Leading Change
Inspiring Progress

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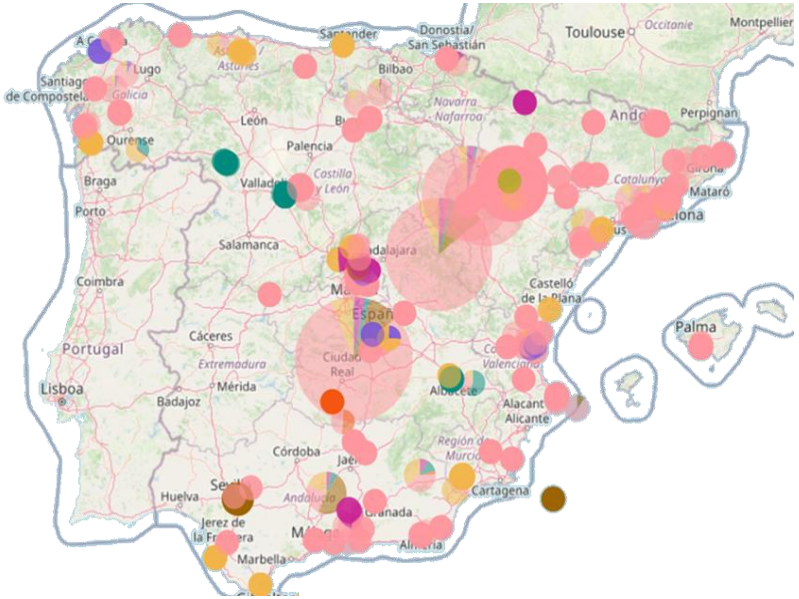
Operation of massive Smart Metering deployments on Cellular IoT networks

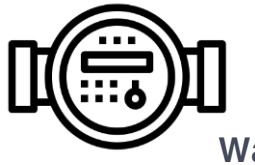
05/03/2025– Telefónica Tech. GSL IoT.

Millions of devices connected through NB-IoT

Telefónica Tech is providing NB-IoT connectivity to millions of devices just in Spain, and the number will grow more

Car beacons





Water meter

Street lamp

Gas meter

Parking meter

Asset control

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A protocol specially suited for IoT communications

NB-IoT is a protocol specially designed and suited for IoT communications.

NB-IoT Characteristics

Bidirectional

3GPP Comms

Battery saving

Penetration/reach

Low Device cost

Main application sectors

SOS

Smart Cities

Gas Management

Water management

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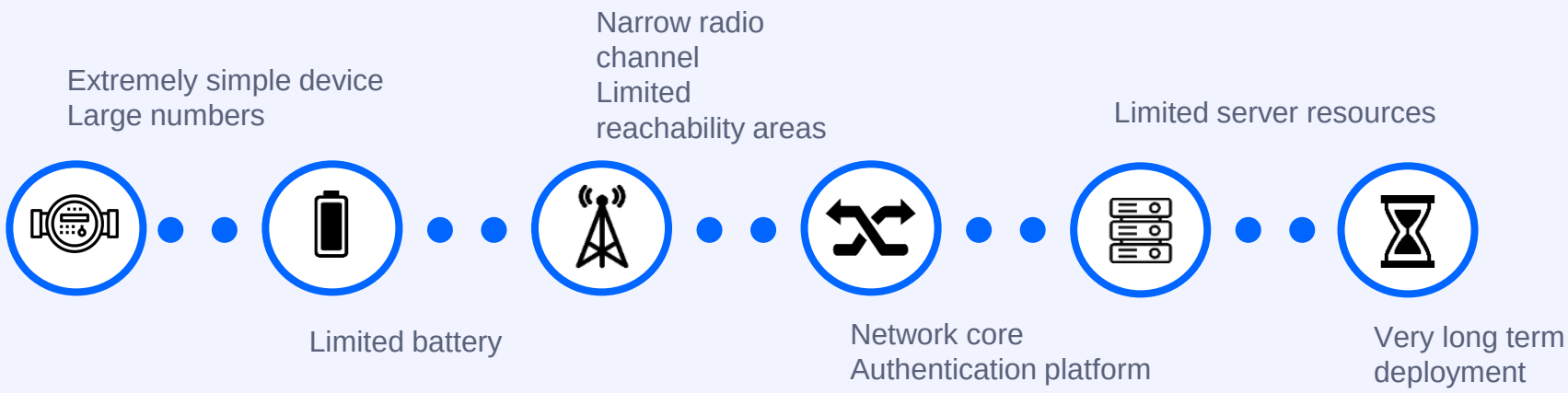
Relevant challenges in massive cellular IoT deployments

Unfortunately massive IoT projects are not as simple as “manufacture, deploy and bill”



Telefónica Tech Massive IoT Deployment Methodology

To handle these challenges Telefónica Tech employs a methodology spanning the full project life time.

