

Summary:

Private Mobile Networks

February 2026



Introduction

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

In this report, a private mobile network is defined as a 3GPP-based 4G LTE or 5G network intended for the sole use of private entities, such as enterprises, industries and governments. It can use only physical elements, RAN or Core, or a combination of physical and virtual elements, but must include a dedicated network core. The definition also covers MulteFire or Future Railway Mobile Communication System. Networks must use spectrum defined in 3GPP and generally serve business- or mission-critical needs.

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GSA members get the full report and the latest GAMBoD data, enabling them to track key metrics including:

- ▶ Number of organisations deploying LTE and 5G private networks worldwide, by country and sector
- ▶ Spectrum allocations dedicated to private enterprise networks across low-, mid- and high-bands
- ▶ Growth in customer references by contract value, highlighting both large deployments and emerging smaller projects
- ▶ Public and confidential references, providing visibility into activity not disclosed in the public domain
- ▶ Details of identified private mobile network customers

Contact info@gsacom.com for access.



Market Status: Key Messages in 4Q25

- 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. From May 2024, we also count customer references that are worth between €50,000 and €100,000, some of which may include trials. Data for references worth between €50,000 and €100,000 is relevant only from 2024
- The total number of GSA customer references to 4Q25 is 1,953, deploying at least one network. A further 170 references are worth between €50,000 and €100,000. Net additions worth over €100,000 in the quarter were 46 customer references, up from 1,907 in 3Q25. Net additions worth between €50,000 and €100,000 were 11 references
- Growth of new customers is moderating in some regions and industries, but this should not be interpreted as a decline in market investment. The data does not reflect the scale, value or expansion of existing deployments
- Market momentum is increasingly driven by existing customers scaling networks across multiple sites, expanding coverage and adding new uses and devices. In concentrated industries such as mining and ports, the limited pool of potential customers naturally constrains additions of new customers, even as deployment depth increases and proof-of-concept deployments transition into full-scale roll-outs. GSA is exploring new methodologies to capture this shift in market maturity
- Slowing growth could also be caused by short-term headwinds, such as investment decisions being influenced by external factors like US tariffs, component shortages (notably DRAM), supply chain constraints and broader macroeconomic uncertainty
- From 3Q25, the database includes additional country detail, with 85% of references now including an associated country, rather than region. This means that 1,642 references now offer country detail. This has enabled GSA to add spectrum detail to 695 existing references. Please note that this is based on the assumption that most of these references relate to the use of dedicated enterprise spectrum where the country has been identified
- There are now 84 countries identified around the world that have at least one private mobile network. Of the top 10 reporting countries, Canada grew by 8% from 3Q25, followed by Brazil, which grew by 5%
- On average, 75% of references included in this database are non-public and unique to this database, submitted by members of the GSA Private Mobile Networks Special Interest Group (SIG). This number can be higher for certain industries, with more than 80% of sectors such as military and defence, maritime and power plants not visible in the public domain
- The SIG now represents 17 companies, including 450Alliance, 5G-ACIA, AiLink, Airspan, Celona, Dell, Ericsson, GSMA, JMA Wireless, Keysight Technologies, Mavenir, Monogoto, Nokia, OnGo Alliance, OneLayer, PrivateLTEand5G.com and TCCA
- Defence and peacekeeping saw the most additions, with six references in 4Q25. It was followed by power utilities, device testing and lab-as-a-service and smart cities, all with five additions. Manufacturing, education and academic research, and mining remain the top three sectors for references, but this does not represent the actual size and scale of deployments, which vary by user type
- There is typically a strong, positive correlation between the number of references and countries with dedicated spectrum. Private mobile networks are mainly in the high-income and upper-middle-income world, with the United States, Germany, the United Kingdom, China and Japan having the most references. It is sometimes reported that China has over 40,000 networks, but we believe a large portion of those networks use the public network and therefore do not meet our definition
- Members can access to an annex containing full information of worldwide allocation of dedicated private network spectrum



