Operators are opening up 5G networks to application developers to drive innovation

- Orange, Telefonica, and Vodafone, in collaboration with Ericsson and Vonage are demonstrating how advanced mobile network functionality can be exposed and made easily consumable by the global developer community.

- The showcase at Mobile World Congress in Barcelona, is an industry milestone and demonstrates the operators' ambition to accelerate innovation by opening up the new generation of mobile networks and exposing advanced network functionalities for app-developers and enterprises under the framework of the GSMA Open Gateway initiative.

- The demonstration shows how the user experience can be significantly enhanced in real time mobile gaming and interactive high density video applications thanks to the operators' exposure of the quality of service on demand (QoD) API, to application developers from Blacknut, Zoom, and Vonage.

The collaboration at Mobile World Congress is deployed on the live networks of Orange, Telefonica, and Vodafone in Spain. The demonstration shows how the telco industry are working with aggregators like Ericsson-Vonage to expose new network capabilities to application developers enabling high-definition interactive video in gaming and productivity applications for mobile devices.

The exposure of advanced 5G functionality through common Application Programming Interfaces (APIs) will enable operators to leverage new ways to monetize 5G and to quickly deliver new services on a global scale with speed. Expansion of the QoD API services to other markets leveraging exposure is also demonstrated in the collaboration. The ambition is for all three operators to use the same QoD API, defined, developed and documented in CAMARA, the open source project driven by Linux Foundation in collaboration with GSMA, which is available for all operators to implement thereby maximizing the potential benefits for the developer community.

Exposing telco capabilities in an open, intuitive, and programmable way via open global APIs will enable developer communities to innovate new applications and features for any device that benefits from connection to the network. All three telco operators are developing their own roadmaps incorporating common service APIs to be made available to developers.

The demonstration at Mobile World Congress features adoption of common APIs across different operators' networks under the framework of the GSMA Open Gateway initiative. This will make it easier for developers to create innovative services utilizing advanced network capabilities such as quality of service, enhanced security, user authentication, or network information such as device information or predictive coverage. These capabilities are core components of the network that have so far not yet been exposed in a unified and easy consumable way to the global developer community.

Laurent Leboucher, Orange Group CTO and SVP Orange Innovation Networks, said "We at Orange are excited to showcase with our peers the first CAMARA live network APIs for new innovative enterprise or consumer services. Having open network APIs from different operators which are harmonized and accessible from one place removes friction for software developers and unleashes innovation and creativity for many use cases. Working with open network APIs creates a virtuous circle of continual feedback, resulting in the constant improvement and development of new innovative features. Orange has been active for many years encouraging and

supporting the development and exposure of APIs, notably through the Orange Developer Portal. The benefits are numerous, with a wide range of APIs enabling developers to co-innovate and develop their business."

Enrique Blanco, Global CTIO, Telefonica S.A. commented: "The showcase that we are jointly bringing to MWC with other major European operators and Ericsson is a very relevant step to lay the foundations for a new business model based on the progress of opening up the functionalities of the new network generations to application developers. It is an industry move, hand in hand with the GSMA through the GSMA Open Gateway initiative, a true catalyst for highly demanding network capability services such as immersive communications, web3 and metaverse related services. The need to provide these premium services perfectly tailored to comply with the needs of business and consumer customers cannot be envisaged in any other way than under a framework based on interoperability. That also means relying in the provision of common, simplify APIs through CAMARA, available to developer communities through the major marketplaces. The telco industry is starting on a path today that presents challenges, but also many opportunities not only for itself, but for society, so it is the right way forward."

Santiago Tenorio, Director of Vodafone Network Architecture says: "Today's mobile networks have vast capabilities that go well beyond basic connectivity. Open network APIs that harness the power and scale of our network are an opportunity for true innovation. Vodafone is providing its product creators and software engineers, as well as third-party developers and businesses outside Vodafone, with access to these new software-driven capabilities to create significant new services. Whether it is helping banks detect unusual transactions, enabling safer flight paths for emergency drones or prolonging the battery life of smartphones, innovation is returning to the network."

Erik Ekudden, CTO & SVP Ericsson says: "We are excited to be part of this collaboration and demo integrated in the live network, which links the mobile network world with the global developer community. This is a paradigm shift that will put network functionality at the center of an enterprise digital transformation. This will allow mobile operators to monetize 5G by exposing advanced network capabilities via easy-to-use APIs. With 5G, we have an innovation platform, unlike anything we've seen before, which together with the Vonage Communications Platform will create a global network platform capable of supporting operators in their growth ambitions."

"Cloud gaming is the perfect showcase to demonstrate the potential of Open Network APIs. Standardised across operators, simple to use and predictable cost wise, they empower application developers to take control of the network QoS," said Olivier Avaro CEO of Blacknut. "With 600+ premium titles playable from the cloud, Blacknut does not only require a solid cloud streaming stack, we also need an efficient network with the right bandwidth, latency and jitter parameters. Open Network APIs give us the opportunity to control the end-to-end user experience and deliver a consistent, stable, and superior gaming experience, even on the go".

Velchamy Sankarlingam, President of Product and Engineering at Zoom says: "We are excited to join forces with Ericsson and global mobile service providers at Mobile World Congress 2023 to demonstrate the seamless and high quality delivery for Zoom Meeting users on the go, taking advantage of Ericsson's QoD Open APIs to tap into the benefits of 5G mobile networks."

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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 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 383 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.

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About Ericsson:

Ericsson enables communications service providers and enterprises to capture the full value of connectivity. The company's portfolio spans the following business areas: Networks, Cloud Software and Services, Enterprise Wireless Solutions, Global Communications Platform, and Technologies and New Businesses. It is designed to help our customers go digital, increase efficiency and find new revenue streams. Ericsson's innovation investments have delivered the benefits of mobility and mobile broadband to billions of people globally. Ericsson stock is listed on Nasdaq Stockholm and on Nasdaq New York. www.ericsson.com

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