



Orange Industry 4.0 Campus welcomes co-innovation of Port of Antwerp, Borealis, Covestro and other industrial partners, maximizing 5G potential in the port of Antwerp

Orange Belgium is now welcoming its first wave of industrial partners to the Orange Industry 4.0 Campus for business. The Port of Antwerp, the chemical company Borealis and high-tech polymer manufacturer Covestro started to co-innovate to developing real-life applications, maximizing the full potential of 5G at Orange Belgium's testing hub. Deloitte Belgium will advise the community on shaping and realizing the business potential of this 5G innovation hub. With Orange's 5G testing network being deployed on the campus, industrial partners will benefit from dedicated connectivity and a guaranteed service quality appropriate for their specific use cases.

Orange Belgium launched this 5G testing network in Antwerp in late 2019 and it is the country's first 5G stand-alone architecture network. It is now available for use by Orange's industrial partners, who will benefit from 5G's full potential: dedicated and tailor-made connectivity adapted to the specific requirements of new innovations such as wireless manufacturing and real-time automation. As Orange Belgium is not just adding 5G capacities on top of the existing 4G/3G technologies, it is deploying a separate network enabling network slicing, very low latency and massive IoT in the port of Antwerp region, enabling the various industry stakeholders to enjoy unmatched performance, reliability and security.

Orange Industry 4.0 Campus industrial partners to demonstrate the possibilities of 5G stand-alone technology

Using the full potential of 5G in Orange Belgium's test network, different real-life and business-critical applications will be built and tested in an industrial environment, including connected tugboats and Smart Field Operators:

- The vessels towing process of connected tugboats will be enhanced thanks to real time broadcasting of mobile radar images to the control room, sent by high level definition embedded cameras. These cameras can be remote controlled in real time.
- For Smart Field Operators, mission critical communications need a guaranteed preemption priority to increase the worker's security in case of alert. These field operators will receive real time and rich technical information about equipment to be operated or maintained, by visualizing a digital twin of the infrastructure they're working on. Remote assistance from the control center will also be eased by real time transfer of images from the field to increase the worker's safety.

Another use case is the automated contaminant tracker that securely sends images of suspect production samples through 5G connection to a specific user within the cloud for further analysis.

Werner De Laet, Orange Belgium's Chief Enterprise Officer, says: "Now that we provide 5G stand-alone (SA) connectivity in our 5G testing hub for business, we offer our partners

dedicated and tailor-made connectivity, adapted to the specific demands of innovative new applications such as wireless manufacturing, real-time automation, smart cities and the Internet of Things. So we are absolutely thrilled with the response we have received from the industrial partners within the Port of Antwerp. Now that this 5G industrial ecosystem is up and running, we will share its progress with the public by the end of June. As such, even if regulatory and legal changes remain necessary, Orange Belgium will continue to play its role of bold challenger on the business market.”

Tim Paridaens, Internet of Things leader at Deloitte Belgium says, "At Deloitte, we strongly believe that 5G's new business standards will pave the way for a whole host of new applications, allowing for industrial-scale IoT networks in factories, warehouses, ports, and more. This unique initiative will provide a real-world test bed, prove the value potential for business and steer technical and business decision-making towards a connected, digital and 5G-enabled future."

Erwin Verstraelen, Chief Digital Information & Innovation Officer at Port of Antwerp adds, “Sensors, smart cameras, remote-controlled ships, autonomous vehicles and drones are all innovative technologies with business potential for the wider port area. What they all have in common is their need for reliable network connectivity: today 4G, tomorrow 5G. Since 5G is not 4G plus 1, we need to learn in a relevant context. Therefore, the Port of Antwerp welcomes the consortium to leverage our port as an innovation platform where relevant 5G use cases can be tested. This will guarantee fast deployment once regular 5G is available.”

Logistics operator Katoen Natie has already agreed to join in a second wave.

A special summit will be organized in June to share the first Industrial 4.0 applications to the Antwerp port ecosystem and the wider regional and Belgian economy as well as the Telecommunication Industry.

About Orange Belgium

Orange Belgium is a leading telecommunications operator on the Belgian market with over 3 million customers; Orange is also active in Luxembourg through its subsidiary Orange Communications Luxembourg.

As a convergent actor, we provide mobile telecommunications services, internet and TV to private clients as well as innovative mobile and fixed-line services to businesses. Our high-performance mobile network supports 2G, 3G, 4G and 4G+ technology and is the subject of ongoing investment.

Orange Belgium is a subsidiary of the Orange Group, one of the leading European and African operators for mobile telephony and internet access, as well as one of the world leaders in telecommunications services for enterprises.

Orange Belgium is listed on the Brussels Stock Exchange (OBEL).

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