

# Actility Enterprise Channels Webinar

February 2021



**Actility**  
Connecting with intelligence

# Agenda

Shmuel Solomon



# Webinar Meeting Agenda

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- Webinar Introduction – **Shmuel Solomon**
- What is new on ThingPark Enterprise Product? **Ramez Soss**
- What is new on Abeeway Geolocation Product? **Rohit Gupta**
- IoT Solutions Engagement – **Aymeric Rambaud**
- The Here and Quuppa Tracking Solutions – **Aymeric Rambaud**
- M2M Germany - A partner success story – **Marius Nickolai**
- Summary and Q&A

# Introduction

Shmuel Solomon



# Webinar Introduction

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- Welcome to our second Enterprise Channels Webinar.
- This webinar provides a view on:
  - The major ThingPark Enterprise business enablers roadmap items.
  - Highlight three areas of intense geolocation technical and business interest that require substantial end-to-end solution to make IoT tracking a reality and realize its promises:
    - Abeeway products.
    - A tracking solution - Combining Here Tracking application, ThingPark Enterprise and Abeeway trackers.
    - High-resolution indoor positioning of assets – Leveraging the Quuppa technology into Abeeway trackers.
  - M2M Germany smart city project for the university town at Giessen.

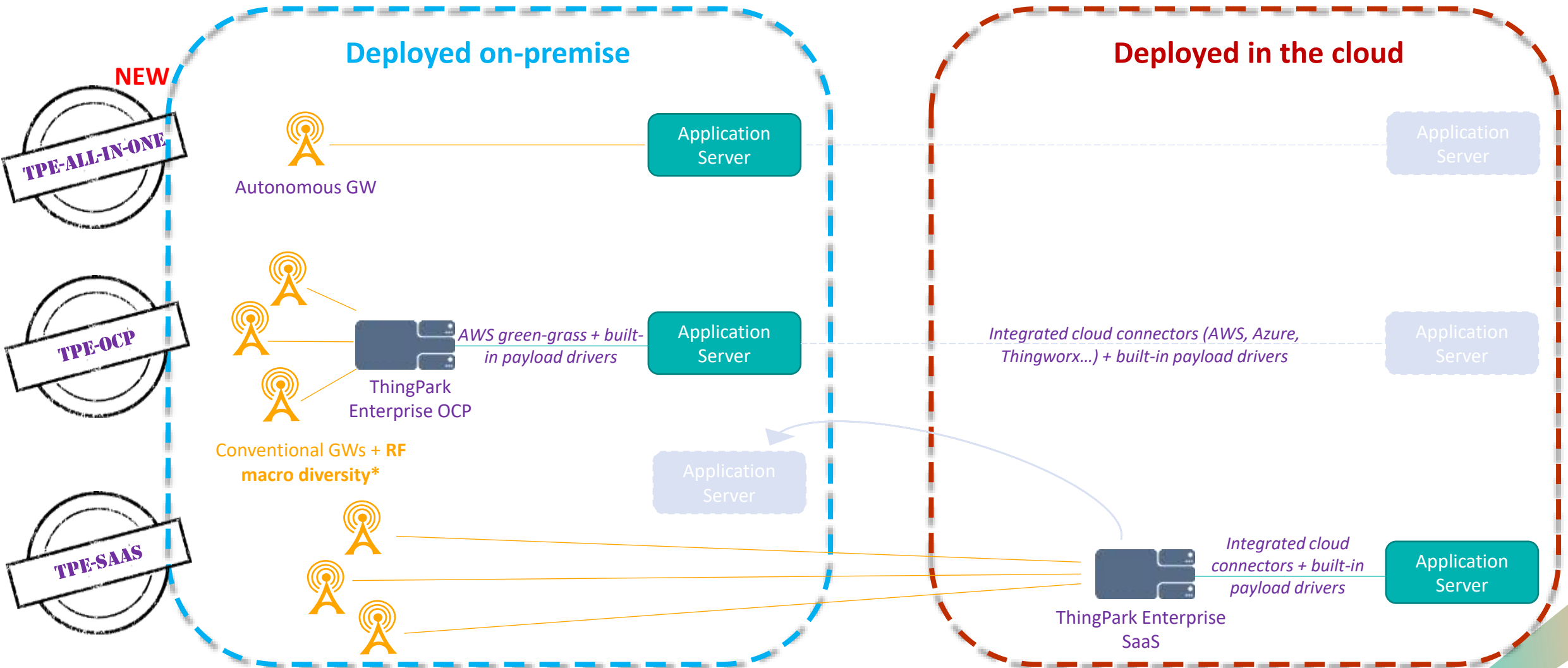


# What's New? ThingPark Enterprise Product

Ramez Soss



# ThingPark Enterprise deployment options



# TPE-All-in-One – Where it fits

- **Single-gateway** deployments, indoor or outdoor
- Limited number of devices (up to 100)



Small warehouse (< 250 m<sup>2</sup>)



Small enterprise (single open space)



Restaurant



Small isolated sites with  
outdoor use-cases  
(100% traffic locality)

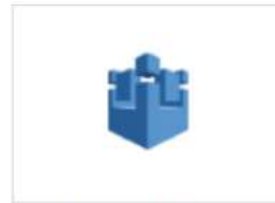




# Coming **soon** on TPE SaaS/OCP...

(1/2)

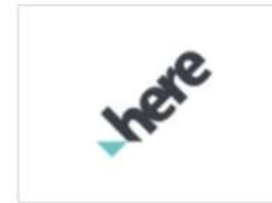
- [SaaS/OCP] Integration with additional cloud connectors *February 2021*



Amazon AWS IoT



Azure IoT Hub



HERE Technologies



IBM Watson IoT



MQTT



ThingWorx



Azure IoT Central



CUMULOCITY



SAP



Yandex



GreenGrass

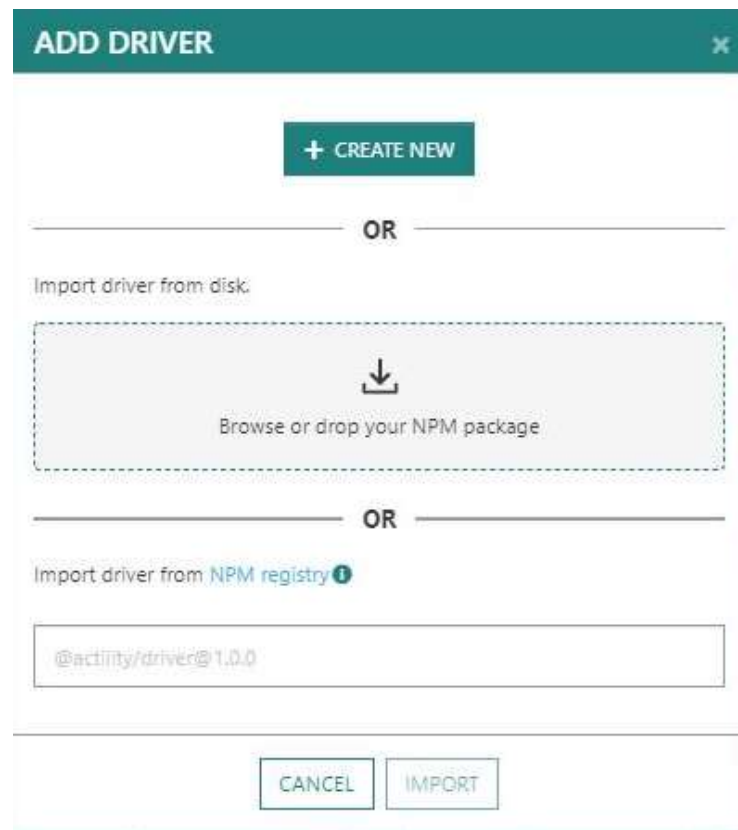


HTTP

# Coming soon on TPE SaaS/OCP...

(2/2)

