



# Opening Upper 6 GHz (6425 – 7125 MHz) Band for Wi-Fi: Enabling Affordable Broadband and Digital Growth in Bangladesh

**June 2026**

# Opening Upper 6 GHz (6425 – 7125 MHz) Band for Wi-Fi: Enabling Affordable Broadband and Digital Growth in Bangladesh

June 2026

## About the Dynamic Spectrum Alliance

---

The Dynamic Spectrum Alliance (DSA) is a global, cross-industry, not-for-profit organisation advocating for laws, regulations, and economic best practices that promote more efficient spectrum utilisation, foster innovation, and deliver affordable connectivity for all.

The DSA is the leading global organization dedicated to advancing spectrum sharing innovation, ensuring wireless resources are used to their fullest potential.. Our membership spans multinationals, small-and medium-sized enterprises, as well as academic, research and other organizations from around the world all working to create innovative solutions that will benefit consumers and businesses alike by making spectrum abundant through dynamic spectrum sharing. DSA welcomes the Government of Bangladesh's commitment to open the upper 6 GHz band (6425 – 7125 MHz) band for licence-exempt Wi-Fi access and offers this paper in support of its full and effective implementation.

## 1. Supporting Affordable and Uninterrupted Internet Access

---

Minister Fakir Mahbub Anam recently stated that the government is working relentlessly to ensure uninterrupted and affordable internet services for all Bangladeshis<sup>1</sup> while expanding digital services across the country and bringing technology to people's lives. The DSA strongly supports this vision and welcomes recent initiatives to expand public Wi-Fi services at airports and railway stations. Making the upper 6 GHz band available for licence-exempt, Wi-Fi would further strengthen connectivity performance and improve the user experience.

The government has also set an ambition to enable broadband connectivity with speeds of up to 1 Gbps. While fibre networks provide the backbone for gigabit broadband, Wi-Fi is the critical last-meter technology that delivers connectivity to end users in homes, enterprises, schools, hospitals, and public venues. As observed by regulators in other countries, congested and poorly performing Wi-Fi networks can undermine significant national fibre investments<sup>2</sup>. Access to the full 6 GHz band would enable Wi-Fi to support multiple wideband channels, which are essential for high-speed internet access and low-latency applications. Without sufficient access to this spectrum band, the full benefits of fibre cannot be fully realised by consumers, businesses, educational institutions, and public services.

There is also a significant percentage of Bangladeshis who access the internet through smartphones on 4G/5G mobile networks. In the mobile broadband environment, Wi-Fi plays the most critical role in offloading data traffic from congested mobile networks, thereby extending the capacity of existing base stations without requiring additional cellular tower investment. This allows operators to deliver affordable and complementary high-speed Wi-Fi connectivity at a cost that mobile data tariffs alone

---

<sup>1</sup> BSS News: [Govt working to ensure uninterrupted internet service for all: Minister](#)

<sup>2</sup> Fast fibre let down by internet users' lousy Wi-Fi <https://www.rnz.co.nz/news/national/513702/fast-fibre-let-down-by-internet-users-lousy-wi-fi>

cannot match. For mobile operators in Bangladesh, a high-capacity 6 GHz Wi-Fi environment would make their mobile networks more sustainable and affordable. Every gigabyte efficiently offloaded to Wi-Fi reduces pressure for additional cellular tower deployment and base station densification. Restricting 6 GHz Wi-Fi would force more traffic back onto mobile 4G/5G networks, increasing operator costs and ultimately the price of mobile data for Bangladeshi consumers.

Technologies such as Wi-Fi Passpoint/OpenRoaming further extend these benefits by enabling devices to automatically authenticate and connect to trusted Wi-Fi networks using existing mobile operator credentials. These technologies support seamless and secure interoperability between licensed 4G/5G mobile networks and Wi-Fi infrastructure, enabling a more efficient national broadband ecosystem and improves user experience roaming indoors and outdoors. Mobile operators around the world are increasingly leveraging these technologies to close indoor coverage gap and lower the network deployment cost. Bangladesh's operators can adopt such experience and industry guidelines by configuring subscribers' devices to seamlessly offload to public and private 6 GHz Wi-Fi hotspots, reducing network load while users experience uninterrupted connectivity.

Beyond urban areas, there are significant parts of Bangladesh where fibre buildout is prohibitively expensive and will take many years to reach. In these underserved and remote communities, existing and next-generation Low-Earth Orbit (LEO) satellite services will and can deliver high-throughput, low-latency broadband comparable to fibre. However, the satellite terminal alone does not complete the connectivity chain: Wi-Fi is the essential last-meter technology that extends gigabit-capable satellite backhaul into homes, schools, health clinics, and local businesses. Where LEO satellite connectivity is already available or planned, full access to the 6 GHz band enables Wi-Fi to deliver the wideband channels necessary to match the capacity of the satellite link — ensuring that end users actually experience the gigabit speeds the satellite can provide. Without sufficient Wi-Fi spectrum, the in-home or in-office Wi-Fi network becomes the bottleneck that prevents customers from experiencing full gigabit speeds, regardless of how fast the satellite connection is.

Enabling licence-exempt access to the full 6 GHz band therefore ensures that Bangladesh can leverage LEO satellite infrastructure to bring high-speed broadband to areas where fibre penetration may be years away — accelerating digital inclusion without waiting for terrestrial network buildout to reach every community.

