

# Actility Enterprise Channels Webinar

December 2023



**Actility**  
Connecting with intelligence



# Agenda

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- **What is new on ThingPark Enterprise release 7.3?** *Ramez Soss (Actility)*
- **ThingPark Network Coverage Tool** - *Ramez Soss (Actility)*
- **What is new on Abeeway and location solutions?** *Rohit Gupta (Actility)*
- **Cicicom's smart parking solution** – *Angelos Kapsimalis (Cicicom)*
- **Accelerating IoT deployments through ready-to-use solutions** – *Abhiraj Verma (Actility)*
- **Q&A**

# What's New on ThingPark Enterprise 7.3?

*Ramez Soss*



# Zoom on new features in TPE 7.3

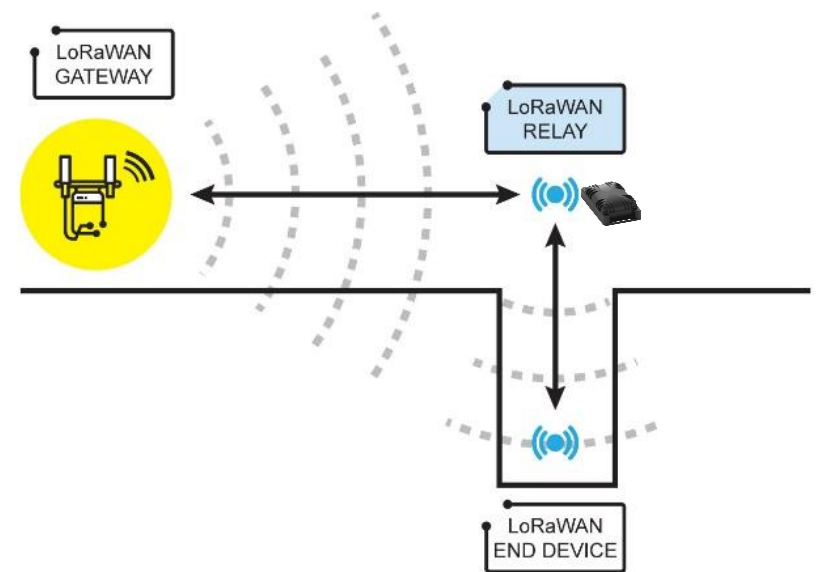
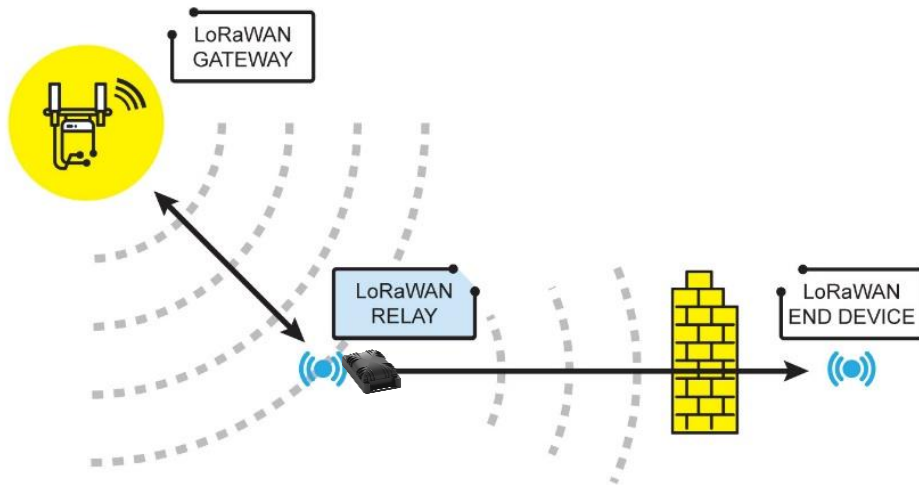
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- LoRaWAN relays
- Enhanced integration with ThingPark APIs
- Alarm notification via TPX IoT Flow connections
- Support domain-specific connections towards external applications
- [SaaS] New KPI dashboard for administrators

**And many more... See the detailed release notes [online](#).**

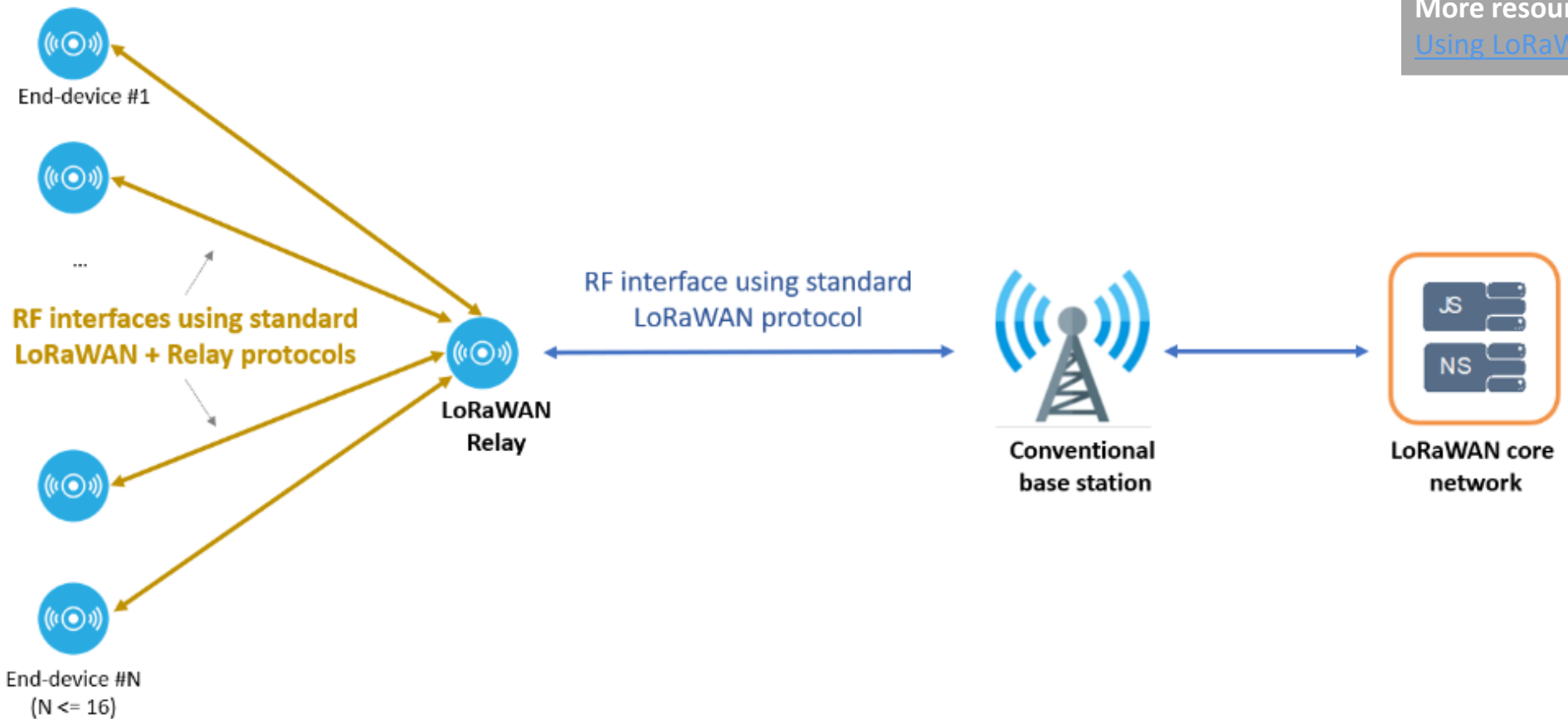
# LoRaWAN relays (1/2)

