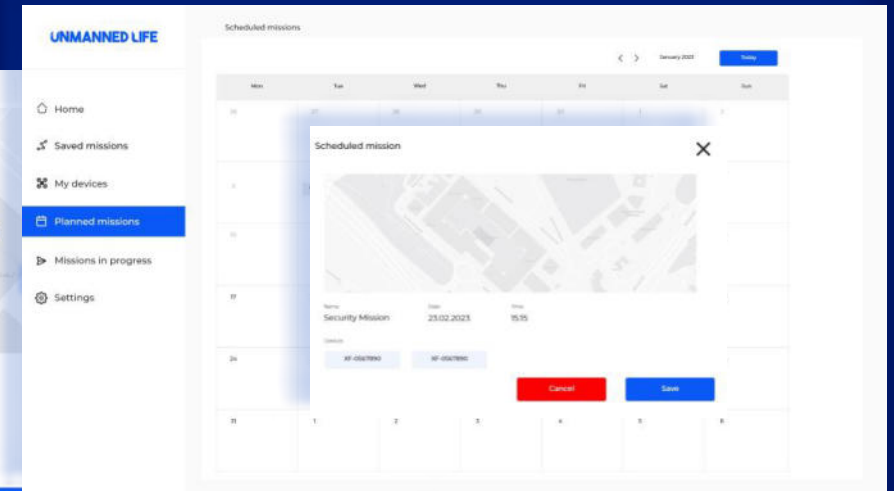
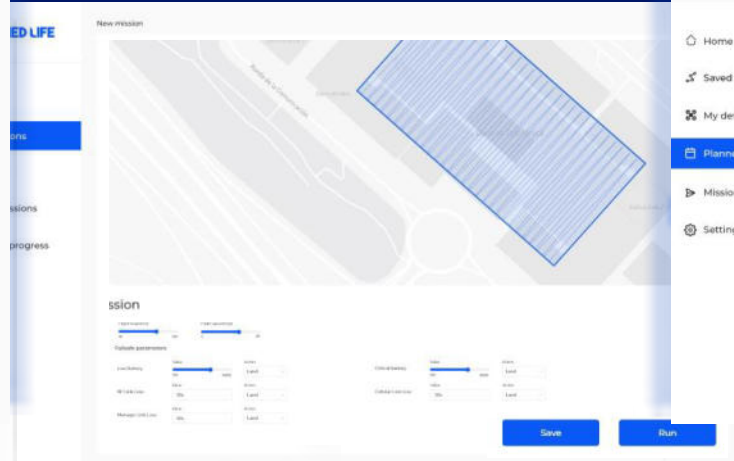
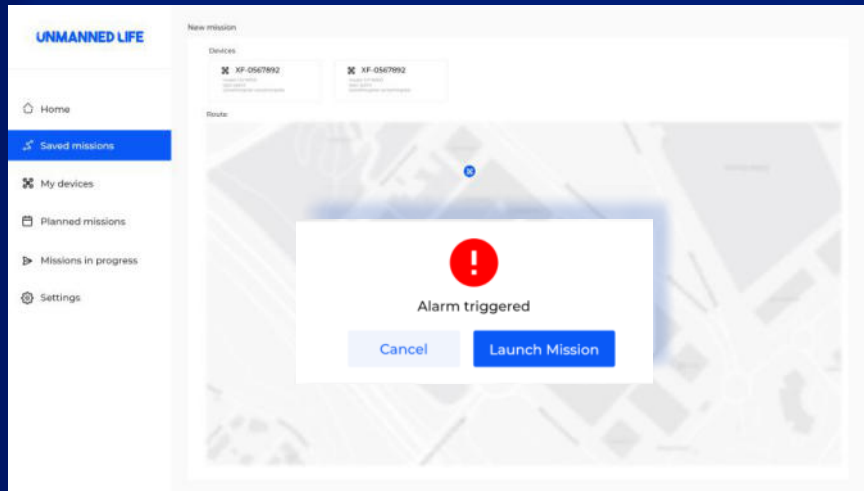
Layering mobile network protection alongside our cybersecurity protocols



Modular

Easy to maintain and upgrade, with frequent new feature releases

MULTIPLE DEPLOYMENT METHODS



Event Trigger

Ensure situational awareness with autonomous drone launches to sensor locations.



On-Demand

Select the mission and parameters in real-time for prompt security rounds ad-hoc.



Scheduled

Upload predefined missions to the platform to ensure frequent surveillance rounds.

OUR GLOBAL FOOTPRINT



Telefónica

Enterprise Headquarter Surveillance

Spain



IBERDROLA Telefónica

Facility Surveillance

Spain



THE BRISTOL PORT COMPANY cellnex

Standard and Triggered Port Surveillance

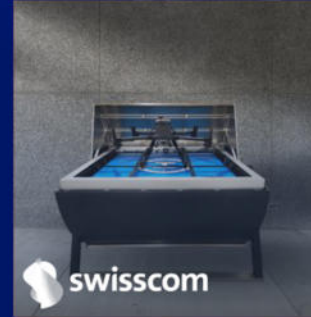
United Kingdom



TELUS

Multi-Site Surveillance Pilots

Canada



swisscom

Enterprise Facility Triggered Surveillance

Switzerland



LIBERTY GLOBAL AWS

EDGE-Hosted Port Surveillance

Belgium



Telefónica

Drone-Based Situational Awareness

Germany