



# Nestwave Investor Presentation

October 2021



# Introducing Nestwave



## Our Vision

To make accurate geolocation viable for every single IoT node



## Our Mission

To enable the proliferation of IoT geolocation with the smallest, most efficient, lowest component count solutions



## What We Do

Cloud Location Services – leveraging our embedded software IP

# Key Facts



HQ Paris, France



25 Staff – Including 8 PhDs



Seed Round €1.2M – March 2019

Bridge Round €2.4M – April 2021



Winner of EU Funding (H2020 Program)



18 Patents (Issued & Pending)



## Investors



# Experienced Management Team



Ambroise Popper CEO

- VP Strategy Quantenna (acquired \$1B+ by ON)
- Co-founder & VP IoT @Sequans (NYSE IPO 2011)
- 20+ years experience France + Silicon Valley



Rabih Chrabieh Founder & CTO

- 25+ Years wireless experience
- Qualcomm, Arraycomm, Sequans
- Co-Founder of Softwave Wireless (acquired by Google)
- 20+ patents



Amra Hadzic Chief Business Officer

- 25+ years experience in sales for wireless & GPS
- Thales, Gemalto, Sequans, Nemerix
- Based in Silicon Valley



Laurent Sibony VP Engineering

- 25+ year experience in wireless & semiconductors
- Strong engineering & project background, leading 60+ teams and complex projects
- Sequans, Alcatel



Alexis Djevaguiroff CFO

- 25 years' experience in finance and operations
- Radiall, Eyeka (now Insites Consulting).

# IoT Tracking is a Booming Market

## Few examples of applications

Already shipping today....