- LoRaWAN Relays are **battery-powered**, can be installed anywhere (do not require electricity or internet connectivity), and work as a 'repeater'.
- They are typically used to extend the coverage in hard-to-reach areas, like basements for water meters or underground for manhole sensors.
- Infrastructure costs can be reduced significantly by installing battery-powered relay devices instead of indoor gateways.



# LoRaWAN relays (2/2)

- Each relay can **securely** support up to 16 end-devices.
- Relays are provisioned the same way as any LoRaWAN device.



More resources:  
[Using LoRaWAN relays](#)

# Enhanced integration with ThingPark APIs

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- OSS-API is now open for partners and customers
  - Full blown set of functionalities: OSS-API is ThingPark's **native API** used by TPE GUIs.
  - New features are supported only on OSS-API, not DX-API.
  - Better performance, faster response times: DX-API was an add-on/wrapper on top of OSS-API.
- DX-API becomes legacy and enters the maintenance mode
  - New customers should directly use OSS-API.
  - Existing customers can use both DX-API and OSS-API using a unified authentication flow, based on Service Accounts.
- **TPE 7.3 is backward compatible with TPE 7.2.**



# Alarm notification via TPX IoT Flow connections

- Ability to report device and base station alarms through TPX IoT Flow connections (e.g. MQTT, HTTPS, Azure, Thingworx...)

```
{
  "BS_alarm": {
    "ID": 102,
    "State": 1,
    "CreationTime": "2022-12-05T19:57:02Z",
    "LastUpdateTime": "2022-12-05T19:57:06Z",
    "Occurrence": 1,
    "Acked": false,
    "AddInfo1": "1",
    "LrrID": "100001C2",
    "PartnerID": "1100033327",
    "CustomerID": "1100033327",
    "BaseStationData": {
      "name": "My base station 1"
    }
  }
}
```

```
{
  "DevEUI_alarm": {
    "ID": 4,
    "State": 1,
    "CreationTime": "2020-09-09T18:14:56.49+02:00",
    "LastUpdateTime": "2020-09-09T18:25:24.49+02:00",
    "Occurrence": 1,
    "Acked": 0,
    "AddInfo1": "69",
    "DevEUI": "0018B2000001156",
    "CustomerID": "199983788",
    "CustomerData": {
      "loc": {
        "lat": "43.58081",
        "lon": "1.4421667"
      },
      "tags": [
        "tag1",
        "tag2"
      ],
      "doms": [
        {
          "n": "France/Paris",
          "g": "Site"
        },
        {
          "n": "Location",
          "g": "Vertical"
        }
      ],
      "name": "My device 1"
    }
  }
}
```

ALARM NOTIFICATION

Device Alarms <sup>1</sup>

ON

Base Station Alarms <sup>1</sup>

ON

ALARMS SETTINGS

Low Uplink Activity Alarm Thresholds

Threshold 1 <sup>1</sup> Condition <sup>1</sup> Severity <sup>1</sup>

After 1 hour WARNING

Threshold 2 <sup>1</sup> Condition <sup>1</sup> Severity <sup>1</sup>

After 2 hours MAJOR

Alarm Notification

Connections <sup>1</sup>

TPX ● MQTT connection

TPX ● AWS connection

Alarm notification has been disabled on this connection. Alarms are no longer notified.

ADD A CONNECTION



# Support domain-specific connections

Two types of connections are supported in TPE 7.3:

- Cross-domain connections (not associated with any domain): visible to all tenants/users, but editable by administrators only
- Domain-specific connections (new in TPE 7.3): these connections are associated with one or several domains and are only visible to authorized users whose domain restrictions match.

## ADDING A CONNECTION

### Your Connection Type

https://

#### Basic HTTPS

Supports HTTPS-based connections, also known as NS-AS Tunnel Interface. **Device payloads are exchanged in encoded format without the support of payload drivers.** This connection type does not support message queuing services. Device and base station alarms cannot be reported over this type of connection.

[Change connection type?](#)

### Set Your Connection\*

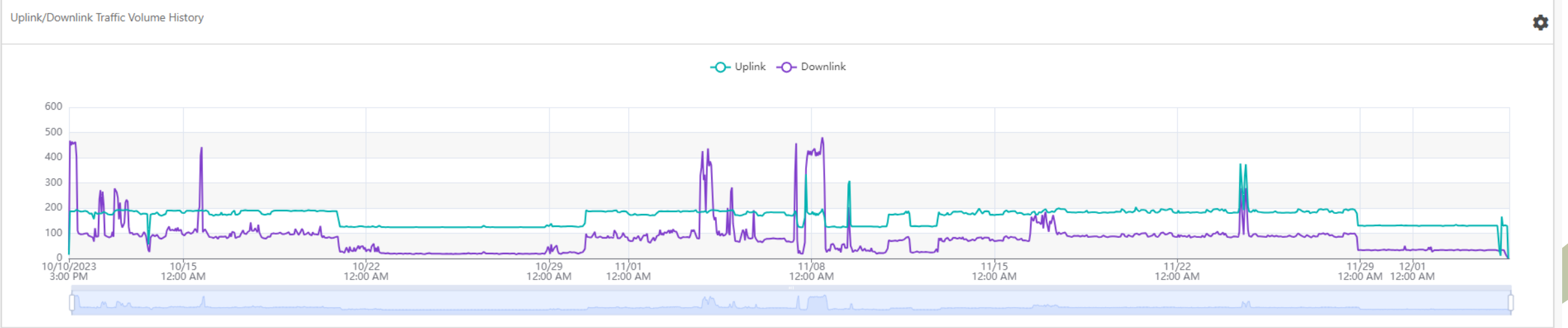
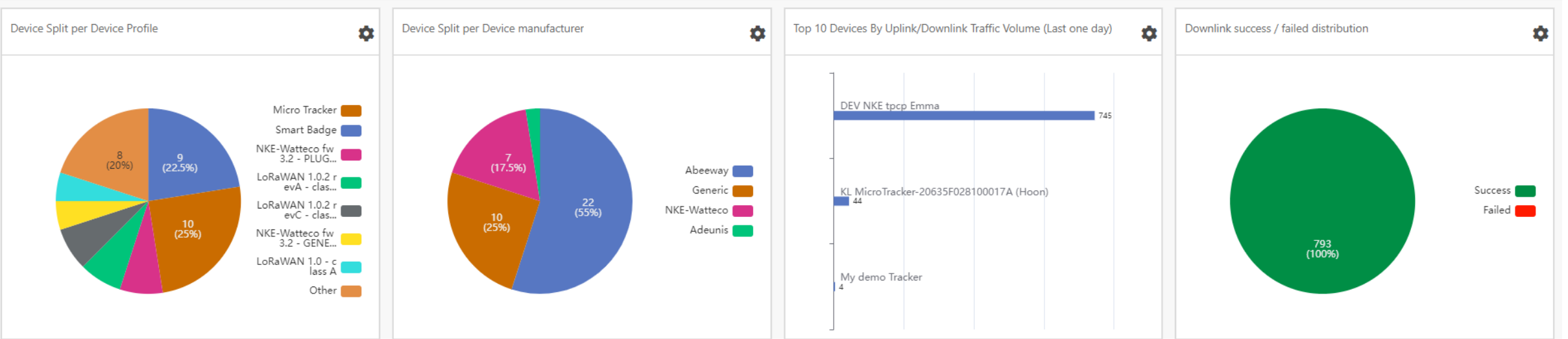
Name\* ⓘ

