

Private Mobile Networks

4Q23 Report Highlights



Demand for private mobile networks based on 4G LTE and 5G technologies is being driven by the spiralling data, security, digitisation and mobility needs of enterprises and governments. Organisations of all types are combining connected systems with big data and analytics to transform operations, increase automation and efficiency or deliver new services. Wireless networking with LTE or 5G enables these transformations even in the most dynamic, remote or highly secure environments, offering the scale benefits of a technology that has already been deployed worldwide.

The arrival of LTE-Advanced systems delivered a step change in network capacity, throughput and deterministic latency. 5G networks will bring increased densities of users and devices, even greater capacity, and further improvements to latency that enable use of mobile technology for time-critical applications.

Private mobile networks are often part of a broader digital transformation programme that includes cloud networking, artificial intelligence, machine learning and data analytics. More and more applications will use these capabilities combined with mobile connectivity.

This is a snapshot of GSA's Private Mobile Networks report; visit gsacom.com or the full version and accompanying database.

Market Status: Key Messages in 4Q23

In 2023, the number of new private network customers categorised by GSA surpassed those of 2022 and 2021. To 4Q23, we have identified 1,384 customers deploying private mobile networks, located in 77 countries at the end of January 2024, up one from 3Q23. These networks are mainly in the developed world so far, with the US, Germany, China, UK and Japan having the most references.

Figure 1 shows customer announcements grew at a compound annual growth rate of 91% from 2017 to 2023.

Manufacturing saw the highest growth of the top 15 sectors from 3Q23, up 7%. Sports, media and events (temporary) rose the most, by over 10%, but from a smaller base. Manufacturing, education and mining remain the top three sectors for customer references.

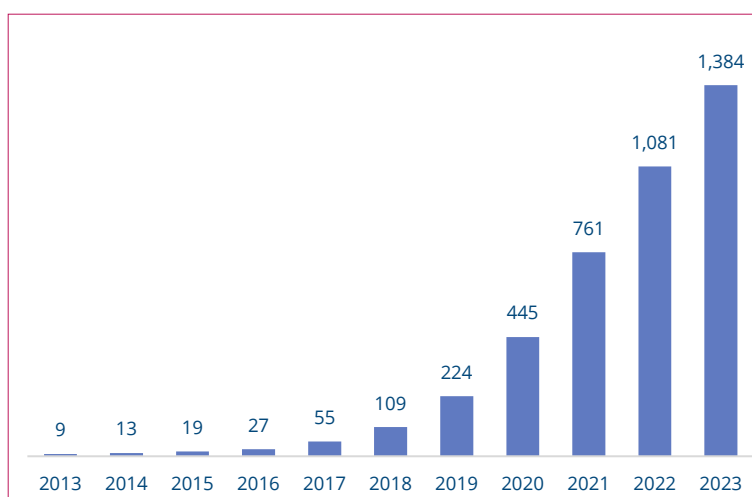
Although 5G deployments make up a large number of references, this number skews toward long-term trials and deployments in educational and test-bed or validation facilities, with a limited number running real operation in industrial situations.

The data gives an indication of the number of customers deploying private wireless networks, but it does not provide a view of the market value of each segment nor a total number of networks deployed. For example, in market segments such as utilities or public protection and disaster relief, a customer deployment could represent a nationwide network deployment, equivalent in value to many hundreds or potentially thousands of campus-style private networks.

GSA counts customer references as unique organisations or government entities deploying one or more 3GPP-based 4G LTE or 5G networks in a given country that are worth more than €100,000. On average, 68% of references in our database are non-public and unique to the database, submitted by members of the GSA Private Mobile Networks Special Interest Group (SIG). The SIG now has nine members: Nokia, Ericsson, Huawei, Mavenir, Airspan, Keysight Technologies, OneLayer and PrivateLTEand5G.com.

A wide range of market participants are engaged in developing and delivering solutions for private mobile networks. With so much opportunity, and so many regulators planning initiatives to make spectrum available for LTE and 5G private usage, we expect significant market developments over the next couple of years.

Figure 1. Private mobile network customer references of over €100,000



ABOUT GSA

GSA is the voice of the global mobile ecosystem and has been representing mobile suppliers since 1998.

Mobile industry research is the backbone of GSA activity and covers topics from devices, chipsets and technology, to networks, features and spectrum.

The GSA research team is constantly following market dynamics and activity to ensure the latest data is available to GSA users via the GSA website.

Data is updated monthly and quarterly and can be referenced by users who register for free on the GSA website.

GSA reports are based on extensive data contained in the GSA GAMBoD databases, which is a resource available to GSA members and associates. Companies and policy makers can subscribe, as a GSA associate, to gain access to GSA databases and member reports for additional insights into the source data behind reports, which can be used for their own research purposes.

Discounted annual subscription are available to regulators, government agencies and licensed mobile operators.

Please email info@gsacom.com for more information.



P.O. Box 6092
Sheffield
S6 9HF
UK

info@gsacom.com

<https://gsacom.com>

© Global mobile Suppliers Association. 2024