Reusable Shipment boxes



3M devices per year

Buy Here Pay  
Here car dealers



4M devices per year

Pets trackers



4M devices per year

Generic Trackers



5M devices per year

....and tomorrow....provided the right technology

Emergency Alerting



40M V16 devices to equip in Spain

300M e-bikes by 2023

E-bikes



Pallets



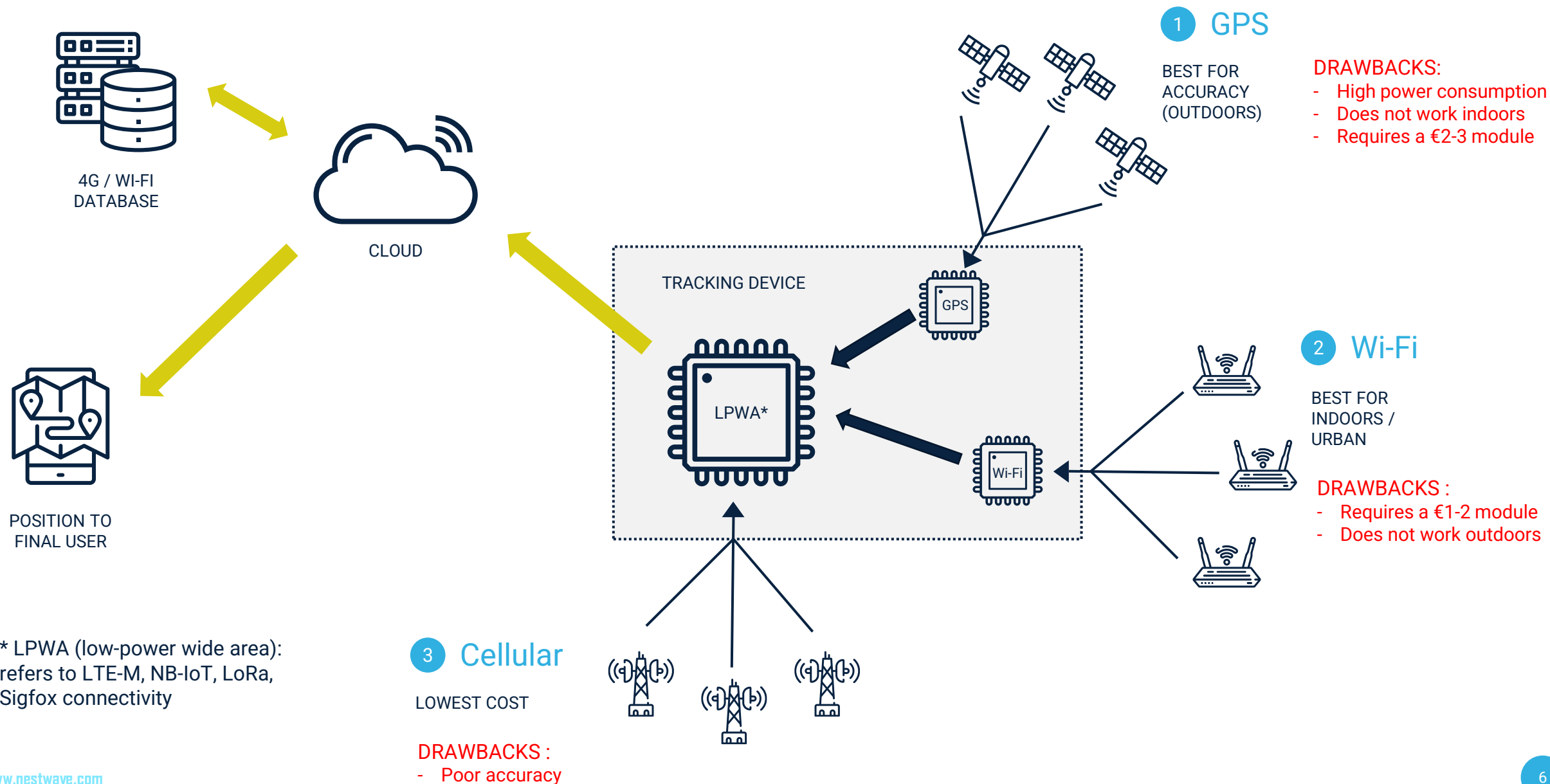
1.4B pallets per year