Certification

Deployment

Field Operation

Escalability

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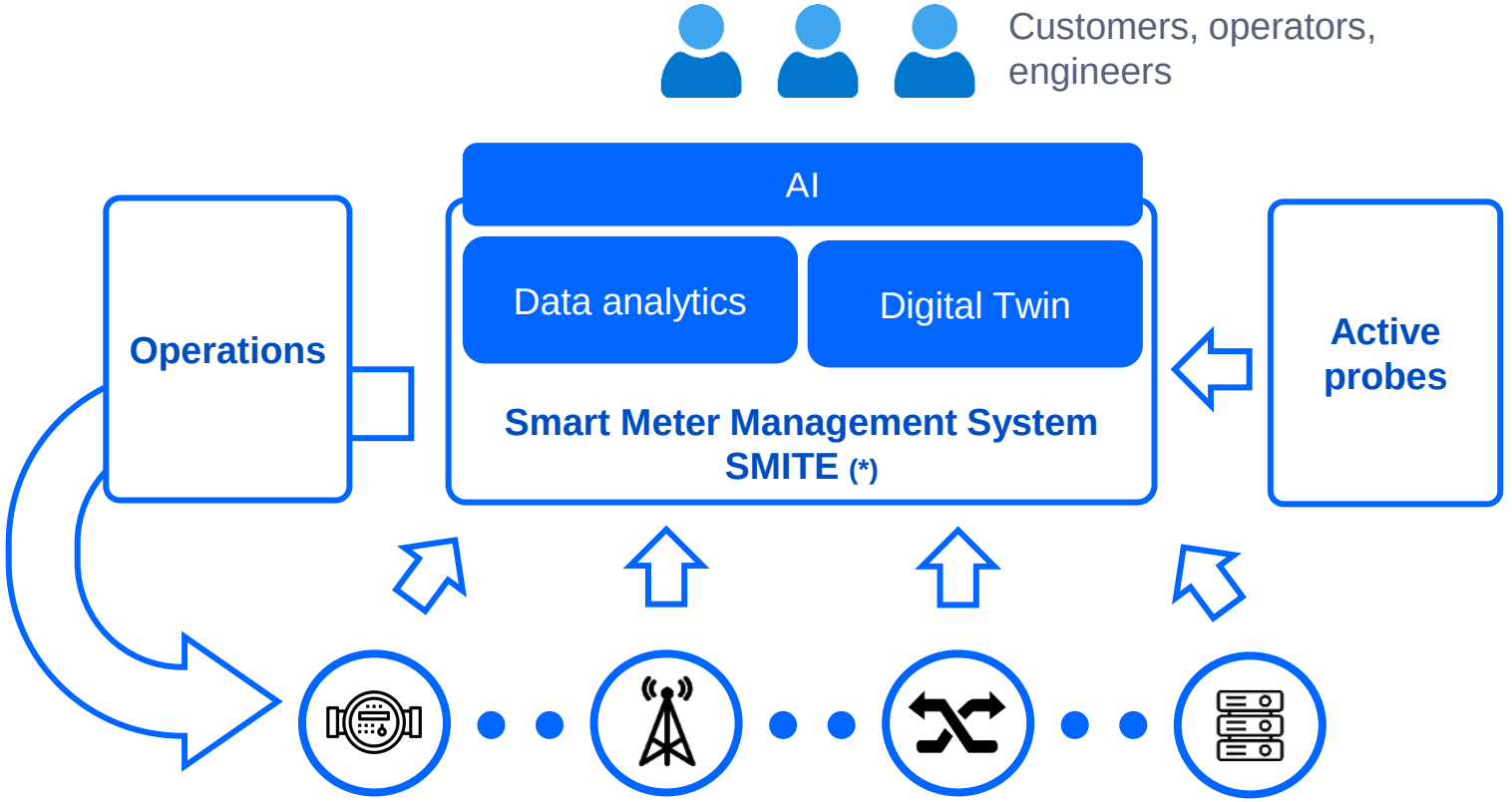
The Smart Meter Management System



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(*) codename

Achieving excellence

Although access methods to network and devices can seem limited, a capable engineering team employing Telefónica Tech methodology and tools achieves notable results.

From:

10%

typical initial connection success ratio

To:

99,6%

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