My HTTPS connection ✓

Domains ⓘ

Cust-1 ✕ +

# New KPI dashboard for SaaS administrators



# ThingPark Network Coverage Tool

*Ramez Soss*



# NCT Overview

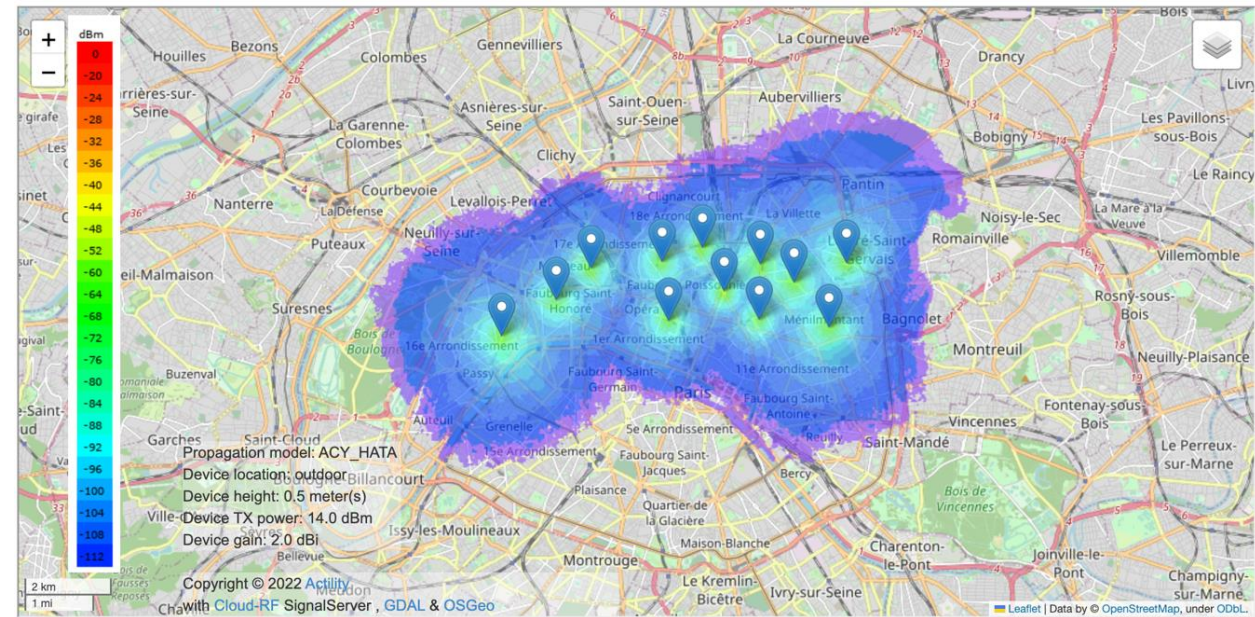
- ThingPark's Network Coverage Tool (NCT) is an in-house RF coverage prediction tool to support radio network planning for **outdoor macro gateways** on rooftops or tower-mount.

**WARNING** The tool is not suitable for coverage prediction of indoor gateways.

- Seamlessly integrated with ThingPark Enterprise SaaS with SSO, reusing BS provisioning info (coordinates, antenna height, propagation environment...)

- **Main customer use cases**

- Predict RF coverage for greenfield deployments and determine the optimum antenna placement
- Generate coverage heatmaps for already-deployed gateways and detect potential coverage holes
- Help undecided prospects to appreciate the Long-Range aspect of LoRaWAN
- Free credit supported on ThingPark Community platform (5 base stations simulated per quarter). Additional credit can be purchased on demand.



# What's new on Abeeway/ThingPark Location

Rohit Gupta





# A versatile catalogue of trackers to match a wide variety of vertical applications



## Industrial tracker

Large battery, hardened casing, high-precision tracking : designed to last *IP65, 19Ah type D battery.*  
*Up to 3 years battery life in motion tracking mode at 120 position per day.*



## Compact tracker

Solid and lightweight, built for heavy-duty tracking.  
*Asset tracking and management, even in the harshest environments.*  
*3xAAA 2.7Ah replaceable batteries, IP 68, ATEX/IECEX Zone 0/2 certified, temperature & motion sensors*  
*Up to 4 years battery life in LP GPS at 24 fix per day.*



## Micro tracker

Light, handy, yet powerful. Enables you to track and protect things (or people and pets) of value.  
*IP65, 450mAh rechargeable battery*  
*Buzzer, multimode button.*

### Battery life :

- *Proximity mode : 5 days to 2 weeks depending on data precision*
- *Location mode : 90 days battery life at 40 fix per day with indoor/outdoor positioning.*



## Smart Badge

Sleek, smart, and multi-functional.  
ideal for worker protection and zone alerts  
*IP65, ATEX Zone 2 certified, Buzzer with 70dB high volume, industrialized magnetic connector, 1300mAh rechargeable battery, multimode button.*

### Battery life :

- *Proximity mode : 1 to 2 months depending on data precision*
- *Location mode : 120 days battery life at 60 fix per day with indoor/outdoor positioning.*

