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16:15 - 17:00
Industry 4.0 digital transformation enabled by private networks

Sandeep Raithatha - Head of Innovation and 5G Private Networks, Virgin Media O2 Business
Dario Cesena - CEO Geprom, Part of Telefónica Tech

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100 Years
Leading Change

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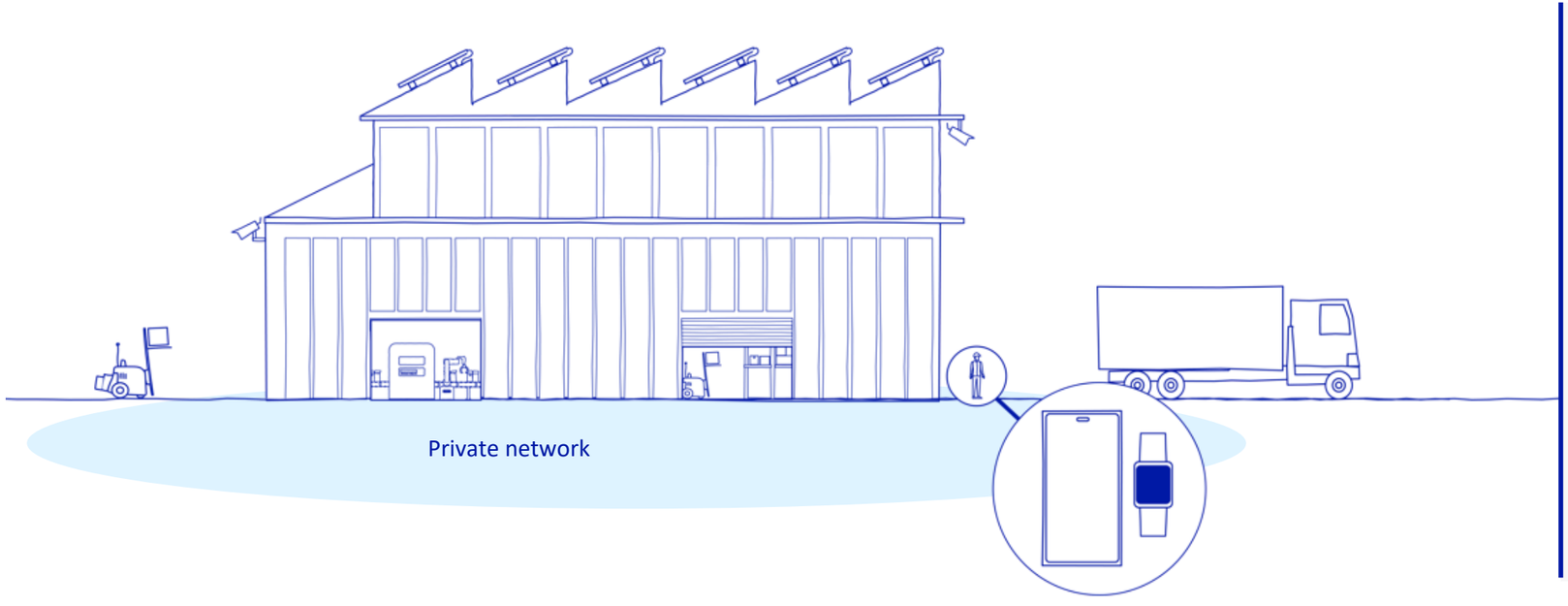
Industry 4.0 digital transformation enabled by private networks

5G private networks enabling digital transformation

The game-changing capabilities of 5G make digital transformation possible for industrial sites where it had been unfeasible before



Dedicated
Local network, dedicated resources, independently managed

Secure
Cellular grade security, sensitive data stays on-premise

Optimised
Tailored performance for local applications, e.g. low latency, QoS

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Private Networks has the potential to transform entire sectors

Sectors such as Manufacturing, Seaports, Logistics & Utilities have emerged as early adopter verticals despite macro-economic headwinds.

