Major European Operators Commit to Open RAN Deployments

Collaboration aims to provide a framework for the creation of an interoperable market for Open RAN and ensure solution availability for a timely deployment in Europe.

Madrid / 20 January 2021 - Deutsche Telekom AG, Orange S.A., Telefónica S.A., and Vodafone Group Plc are joining forces to support the rollout of Open Radio Access Network (Open RAN) as the technology of choice for future mobile networks to the benefit of consumer and enterprise customers across Europe.

In a Memorandum of Understanding (MoU) the four operators expressed their individual commitment to the implementation and deployment of Open RAN solutions that take advantage of new open virtualized architectures, software and hardware to build more agile and flexible mobile networks in the 5G era.

The four operators will work together with existing and new ecosystem partners, industry bodies like the O-RAN ALLIANCE and the Telecom Infra Project (TIP), as well as European policy makers, to ensure Open RAN quickly reaches competitive parity with traditional RAN solutions. This initiative is an important milestone towards a diverse, reinvigorated supplier ecosystem and the availability of carrier-grade Open RAN technology for a timely commercial deployment in Europe.

Enrique Blanco, Chief Technology & Information Officer (CTIO) at Telefónica, said: "Open RAN is the natural evolution of radio access technologies and it will be key for 5G networks. Telefónica believes the whole industry must work together to make it a reality. I am excited to be partnering with major European operators to promote the development of an open technology that will help to enhance the flexibility, efficiency and security of our networks. This is an extraordinary opportunity for the European industry not only to promote the development of 5G but also to participate in its sustainable technological development."

Michaël Trabbia, Chief Technology & Information Officer (CTIO) at Orange, said: "Open RAN is the next major evolution of 5G RAN. Orange believes it is a strong opportunity for existing and emerging European actors to develop O-RAN based products and services, starting with indoor and rural areas. This evolution should be supported by a large European ecosystem (academics and research, software and hardware developers, integrators, public funding for R&D) as it is a unique occasion to reinforce the European competitiveness and leadership in the global market."

"Open RAN is about network innovation, flexibility and faster rollout. Deutsche Telekom is committed to its promotion, development and adoption to ensure the best network experience for our customers. To seize this opportunity, it is critical that we join forces with our leading European partners to foster a diverse, competitive and secure 4G/5G ecosystem based on open RAN solutions", said Claudia Nemat, Chief Technology Officer of Deutsche Telekom. "Through our open labs and community activities, we facilitate smaller players to enter the market with their solutions. To build on this foundational work, we urge government support and funding for community activities that will strengthen the European ecosystem and leadership in 5G."

Vodafone Group Chief Technology Officer Johan Wibergh said: "Open RAN has the power to stimulate European tech innovation using the expertise of the companies that develop it and the governments who support it. Opening up the market to new suppliers, with our ambition and government advocacy, will mean faster 5G deployment, cost-saving network efficiencies and world-class services. We remain committed to rolling out our Open RAN program across Europe, and we're taking it even further. We aim to open R&D labs for new, smaller suppliers to develop their products. But to do this we need a supportive investment environment and political backing, and we urge European governments to join us in creating the Open RAN ecosystem."

The development and implementation of Open RAN is widely expected to have a positive impact on the European Telecommunication market. In traditional RAN, the networks are deployed using fully integrated cell sites, where the radios, hardware and software are provided by a single supplier as a closed proprietary solution. Mobile operators are today re-evaluating the way their networks are deployed.

With Open RAN the industry is working towards standards and technical specifications that define open interfaces within the radio system, including hardware and software, so that networks can be deployed and operated based on mix-and-match components from different suppliers. Operators will be able to draw on the reinvigorated supplier innovation to drive cost efficiencies and more flexibly deliver customized services in response to evolving customer demands.

The introduction of Open RAN, virtualization and automation will enable a fundamental change in the way operators manage networks and deliver services. Operators will be able to add or shift capacity more quickly for end users, automatically resolve network incidents or provide enterprise level services on-demand for industry 4.0.

The four operators believe that the European Commission and the national governments have an important role to play to foster and develop the Open RAN ecosystem by funding early deployments, research and development, open test lab facilities and incentivizing supply chain diversity by lowering barriers to entry for small suppliers and startups who can avail of these labs to validate open and interoperable solutions.

About Deutsche Telekom
Deutsche Telekom is one of the world's leading integrated telecommunications companies, with some 235.8 million mobile customers, 27.3 million fixed-network lines, and 21.3 million broadband lines. We provide fixed-network/broadband, mobile communications, Internet, and IPTV products and services for consumers, and information and communication technology (ICT) solutions for business and corporate customers. Deutsche Telekom is present in more than 50 countries. With a staff of some 229,170 employees throughout the world, we generated revenue of 80.5 billion Euros in the 2019 financial year, about 66 percent of it outside Germany. (All figures taken from the 2019 Annual Report)

About Orange
Orange is one of the world's leading telecommunications carriers with a turnover of €42 billion in 2019 and 143,000 employees as at 30 September 2020, of which 83,000 are in France. The Group has a total customer base of 257 million customers worldwide at 30 September 2020, including 212 million mobile customers and 21 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 Services. In December 2019, the Group presented its new "Engage 2025" strategic plan, which, guided by social and environmental accountability, aims to reinvent its operator model. While accelerating in growth areas and placing data and AI at the heart of its innovation model, the Group will be an attractive and responsible employer, adapted to emerging professions.

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

Telefónica is one the largest telecommunications service providers in the world. The company offers fixed and mobile connectivity as well as a wide range of digital services for residential and business customers. With more than 341 million customers, Telefónica operates in Europe and Latin America.

Telefónica is a 100% listed company and its shares are traded on the Spanish Stock Market and on those in New York and Lima.

About Vodafone Group

Vodafone is a leading telecommunications company in Europe and Africa. Our purpose is to "connect for a better future" and our expertise and scale gives us a unique opportunity to drive positive change for society. Our networks keep family, friends, businesses and governments connected and – as COVID-19 has clearly demonstrated – we play a vital role in keeping economies running and the functioning of critical sectors like education and healthcare.

Vodafone is the largest mobile and fixed network operator in Europe and a leading global IoT connectivity provider. Our M-Pesa technology platform in Africa enables over 45m people to benefit from access to mobile payments and financial services. We operate mobile and fixed networks in 21 countries and partner with mobile networks in 48 more. As of 30 September 2020, we had over 300m mobile customers, more than 27m fixed broadband customers, over 22m TV customers and we connected more than 112m IoT devices.

We support diversity and inclusion through our maternity and parental leave policies, empowering women through connectivity and improving access to education and digital skills for women, girls, and society at large. We are respectful of all individuals, irrespective of race, ethnicity, disability, age, sexual orientation, gender identity, belief, culture or religion.

Vodafone is also taking significant steps to reduce our impact on our planet by reducing our greenhouse gas emissions by 50% by 2025 and becoming net zero by 2040, purchasing 100% of our electricity from renewable sources by 2025, and reusing, reselling or recycling 100% of our redundant network equipment.

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