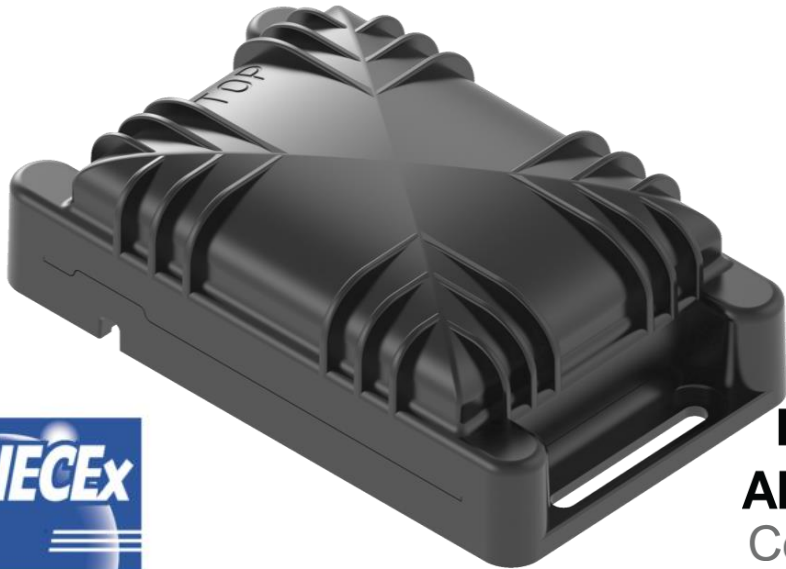


**NEW**

Low power ATEX/IECEX BLE beacon manageable over LoRaWAN

# Industrial Manageable ATEX Beacon

Availability: NOW



Microsoft

Azure  
Certified  
Device



LoRa  
Alliance  
Certified



Marketplace Ordering link: [here](#)

## Beaconing Formats

Eddystone

iBeacon

AltBeacon

Quappa

## LoRaWAN® Specifications

LoRaWAN class A; 16 dBm for EU; 21.5dBm EIRP max; CE; FCC

## HW specification

Size : 112mm x 66mm x 33mm, very modular fixation  
Waterproof enclosure (IP68); IK08, tropicalised PCB.  
Functional temperature range -20°C to + 65°C  
Temperature sensor, Magnetic switch (option)



## Power management

Designed for long Battery life 8Ah battery (Type AA/3.6V Li-SOCl<sub>2</sub>)  
Supercapacitor to protect against battery passivation  
Low stand-by current  
Supports high peak current for high LoRaWAN Tx power (20dBm mode)

## Programmable Functionalities

Programmable using Abeeway app or over LoRaWAN

## ATEX/IECEX

ATEX/IECEX Zone 0 and ATEX/IECEX Zone 2 certified for use in hazardous/explosive environments

A BLE beacon designed for asset tracking in industrial environment

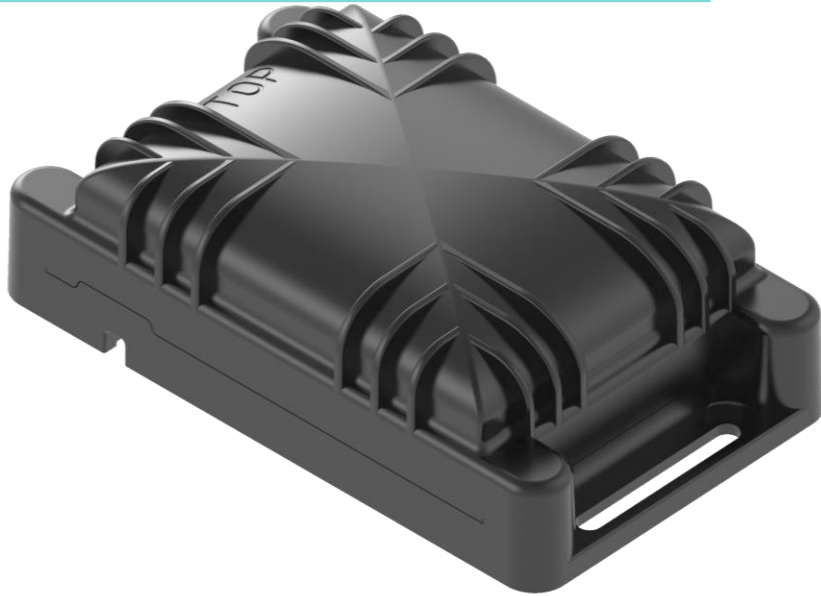


# Combo LPWAN Compact Tracker

Availability: H1'2023

**NEW**

Compact Tracker combining  
LoRaWAN, LTE-M & NB-IOT



## Geolocation technology



GPS



A-GPS



Wifi sniffer



BLE

## LoRaWAN® Specifications

LoRaWAN class A; 16 dBm for EU; 21.5dBm EIRP max; CE

## Cellular Specifications

LTE-M and NB-IOT

Supported bands: 1, 2, 3, 4, 5, 8, 12, 13, 14, 17, 18, 19, 20, 25, 26, 28, 66, 70, 71, 85);

Total Radiated Power (TRP) = 18dBm

## HW specification

Size : 112mm x 66mm x 33mm, very modular fixation

Waterproof enclosure (IP68); IK08, tropicalised PCB.

Functional temperature range -20°C to + 65°C

Temperature sensor, 3D motion sensor, Magnetic switch (option)



## Power management

Designed for long Battery life 8Ah battery (Type AA/3.6V Li-SOCl<sub>2</sub>)

Supercapacitor to protect against battery passivation

Low stand-by current

## Programmable Functionalities

Motion Tracking / Permanent track/ Start & Stop / Activity Tracking / Standby

Geofencing: Send notification when leaving/entering a specified zone

Activity rate: Monitor operating period with on board sensors

Leverages [Sequans GM02S module](#)  
and [Abeeway-Murata 1WL](#)  
[Geolocation module](#)



For more information: [here](#)

ATEX Certification: In progress

A tracker designed for asset tracking/management in industrial environment

# LoRaWAN Relay

Availability: Q1'2023

**NEW**

Compact Tracker configurable as LoRaWAN Relay



Leverages [Abeeway-Murata 1WL Geolocation module](#)



## Use Case

Reduce infrastructure CAPEX to ensure target coverage at the edge

## LoRaWAN® Specifications

LoRaWAN class A; 16 dBm for EU; 21.5dBm EIRP max; CE  
LoRa Alliance Relay specification (TS011-1.0.0 Relay)

## HW configuration

Size : 112mm x 66mm x 33mm, very modular fixation  
Waterproof enclosure (IP68); IK08, tropicalised PCB.  
Functional temperature range -20°C to + 65°C  
Temperature sensor, Magnetic switch (option)



## Power management

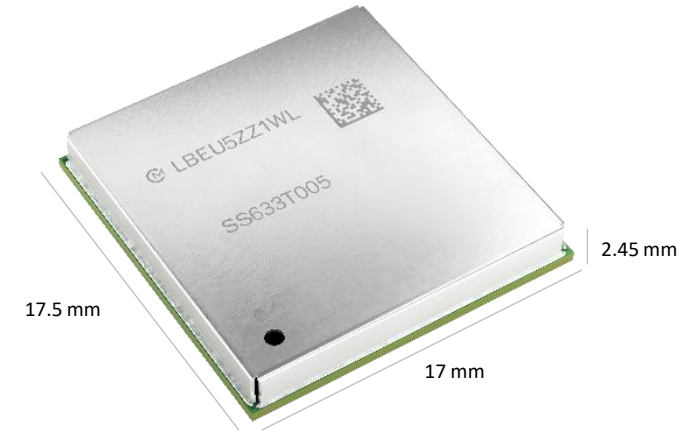
Designed for long Battery life 8Ah battery (Type AA/3.6V Li-SOCl<sub>2</sub>)  
Supercapacitor to protect against battery passivation  
Low stand-by current  
Supports high peak current for high output power (20dBm mode)