- [SaaS] Support of custom payload drivers - *February 2021*



ADD DRIVER

+ CREATE NEW

OR

Import driver from disk:

Browse or drop your NPM package

OR

Import driver from NPM registry

@activity/driver@1.0.0

CANCEL IMPORT

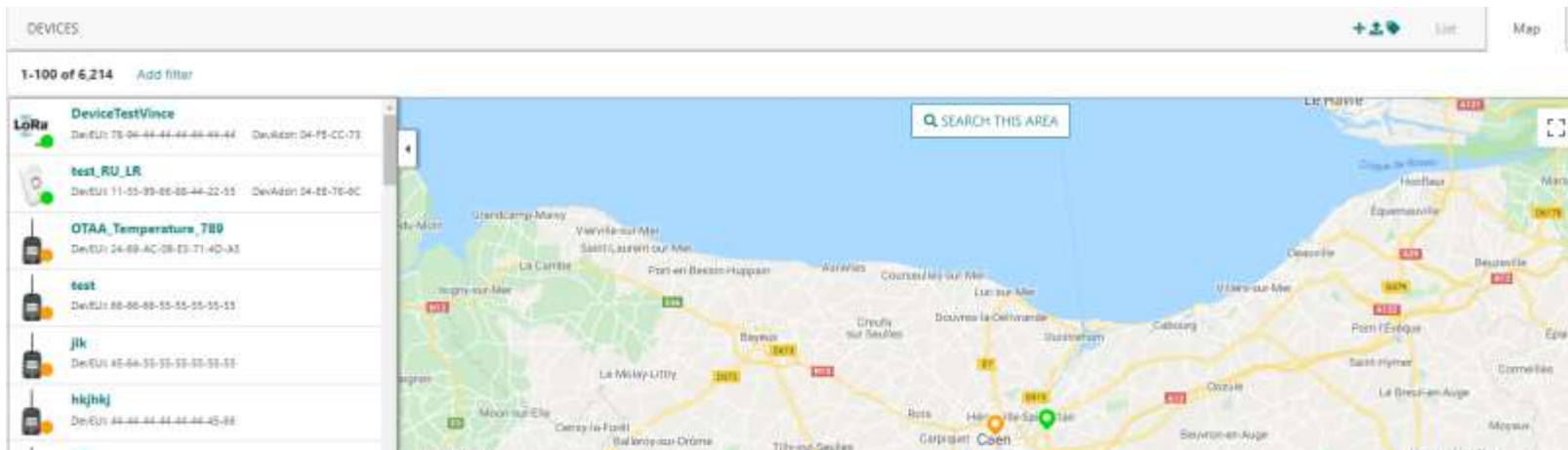
- [OCP] Enriched payload driver catalog, augmented with built-in drivers for the following vendors (already supported for SaaS) - *April 2021*



# Coming **next** on TPE SaaS/OCP...

ThingPark Enterprise release 7.0 - *June 2021*

- UI/UX enhancements
- Simplified device onboarding, by QR code
- Roaming
- Multicast mode
- Support latest LoRaWAN specifications



## Filter devices

Filter by name or DevEUI...

Health state

- ☒ Active ⓘ
- ☒ Initialization ⓘ
- ☒ Connection Error ⓘ

Battery

All

Tags

My tag

No matching found

Minimum alarm state ⓘ

All

CANCEL

APPLY

# What's New? Abeeway Products

Rohit Gupta



# ThingParkLocation value proposition

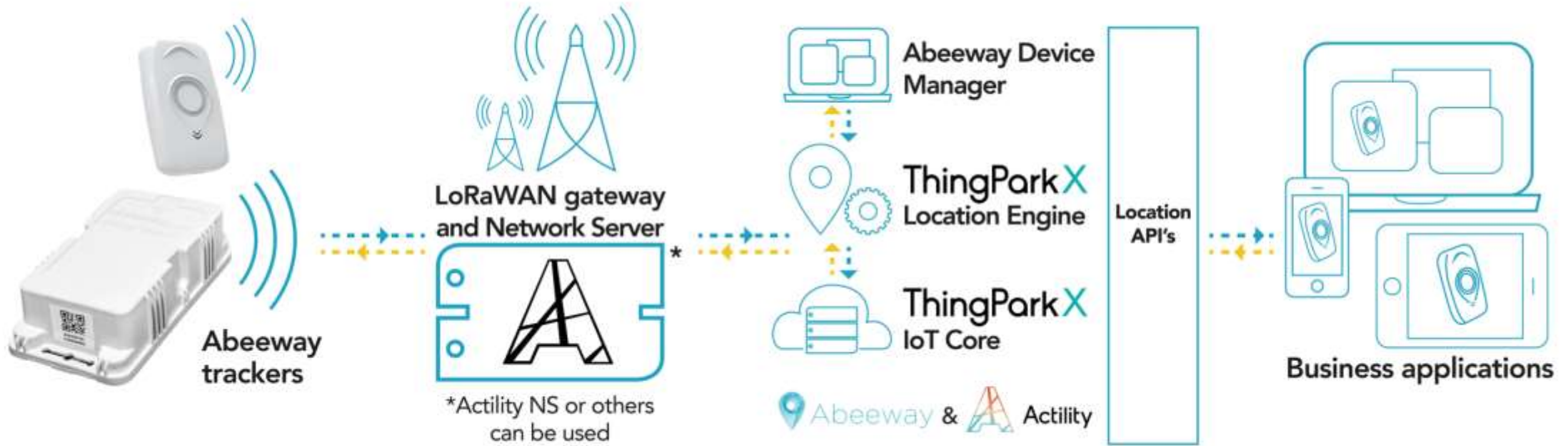
*unlocking the value  
of LPWAN-enabled  
geolocation for IoT  
Vertical Segment*





# What is ThingPark Location ?

**ThingPark Location** is a solution combining **low-power multi-technology trackers** with a **modular location engine** to allow IoT Application to unlock the value of LPWAN-enabled geolocation.



Processing the positioning information at the edge of the LPWA network to deliver the actionable positioning information to the business application.

\* ATEX Zone 2 Certified  
ATEX Zone 1 pending

# 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.*



## Micro tracker

Light, handy, yet powerful. Enables you to track and protect things (or people and pets) of value.  
*IP 65, **ATEX**\*, 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.



