Program VGR-5G

Technical- and Functional target state

Updated 25 September 2026

Region Västra Götaland (VGR) is establishing a private 5G network to provide indoor coverage in our premises. These are located at more than 500 sites across Västra Götaland, with a total floor area of approximately 2 million square metres.

The aim is to extend the existing network infrastructure with mobile technology by establishing a radio access network (RAN) and our own core network. All functions currently communicating over VGR:s network may be considered, including data networking, telephony, IoT and medical technology.

Collaboration with existing commercial operators will provide wider radio coverage throughout VGR:s area of operations.

VGR is establishing a 5G standalone (SA) radio network combined with a core network supporting both 4G and 5G SA. Initially, this will enable interconnection with commercial operators' networks through the 4G component.

Availability, resilience and control over our own infrastructure are guiding principles for VGR:s deployment. The mobile radio networks at a large proportion of the premises must therefore be designed for redundancy and resilience. This will allow local calling and alarm functions to remain operational at sites such as major hospitals during a crisis or a heightened state of alert, or if connectivity to central functions is disrupted or lost entirely.

VGR is registered with the Swedish Post and Telecom Authority (PTS), has its own PLMN ID (240-900) and has obtained its own spectrum

licences for the relevant premises.

All VGR partners, suppliers and manufacturers are expected to support these arrangements. The licences are published in the PTS register of official documents.

The number of handheld devices is estimated at one per employee, corresponding to just under 60,000 devices. In addition, there will be other equipment, the volume of which is currently unknown. In the longer term, this is likely to outnumber handheld devices many times over as medical equipment and RedCap (Reduced Capability) IoT devices begin to be used on the network.

Additional functionality will be implemented on top of the underlying technical platform. Examples include:

A: Mission-critical functionality with priority classes, requiring support from all components and suppliers involved.

B: Indoor positioning with at least cell-level accuracy.

The products deployed by VGR must be secure, flexible, future-proof and support a high degree of automation. They must also be capable of integration with VGR:s central access control and authorisation functions, as well as other systems for security, visibility (monitoring), log and alarm management, and centralised operations.

Suppliers must have an established support organisation in Sweden covering installation, operation and ongoing management.