Players and Market Statistics

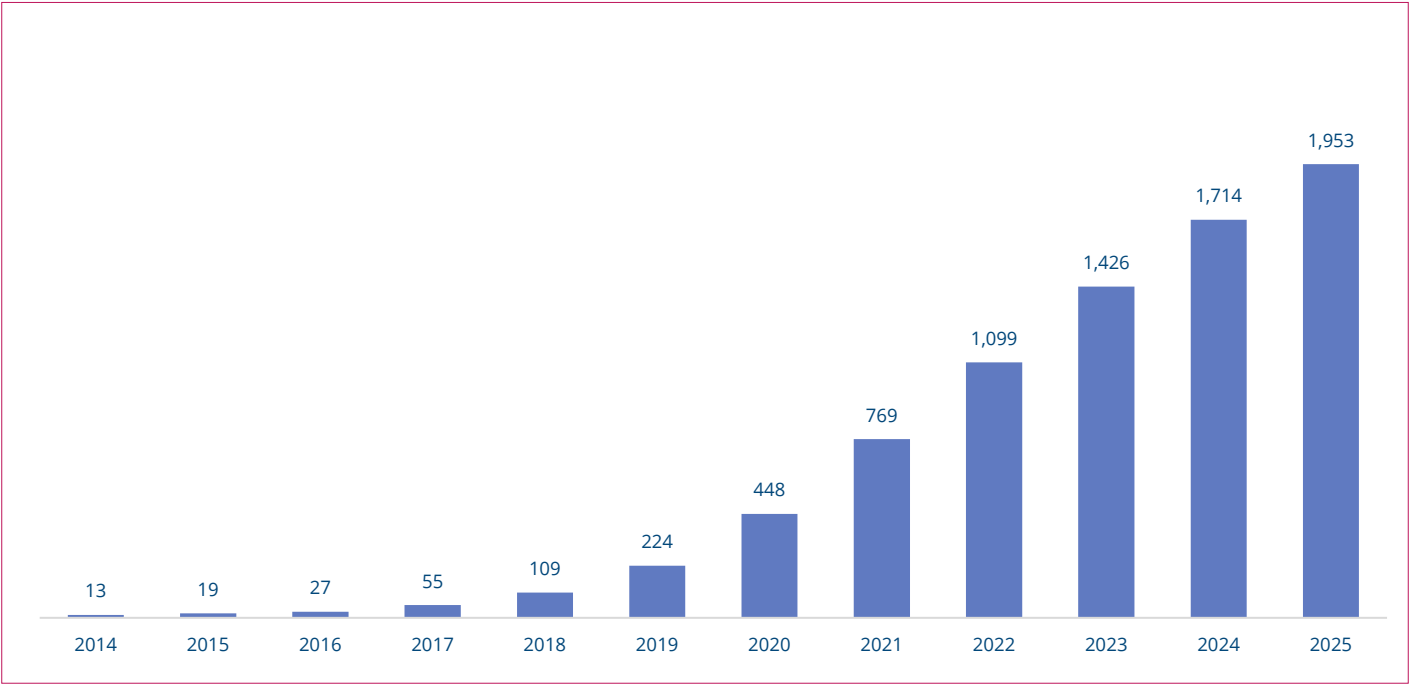
The private mobile network market is home to a wide range of service providers, including equipment and technology suppliers, mobile network operators, system integrators and the private network end users, who sometimes take responsibility for installing or operating their own infrastructure.

GSA has counted over 50 equipment vendors that have been involved in the supply of equipment for private mobile networks based on LTE or 5G. Commercial availability of pre-integrated solutions from several equipment providers increased in 2021; these solutions aim to simplify adoption of private networks, which should add market impetus. In addition, GSA has identified more than 66 telecom network operators (counting national operators within the same group as distinct entities) involved with private mobile network projects. Many other types of player, such as systems integrators, consulting firms and software core vendors are also involved to varying degrees with private mobile network projects.

Also, global-scale cloud providers, often referred to as hyperscalers, are offering private mobile network solutions, sometimes in partnership with mobile operators or network suppliers. Their ability to exploit mass-scale cloud infrastructure and their existing presence in commercial enterprises is likely to drive additional growth in the private mobile network market.