2B Fedex packages per year

Parcels

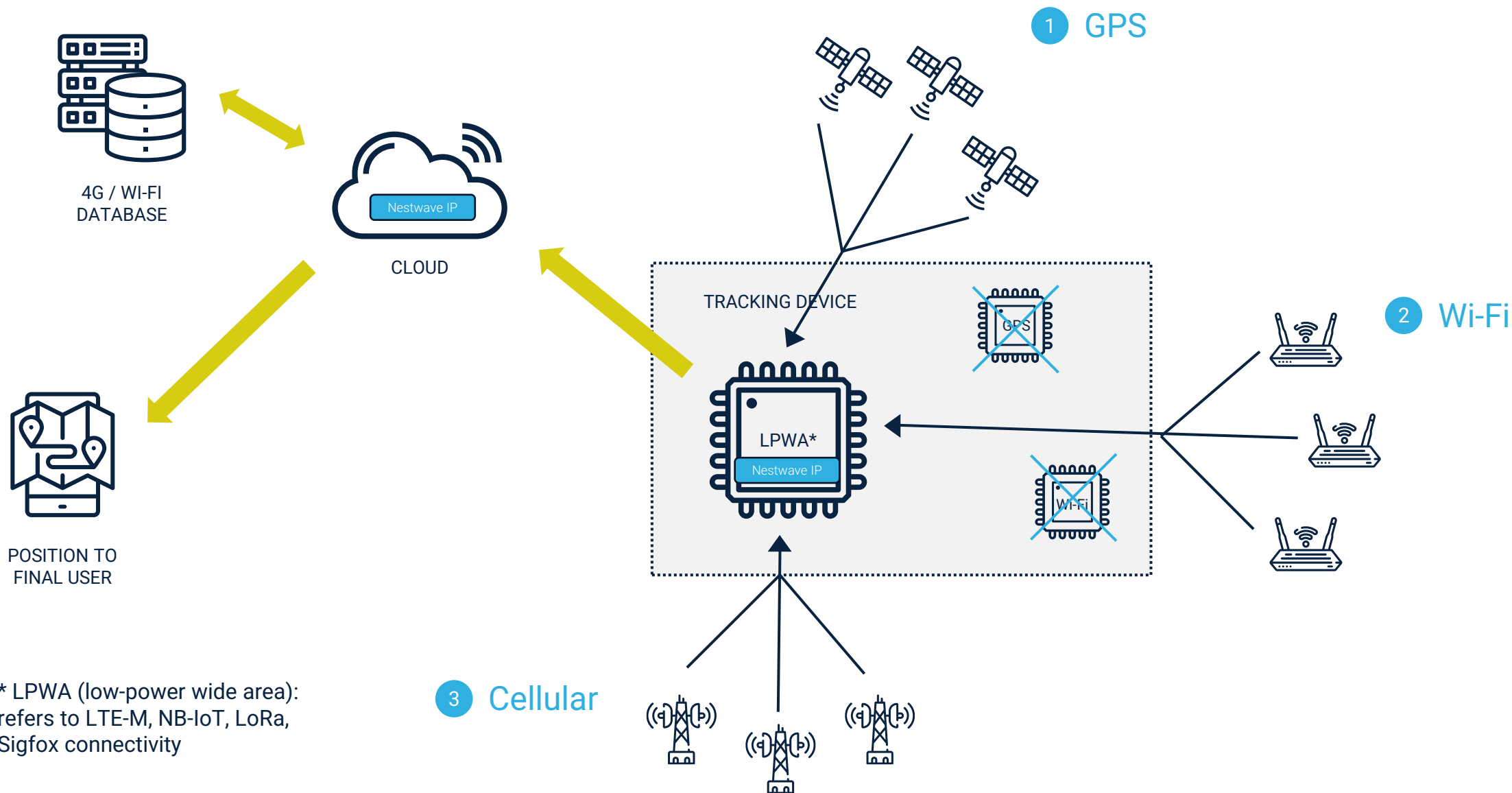


# Typical Tracking Architectures





# Nestwave-based Tracking Architectures



# A Hybrid Software Approach

Add geolocation to existing IoT modem chips

## Pure Software Solution

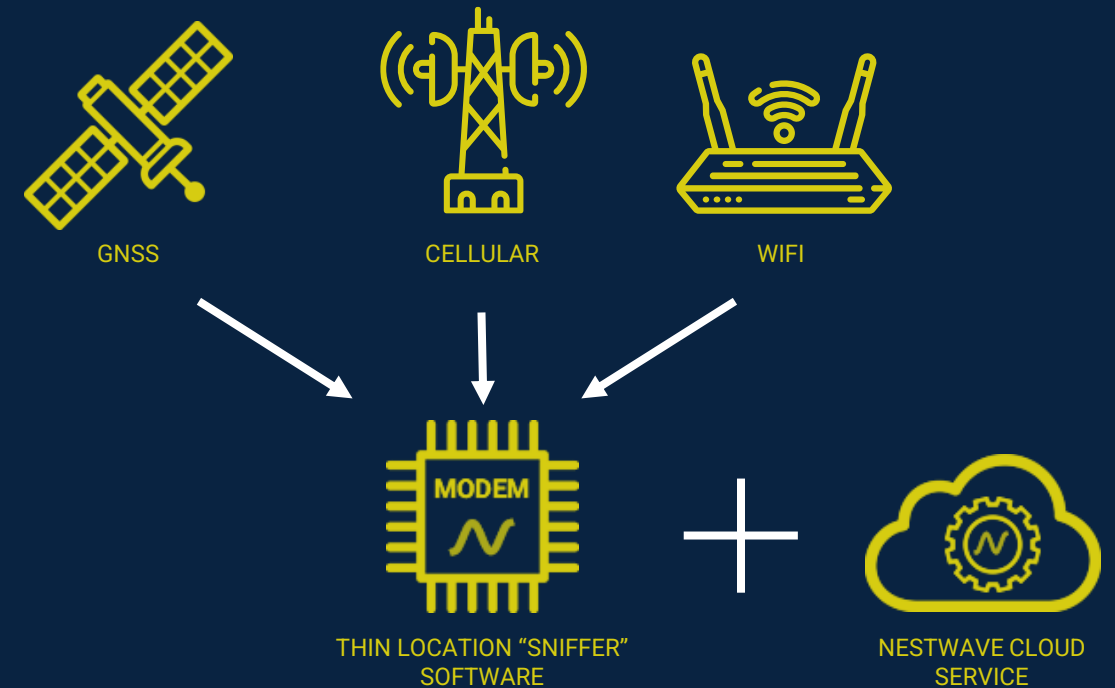
- Runs on LPWA chipsets – no external GNSS chipset needed
- Compatible with existing chipsets – no redesign needed