Manufacturing

Utilities

Airports
and Seaports

Major infrastructure
projects

Oil, Gas and Energy
companies

Defence

Logistics and
Warehousing

Healthcare

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Private Network is an enabler for digital transformation

Reducing costs, creating a safer working environment and creating a more sustainable business are the key drivers

Maintaining profitability

Improve health & safety

More sustainable business

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A Digital transformation journey

Thinking beyond the tech to drive key outcomes and value is critical

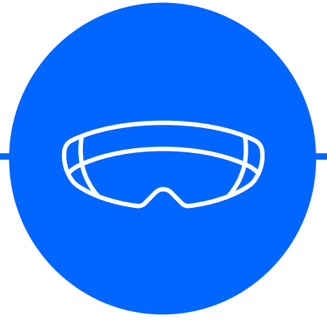
Connected Workers

Connectivity to key business applications

Connected Assets

Asset geofencing
Inventory management

Connected Workers + Assets



Augmented reality remote expert
Virtual reality training

Monitoring

Predictive maintenance
Computer and machine vision with AI

Automating

Automated guided vehicles
Autonomous mobile robots
Drone inspections

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Digital Transformation & Industry 4.0

¿What do we consider digital transformation?

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Digital Transformation & Industry 4.0

¿What do we consider digital transformation?

Equipment

Cybersecurity

Real-time process control

OT Communications

Monitoring in real time

Predictive and cognitive analysis

Digital Twin

Advanced process automation

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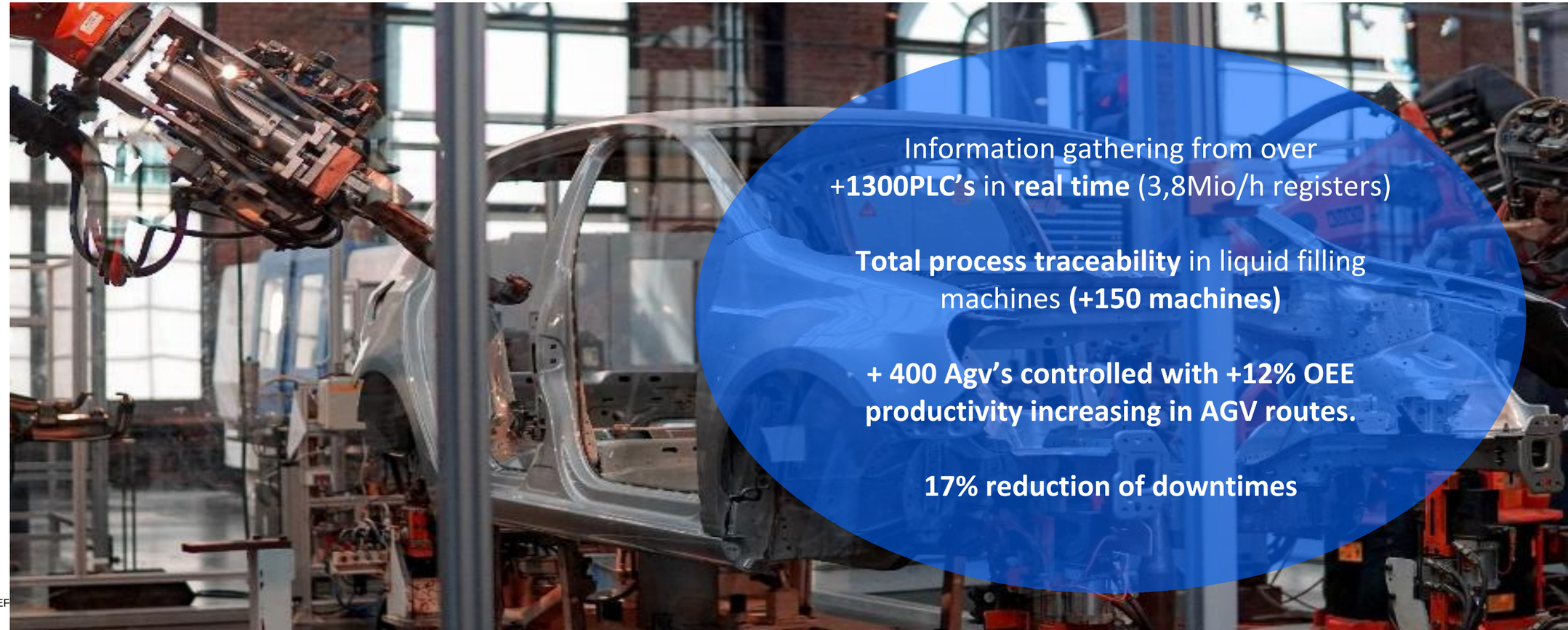
Digital Transformation & industry 4.0

SEAT Martorell use case



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Digital Transformation & Industry 4.0

Now… ¿We are helping to Digitise and transform SEAT processes?

