

# Private Mobile Networks

Quarterly 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](https://gsacom.com) or the full version and accompanying database.

## Market Status: Key Messages in 4Q22

Total private mobile network customer references for 2022 reached 1,077, up from 756 in 2021 (see Figure 1). They rose by 122 from 955 in 3Q22. 2022 set a record for new customers, with 321 customer references announced, up from 312 in 2021. This figure does not represent total network deployments or revenue.

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.

In many cases, 2022 was a year of even more substantial growth as many customers began to transition from single sites to multisite deployments, and some multimillion contracts were won.

Despite a tough economic forecast for 2023, private mobile networks are expected to remain strong because of their cost efficiency and the importance of modernising and optimising communications infrastructure in critical industries.

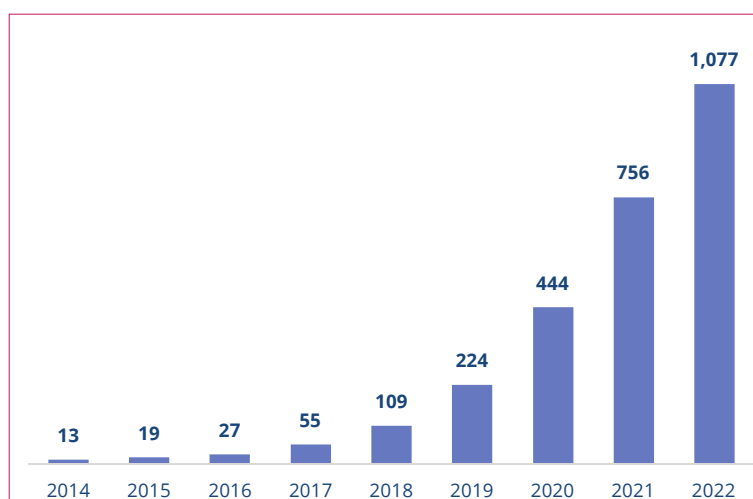
Over 64% of references included in GSA's database are non-public and unique to the database, submitted by members of the GSA Private Mobile Networks Special Interest Group (SIG). The SIG now has eight members: Nokia, Ericsson, Huawei, Mavenir, Airspan, Keysight Technologies and PrivateLTEand5G.com.

There are 74 countries around the world that now have private mobile networks — an addition of two since 3Q22.

The three fastest-growing industry sectors were device testing and lab-as-a-service, manufacturing and public venues. A large number of device testing and lab-as-a-service references were added in 4Q22 following the discovery of a new data source. Manufacturing, education and mining remain the three largest sectors for customer references, but this does not represent the actual size and scale of deployments, which vary by user type.

There is a strong, positive correlation between the number of private mobile network references and countries with dedicated spectrum. Private mobile networks are mainly in the developed world, concentrated in the US, Germany, China, UK and Japan.

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.

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