## Combines Multiple Location Technologies

- GNSS
- Cellular
- Wi-Fi

## Cloud-assisted Implementation

- Keeps embedded IP low-power
- Leverages computation power of cloud





# Benefits of Nestwave Solution



## Optimized Hardware Design

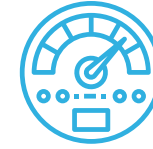
- Eliminates dedicated GNSS module
- Saves ~€2-3 on total material cost
- Enables smaller and cost-optimized designs



## Extended Battery Life\*

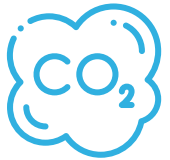
- Fast fix reduces GNSS power up to 10x
- Allows for up to 4x battery life improvement

*\* Compared to traditional GNSS approach*



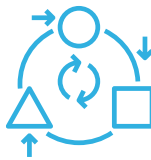
## Performance Everywhere

- Works outdoors, indoors and urban
- Leverages cloud for advanced modeling



## Low Carbon Footprint

- Uses less raw material (silicon, PCB, Lithium)
- Saves up to 75% of wasted energy
- Allows for on-demand usage



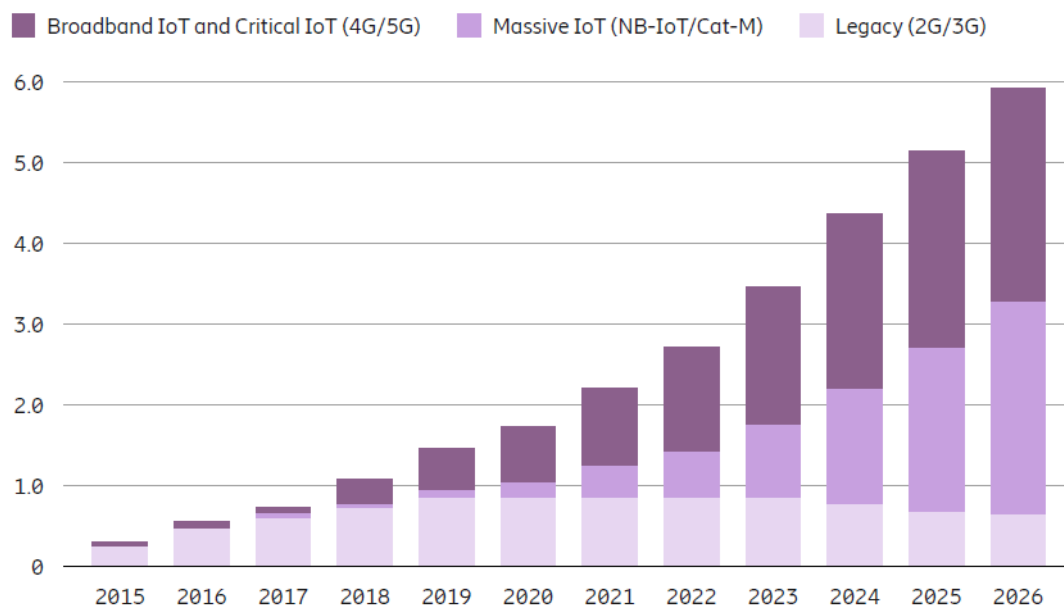
## Highly Adaptable

- Configurable trade-off power vs. accuracy
- Coexistence by design with LPWA protocols

# A Massive Market Opportunity

Serviceable Market of \$2B (Chipset & Cloud)