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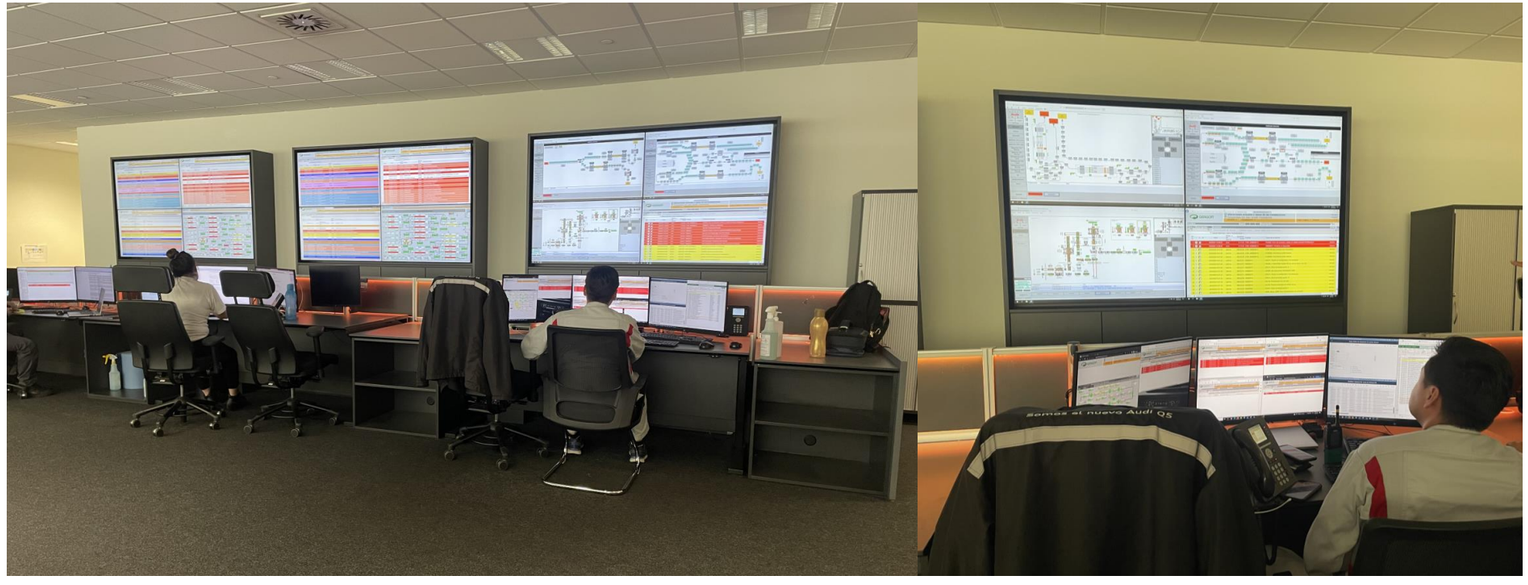
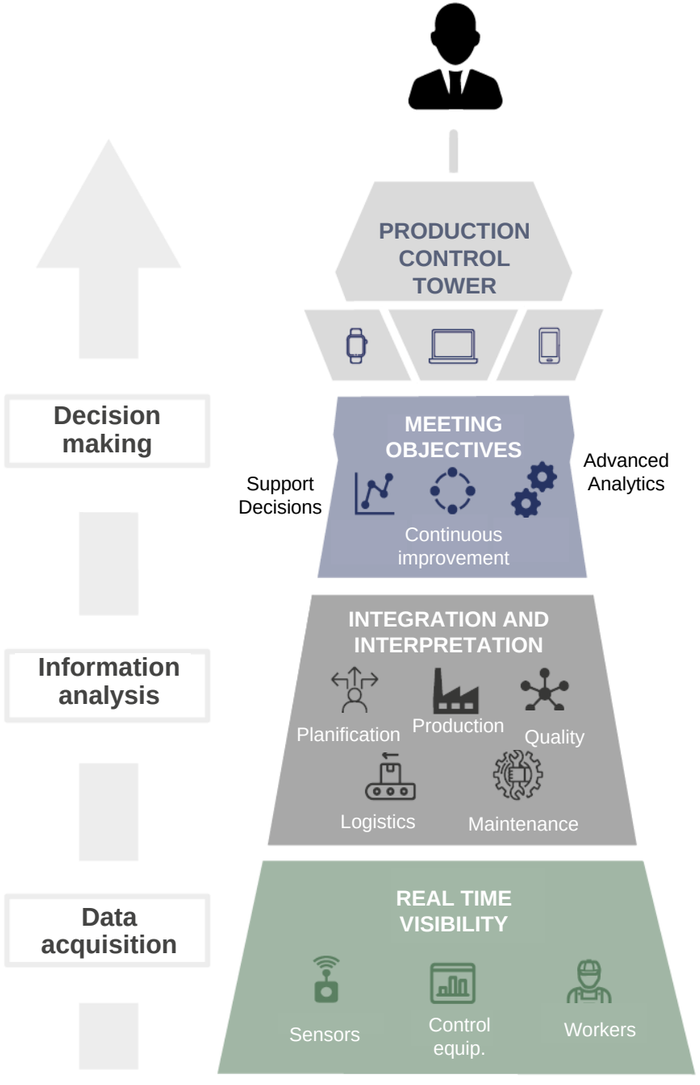
Digital Transformation & Industry 4.0

