

DSA Position about the recent 6 GHz decision in Brazil

The Dynamic Spectrum Alliance (DSA) expresses deep concern over Anatel Brazil's recent decision to modify their 2021 decision enabling unlicensed access to the 5925 - 7125 MHz frequency band. This reversal, reducing the range to the 5925 – 6425 MHz range poses significant challenges for Brazil's technological and economic progress.

The original decision to open the 6 GHz band for unlicensed access, voted unanimously by all the Anatel commissioners, was a landmark move that positioned Brazil as a global leader in innovation and connectivity. After that, dramatic positive changes took place in the Brazilian broadband market:

- **Quantum leap in the number of fixed broadband lines:** the number of lines in 2023 was 47,239,897 driven by the increase in growth rate triggered by the pandemic, the capability of service providers to respond to increased need, and policy incentives.
- **The average fixed broadband download speed grew to 334.57 Mbps.**
- **The percentage of fixed broadband lines in excess of 150 Mbps increased 48.72% by 2023.**

The dramatic increase in the percentage of lines with speeds higher than 150 Mbps had a multiplying effect in the value of addressing the residential Wi-Fi bottleneck by allocating the full 6 GHz band for restricted radiation equipment use. This new decision from Anatel will directly affect the growth of fixed internet broadband that Brazil experienced after the initial decision. It will impact more than 20,000 national wireless internet service providers that rely on this unlicensed spectrum as a complement to fiber to ensure high-quality connectivity all around the country, especially in unserved or underserved regions. Furthermore, this divergence from regional use of the 6 GHz frequency band could affect economies of scale and increase prices for Wi-Fi users.

The allocation of this spectrum is critical for the deployment and development of advanced technologies such as Wi-Fi 6E and the future Wi-Fi 7, which are essential for supporting data-intensive applications and expanding broadband connectivity. These advanced applications depend on the capabilities of 6 GHz Wi-Fi, and 6 GHz device shipments are on the rise with 807.5 million predicted for 2024, up 66% from 2023¹.

Anatel's new decision undermines the potential for widespread broadband access, particularly for small and medium-sized enterprises and underserved communities. It also hampers the ability of Brazilian businesses and consumers to benefit from enhanced Wi-Fi capacity, which is crucial for 4G and 5G data offloading and the proliferation of new applications. Additionally, this decision introduces uncertainty in national regulatory decisions, potentially slowing down investment by companies that manufacture devices in Brazil.

¹ IDC, Worldwide Wi-Fi Technology Forecast, November 2023

On the economic front, an initial study commissioned by the DSA showed substantial economic benefits, including an estimated contribution of \$163.5 billion to the Brazilian economy by 2030². A subsequent study in April last year updated the initial economic assessment and revealed an even higher economic benefit for the country in maintaining unlicensed access: the cumulative economic value between 2024 and 2034 of allocating the full 6 GHz band for unlicensed use amounts to US\$ 689.18³. A much higher number than the total economic benefits between 2024 and 2034 of US\$447.15 resulting of allocating the lower 500 MHz for unlicensed use and the upper 700 MHz band for use by IMT⁴, as proposed by Anatel now.

The DSA remains committed to advocating for policies that promote efficient and effective spectrum utilization. We urge Anatel to reconsider this decision in light of the significant drawbacks it poses to Brazil's digital future and economic growth.

² <http://dynamicspectrumalliance.org/wp-content/uploads/2020/11/1-DSA-Valor-Economico-Uso-Nao-Licenciado-6-GHz-Brasil-1.pdf>

³ <https://dynamicspectrumalliance.org/2024/Assessingtheeconomicvalue6GHzBandBrazil2021-2034.pdf>

⁴ Source: Estimation from Telecom Advisory Services in their [2024 report](#), using as an input the GSMA report GSMA, “Visao do mercado brasileiro – 5925-7125 MHz a faixa de 6 GHz” (May, 2022).