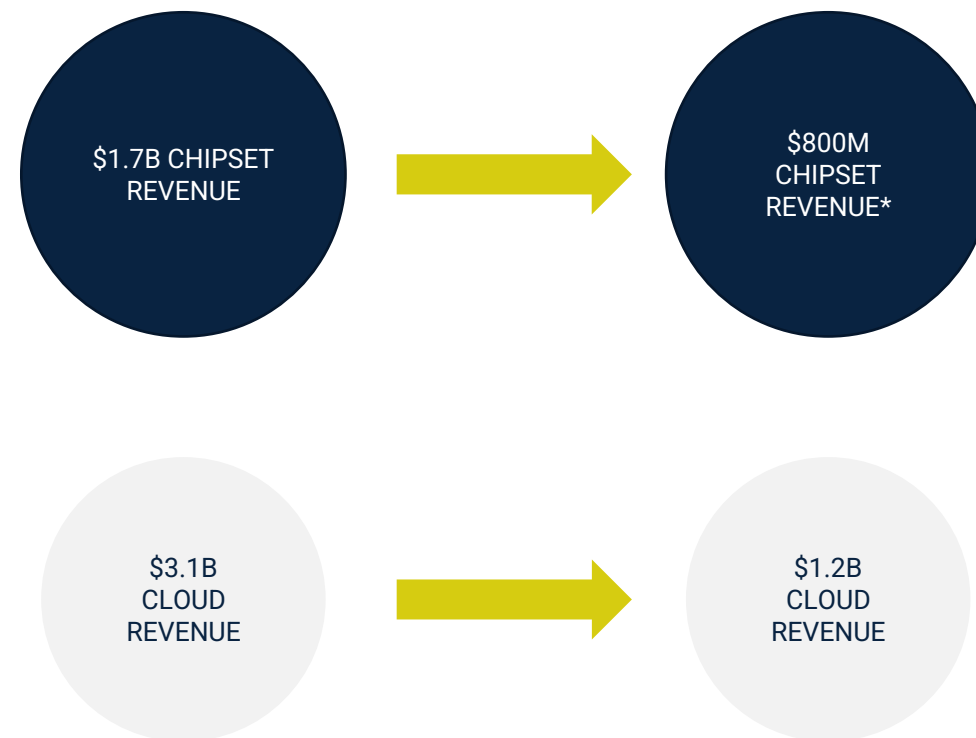
6B IoT connections by 2026



Source: Ericsson Mobility Report (Nov 2020)

LPWA Market 2026

Location Market 2026



Source: ABI Research (Jan 2021)

# Growing Momentum for IoT Location

## New Market Needs

- Circular Economy / Waste Reduction
- Supply chain disruptions (COVID)
- Alternative transportation (bikes, scooters, etc..)
- Industry 4.0

## Widespread & Affordable LPWA Connectivity

- Networks are being deployed worldwide
- Roaming agreements now in place
- Price of connectivity dropping significantly

## Market Boundaries Moving

- U-Blox releasing cloud solution
- Apple releasing Airtags
- Interest for adding location to fixed devices

“The IoT can be divided into two main inputs: sensors and location. These two are increasingly converging. Location has traditionally been key for moving assets, and the growth of asset tracking will continue to drive the market. As further technological capabilities and market opportunities develop, and as location services start to gather more data, new applications will emerge – such as adding location to fixed devices”

