

Spectrum Navigator, Q2 2021

New insights and trends to watch

August 2021



The GSMA represents the interests of mobile operators worldwide, uniting more than 750 operators with nearly 400 companies in the broader mobile ecosystem, including handset and device makers, software companies, equipment providers and internet companies, as well as organisations in adjacent industry sectors. The GSMA also produces the industry-leading MWC events held annually in Barcelona, Los Angeles and Shanghai, as well as the Mobile 360 Series of regional conferences.

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This quarterly series leverages the GSMA Intelligence Spectrum Navigator tool to identify key trends and insights.

GSMA[™] Intelligence

GSMA Intelligence is the definitive source of global mobile operator data, analysis and forecasts, and publisher of authoritative industry reports and research. Our data covers every operator group, network and MVNO in every country worldwide – from Afghanistan to Zimbabwe. It is the most accurate and complete set of industry metrics available, comprising tens of millions of individual data points, updated daily.

GSMA Intelligence is relied on by leading operators, vendors, regulators, financial institutions and third-party industry players, to support strategic decision-making and long-term investment planning. The data is used as an industry reference point and is frequently cited by the media and by the industry itself.

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Spectrum for 5G

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Spectrum for previous generation networks

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Spectrum Navigator: all the data at your fingertips

Five things to watch for: 2021 and beyond

- 1 Momentum continues for spectrum assignments** – In 2021, there will be new spectrum assignments across 30 countries. This is the highest number of assignments in a single year since 2017, when the first 5G auctions took place. A mix of 4G and 5G spectrum bands will be assigned in a range of major markets over the rest of the year, giving operators the opportunity to renew existing licences or acquire new spectrum. Canada is holding its first 5G auction to assign key spectrum in the 3.5 GHz band (in July); in Latin America, Brazil and Peru will see their first major 5G spectrum assignments, while in Europe assignments of spectrum in the 700 MHz band (a key band for 5G) will progress, with eight additional countries announcing plans to release this spectrum by the end of 2021
- 2 mmWave deployments will increase the value of spectrum** – Assignments of spectrum in mmWave bands are on the rise, as 5G rollouts and adoption make progress and the mmWave ecosystem matures. Fifteen countries have already released mmWave spectrum for 5G, and by end of 2021 a total of 22 countries will be making this spectrum available for 5G. Deployments in mmWave spectrum, coupled with 5G device developments, will offer new possibilities to expand 5G use cases on a larger scale, including fixed wireless access (FWA).
- 3 Spectrum sharing on the rise** – Before the 5G era, there was no significant use of shared spectrum; exclusive licensing has been the main mechanism so far. However, interest in spectrum sharing is growing as the wider mobile ecosystem explores new network models (including private networks) and use cases. This is likely to continue for the rest of 2021 and beyond, since more regulators have to consider spectrum-sharing requirements or conditions as part of their new 5G spectrum assignment models, to cater for the needs of verticals. A number of countries have already opened up spectrum in key IMT bands for shared use (e.g. Germany, Hong Kong, Finland).
- 4 Spectrum refarming will fuel 5G deployments in developing markets** – As developing markets enter the 5G era, spectrum availability will become crucial for operators wishing to deploy 5G networks and launch 5G commercial services. If governments in these countries are slow to act, operators will be required to explore ways of refarming existing spectrum bands to support deployments of new 5G networks. This has happened already in markets such as Puerto Rico and Slovakia.
- 5 Most network sunsets** – 2021 is expected to be the year with the highest number of 2G and 3G network sunsets (a total of 33). The rollout of 5G networks has led operators and regulators to step up plans to switch off legacy networks and refarm 2G and 3G spectrum for 4G and 5G. This will also allow operators to shift frequencies towards more spectral-efficient networks. By reducing the number of technologies maintained, operators should be able to significantly lower running costs, rationalise device portfolios and simplify tariff structures.

Our spectrum data

- Ongoing tracking of operators' spectrum assignments, licence duration and obligations
- Granular data covering 200 countries and 1,120 operators worldwide, from 1980 to today, updated regularly
- Basis for understanding future spectrum availability and plans
- Supports device pricing strategies (when combined with our device database)
- Helps identify market trends and opportunities driven by 5G

Spectrum Navigator

- User-friendly and comprehensive spectrum dashboard
- Custom search for spectrum assigned by frequency band
- Granular split by region, country and operator
- Dedicated section on current and future auction plans, including disruptions to auctions in times of Covid-19
- Data tables that allow a quick understanding of key market questions on licence duration and obligations

How do I get access?

Talk to our Analyst

We would be keen to understand how our spectrum tool and data address your needs and requirements. Schedule a demo with our industry expert to find out more. Please email info@gsmainelligence.com for more information.

Talk to your Account Manager

The Spectrum Navigator tool is available as an addition to your GSMA Intelligence subscription. Please email info@gsmainelligence.com for more information.

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