

COVID-19: the telecoms industry should mitigate the associated risks to avoid a slowdown in 5G activities

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On 11 March 2020, the World Health Organisation (WHO) confirmed COVID-19's status as a pandemic following a global increase in the number of infections. The crisis continues to be hugely disruptive to the global economy and, with the cancellation of this year's Mobile World Congress (MWC),¹ the telecoms industry is not immune from these effects. 2020 is set to be an important year for the industry, with several high-profile milestones expected to be passed, among these the release of the latest 3GPP 5G specifications.

This comment examines how COVID-19 will impact mobile network operators' (MNOs') and telecoms vendors' 5G activities and explores ways in which this disruption can be mitigated to enable innovation to continue.

COVID-19 is likely to delay the 3GPP Release 16 and will slow the progress of full deployments for 5G SA use cases

Following a delay of 3 months, the 3GPP standard body was set to deliver Release 16 – the much-anticipated second phase of 5G specifications – in June 2020. This is an important milestone in the 5G development cycle because it builds significantly on Release 15, which was finalised at the end of 2017. More specifically, Release 16 builds on the 5G standalone (SA) core with the ultra-reliable-low latency communications (URLLC) use case.

In early March 2020, the chairs of the 3GPP Technical Specification Group (TSG) announced that they had cancelled all face-to-face Working Group meetings scheduled for May 2020. The TSG chairs also announced that they were considering the viability of holding e-meetings as an alternative, however, this presents numerous challenges, given that the number of delegates that attend these meetings is in the thousands and negotiations are required to reach agreements. Therefore, it may be impossible for any real progress to be made without face-to-face meetings.

Ultimately, this may impact the delivery date of Release 16. Operators can deploy SA with Release 15, but many had planned to deploy non-eMBB use cases by the end of 2020. Several Chinese MNOs are in this position, having originally announced launches of 5G SA architecture launch using Release 16 by 4Q 2020.

China is aiming to continue its 5G deployments, despite the challenges presented by COVID-19

China has shown it determination to become a 5G leader by bringing its timetable for a 5G commercial launch forward to 2019. In June 2019, the Chinese regulator MIIT, handed spectrum to the three major MNOs, China

¹ For further detail on this subject, see Analysys Mason's NEPs made no mention of open RAN at 'no-MWC' events, which is a missed opportunity in a fast-moving market.





Mobile, China Telecom and China Unicom, in a beauty contest where the MNOs did not have to bid for the bands in a spectrum auction process. MIIT also announced that 130 000 5G base stations had been deployed by the end of 2019. Despite ongoing COVID-19 challenges, the Chinese government has prioritised 5G deployments. Although many companies in China have told employees to stay at home and extend their Lunar New Year holiday, the three MNOs are pursuing site deployments with renewed vigour. They aim to deploy over 600 000 sites by end of 2020.

COVID-19 will disrupt 5G commercial launches in several countries

There are other important events that will shape telecoms in 2020 more generally, as well as MNOs' 5G marketing and launch activities more specifically, including the Tokyo Summer Olympics and new 5G spectrum auctions, such as those in France, the Netherlands, Portugal UK and the USA.

The Tokyo Olympics will serve as a significant marketing platform, not just for MNOs in Japan, but other operators worldwide. MNOs in Japan have, for years, promised to use the Tokyo Summer Olympics 2020 as an important opportunity to showcase new 5G use cases beyond just enhanced-mobile broadband (eMBB), such as 8K virtual reality (VR) and other smart-city applications. The new entrant Rakuten Mobile had also announced that its 5G launch will happen in June.

MNOs in Japan may not get their big-bang moment though, given some comments from an International Olympic Committee executive who, in early March, suggested that although the total cancellation of the upcoming Olympic event was not an option, it may be suspended for a prolonged period of up to 2 years.

The COVID-19 pandemic is causing a significant reduction in travel and in the number of in-person meetings, which will likely impact spectrum auctions in the countries mentioned, and it is likely to delay commercial 5G launches. The USA is among the countries that most-needs the upcoming CBRS spectrum auction (set for June) and the C-band auction (set for December) to go ahead. This is because neither AT&T nor Verizon have C-band spectrum (unlike their competitor, the New T-Mobile company), which is necessary to deliver the macro-level coverage that C-band provides.

Vendors should continue development activities while regulators should ensure their online platforms are ready for auctions

Many fast-moving MNOs had announced their plans to launch 5G SA architecture by 4Q 2020 and are working with their vendor partners to trial different solutions. It is likely that these timelines will be disrupted, particularly if the 3GPP Release 16 is delayed. Nevertheless, vendors have been part of the Release 16 journey from the beginning and are aware of the alternatives under discussion.

Most of the ongoing development activities are software-based, which will require network software upgrades rather than time-consuming hardware changes, but this means that incorporating the final adjustments into the code should not require a major overhaul. Vendors should therefore continue to develop their products and incorporate the final adjustments as and when they are made available. MNOs should also continue their trial activities and prepare for when Release 16 is finalised and delivered by their vendor partners.

In order to reduce health risks, avoid spectrum auction delays, and ensure that MNOs can launch 5G services as soon as possible, regulators should ensure that their online platforms are up-to-date and capable of handling the auction process without the need for physical presence.