TANCRED TAYLOR  
ANALYST @ABI RESEARCH

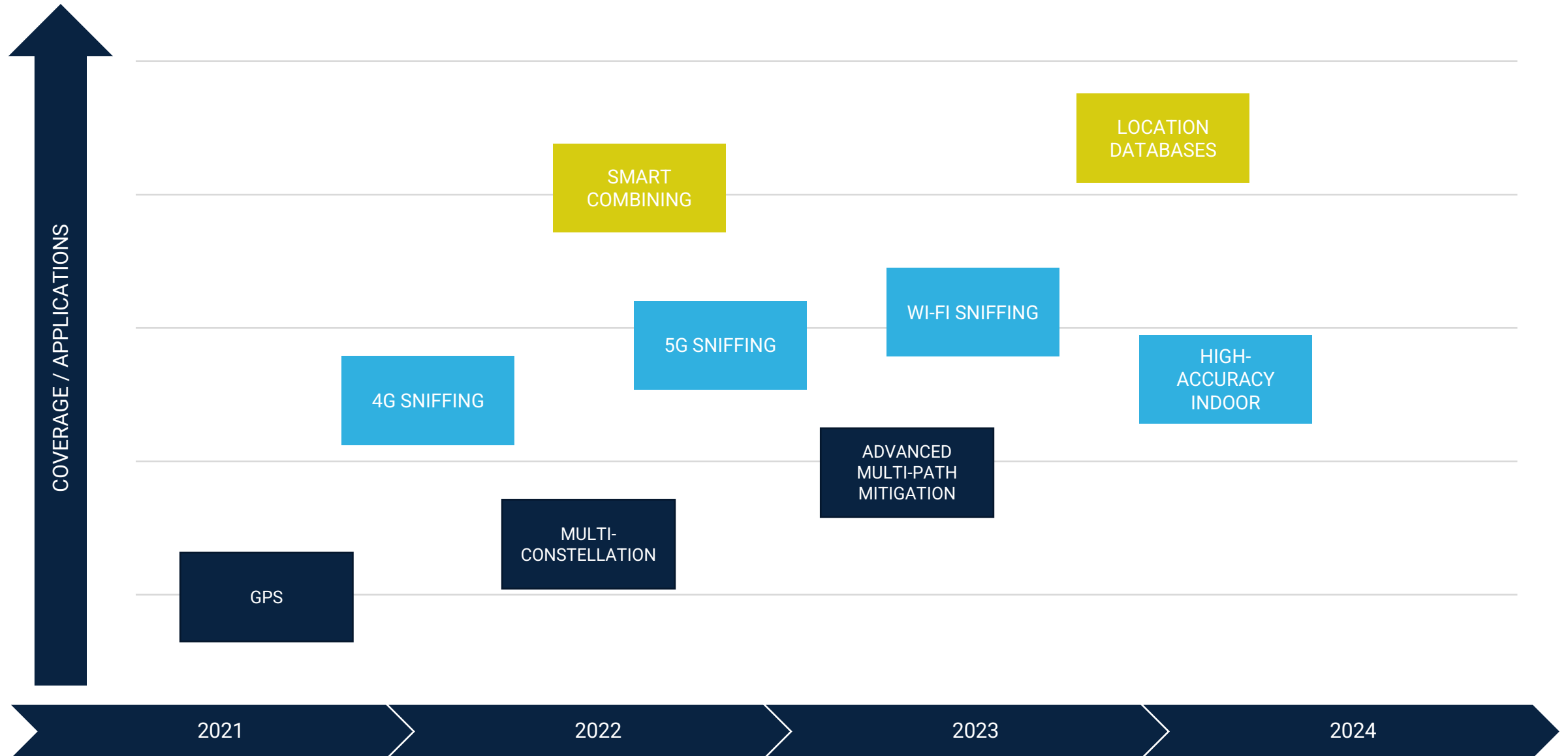
# Competitive Positioning



Technology	GNSS on-board	Cloud-assisted GNSS	Cellular (eCell ID / OTDOA)	Wi-Fi	Hybrid
Accuracy	Excellent 5-10m	Good 10-20m	Poor >>100m	Good 20-50m	Excellent <10m
Power Consumption	High	Low	Low	High	Low
Cost (TCO)	High	High	Low	High	Low
Usage Location	Outdoors	Outdoors	Mostly Outdoors	Indoors Urban	Seamless Indoor/Outdoor
Use Cases	Smartphone Navigation	IoT	IoT	IoT	IoT