ATEX Certification: In progress

A Relay designed for asset tracking/management in industrial environment

# Murata-Abeeway co-developed Geolocation Module

- Ideal for Indoor-Outdoor geolocation
  - Small and compact circuit component
  - Ultra-low power consumption
  - Includes
    - STMicro STM32WB MCU
    - Semtech LR1110 LoRa chip
    - MT3333 GNSS chip
- Includes all necessary components of a multi-technology tracker device, greatly simplifying PCB design
  - Fewer layers are required on the PCB
  - Simplifies product testing as all module components have been pre-tested
  - The module's RF certification can be reused for end-product certification
  - The Abeeway-Murata Evaluation Board is provided for quick start of hardware development



Type 1WL Module



Marketplace Ordering link: [here](#)

# ATEX/IECEX certification for Abeeway devices



- ATEX/IECEX certification for Abeeway trackers for use in hazardous environments
- Typical Use case: Fixed offshore platforms, petrochemical plants, mines, flour mills, etc.
- Note:
  - Zone 0 includes certification for Zone 1/Zone 2 (Gas)
  - Zone 20 includes certification for Zone 21/Zone 22 (Dust)

	Supported tracker models
ATEX Zone 0-20 IECEX Zone 0	Compact tracker, Industrial Manageable ATEX Beacon
ATEX Zone 2-22	Micro Tracker V2, Smart Badge, Compact tracker, Industrial Manageable ATEX Beacon
ATEX Zone 1-21	Smart Badge

# ATEX/IECEx certification for Abeeway devices (2/2)

- For more information on ATEX/IECEx markings, see [here](#).



Compact Tracker Industrial Manageable ATEX beacon	<p><b>ATEX Zone 0:</b> II 1G Ex ia IIC T4 Ga Ta -20 °C ... +40 °C II 1D Ex ia IIIC T135°C Da Ta -20 °C ... +40 °C</p> <p><b>ATEX Zone 2:</b> II 3G Ex ic nA IIC T4 Gc Ta -20 °C ... +40 °C II 3D Ex ic tc IIIB T135°C Dc Ta -20 °C ... +40 °C</p> <p><b>IECEx:</b> Ex ia IIC T4 Ga Ex ia IIIC T135°C Da</p>
Smart Badge	<p><b>ATEX Zone 1:</b> Ex II 2G Ex ib IIC T4 Gc Ex II 2D Ex ib IIIC T135°C Db</p> <p><b>ATEX Zone 2:</b> Ex II 3G Ex ic IIB T4 Gc Ex II 3D Ex ic IIIB T135°C Dc</p>
Micro Tracker V2	<p><b>ATEX Zone 2:</b> II 3 G Ex ic IIB T4 Gc (-20 °C ≤ Tamb ≤ +40 °C) II 3 D Ex ic IIIB T135 °C Dc (-20 °C ≤ Tamb ≤ +40 °C)</p>



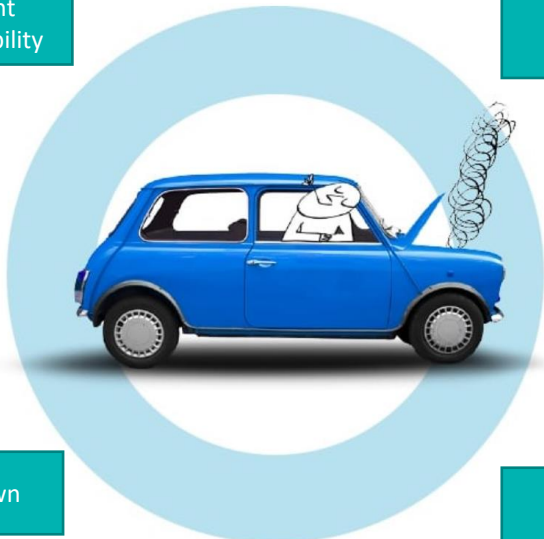
# Car tracking for Anti-Theft with Roole

- Find lost cars and reduce the insurance costs with long autonomy and reliability, unlike the regular cellular GPS-based devices
- To address consumer needs in France, Insurance company in France will launch a mass-market car tracking offer, with LoRaWAN connectivity based on public network, Abeeway Compact Tracker and Wetrak Mobile APP (whitelabel using Abeeway tracking app). [Link to PR](#)



Accident Responsibility

Theft/ Vandalism



Breakdown

Remote assistance



**Benefit:** safety and security for cars, technical assistance and theft





# Human and asset tracking for Debswana outdoor mining with 14,000 devices

- **Debswana** (merged with Anglo American) is the world's leading producer of diamonds by value, operating **four diamond mines** in the eastern and central parts of Botswana.
- The company is deploying **14 000 Smart Badges**, with full LoRaWAN coverage for different use cases with same infrastructure
- The badges are used **ensure both worker optimization and safety.**
- Features include **map-based remote tracking and panic button for SOS calls.**
- LoRaWAN Gateway backhaul options include 3G/4G (if available), Local LAN to satellite modem (if already available).



**Benefit:** significantly improved workers safety





## 39,000 Abeeway trackers for Saudi Arabia's biggest hospitality project - Red Sea Giga Project

- **The Red Sea Development Company (TRSDC)**, the developer behind the world's most ambitious regenerative tourism project, via MachinesTalk, is deploying **Smart Badges for up to 36,000 construction workers**, and **Compact Trackers for up to 3,000 vehicles** on its construction site area for **site security, worker safety, access control, and process efficiency**, including the LoRaWAN® network infrastructure provided by Actility's ThingPark platform.
- Features include real-time and map-based remote tracking with **heatmaps and counts for more effective resource allocation**, **SOS button for workers** and **estimated time of arrival (ETA)** for vehicles.
- TRSDC particularly values the **Low-Power GPS cutting** GPS energy consumption and increasing devices battery life up to 4 times, and **BLE Beacons feature for precise indoor tracking**. [Link to PR](#).



