

Agenda



Item	Speaker
Welcome and introduction	<i>Fiammetta Diani (GSA)</i>
Galileo and GNSS positioning in IoT	<i>Justyna Redelkiewicz (GSA)</i>
How to achieve accurate positioning without draining your battery – main innovations	<i>Omar Valdes (GSA)</i>
R&D developments: Apollo, GoT and Geonav IoT	<i>Thierry Torlotin (Apollo - Syntony), Samuel Ryckewaert (GoT - Ubiscale), Laurent Arzel (Geonav IoT – Telespazio France)</i>
Perspective from chipset manufacturers: STMicroelectronics & U-blox	<i>Luis Serrano (STMicroelectronics) Oreste Concepto (U-blox)</i>
Q & A	

European GNSS Agency is in charge of Galileo, the European Global Satellite Navigation System



- Providing global positioning, navigation and timing information
- Used today on majority of professional devices and consumer platforms
 - 26 satellites in orbit
 - Initial Services provided since 2016



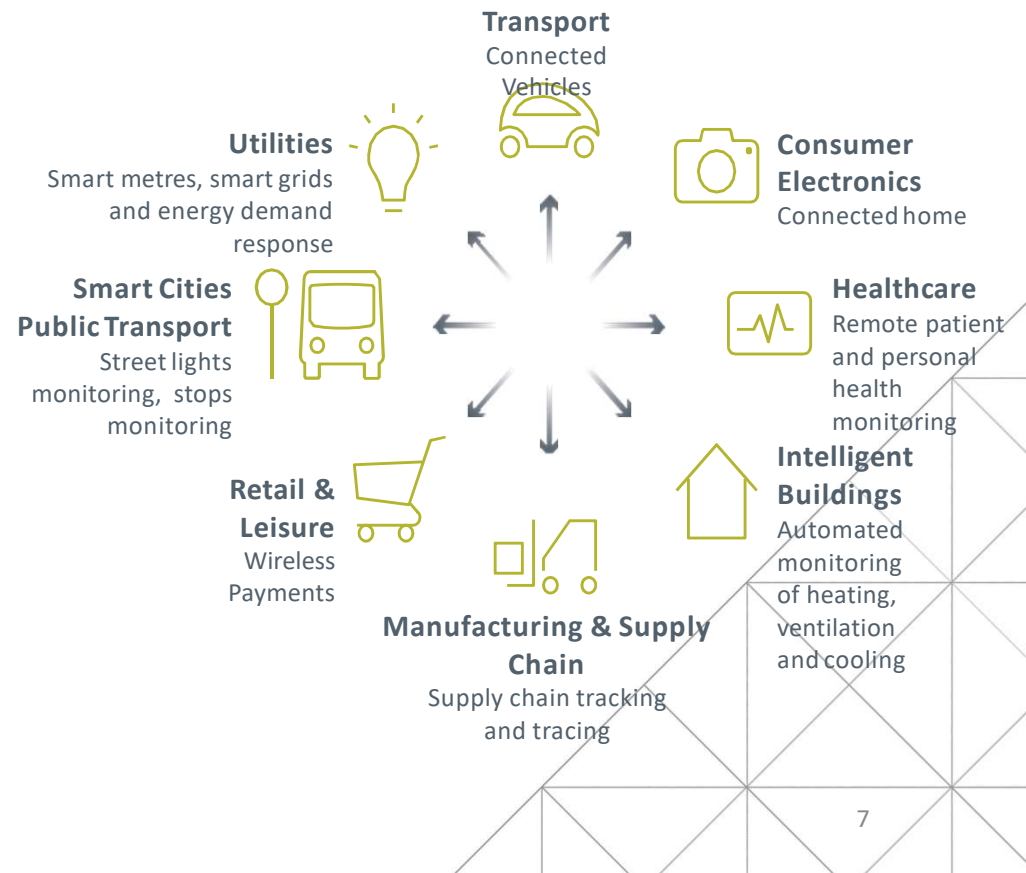
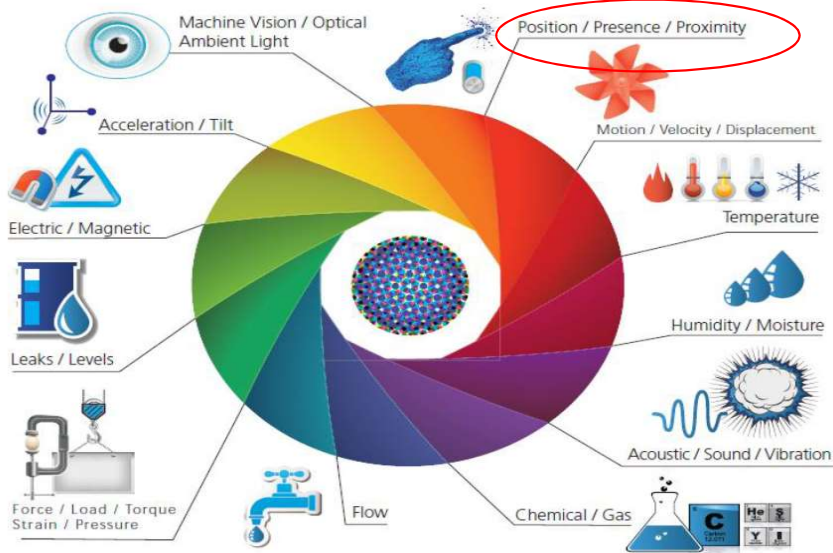
USEGALILEO.EU
FIND A GALILEO-ENABLED DEVICE TO USE TODAY