# Product Roadmap



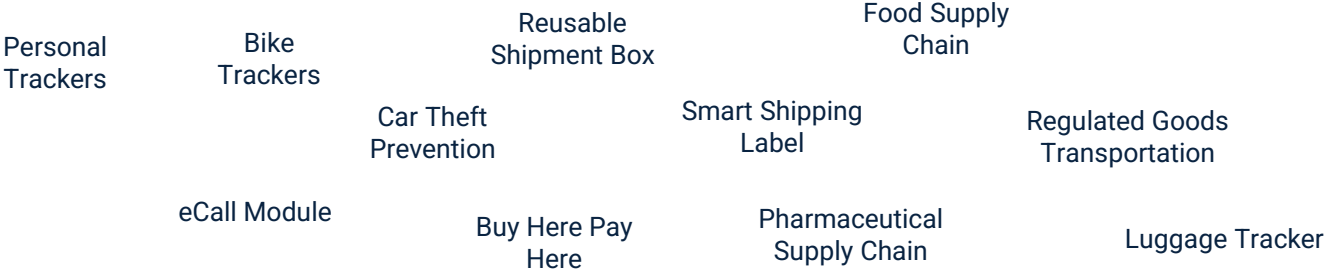
# Dual-Track Business Model



# Phased Go-To-Market



END  
CUSTOMERS  
Subscription



CHIPSET  
ENABLERS  
IP Licensing



# Growing Traction

## Design Win with 3 chipset vendors



Leaders of LTE-M for US & Europe



NB-IoT for China & Europe



NB-IoT with focus on China

## Engaged with 3 additional, large, chipset vendors

**SONY**



## Design-in with end customers

### Several products under design

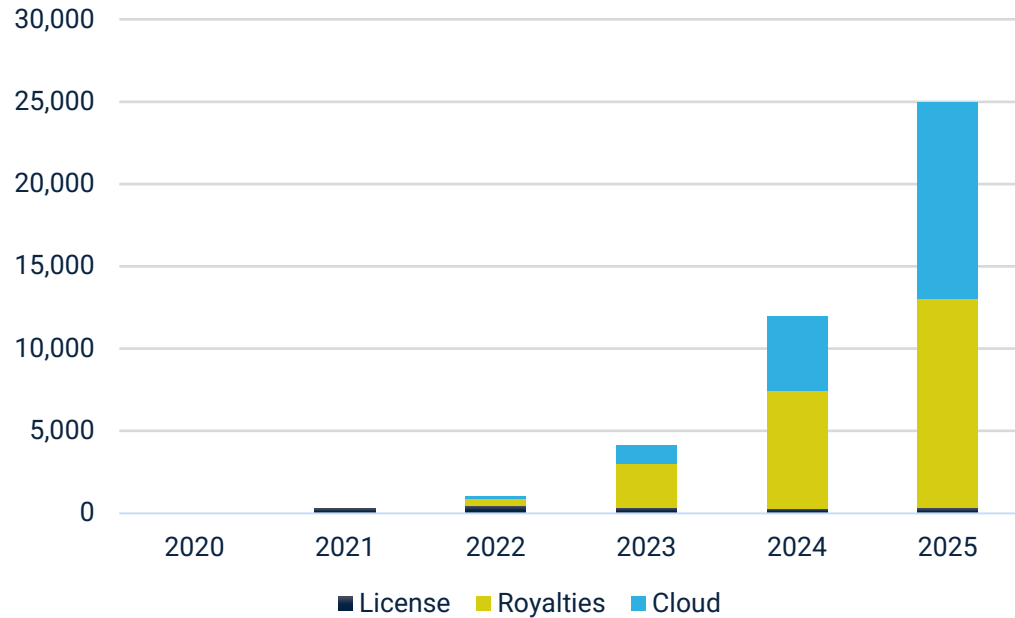
- Personal tracker– to be announced at CES 2022
- Buy Here Pay Here tracking device
- General Purpose module (from Tier 1 module vendor)

### Design-in stage for multiple opportunities

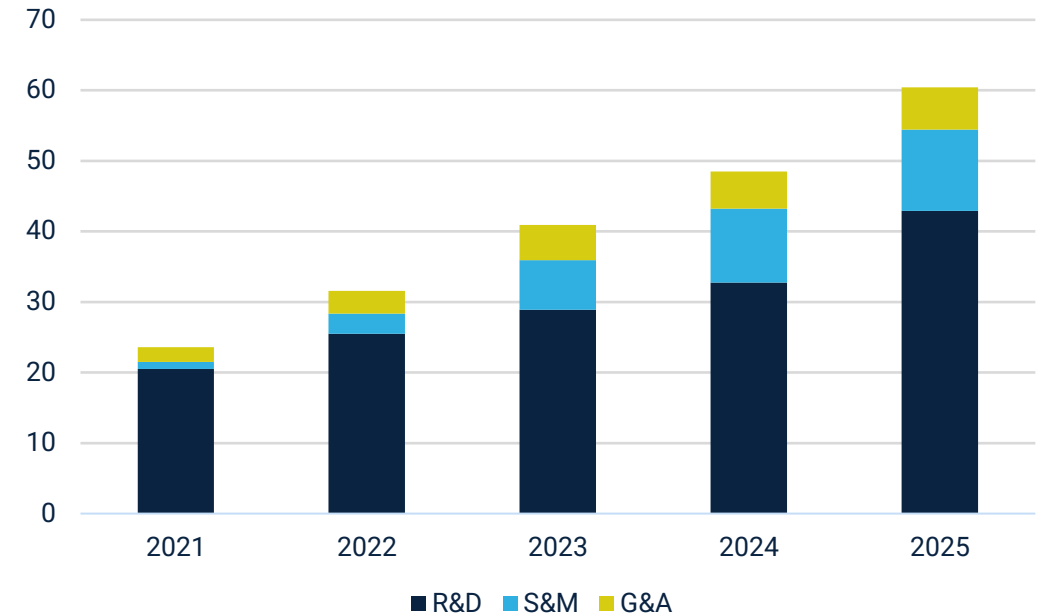
- Car theft recovery
- E-Bike recovery
- Emergency alerting (V16 in Spain)
- Smart agriculture sensors