**Benefit:** meeting the highest international standards for health, safety and sustainability on a construction site.



# Construction Workforce Safety and Zoning Solution in Parisian RATP Subway Tunnels

- **RATP Group** installed an IoT workforce counting solution in the Parisian subway undergoing large-scale extension works. The solution includes a **private LoRaWAN® network infrastructure** by Actility, **3500 Smart Badges**
- There is a **legal obligation to precisely track the number of people on the site**. If there is an accident, the managing company is obliged to quickly identify the people close to the accident site to **evaluate the operating mode and the risks of the intervention**.
- Bluetooth tags are positioned **every 50 meters** to create a positioning reference frame. Each worker on the site is given a **Smart Badge** which scans those tags. Once scanned by the Abeeway sensor, this information is sent back through LoRaWAN network. [Link to PR](#)



**Benefit:** simplest infra with wiring minimized, needed only for antennas placed every 3 km in tunnels.







## 20 000 pieces of equipment connected in real time with Bouygues Construction

- Bouygues Construction Matériel is using Abeeway LoRaWAN® trackers for **remote real-time management and optimization of the equipment** (cranes, lifting accessories, bungalows, electro portables, work platforms, etc.) on more than a **thousand sites, spread over 5 technical bases**.
- The fleet manager can **navigate on a virtual map** provided by Omniscent, and view, in real time, the **location and usage** of each piece of equipment.
- Knowing the exact usage rate allows to **ease billing processes , better allocate resources, monitor equipment life cycle, reduce inventory costs** and take decisions based on real field information. [Link to PR.](#)



**Benefit:** annual savings of 5 to 10% on maintenance and fleet management and a ROI over 3 years.





## Volvo Trucks plants tracking vehicles for manufacturing process optimization

- Volvo Trucks manufactures trucks in multiple factories across Europe, USA and Brazil. The Blainville site in France must track **5000-6000 trucks** in a plant which produces **70-100 vehicles daily**. The trucks are stored on the factory yard, but many are moved several times per day for customization tasks. Keeping track of their location manually was an extremely time-consuming task.
- **Industrial Trackers** are placed in the trucks **before they leave the assembly line**. Using LoRaWAN, the devices communicate about every change of their position. To operate any customization on a truck, it is easily located on Thingworx application.
- The manufacturer is saving **over a hundred of thousands euros per year** only for one factory plant.
- [Link to PR](#)



**Benefit:** significant operational cost savings



USE CASE: Paros  
The 1<sup>st</sup> European Smart Island



# SMART PARKING

Smart solutions  
for smart cities

Member of





# The problems

- Island of 14.000 people that attracts more than half a million tourists every summer
- Short term parking spots are occupied for long term
- Finding a parking space can be a challenge
- The lack of personnel makes it difficult for local authorities to monitor
- Loss of revenues and decreased citizen and tourist satisfaction



# The solution

## Smart Parking – Parking Violation Monitoring

- Smart system of Finding and Paying for parking spots and Detecting Parking Violations
- Awarded TOP 3 BEST CUSTOMER SOLUTION IoT World Congress in Barcelona



**Empowering  
Innovation**

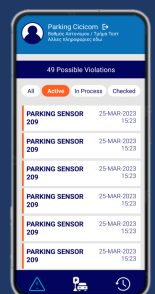
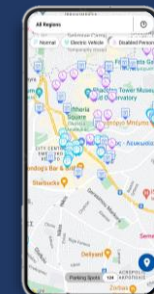
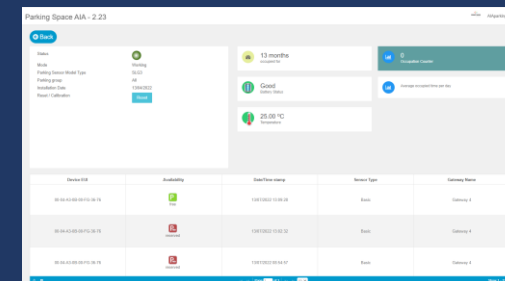


- The only Greek company member of LoRa Alliance that manufactures fully certified products
- Complete software and hardware solutions
- Designs and manufactures one of the few parking sensors that are certified from LoRa Alliance



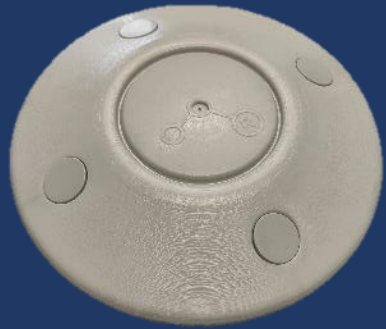
# How it works

- Smart Parking Sensors
- Vehicle identification devices (tags)
- Low Power Wide Area Networks (LP-WAN)
- Actility's ThingPark Enterprise
- Web monitoring platform
- Mobile apps



Integrated management and control of designated parking areas, reducing response time and automating the fining process

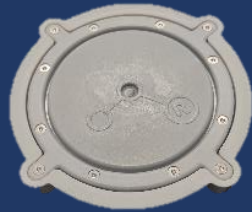
# Sensors



Surface mount



In-ground



flush mount



Identification device (tag)  
For disabled, resident parking etc



High detection  
rate



Battery lifetime  
up to 10 years



Fully certified product



Triple detection  
technology



Driver/vehicle identification  
using tags

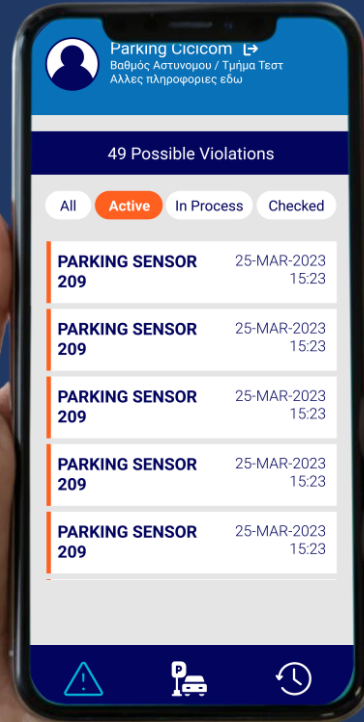




Disabled



Resident



Violation



Real time Notification



Guidance to the violation spot for inspection and fining

# Parking Violations

Using identification devices (tags)



disabled



residents



Reserved/VIP

Without using identification devices (tags)