Galileo is Europe's Global Satellite Navigation System (GNSS), providing users with improved positioning and timing information.

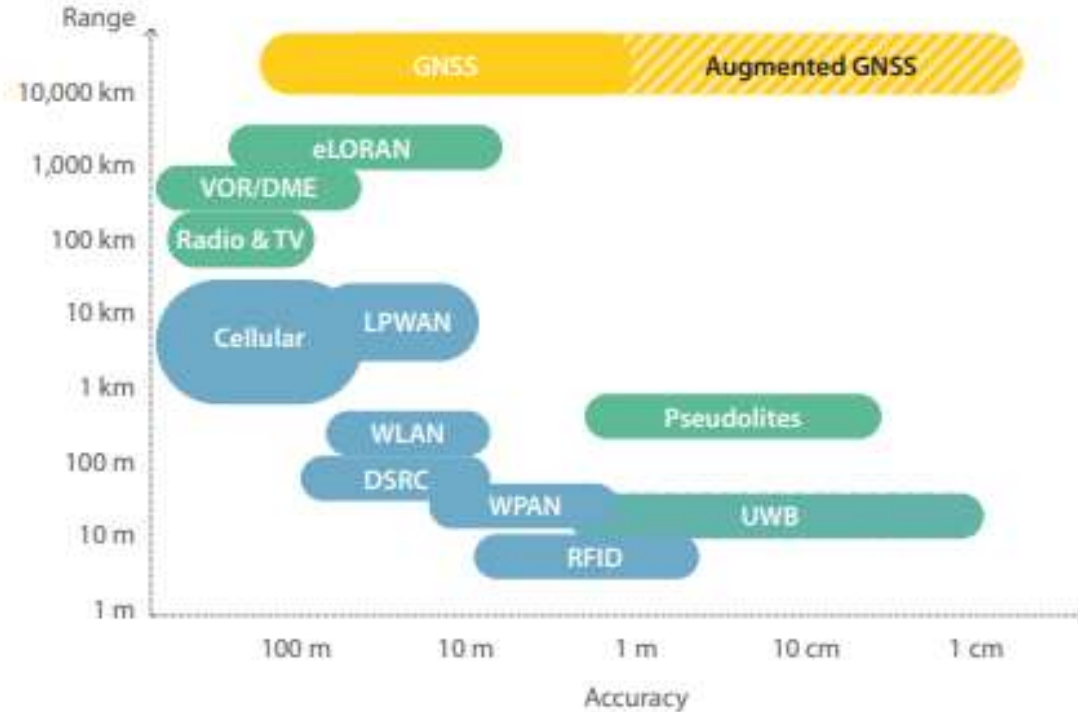
Click on the icons to find Galileo-enabled devices.



Without sensors there's no IoT



Several technologies can provide positioning capabilities relevant to locate “things”