Worldwide rollout: Global Data Standardization based Central Monitoring Tool



Control room at the México AUDI plant in San José Chiapa



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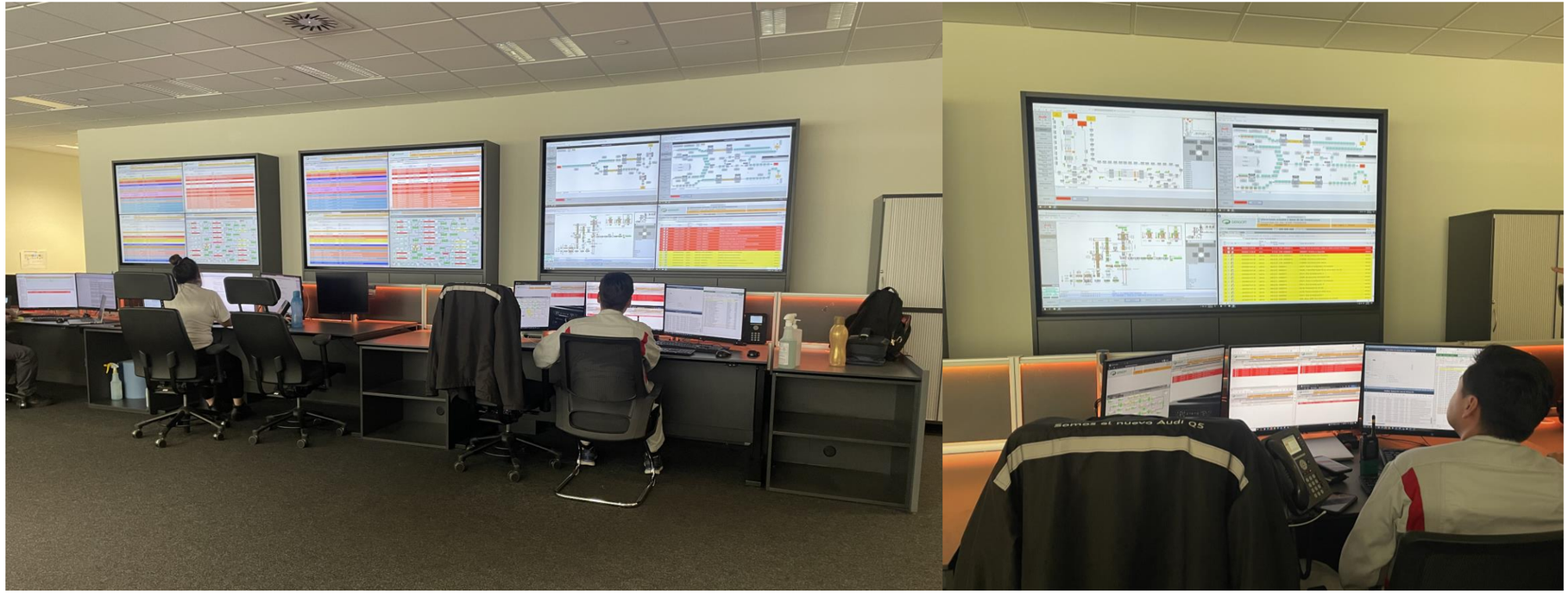
“Data has become one of the main assets of companies”

