

# BT uses ADVA synchronization solution in 5G strategy

Precise and resilient PRTC solution built on modular 10Gbit/s grandmaster clocks enables smooth mobile migration

**London, UK. March 25, 2019.** ADVA (FSE: ADV) today announced that BT is leveraging its high-capacity, future-proof Oscilloquartz synchronization technology to bring 4G coverage to previously underserved areas and begin the rollout of 5G services across the UK. Prior to this deployment, BT's timing network was based purely on frequency synchronization. With the new solution, it will now distribute stable and accurate phase and time-of-day information, enabling BT to dramatically improve the use of its spectrum. The new synchronization network is built on the [OSA 5430](#) and [OSA 5440](#) and integrated with ADVA's network management solution. The technology provides the sub-microsecond accuracy required for next-generation mobile applications together with hardware redundancy for unbeatable resilience.

"Adding robust, highly accurate phase and time synchronization unleashes the full potential of our network. Not only does it empower us to deliver the services our customers demand today but it's also the key to our 5G aspirations," said Neil McCrae, chief architect, BT Group. "The OSA 5430 and OSA 5440 offer the robustness of hardware redundancy together with the scale we require to meet tomorrow's needs. Their modular design also means that our network is ready to support future timing technologies without further upgrades. Our close partnership with ADVA's team and their Oscilloquartz timing experts is another crucial factor. It's been clear from day one that they understood our core requirement for a flexible architecture with superb levels of precision and protection."

Deployed nationwide in 10 core time base sites, 106 metro time sites and close to 1,000 Tier 1 sites at the network edge, BT's new synchronization solution answers the demands of sophisticated LTE Advanced applications and enables a smooth transition to 5G connectivity. ADVA's modular grandmaster clocks support PTP, NTP and SyncE over multiple 10Gbit/s interfaces. They provide unprecedented levels of accuracy and offer phenomenal holdover performance in case of GNSS outages, meeting ITU-T G.8272 primary reference time clock (PRTC) requirements. Comprehensively managed by [ADVA's network management solution](#), the technology is also ready to combine with its advanced cesium clocks for enhanced PRTC levels of stability, accuracy and reliability even without GNSS.

"Phase synchronization has been a long-term development in international standards, and ADVA has actively contributed to that process," commented Mike Gilson, standards contributor and technical specialist, timing and synchronization, BT Group. "By incorporating these capabilities in a flexible, high-performance solution, ADVA has created a synchronization network ready for the demands of 5G connectivity. We've been very pleased with

the way ADVA's team have worked closely with us to fulfill not only our initial requirements but also provide a foundation for the future."

"Bringing these levels of accuracy and resilience to BT's mission-critical synchronization network is a real milestone. Achieving phase synchronization is a major challenge but with our uniquely flexible, high-capacity technology and the dedication and experience of our team, we've been able to handle all of that complexity on BT's behalf and provide the ideal solution for its needs and ambitions," said Sarah Mendham, senior director, sales, ADVA. "It's all about meeting urgent 4G requirements while also laying the groundwork for BT's future ambitions," added Gil Biran, general manager, Oscilloquartz. "By providing the tools to offer 5G services and deliver valuable time-as-a-service offerings, we're enabling BT to continue expanding its horizons. This network opens the door to the IoT services of the future and delivers a significant boost to the UK's digital economy."

Watch this video for more information on the OSA 5430: <https://youtu.be/iHkMYbmE9Vw>.

A video on the OSA 5440 is also available here: <https://youtu.be/iQeOMrqddZo>.

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### About ADVA

ADVA is a company founded on innovation and focused on helping our customers succeed. Our technology forms the building blocks of a shared digital future and empowers networks across the globe. We're continually developing breakthrough hardware and software that leads the networking industry and creates new business opportunities. It's these open connectivity solutions that enable our customers to deliver the cloud and mobile services that are vital to today's society and for imagining new tomorrows. Together, we're building a truly connected and sustainable future. For more information on how we can help you, please visit us at: [www.advaoptical.com](http://www.advaoptical.com).

### About Oscilloquartz

Oscilloquartz is a pioneer in time and frequency synchronization. We design, manufacture and deploy end-to-end synchronization systems that ensure the delivery and assurance of highly precise timing information over next-generation packet and legacy networks. As an ADVA company, we're creating new opportunities for tomorrow's networks. For more information, please visit us at: [www.oscilloquartz.com](http://www.oscilloquartz.com).

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