Terrestrial Wireless

Band n53 & XCOM RAN Technology





Connect Smarter with Globalstar Terrestrial Wireless

High-value spectrum for 5G private and mobile networks featuring XCOM RAN technology.

Globalstar's terrestrial spectrum, Band n53, offers carriers, cable companies, and system integrators a versatile, fully licensed channel with a growing ecosystem to improve customer wireless connectivity, while Globalstar's XCOM RAN technology offers significant capacity gains in dense wireless deployments.

Globalstar's Band n53 is a rare swath of mid-band spectrum, available to partners for the deployment of private networks requiring strong security, reliable performance and high capacity. For MNOs/MVNOs seeking to add true 5G service to their networks, Band n53 offers interference-free capacity for small-cell deployment in high-potential markets without overbuilding.

Band n53 benefits

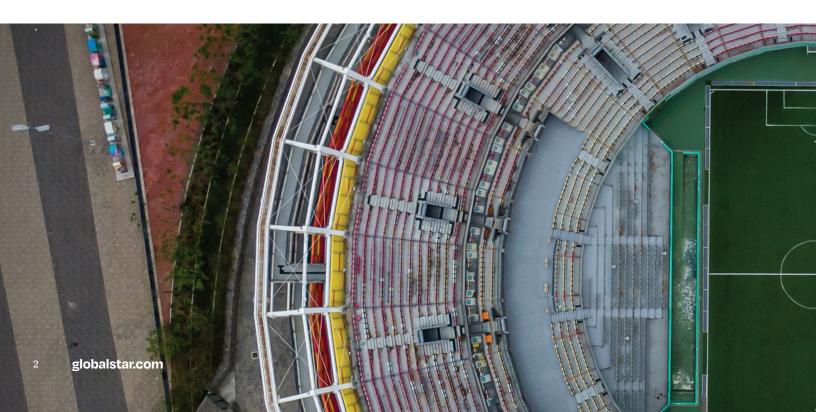
- Freedom from interference with unlicensed and lightly licensed spectrum as well as licensed mobile bands
- · Seamless mobility
- · Greater range and coverage than Wi-Fi, reducing capital costs
- More stable performance for multiple connections delivering greater scalability than Wi-Fi
- Superior security compared with Wi-Fi
- 5G network slicing capabilities that enable more speed and throughput, with per-application QoS granularity and control

XCOM RAN technology

Globalstar's XCOM RAN Technology is a coordinated multipoint radio system that enhances Globalstar's terrestrial wireless business, enabling significant capacity gains in dense wireless deployments, while accelerating and expanding its ability to develop commercial applications and enter a broader range of end markets.

XCOM RAN high performance sub-7GHz 5G RAN provides:

- Efficient use of radio spectrum
- 5-10x gains for download and upload without changes to phones or standards
- Even higher gains achievable with second generation architecture



The right spectrum for private and mobile networks

Band n53 is time-division duplexing (TDD) spectrum, requiring only a single frequency band for uplink and downlink, with a frequency range of 2483.5-2495 MHz and bandwidth of 11.5 MHz.

For private networks

By licensing Band n53, systems integrators and end-users gain easy-to-deploy, campus-wide wireless connectivity serving:

- Industrial and power plants
- Ports, warehouses, and logistics facilities
- Critical infrastructure
- Offshore energy platforms
- Corporate, hospital and university campuses
- Entertainment venues, stadiums and shopping malls
- Mines and farms
- Industrial automation and robotics

For mobile networks

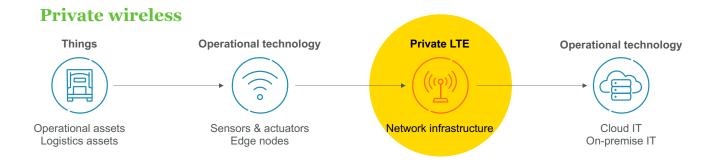
Band n53 offers interference-free capacity for true 5G small-cell deployment in high-potential markets. In addition, multiple technology partnerships at the chipset, device and RAN system levels support these targeted investments in next-gen service.



Who can license Band n53?

- Systems integrators license our spectrum and engage with technology providers to design and build networks for enterprise and government customers who require secure and reliable connectivity for private networks.
- Enterprise and government organizations with their own systems integration capability can license Band n53 for private networks supporting their secure, high-capacity communications.
- MNOs/MVNOs can extend true, standalone 5G in high-potential markets by licensing Band n53 for specific coverage areas and avoid interfering with existing radio infrastructure. The same licensed spectrum can also be applied to development of private 5G networks – a major opportunity for MNOs and MVNOs to apply their extensive knowledge of mobile network security and performance to access new markets.

Terrestrial wireless opportunities



- Secure proprietary wireless networks tailored for enterprise, transportation, or proprietary wireless networks tailored for enterprise, transportation, or government use cases
- Band n53 represents a rare swath of global licensed satellite spectrum (convertible to terrestrial spectrum) not controlled by wireless operators
- Globalstar's XCOM RAN technology offers significant capacity gains in dense wireless deployments.

What is the Band n53 technology ecosystem?

A growing range of technology partners are providing -



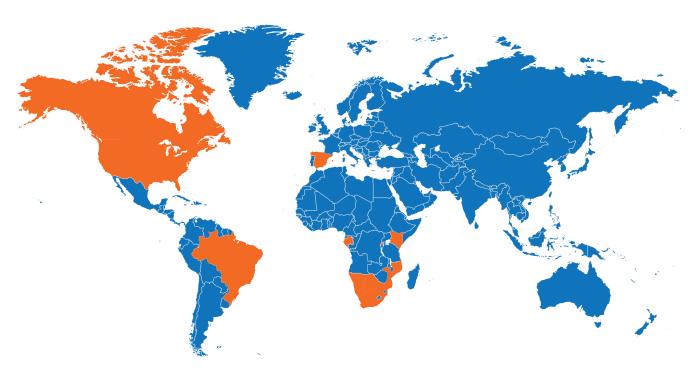


/ Where is Band n53 currently licensed?

Globalstar received its first spectrum license for Band 53/n53 from the US FCC in 2016. Since then, we have gained approval in 11 nations that are home more than 870 million people, and we continue to add approvals every year as we build out a global portfolio of spectrum licenses. Both Band n53 and its 4G variant Band 53 have also received approval from the Third Generation Partnership Project (3GPP).

- United States
- Canada
- Brazil
- Spain
- · South Africa
- Botswana

- Rwanda
- Gabon
- Mozambique
- Kenya
- Namibia



Terrestrial Authority Obtained

Why Globalstar?

Globalstar helps people connect, communicate, and transmit data in smarter ways.

As a telecom infrastructure provider, we offer reliable satellite and terrestrial connectivity that's simple, fast, secure, and affordable. With our low-earth orbit (LEO) satellite network providing coverage to more than 200 countries, we connect and protect assets, transmit key operational data, and save lives — from any location — for consumers, businesses, and government agencies around the globe.

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In addition to SPOT GPS messengers that connect people in remote environments, Globalstar offers next-generation IoT hardware and software products that efficiently track and monitor assets, process smart data at the edge with AI-enabled applications and manage analytics with cloud-based telematics solutions — all of which drive safety, productivity, and profitability.

We transform smart ideas into smarter solutions.

To learn more about how Globalstar can benefit your business, contact us at salesinfo@globalstar.com.







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Connect smarter