“The company that best manages the data derived from its productive processes, will have the chance to be better than its competitors ”

Digital Transformation & Industry 4.0

Worldwide rollout: Global Data Standardization based Central Monitoring Tool



Control room at the México AUDI plant in San José Chiapa

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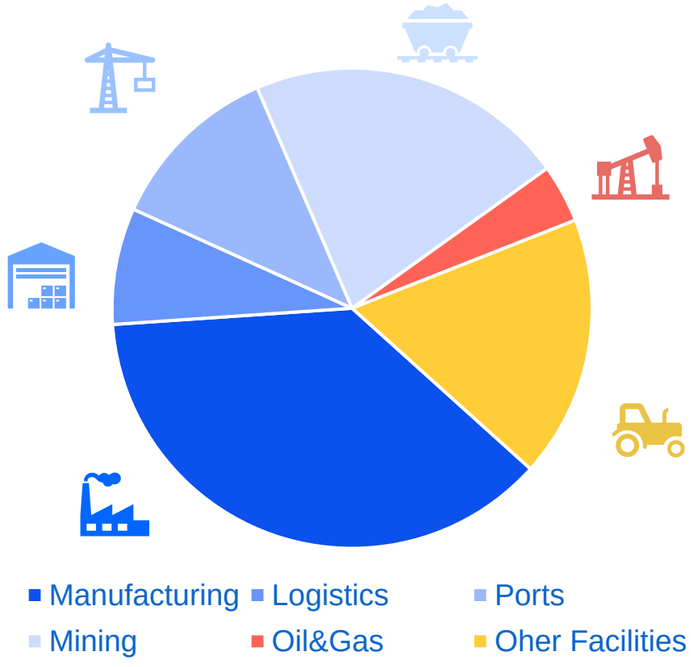
“Private networks like 5G are one of the main enablers of Digital Transformation ”