restricted



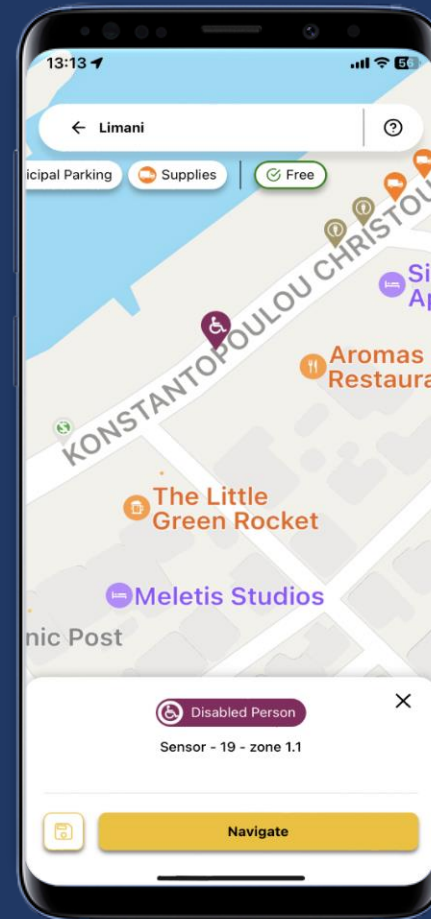
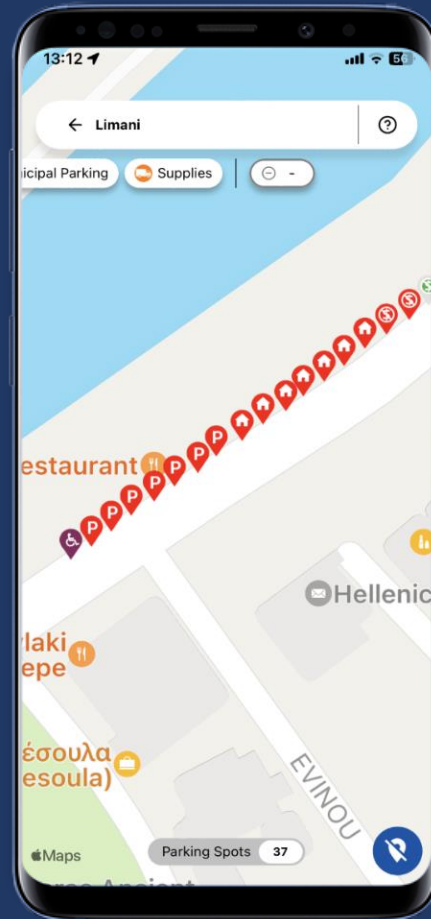
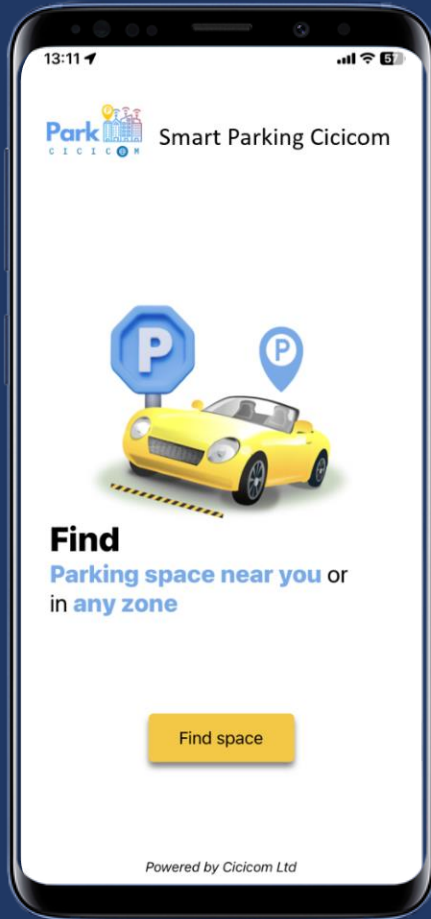
time limit



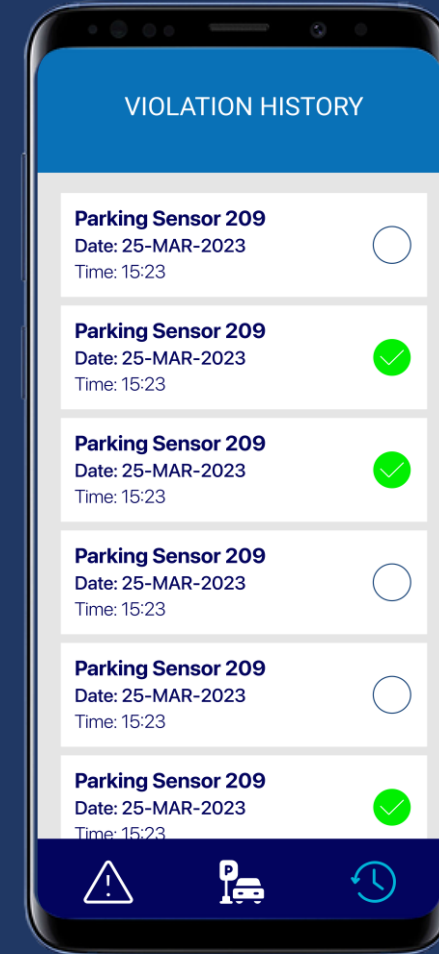
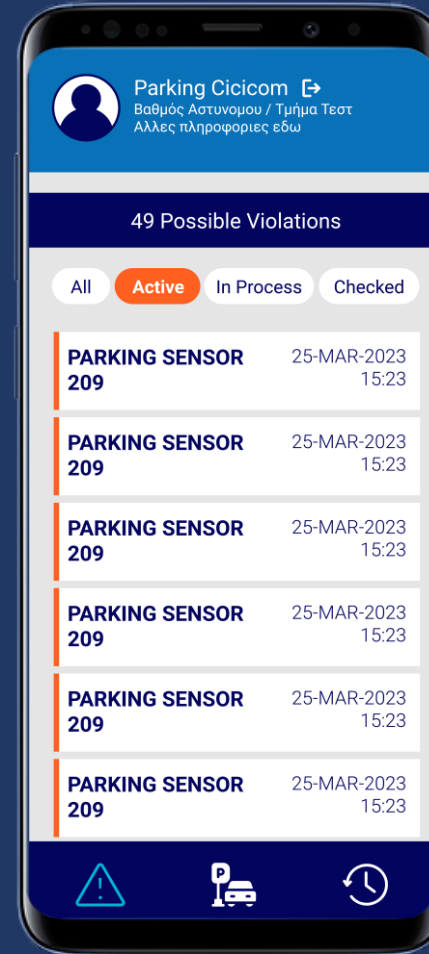
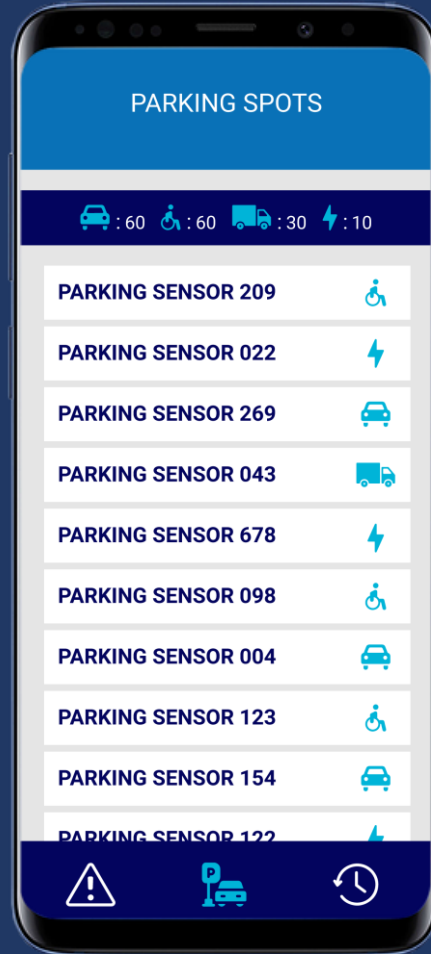
with payment

Detection, monitoring and management for all use cases of parking violations

# Citizen Mobile App



# Municipal Police Mobile App





# Benefits



Complete solution. Effective monitoring and management of parking spaces in real time