## Compact tracker

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



## Smart Badge

Sleek, smart, and multi-functional.  
ideal for worker protection and zone alerts  
*IP65, **ATEX**\*, Buzzer with 100dB 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.

# ThingPark X Location Engine

Because there is no single-size-fits all geolocation technology

**Multi-technology** geolocation algorithm to the optimal location information.

Driving power efficiency one step further with our **Patented LP-GPS algorithm**

**Not only a point on a map** : Value-added capabilities like geofencing , DA-GPS, or alerting capabilities.

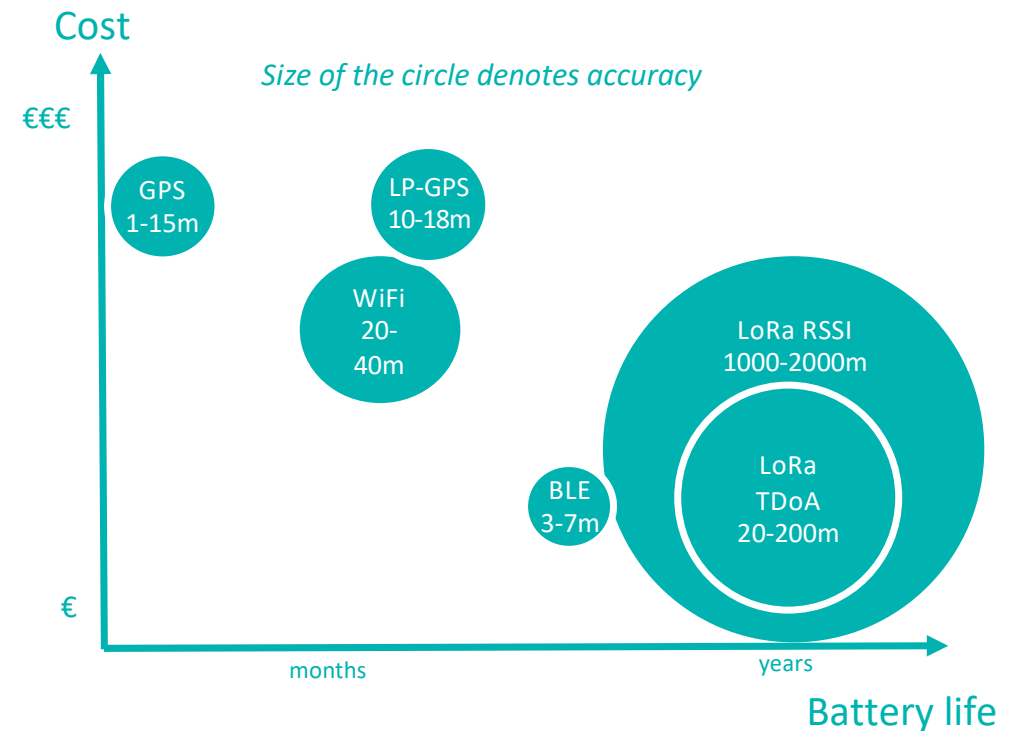
**Abeeway Device Management**, to administrate efficiently your fleet of trackers

**API Driven** framework to smoothly integrate with any application

Integrated with major **location database**



Finding continuously the optimal balance between power efficiency, accuracy, costs



# Abeeway Device Manager

**Built-in application allowing to efficiently manage your fleet of trackers**

## Configure

Select a predefined use-case or build your own customized configuration.

## Visualize

Visualize your tracker on a map : real-time location and history

## Assess performance

Radio performance monitoring

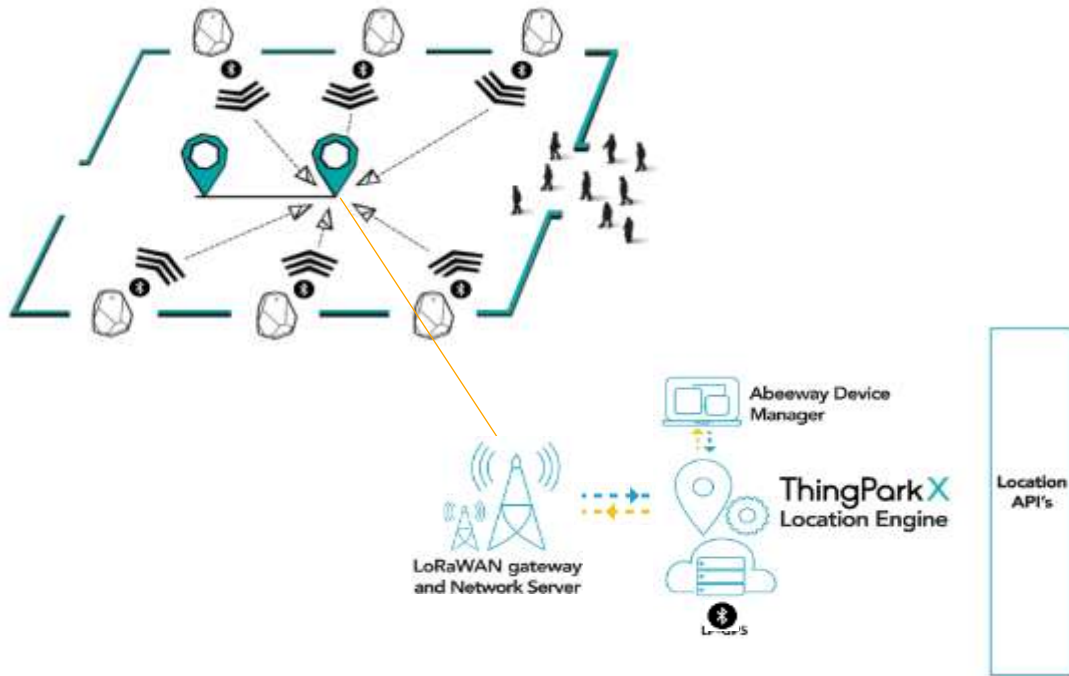
Location technology usage

Battery level monitoring



# Key Achievements (2020) (ThingPark Location)

- BLE Positioning and scanning for upto 20 beacons
- Filtering on BLE beacon payloads



- Proximity alert and contact tracing for Covid-19
- LED/audio feedback and risk exposure reporting