Our latest data shows that in the fourth quarter of 2025, there were 1,953 total private network customers, of which 46 were new additions. This figure is a slight decrease from 3Q25, when 61 references were added. It should be noted that slowdown in the number of announcements is not representative of slowing growth in market activity — rather, existing customers are continuing to scale trials to multisite deployments, and announcements will greatly vary in the size of contract value. Customer announcements grew at a compound annual growth rate of 51% from 2017 to 2025 (see Figure 1).

Figure 1. Private mobile network customer references of more than €100,000, by year announced

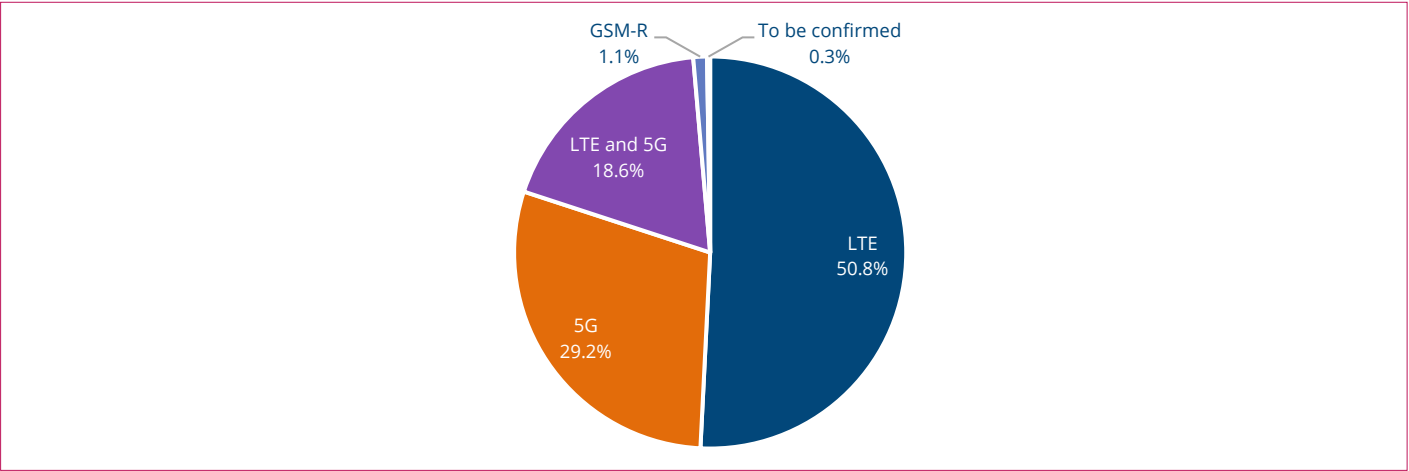




GSA categorised 1,953 customers deploying private mobile networks by the end of 2025, which were in 84 countries and territories. Where organisations have subsidiaries in different countries or territories deploying their own networks, each subsidiary is counted separately.

LTE is used in 1,355 of the catalogued customers deploying private mobile networks for which GSA has data; 5G is being deployed in 934, or 48%, of these customers (see Figure 2). Interestingly, this represented an incremental increase in the proportion of customers with an LTE-only network in 4Q25 from 50.7% to 50.8%.

Figure 2. Private mobile network customers by technology used (base: 1,953 catalogued customers deploying private wireless networks with revenue greater than €100,000)



Note that these numbers represent the technology used in the initial contract win and some may have since upgraded to 5G or added 5G since deployment — but this is not yet a common occurrence.