Access to statistics, graphs and comparisons of historical data



Real time notification for possible violations



Drastic reduction of response time



Area of responsibility expansion and saving of personnel and resources



Increase in Municipality revenues



Increased citizen satisfaction and especially sensitive groups

# CREATING A SMART FUTURE





**Actility**  
Connecting with intelligence

# Actility Solutions – Mindset

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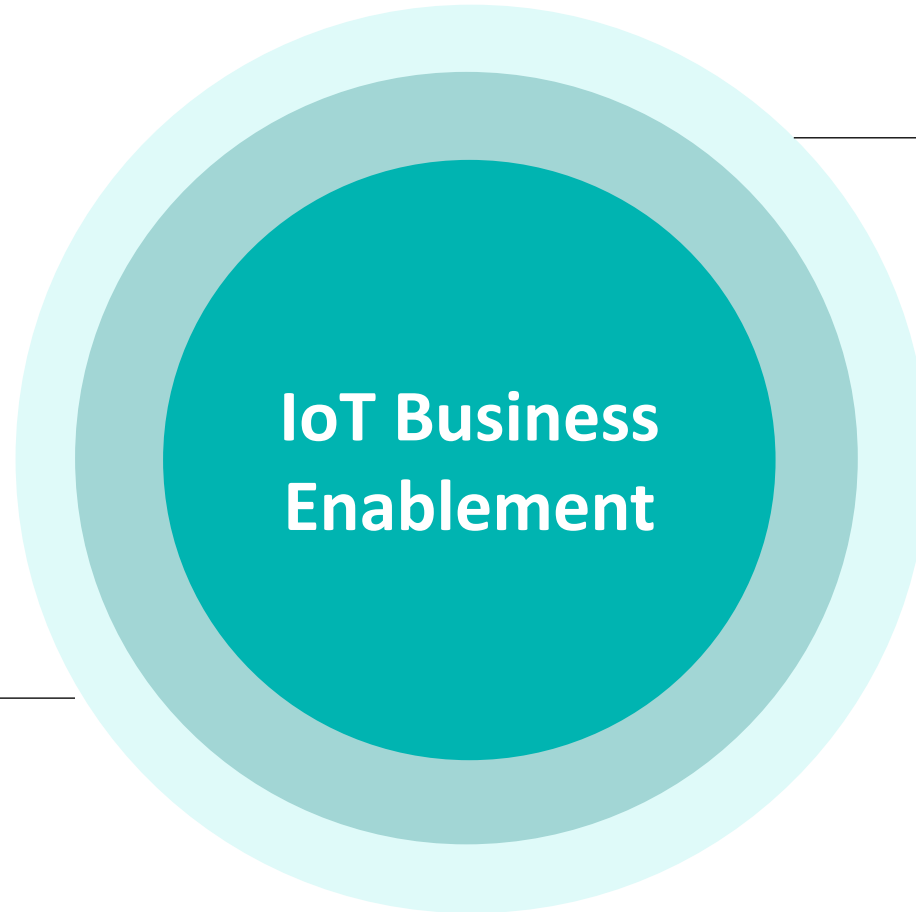
*Mind Over Matter*

*Abhiraj Verma <[abhiraj.verma@actility.com](mailto:abhiraj.verma@actility.com)>*

# Actility and its partners solutions business is growing faster than the market

**+55**

**Customer ready to use solutions**  
*Powered by Actility and its eco-system*



**+250%**

**Actility Marketplace active solution sellers vs. 2022**

# Address Partners and Customers Priorities by Yourself

**Empower Partners**

**29%**

of experts claim they have no knowledge and found the right solution when it comes to digital transformation initiatives

**Collaborative**

**76%**

lack of IoT interdisciplinary collaboration will lead to project failures

**“Maze of complexity”  
frustrations**

**38%**

Are lost in complexity instead of spending time on work that truly matters with powered tools

**No code solutions**

**30%**

Microsoft: 30% of IoT projects fail in the proof-of-concept stage



# Be at the heart of the eco-system



## Application Platforms



## System Integrators



## Activity

## Solution Providers



## Activity

## Ecosystem Partners

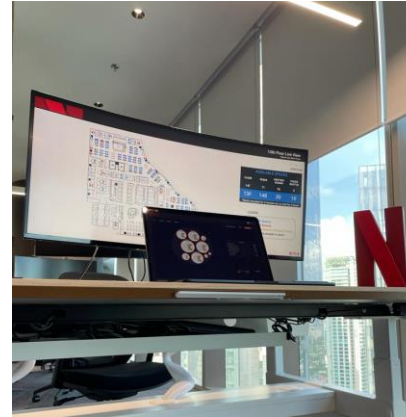


# Ready to use solutions

## Intuitive Workspaces

### Intuitive and Customized Real Estate AI Analytics

A customised and scalable Analytics Solution that delivers high value and action orientated outcomes returning tangible real estate portfolio optimisation



### Desk Spaces or Meeting Rooms /Phone Booths

- Sensitive Presence Sensor
- Battery Life – 10 Years +
- Smallest Profile Occupancy sensor Globally
- Activity global and private LoRaWAN Network Coverage

## Intuitive Workspaces



## Actility and its partners solutions business – they say



*“Together with Actility and a market leading solution within Office Optimization, we are able to reach customers globally, combining the complementary strengths of Actility, Intuitive and Sensative”.*



*"Actility removed every pain point associated to device, network setup and coverage. This allows us to focus and what we do best without time or effort maintaining the data flow, devices or connectivity challenges"*

**Intuitive Workspaces**



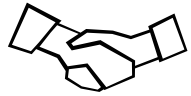
Yes, it concerns you.  
...if business matters to you.

Actility

# Partner Enablement – Holistic on-demand Solution enablement offer

Enabling partners to drive success across customer deal lifecycle aligned to 2024 Goals

Build Solutions Pipeline



Sales  
Enablement

Convert Sales Opportunities



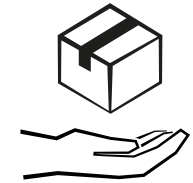
Pre-Sales  
Enablement

Build Technical Capability



Certification  
Enablement

Build Solution Readiness



Delivery  
Enablement

Accelerate Lead Cycle

Build a solution, improve Deployment Efficiency  
& Time to Value

# Investments & Incentives – What can you expect?

## Top partner solutions investments to drive partner success

### Key Investment

### Goals

#### Partner Enablement



360° tech & sales enablement to help you establish strong solutioning business practice. With special tools and people to facilitate the journey and win.

#### Specializations



Differentiate your organization with an IoT leader, capabilities and customer impact

#### Campaign in a Box



Simplify and drive impact your market demand generation execution – work directly with our marcom and marketplace teams

#### Actility Investment & Incentive



Investments to help you win at every stage of the customer journey



# What Next?

Connect directly with your sales representative or with me to start a solutioning sales enablement conversation

[abhiraj.verma@actility.com](mailto:abhiraj.verma@actility.com)



# Thank you



Activity