## Proximity Alert & Monitoring

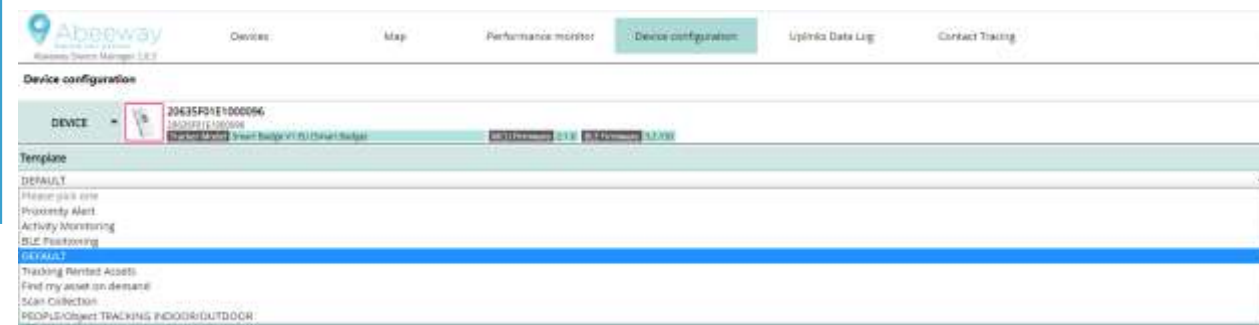
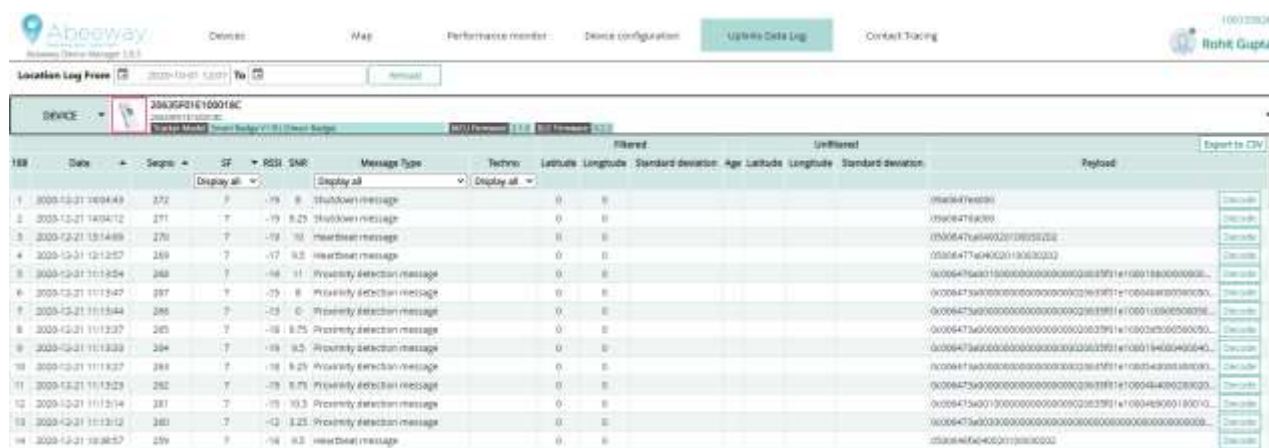


Distance Too Close (e.g. 1 meter, 3 min.)



# Key Achievements 2020 (Abeeway Device Manager)

- Viewing uplink logs of Abeeway trackers
  - ADM offers significant help with debugging & troubleshooting Abeeway trackers
- 
- The screenshot shows the bottom navigation bar of the Abeeway ADM application. It includes tabs for 'Devices', 'Map', 'Performance monitor', 'Device configuration', 'Uplink Data Log' (which is currently selected and highlighted in teal), and 'Contact Tracing'. The 'Uplink Data Log' tab is active, indicating that the interface shown in the background is for viewing uplink logs.
- Support for Configuration Profiles for easier deployment
  - Profiles are preset based on use case (for ex. BLE geolocation, Proximity detection, indoor/outdoor tracking)
  - Numerous UI enhancements on usability



# Geofencing & Alerts

- Creation of geofences and send notifications to the business application
- Set alerts on Firmware parameters and send notifications to AS
- The positions of the tracker can be based on WiFi/GPS/BLE\*

