Ericsson Spectrum Sharing milestone connects continents, 5G live networks and 5G devices

- Data call connects Bern, Switzerland and Gold Coast, Australia using Ericsson Spectrum Sharing over live commercial 5G networks and commercial form factor 5G smartphones
- Milestone shows dynamic spectrum sharing supports 5G smartphones, enabling service providers to quickly launch 5G services over a wide area and expand 5G coverage
- Ericsson, together with industry leaders OPPO, Qualcomm Technologies, Swisscom and Telstra, move towards commercial dynamic spectrum sharing

The move toward commercial Ericsson (NASDAQ: ERIC) Spectrum Sharing continues to gather pace with a 5G smartphone from Chinese manufacturer OPPO now added to its 5G ecosystem and successfully tested with a transglobal 5G data call in live commercial 5G networks. Ecosystem industry leaders Qualcomm Technologies (a subsidiary of Qualcomm Inc.), Swisscom, and Telstra also played vital roles in the achievement, which underlined the value of dynamic spectrum sharing to the industry.

The November 29 data-call-first connected Bern, Switzerland and Gold Coast, Australia, with Ericsson Spectrum Sharing deployed in Swisscom and Telstra's commercial 5G networks at the respective sites. The call was achieved using spectrum sharing on a 3GPP Frequency Division Duplex (FDD) band. Pre-commercial 5G smartphones from OPPO, powered by the Qualcomm® Snapdragon™ X55 5G Modem-RF System, were used on both ends of the call. OPPO is the first 5G device manufacturer to implement Ericsson Spectrum Sharing in its smartphones.

The data call success validates the support for Ericsson Spectrum Sharing across its 5G ecosystem, from chipsets to 5G devices, and communication service providers' network products and solutions. The strengthening of the ecosystem is also a step towards the commercial introduction of Ericsson Spectrum Sharing.

**Ericsson Spectrum Sharing**, part of **Ericsson Radio System**, is a complete dynamic spectrum sharing solution based on the 3GPP standard with additional intelligent scheduler algorithms. This allows the deployment of both 4G and 5G in the same band through a software upgrade, and dynamically allocates spectrum based on user demand. The switch between 4G and 5G carriers happens within milliseconds, minimizing spectrum wastage and enabling best user performance.
This unique Ericsson innovation will enable service providers to quickly launch 5G services over a wide area and successively expand 5G coverage in a tailored way by re-using existing network infrastructure and taking advantage of previous spectrum investments. Communication service providers can therefore provide 5G commercial services and move towards standalone (SA) 5G without the need for blanket costly re-investment.

Fredrik Jejdling, Executive Vice President and Head of Networks, Ericsson, says: “This industry-first highlights the value that Ericsson Spectrum Sharing has to communication service providers as they roll-out and ramp-up 5G. With this milestone achieved with our 5G ecosystem partners OPPO, Qualcomm Technologies, and customers Swisscom and Telstra, we’ve shown that our unique solution will not only enable service providers to re-use their 4G spectrum assets for 5G but that it will also support all 5G devices. It is the most economically feasible way to launch 5G on existing bands, enabling nationwide 5G coverage and helping make 5G accessible around the world.”

Andy Wu, Vice President and President of Software Engineering Business Unit, OPPO, says: “As a leading global tech company, OPPO proactively works to accelerate large-scale commercialization of 5G. Our cooperation with Ericsson, Qualcomm, Swisscom and Telstra to facilitate the commercial use of Dynamic Spectrum Sharing (DSS) technology is part of the in-depth collaborations among the five companies in the 5G era. The 5G smartphones that support this technology will provide more stable, seamless, and speedy connections, and hence a better user experience in the future.”

Enrico Salvatori, Senior Vice President and President, Qualcomm EMEA, says: “Coverage is the next 5G killer app and this is another significant milestone and step towards ubiquitous 5G coverage. Dynamic spectrum sharing will bring key benefits to operators and consumers globally and our second-generation Snapdragon X55 5G Modem RF System is a comprehensive solution designed to allow OEMs to rapidly develop global 5G multimode devices for a new era of connected experiences.”

Christoph Aeschlimann, Member of the Executive Board and Head of IT, Network & Infrastructure, Swisscom, says: “We are very excited to reach yet another 5G milestone with our partners. The first international end-to-end Ericsson-Dynamic Spectrum Sharing call is the next step in our 5G journey. It was only possible with a well experienced team of provider, vendor, chipset and handset maker with a proven 5G track record.”

Channa Seneviratne, Network and Engineering Infrastructure Executive, Telstra, says: “This latest collaboration of industry partners is paving the way for the faster rollout of 5G by using existing spectrum holdings to serve the needs of 4G and 5G customers in the same location at the same time. This collective implementation is yet another innovative example of how 5G technology continues to advance in a rapid fashion, and at Telstra we are pleased to bring that latest technology to Australians first.”
Ericsson has achieved multiple 5G landmarks with all the partners involved in the latest achievement.

Swisscom, with Ericsson as its sole 5G vendor, was the first communications service provider in Europe to launch commercial 5G services in April 2019 on the 3.6 GHz band. Swisscom is targeting 90 percent population coverage by the end of 2019.

Telstra, with Ericsson as a key network partner, went live with 5G commercial services and four 5G devices in May 2019 on the 3.6 GHz band. Telstra now offers six 5G devices, and has some 5G sites in 25 metro and regional cities around Australia, with another 10 cities to be added by 30 June 2020.

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- Ericsson and Swisscom in European commercial 5G first
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- Ericsson and Telstra complete Australia’s first 5G end-to-end standalone call
- Ericsson and Telstra announce 5G partnership
- Ericsson 5G is live in Switzerland

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- Ericsson Radio System
- Ericsson Core network
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