MWC22: more vendors emphasised full private 5G network solutions

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Michele Mackenzie

The private 5G network opportunity was a central theme at Mobile World Congress 2022 (MWC22). Vendors are developing full solutions that are based on both their own assets and those of partners. Challenger vendors are building channels to ensure that their products form part of a full solution. This activity has partly been accelerated by AWS's private 5G launch in November 2021. The common focus of all vendors at MWC22 was to deliver private networks that are simple to adopt, and to expand the market by doing so.

The focus was on execution rather than announcing new products

The private networks market has evolved significantly since MWC19. The focus at the event 3 years ago was on how private LTE networks were paving the way for private 5G networks. At that time, only a handful of vendors (including Ericsson and Nokia) and a few operators (such as Telefónica and Vodafone) were showcasing their capabilities. At the event in 2022, private 5G networks took centre stage; most vendors and operators have a private 5G narrative, if not a fully fledged service offer. Many announcements (such as those by Amdocs, Cisco and HPE) preceded the show, and vendors instead used MWC to promote their offers and provide details about how they are delivering their strategies.

AWS's entry into the private 5G market in late 2021 has certainly motivated other vendors to move more quickly to provide simpler, packaged solutions with pre-configured assets (both their own and partners'). MWC emphasised the high levels of activity by vendors to partner and bring to market full solutions that are easy to deploy and scale.

Suppliers are expanding both their capabilities and their channels to reach a broader audience

Figure 1 provides details of some of the different types of suppliers in the private networks space and outlines what they are doing to broaden the functionality and reach of their private networks offers.

Figure 1: Overview of the private network strategies of various supplier types

Supplier type	Examples	Solution strategy	Channel strategy
Network equipment providers	Ericsson, Huawei and Nokia	Deliver multiple components of the value chain and build capabilities internally or through partnerships and acquisitions	Operators, systems integrators and direct to enterprise
Challenger vendors	Athonet and Celona	Deliver network and platform components that are crafted for enterprise	Enterprise networking vendors, systems integrators and operators

Supplier type	Examples	Solution strategy	Channel strategy
Enterprise networking vendors	Cisco and HPE	Combine solutions with Wi-Fi and other networking solutions, and join up hardware and software platform components	Operators, systems integrators and direct to enterprise
Public cloud providers	AWS and Microsoft Azure	Provide the compute platform on which the network will operate and combine private networks with edge and public cloud computing capabilities	Operators and direct to enterprise
Operators	Telefónica and Vodafone	Work towards hybrid model architecture using public network assets and deliver IoT services on top of the network	Direct to enterprise and vendor partners

Source: Analysys Mason, 2022

The key message from the **network equipment providers** at MWC22 was that they are building on their early success to target new channels and to deliver new deployment models and new capabilities.

- Nokia is expanding its indirect channel partnerships with systems integrators and IT players such as Kyndryl and Tech Mahindra.

- Ericsson acquired Quortus, a packet core technology vendor, in late 2021. This acquisition received little attention. Quortus's EPC and technology platform is tailored to enterprise requirements rather than those of public networks.

- Huawei emphasised how its success in the Chinese market can help it in Europe. In China, it works with operators that deliver hybrid private networks based on public and private network assets.

Challenger vendors are focused on delivering full solutions. They are forging partnerships to ensure that their assets form part of larger vendors' packaged offers, but are also looking at new channels to market. For example, Celona has already been working with HPE and NTT to take its solution to market as part of a packaged offer, and it has also announced a partnership with Verizon. Verizon's new offer with Celona will target the mid-market and will provide a pre-packaged cloud-based solution. Challenger vendors are embedding their solutions as part of a larger vendor's or operator's offer.

The large **enterprise networking vendors** have honed their private networks solutions to play to their existing strengths in the enterprise market. Cisco and HPE both announced private 5G solutions before MWC and both emphasise the combination of private 5G and Wi-Fi networks. They see private 5G as an extension of enterprise networking, and as an add on to Wi-Fi. They are well-placed to do this, given their installed customer base.

Public cloud providers promoted their compute capabilities as the foundation for private 5G and are positioning private 5G as an extension of cloud services. They have plenty of other strengths in providing the infrastructure and platform capabilities to support the applications on top of the network, but providing the compute foundation was central to their message.

Operators are preparing to deliver the next stage of their private 5G strategies and are considering using a hybrid model (that is, combining elements of public and private networks). Operators can potentially deliver the network components for private 5G networks or complementary network solutions (such as Wi-Fi) or both. Their positioning is a strength in some ways because they are not committed to one vision of how private 5G

will play out, but it is also possibly a weakness if it means that their messaging becomes diluted by trying to offer too much.

Identifying key differentiators at this stage of market development is challenging. However, each group of suppliers is playing to its strengths and is working on its differentiators. Ericsson is developing an interesting narrative through its Cradlepoint acquisition and Nokia's MXIE stands out for its delivery of mission-critical applications. Operators have an opportunity to differentiate using hybrid architecture models. However, these groups of players must offer full solutions that are easier, cheaper and faster to deploy than previous iterations before they can fully develop their differentiators. Only by doing this will any of them be able to expand the market and gain scale.