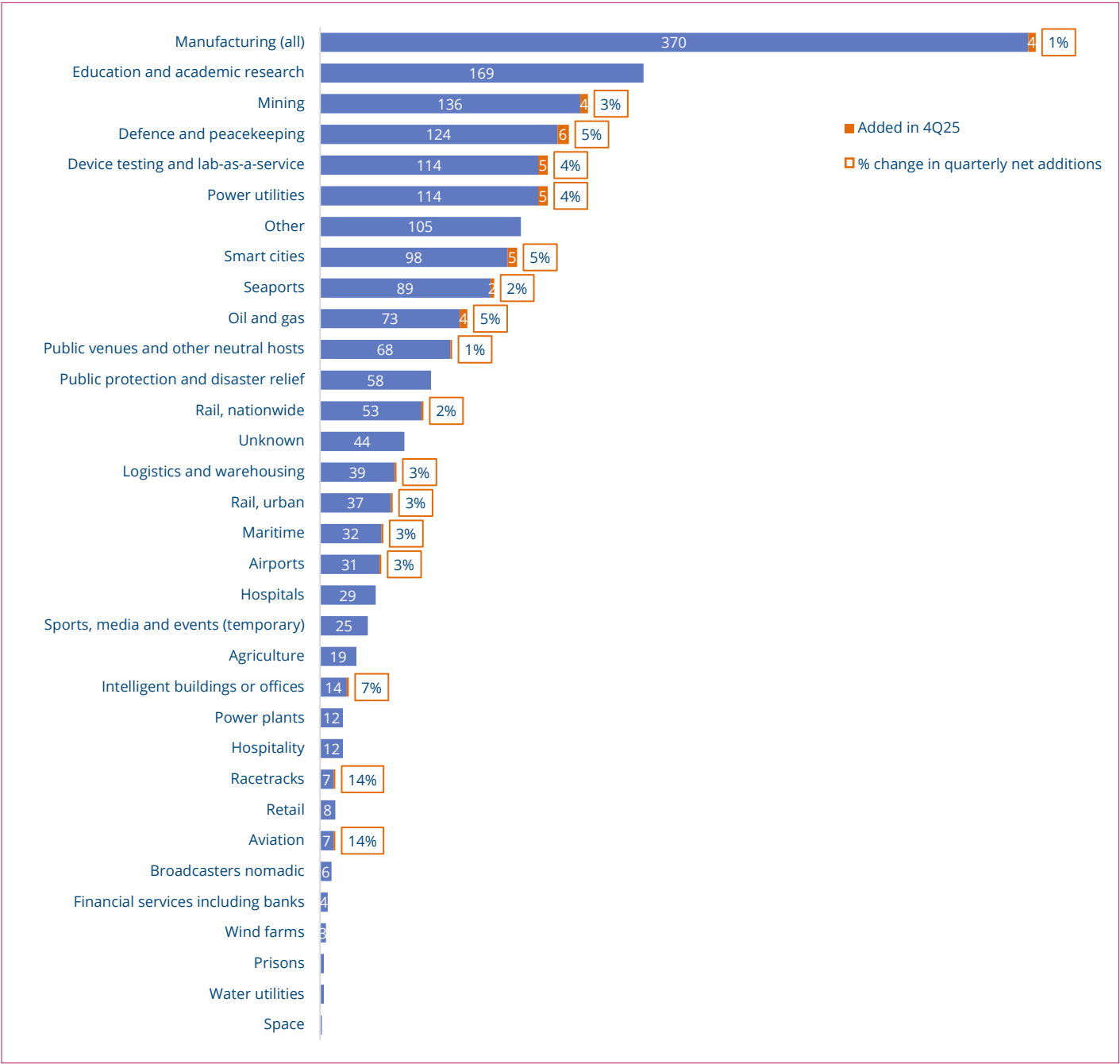
5G-only remains a smaller portion but grew from 28.5% to 29.2% in 3Q25. LTE and 5G references represent 18.7%; this pairing is used either where a customer has deployed both LTE and 5G radios on the same site or has multiple sites with a combination of LTE and 5G usage.

Although the proportion of 5G deployments makes up a significant number of references, it must be noted that this number skews toward long-term trials and deployments in educational and test-bed or validation facilities, with a limited number running real operations in industrial situations.



As we build our database, GSA's data indicates that the manufacturing sector is a strong adopter of private mobile networks in terms of the number of customer deployments, with 374 identified companies. The education and academic research sector is the second-most-common group, with 169 customers deploying private networks, followed by mining companies (140) and defence and peacekeeping (130). Device testing and lab-as-a-service (119) and power utility companies (119) round out the top five. This is shown in Figure 3.

Figure 3. Number of identified customers deploying private mobile networks in trials and commercially, by sector (base: 1,953 organisations deploying private wireless networks with revenue greater than €100,000)



ABOUT GSA

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

GSA Research

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 GAMBoD Database

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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