



Press release
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Orange and Vodafone to cooperate on Open RAN network sharing in rural areas across Europe

Pilot project to take place in Romania

Today, Orange and Vodafone agreed to build an Open Radio Access Network (RAN) with RAN sharing in rural parts of Europe where they both have mobile networks. This is the first time that two companies have agreed to share Open RAN networks in Europe.

The first commercial sites to be deployed under this agreement are planned to start this year in a rural area of Romania, near Bucharest. They will provide an initial real-life experience of this new operational model based on the integration of multi-vendor hardware and software, paving the way for wider scale deployments. Orange and Vodafone are currently working to individually select strategic vendors for this initial build phase.

Today's announcement reinforces the companies' respective commitment to rollout Open RAN as the technology of choice for future mobile networks across Europe, leading to a more resilient and reinvigorated vendor supply chain. The companies' commitment to Open RAN also supports the European Commission's ambitious target to have 5G in all populated areas by 2030.

Open RAN unlocks significant advantages over traditional network sharing. By using open and virtualised RAN, relying on disaggregated software and hardware, Vodafone and Orange will each have greater flexibility when adding new radio sites or upgrading existing ones, while keeping the cost and energy consumption low. This model will serve as a blueprint to extend 4G and 5G networks to rural communities across Europe.

Michaël Trabbia, Chief Technology and Innovation Officer at Orange, said: "Orange is excited to co-operate with Vodafone on a first open RAN sharing deployment in Romania, which is a significant milestone on the road to wide-scale open RAN adoption across Europe. It is a major step towards agile and fully-automated networks, unleashing the potential of virtualization and AI to boost performance while driving both infrastructure and operational costs down.

"In particular, Open RAN is a great opportunity to take network sharing to a whole new dimension, with even higher operator differentiation thanks to the ability for each of the partners to tune its network more independently according to its promises towards its own customers."

Alberto Ripepi, Chief Network Officer of Vodafone, said: "We are delighted to be working with Orange on this industry-first initiative. By combining resources, we will reduce the cost



of hardware, minimise fuel consumption and the need for duplicate sites whilst eradicating coverage not-spots.

“Open RAN also means we can more quickly add new software features without necessarily replacing the hardware components, which is often the case today. This minimises any disruption to service and ensures customers in rural areas receive the same upgrades as those in the cities.”

Under existing sharing agreements one operator is typically responsible for all the component parts of a shared site, with both operators using the same RAN vendor or software release, and life cycle management.

Open RAN sharing paves the way for Orange and Vodafone to reap the benefits of a truly open infrastructure, allowing the sharing of all hardware components (radio units and Cloud infrastructure) while independently managing their own RAN software on a common cloud infrastructure. As a result, each company can tailor services and capacity to their specific customer needs, while ensuring a strong and secure isolation between each operator's data. This is in line with the priorities that have been developed under the Memorandum of Understanding (MoU) both operators signed in early 2021 with other major European operators.

Testing of the Open RAN solution on a live network will continue throughout 2023, allowing a like-for-like comparison with legacy networks and will aim at confirming the feature and performance parity between Open RAN and traditional RAN solutions, before expanding the Open RAN sharing blueprint to other markets.

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About Orange

Orange is one of the world's leading telecommunications operators with sales of 43.5 billion euros in 2022 and 136,000 employees worldwide at 31 December 2022, including 75,000 employees in France. The Group has a total customer base of 287 million customers worldwide at 31 December 2022, including 242 million mobile customers and 24 million fixed broadband customers. The Group is present in 26 countries. Orange is also a leading provider of global IT and telecommunication services to multinational companies under the brand Orange Business. In February 2023, the Group presented its strategic plan "Lead the future", built on a new business model and guided by responsibility and efficiency. "Lead the future" capitalizes on network excellence to reinforce Orange's leadership in service quality.

Orange is listed on Euronext Paris (symbol ORA) and on the New York Stock Exchange (symbol ORAN).

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About Vodafone



Unique in its scale as the largest pan-European and African technology communications company, Vodafone transforms the way we live and work through its innovation, technology, connectivity, platforms, products and services.

Vodafone operates mobile and fixed networks in 20 countries, and partners with mobile networks in 47 more. As of 31 December 2022, we had over 330 million mobile customers, more than 28 million fixed broadband customers, and 21 million TV customers. Vodafone is a world leader in the Internet of Things (IoT), connecting over 155 million devices and platforms.

We have revolutionised fintech in Africa through M-Pesa, which celebrated its 15th anniversary in 2022. It is the region's largest fintech platform, providing access to financial services for more than 58 million people in a secure, affordable and convenient way.

Our purpose is to connect for a better future by using technology to improve lives, digitalise critical sectors and enable inclusive and sustainable digital societies.

We are committed to reducing our environmental impact to reach net zero emissions across our full value chain by 2040, while helping our customers reduce their own carbon emissions by 350 million tonnes by 2030. We are driving action to reduce device waste and achieve our target to reuse, resell or recycle 100% of our network waste.

We believe in the power of connectivity and digital services to improve society and economies, partnering with governments to digitalise healthcare, education and agriculture and create cleaner, safer cities. Our products and services support the digitalisation of businesses, particularly small and medium enterprises (SMEs).

Our inclusion for all strategy seeks to ensure no-one is left behind through access to connectivity, digital skills and creating relevant products and services such as access to education, healthcare and finance. We are also committed to developing a diverse and inclusive workforce that reflects the customers and societies we serve.

For more information, please visit www.vodafone.com, follow us on Twitter at @VodafoneGroup or connect with us on LinkedIn at www.linkedin.com/company/vodafone.

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