- Availability of TPX IoT Flow cloud connectors with ThingPark Location



Azure IoT Hub



Amazon AWS IoT

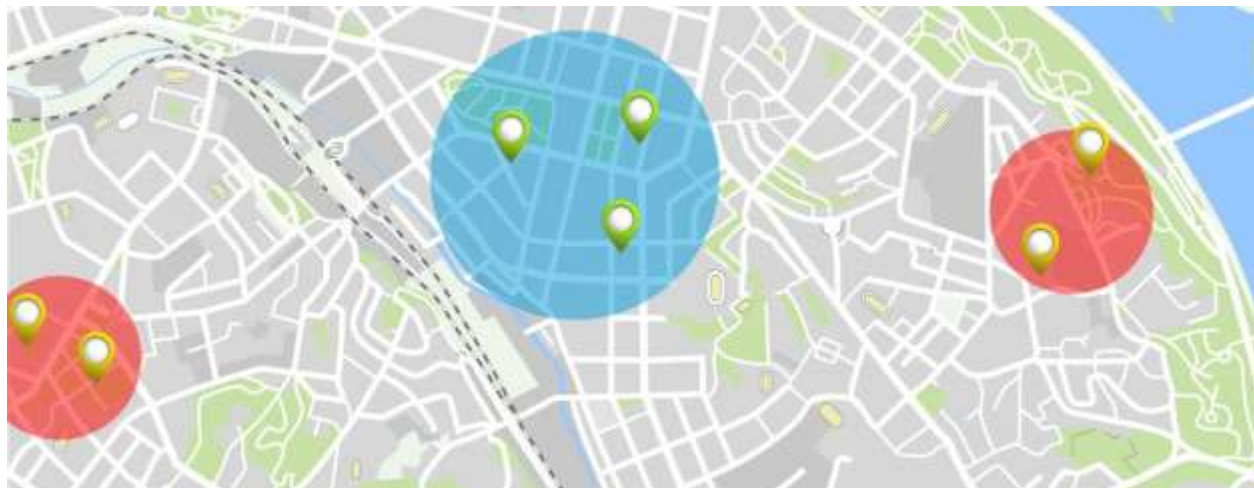


IBM Watson IoT

MQTT



ThingWorx



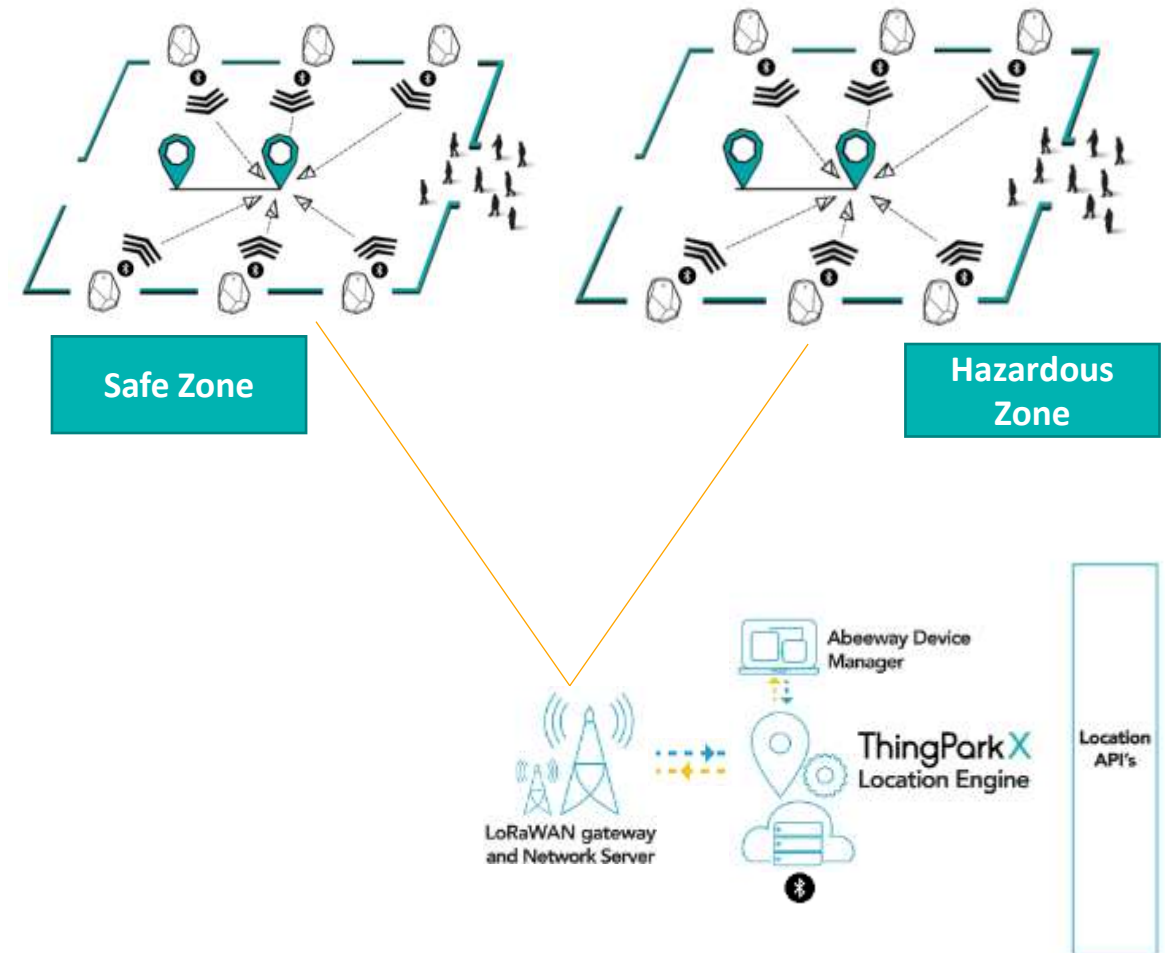
# BLE Zoning

Launch Date: Q2'2021

## How does it work?

- Abeeway device 'Sniffs' Nearby BLE Beacons.
- The Beacon Types (based on prefixes) are configured to mark different zones:
  - Safe
  - Hazard
- The tracker changes the operating mode/buzzer and LED UI depending on the detected beacon types and reports it over LoRaWAN along with GPS/WiFi positioning information to the business application

The main use case is **to track worker safety** and also management **time spent by workers in different zones**



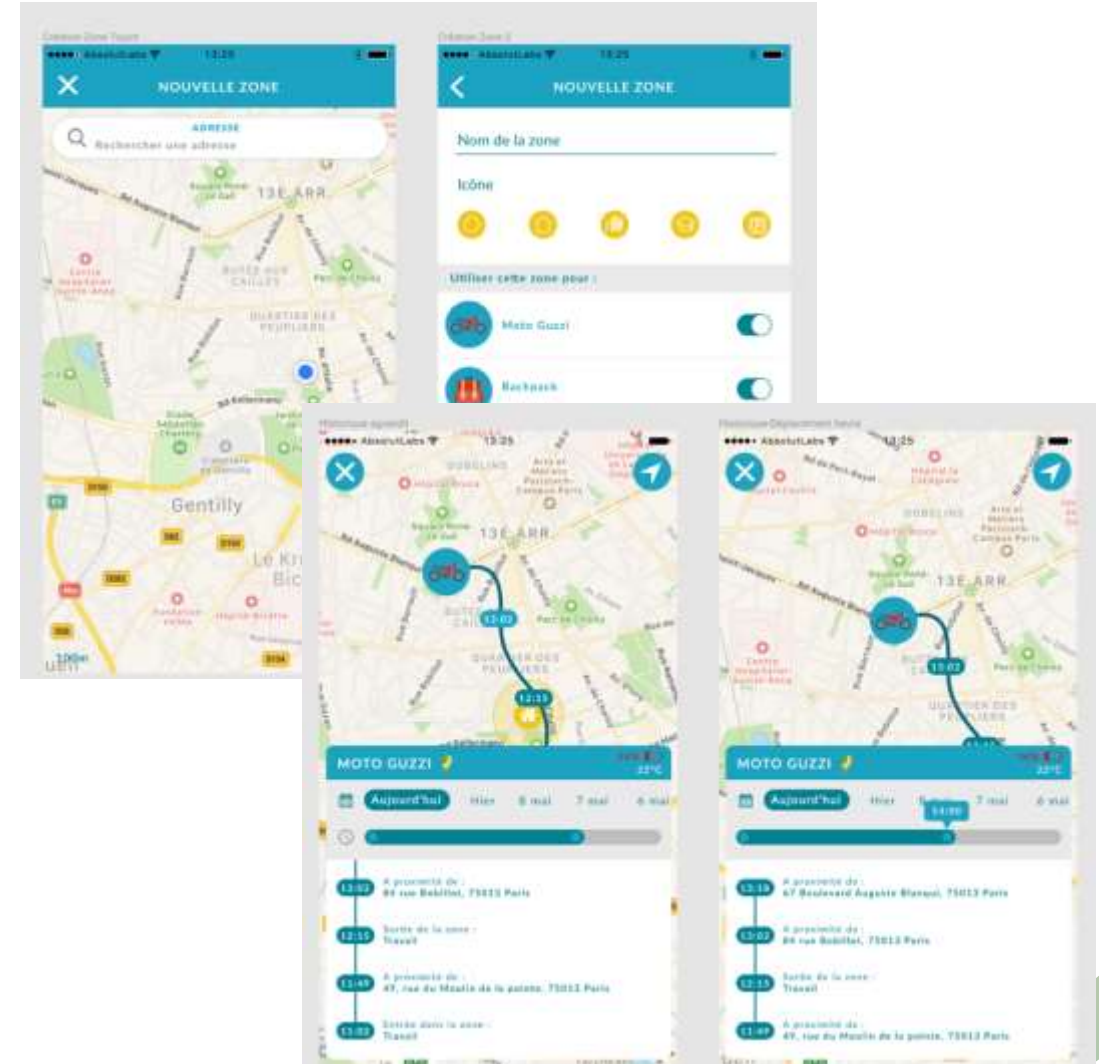
# Helping our customers to address the consumer market with the **Abeeway Mobile Application**

Launch Date: H2'2021

## User-friendly mobile app enabling multi-purpose consumer tracking

- Feature set : manage and customize your tracker, locate it on demand anywhere anytime, view its detailed motion history, set up alerts, change modes, share it with our users, geofencing and update your tracker's firmware.
- Native apps on iOS and Android

