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□ □ **Nokia today announced it will expand its Self-Organizing Networks (SON) technology across 5G networks operated by one of the world’s leading telecommunications carriers, Orange. The deal will cover all of Orange’s markets, starting with France and Spain. Nokia continues to offer widespread support for 2G, 3G and 4G spanning more than one million Orange radio cells in Europe, Middle East and Africa.**

Nokia SON operates on top of any vendor’s radio technology, enabling Orange to optimize its live commercial networks regardless of who built them. As a key tool in the Nokia network management and optimization portfolio, SON offers Orange the power to automate radio network configuration and optimization processes, as well as improve network performance and efficiency to support the increasing demands of 5G.

Nokia SON lets Orange automate operations to realize the full potential of their existing 2G, 3G and 4G networks while also supporting the progressive deployment of 5G. Providing a centralized SON platform, it automates operations across multiple technologies, eliminating complexities from the multi-vendor and multi-layered networks naturally found across global operators. The extreme automation and artificial intelligence framework built into Nokia SON helps Orange affiliates provide better network quality with greater reliability and speed to their customers.

The deal is the latest example of Nokia's continued investment, capability and focus on developing technology that supports the practicality of 5G network upgrades. Utilizing Nokia SON's software development kit (SDK), Orange has been creating and sharing custom solutions to manage their unique network environments.

**Arnaud Vamparys, Senior VP Radio Networks and 5G at Orange, said:** "As a long-term partner, Nokia was a natural choice to help us automate our mobile networks in different geographies. The complexity of radio optimization is growing with 5G beamforming and Nokia's flexible, automated and multi-vendor platform enables us to maintain our exemplary network quality and customer satisfaction in the 5G era."

**Mark Atkinson, Head of RAN at Nokia, said:** "5G deployments and rollouts look much simpler on paper than they do in the real world. We appreciate and understand that our CSP customers have a technology stack that spans multiple vendors, which can lead to inefficiencies and complexity. Working with Orange and its global affiliates to optimize and simplify their multi-vendor networks is a challenge we relish and are proud to be part of."

### About Nokia

We create the critical networks and technologies to bring together the world's intelligence, across businesses, cities, supply chains and societies.

With our commitment to innovation and technology leadership, driven by the award-winning Nokia Bell Labs, we deliver networks at the limits of science across mobile, infrastructure, cloud, and enabling technologies.

Adhering to the highest standards of integrity and security, we help build the capabilities we need for a more productive, sustainable and inclusive world.

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