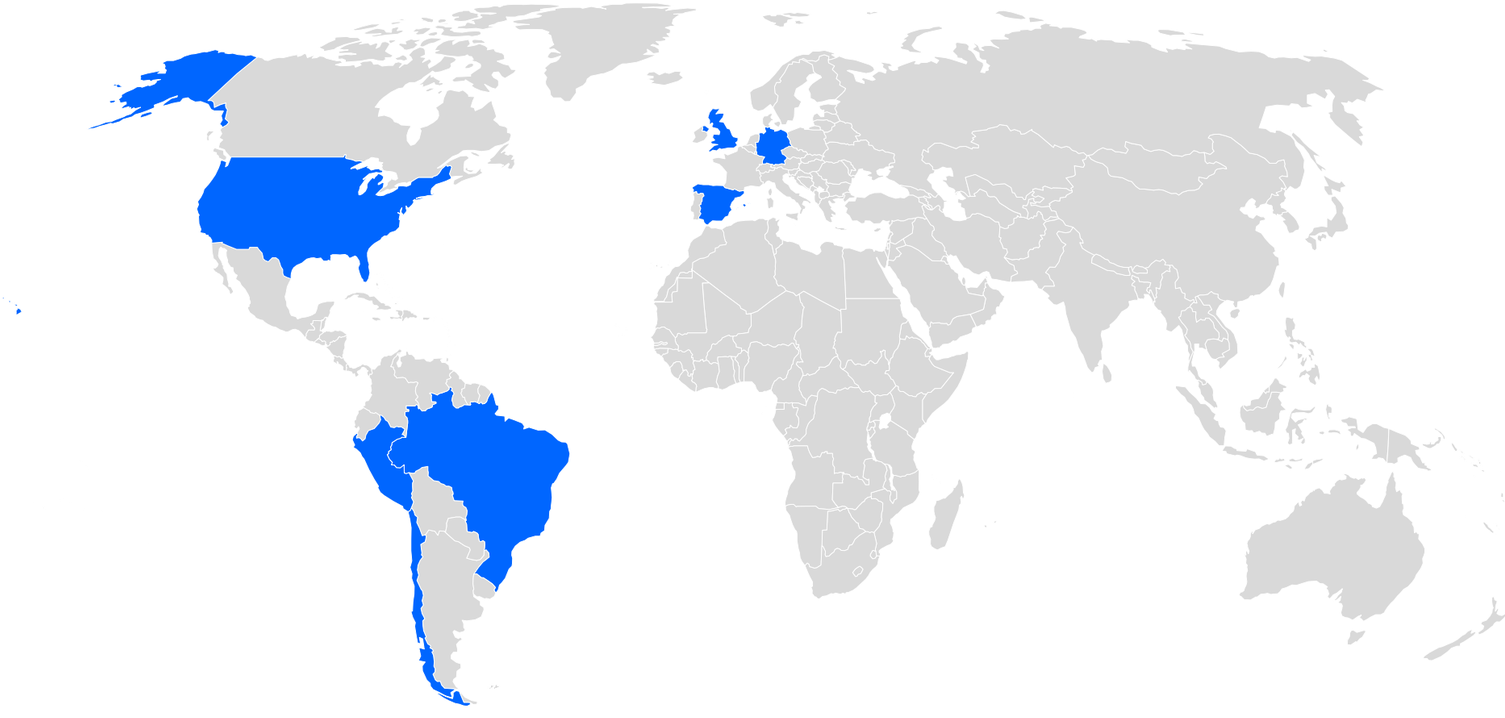
Why?
Benefits

- Ultra low latency
- More Bandwith
- More Efficiency
- Ensure and maximize quality service

Our Private Network deployments around the world

More than 50 projects to date spanning a wide range of industry sectors





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South London and Maudsley (SLAM) NHS Foundation Trust

South London and Maudsley NHS Foundation Trust

The UK’s first 5G-connected hospital

The problem

The need to investigate the efficiency, safety and security benefits of using smart, 5G-connected technologies in NHS hospitals

The solution

Use of smart, 5G-connected technologies in NHS hospitals – including IoT (Internet of Things), AR (Augmented Reality) and AI (Artificial Intelligence).

The outcome

Our Private 5G network reporting benefits of improved productivity & patient care with reliable connectivity

“We are proud to be partnering with Virgin Media O2 Business to create the UK’s first 5G-connected hospital, which enables us to use digital innovations to improve patient outcomes. This is a very exciting step forward.”

Stuart MacLellan, Acting Chief Information Officer at at SLAM

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British Sugar

The UK’s first multi-site private network

The problem

A lack of fast, site-wide connectivity was impacting productivity at British Sugar’s main UK factories

The solution

Close cooperation between Virgin Media O_2 Business and British Sugar teams led to the design of a dedicated private network

The outcome

Improved health and safety and security, increased productivity and efficiency with a secure private network

“Previously we needed someone in the control room and someone who could walk around the site. Now we have one person who can walk around the site with the control room in their hands.”

Paul Hitchcock Head of Engineering & Technology, British Sugar

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British Sugar case study: **Providing a dedicated 4G private network**

Business

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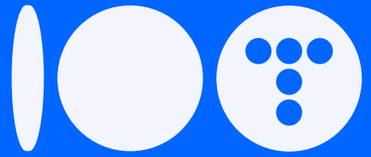

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