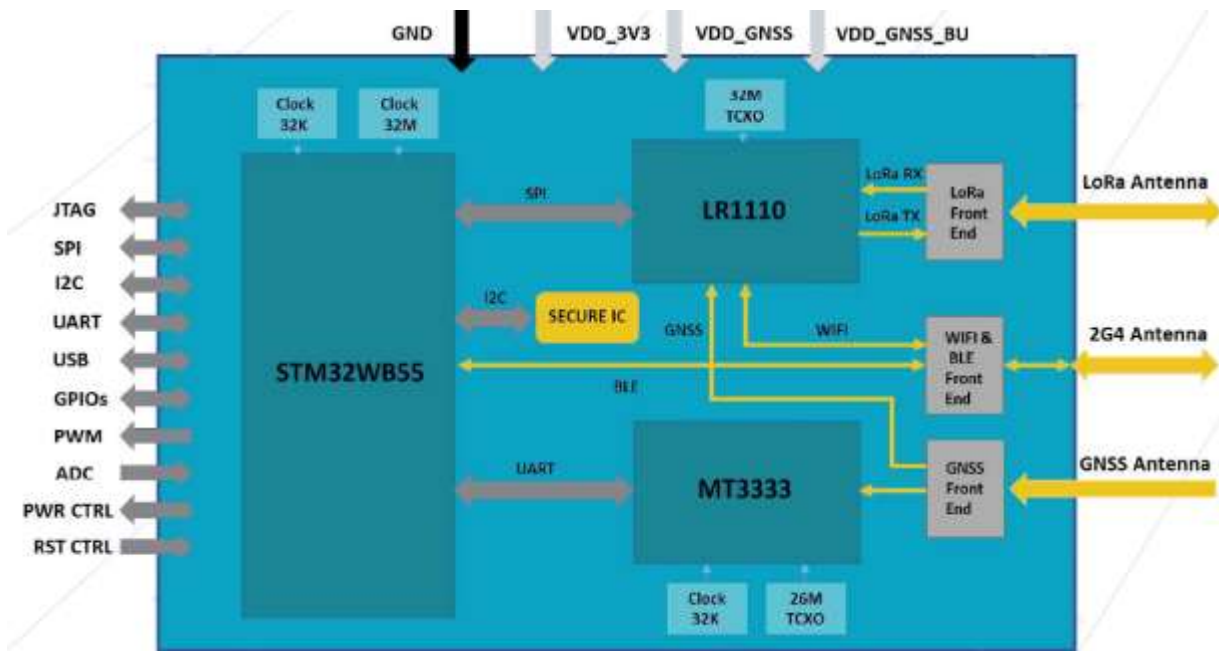
*Designed to be easily customizable to fit any brand identity and particular needs under white label scenario*



# LPWAN Geolocation Module

Launch Date: H2'2021

- Multi-technology LPWAN geolocation module (GPS, WiFi, BLE, LoRaWAN Ranging)
- Ease access to Abeeway technology to address a wide range of use cases
- Reduce costs
- Reduce time to market





# Asset tracking with Here Tracking and Quuppa

Aymeric Rambaud





# Lack of visibility on your assets can significantly impact your business

## Operational Challenges...

Lack of Traceability



Inability to maintain asset inventory



Unknown Asset Utilization



Protection against theft/misplacement



Prevention of asset damage



Lack of an Audit Trail; Billing disruptions



## ... Impacting your business

Assets fleet are oversized

Operations are slowed down

Workforce safety is at risk

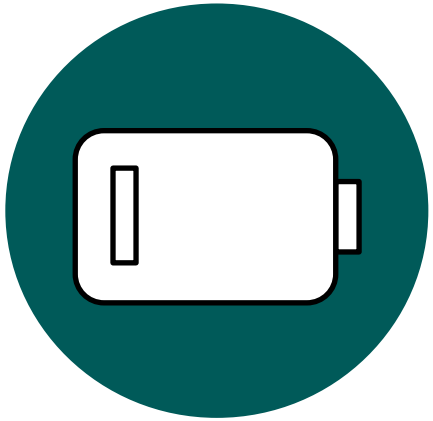
Compliancy is not enforced



# Tracking assets comes with a couple of technology challenges

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You need a solution that...



... is truly  
Low-Power



... provides end-to-end visibility  
Both indoor & outdoor



... Integrates with  
your business applications



... Ensures low  
Total Cost of Ownership



# Ensures global visibility of your high-value asset, at low-power



## End-to-end solution

Combining **Here Tracking application** with **Abeeway low-power trackers** and **ThingPark powered public or private LoRaWAN networks**, your benefit from a comprehensive solution to track your high-value assets.

## Indoor & outdoor, seamlessly

Abeeway Multi-technology trackers dynamically adapts to the situation to provide assets position wherever they are.



GPS



LP-GPS



Wifi sniffer



BLE

## In your private facilities

Take the full benefits of indoor positioning technologies – Wi-Fi or BLE – within your industrial facilities with Here Tracking Fingerprinting algorithms, Here Venue Maps and ThingPark Enterprise.

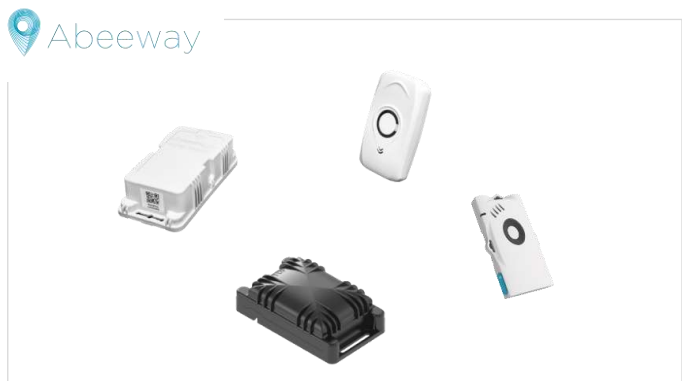
## Optimal TCO

Cost efficiency is a key requirement when it comes to large scale asset management. Our solution is infrastructure-savvy and fully leverages LoRaWAN capabilities to ensure optimal TCO.

*Ultra low-power trackers, Leverage existing Wi-Fi infrastructure, Deploy inexpensive LoRaWAN infrastructure and mutualize it.*



# Solution overview



LoRaWAN



## ThingPark



IoT Connectivity Management



Multi-technology Solver



REST API



IoT Drivers



Here Tracking Connector



Activity



## HERE Tracking



Abeeway trackers are multi-mode trackers with embedded sensors combining GPS, Low-power GPS, Wi-Fi Sniffer, BLE and LoRaWAN TDoA geolocation technologies. Combined with Activity ThingPark Location, Abeeway trackers delivers accurate outdoor and indoor geolocation & proximity enforcement applications.

Abeeway trackers have been designed to support industrial IoT use cases anywhere, including in explosive environment thanks to their ATEX certification.

ThingPark is the leading LoRaWAN networking solution, managing over 35,000 commercial gateways. It streamlines your digital transformation, eliminating wiring for most sensors, enabling indoor/outdoor tracking and many other use cases.