## Annual Revenue (K€)



## Average Headcount



### Assumptions

- Royalties:
  - 10% market share on total chipset
  - Average royalty of \$0.24
- Cloud:
  - attach rate 75%
  - average monthly revenue \$0.018

# Business Plan

Planning to reach positive EBITDA by 2024 – with €5M cash injection in 2022

	2021	2022	2023	2024	2025
<b>INCOME STATEMENT</b>					
<b>REVENUE</b>					
License Revenue	300,000	460,000	340,000	280,000	300,000
Royalty Revenue	0	430,000	2,680,000	7,170,000	12,760,000
Cloud Revenue	0	127,308	1,129,066	4,559,422	11,917,011
<b>Total Revenue</b>	<b>300,000</b>	<b>1,017,308</b>	<b>4,149,066</b>	<b>12,009,422</b>	<b>24,977,011</b>
Cost of Goods Sold (COGS)	0	-21,218	-188,178	-759,904	-1,986,168
<b>Gross Profit</b>	<b>300,000</b>	<b>996,090</b>	<b>3,960,889</b>	<b>11,249,518</b>	<b>22,990,842</b>
<b>OPERATING EXPENSES</b>					
G&A Expense	612,949	723,899	1,054,631	1,152,346	1,313,154
R&D Expense	2,026,111	2,939,301	3,316,344	3,868,909	5,066,987
S&M Expense	207,969	806,364	1,828,396	2,772,080	3,264,761
<b>Total Operating Expenses</b>	<b>2,847,029</b>	<b>4,469,564</b>	<b>6,199,370</b>	<b>7,793,335</b>	<b>9,644,902</b>
<b>EARNINGS</b>					
<b>EBITDA</b>	<b>-2,547,029</b>	<b>-3,473,473</b>	<b>-2,238,482</b>	<b>3,456,183</b>	<b>13,345,940</b>
<b>CASH</b>					
Bridge / Equity investment	2,400,000	5,000,000	0	0	0
Ending cash balance	1,735,041	3,928,434	1,202,580	3,672,359	15,593,287

# Our Ask

## Nestwave is addressing a massive opportunity

- Tracking market has high potential but needs better solutions to take-off
  - New applications like parcel tracking or bike tracking are not viable with today's power-hungry GPS solutions
- Nestwave has the solution to the biggest pain points of tracking devices
  - 4x improvement on battery life
  - Works in all environments (outdoor, indoor, urban)
  - Enables smaller size & lower cost devices

## Nestwave is seeking up to €5M new money, in order to

- Fund development of product roadmap
  - New position technologies (5G, Wi-Fi)
  - Scalable cloud platform
  - New patents to protect competitive edge
- Accelerate sales & marketing efforts
  - Geographical sales expansion (US, China, Taiwan, Korea)
  - Marketing push to strengthen Nestwave brand
  - Address directly end users, in addition to chip vendors

## Looking for a lead investor

- Existing investors UI and Faktory are planning to follow-up
- EIC Fund has a commitment of €300K



**Ambroise Popper – CEO**

ambroise@nestwave.com

+33 6 6063 5720

Nestwave SAS

27 Rue du Chemin Vert, 75011, Paris , France

+33 1 88 33 69 10

[www.nestwave.com](http://www.nestwave.com)