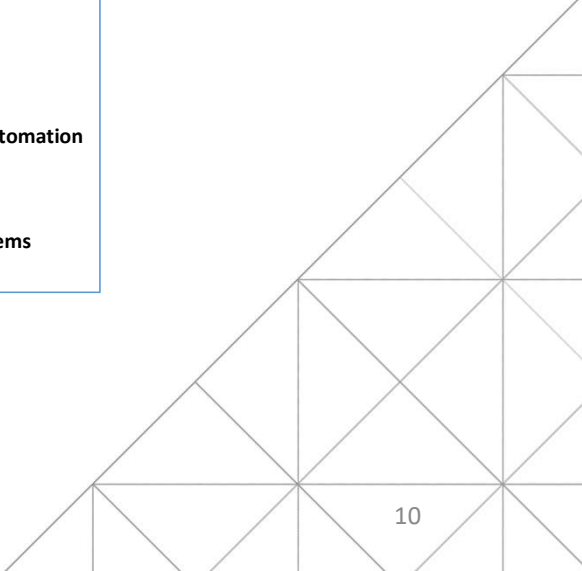
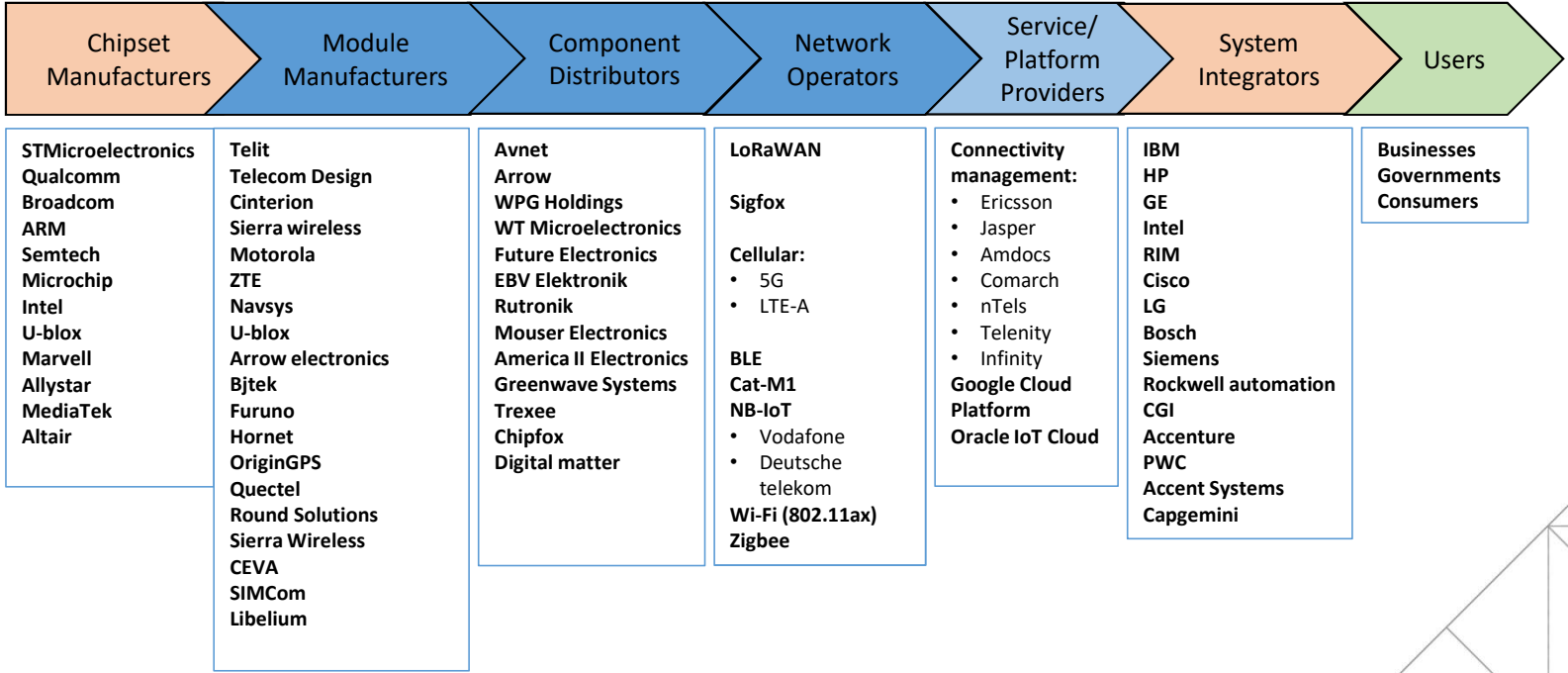
*Can be used either as a dedicated positioning system, or as a communications one

A perspective of IoT from the GNSS point of view



	TODAY	TOMORROW
HIGH END <ul style="list-style-type: none">• Lower power consumption and cost constraints• (fleet management, drones, smartphones)	■ <i>Multi- constellation</i>	■ <i>Multi-frequency</i>
MID RANGE <ul style="list-style-type: none">• Medium power consumption and cost constraints• (asset tracking, wearables, bike sharing, smart lightning)	■ <i>GPS – only</i>	■ <i>Multi-constellation</i>
LOW END <ul style="list-style-type: none">• High power consumption and cost constraints• (low value asset management and tracking)	■ <i>No GNSS</i>	■ <i>Innovative concepts (e.g. cloud processing)</i>

The enhanced performances of GNSS are not yet widely recognized across the value chain



One size does not fit all

- There is a large variety of GNSS based location solutions
- Innovative solutions are available enabling low energy per position fix
- Not all location solutions are compatible with all connectivity solutions
- We're here to help you select the solution that will best suit your needs