ThingPark acts as aggregation point for open-garden LoRaWAN ecosystem and takes care of all friction points to accelerate the transformation your sensors' data into actionable business insights.

To operate efficiently, your business needs greater visibility and traceability of its devices and assets.

HERE Tracking offers precise, end-to-end tracking along with real-time and historic locations for all your devices and assets. Gain global visibility of these elements while maximizing battery life and reducing operating costs.

Activity





# Optimize your business operations with global asset visibility

Our end-to-end solution digitalize your business operations to make it efficient, reliable, predictable & safe



## Save Time

Locate assets when you need it to increase your productivity and improve your reactivity.



## Protect your assets

Be alerted in real time of inappropriate asset locations to protect them against theft.



## Streamline operations

Understand how your assets are used and tailor your fleet's size and how you dispatch it.



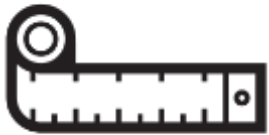
## Ensure compliance & safety

Continuously track & trace your assets to help you meet regulatory compliance and enforce your safety procedures.

# When centimeters matter !



Abeeway low-power trackers now support Quuppa angle of arrival method to provide high-resolution indoor positioning of assets.



Sub-meter accuracy

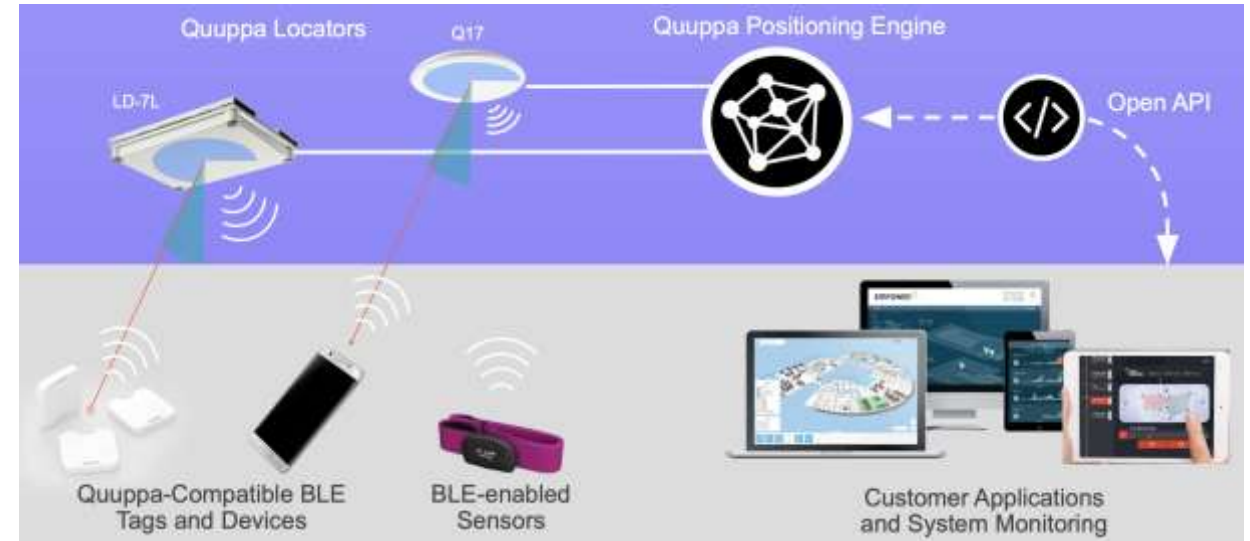


ATEX compliant



Both Indoor & Outdoor

Activity



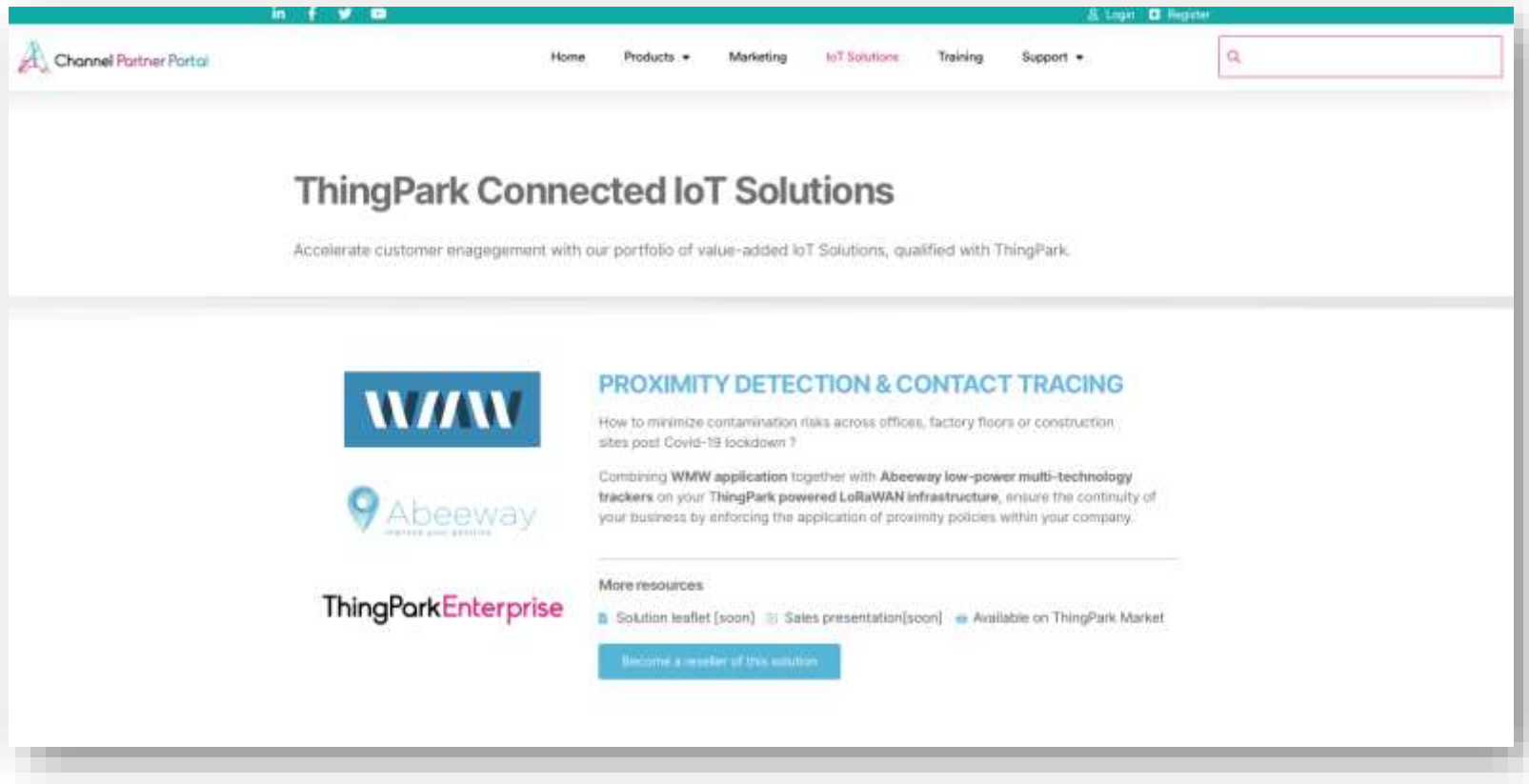
**The Quuppa Intelligent Locating System™** is a powerful technology platform for location-based services and applications. Its unique Direction-)Finding methodology and positioning algorithms enable real-time tracking of *Bluetooth®* Low Energy (Bluetooth LE) Tags and devices, **with centimetre level accuracy**. The Quuppa Intelligent Locating System is a reliable, versatile, highly customisable, fully scalable and cost-effective Real Time Locating System (RTLS) solution for all industries.

# IoT Solutions Engagement

Aymeric Rambaud



# IoT Solutions are now on the Channel Partner Portal



Get up-to-date information about ThingPark Connected IoT Solution...

- Solution leaflet
- Sales presentation
- Link to ThingPark Market
- More resources to come

... and become a reseller

Contact us using the online form

# A Partner Success Story

Marius Nickolai, CEO M2M Germany GmbH  
Shmuel Solomon





we make  
your business  
wireless

# Success Story



**LoRaWAN®  
network**

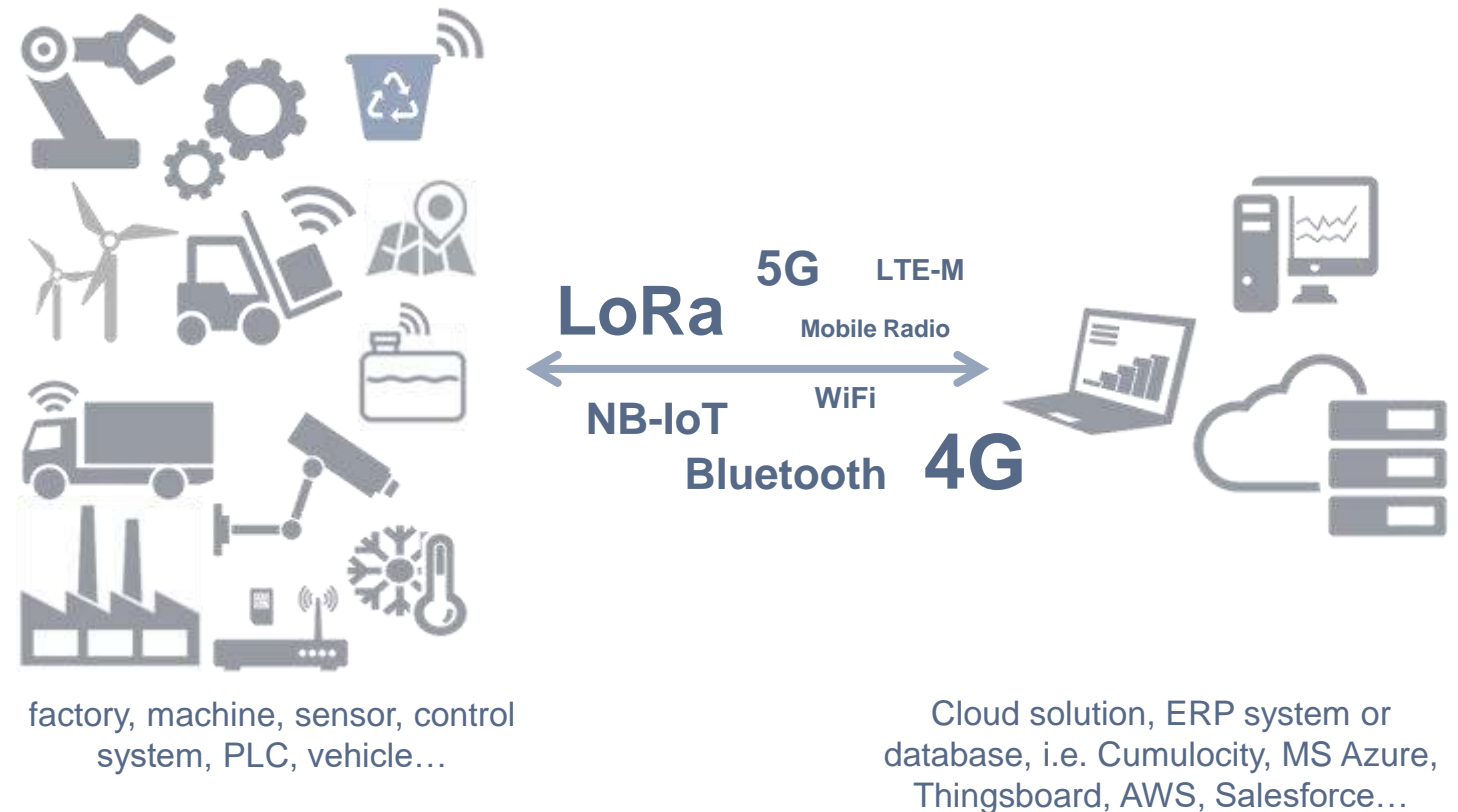
**for the city of  
Gießen**

February 2021  
[www.m2mgermany.de](http://www.m2mgermany.de)

## Portfolio

- Consulting
- Workshops & trainings
- Project management
- Research & Development
- Sales & Distribution of Hardware, components and OEM solutions
- After-Sales-Service
- OEM Development & production

## From application to Cloud



we make  
your business  
wireless



## Use Case – Smart City

Building a LoRaWAN network for the city of Gießen

- SWG Gießen – local public utility company
- Gießen – university town with 90.000 residents

## Pain Points

- Covid-19 prevention in schools, sports facilities and public buildings
- Indoor climate monitoring
- Monitoring of room occupancy (motion and occupancy detection)
- Acquisition of meter readings
- Smoke detector monitoring

## Challenges SWG

### Must have!

- own infrastructure
- 100% data sovereignty
- 100% control about the radio network
- 100% control about sensors
- maximum scalability
- Supporting of a broad range of use cases
- a reliable partner who can supply everything from a single source





we make  
your business  
wireless



## Project solution SWG

### ThingPark Enterprise Platform SaaS



- Transforms raw data into insights
- Simple
- Scalable
- Easy to operate
- Secure bi-directional communication between base station and devices
- Supports class A, B and C devices.

### M2m Germany

- Planning and measuring of suitable gateway locations indoor & outdoor



### Use of various LoRa sensors for different requirements





we make  
your business  
wireless



## The results:

- Covid-19 prevention – CO<sub>2</sub> Monitoring in many Schools
- Transparent energy consumption - cost reduction
- Indoor climate monitoring for more effective energy management - cost reduction
- Test various use cases for later expansion stages, e.g. parking management



# Thank You!

Continue the discussion and contact Actility technical and commercial experts at [channels@actility.com](mailto:channels@actility.com)

*Or directly at:*

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