## **2. 6 GHz Wi-Fi as infrastructure for Bangladesh's digital economy**

---

The government of Bangladesh's 'Digital Bangladesh Vision' views digital development as core to its overall economic development strategy. Bangladesh's rapidly growing ICT sector encompassing freelancers, software exporters, digital financial services, and a nascent startup ecosystem depends on reliable, high-capacity wireless connectivity as its foundational infrastructure.

Wi-Fi operating in the full 6 GHz band can provide the low latency and high capacity that modern digital business applications such as AI-assisted tools, cloud services, and video collaboration require - this is something what the lower 500 MHz (5925 – 6425 MHz) alone cannot deliver the wider channel availability and capacity needed for these use cases. Opening the full 6 GHz band would help position Bangladesh as an attractive destination for technology investment and manufacturing.

The importance of reliable Wi-Fi is also evident in education, research consistently identifies connectivity quality as the most critical technology factor for improving learning outcomes<sup>3</sup>. In

---

<sup>3</sup> DSA Wi-Fi's Critical Role in Education, Case Study: Thomas More University  
<https://www.dynamicspectrumalliance.org/2025/Wi-Fi'sCriticalRoleinEducation.pdf>

healthcare, 6 GHz Wi-Fi can enable telemedicine, connected medical devices, and digital patient management in district and upazila health facilities<sup>4</sup>. In public administration, it can underpin the digital service delivery that the government’s Smart Bangladesh initiative depends upon.

In addition, making the full 6 GHz band licence-exempt would also support affordable and high-capacity community Wi-Fi, wireless ISPs (Internet Service Providers), and rural broadband extension using standard-power Wi-Fi deployment in areas where fibre deployment remains economically challenging. This would further strengthen digital inclusion and support more equitable access to broadband-enabled services across Bangladesh.

### 3. The Real Revenue Picture: Indirect Economic Value Vastly Exceeds Auction Proceeds

The DSA recognises that assigning of the upper 6 GHz band for licence-exempt access may raise questions about foregone spectrum auction revenue. However, the DSA urges the Government and BTRC to consider the full economic picture — not merely auction proceeds, but the indirect economic value generated by the use of that spectrum.

A landmark study commissioned by the DSA — “[Assessing the Economic Value of Wi-Fi: India, 2024–2034](#)” provides the most directly relevant evidence available. The study compared economic benefits for licence-exempt upper 6 GHz band allocation versus licensed approach:

Spectrum Scenario	Total Economic Value (USD, 2024–2034)	Key Finding
Full 1200 MHz for Wi-Fi	<b>\$4,030 billion</b>	Maximum GDP impact — the optimal outcome for India and Bangladesh
500 MHz for Wi-Fi (lower band only)	<b>\$2,918 billion</b>	Loss of \$858 billion vs full band — the cost of a partial allocation
700 MHz of upper band for IMT	<b>\$254 billion</b>	

This evidence suggests that the broader economic value generated through licence-exempt Wi-Fi use may substantially exceed the value generated through exclusive licensed assignment models: allocating 700 MHz of the upper 6 GHz band to licensed cellular/IMT instead of Wi-Fi results in a loss of USD \$858 billion than licence-exempt use of the same spectrum. No spectrum auction revenue can compensate for value loss at this scale. Accordingly, the opportunity cost of restricting the upper 6 GHz band to licensed use should be carefully weighed against the long-term benefits of wider broadband access, higher network efficiency, and increased innovation.

The commercial reality of licensing the upper 6 GHz band is illustrated by Hong Kong’s November 2024 auction of 400 MHz in the band. Only three of the four mobile operators participated, with 25% of the available spectrum remained unsold and final bids closed only slightly above reserve prices — in stark contrast to the same period auction’s 850 MHz, 900 MHz, and 2300 MHz lots, where strong operator demand drove prices significantly higher. Industry analysts attributed the weak 6 GHz demand to the band’s poor propagation characteristics relative to sub-4 GHz spectrum, the high infrastructure cost of deployment, and the near-total absence of a commercially available device ecosystem<sup>5</sup>. This experience indicated that expected auction revenues from upper 6 GHz spectrum

<sup>4</sup> Wi-Fi Alliance: 6 GHz Wi-Fi Trial in Thailand <https://www.wi-fi.org/6-ghz-wi-fi-trial-thailand>

<sup>5</sup> Dean Bublely: Key Lessons from Hong Kong’s 6 GHz Spectrum Auction: <https://broadbandbreakfast.com/dean-bublely-key-lessons-from-hong-kongs-6-ghz-spectrum-auction/>

should be assessed cautiously, particularly in developing markets where the economic and deployment conditions may differ significantly.

#### **4. The Global Context: Many Economies Have Already Opened the Full 6 GHz Band**

---

The DSA recognises the importance of regional harmonisation for the economy of scale. At the same time, spectrum policy approaches continue to evolve globally, particularly as countries seek to address rapidly growing broadband demand and support next-generation wireless technologies. Bangladesh is not charting unfamiliar territory, many developed and developing economies around the world like US, Canada, South Korea, Kazakhstan, Saudi Arabia, Argentina, Colombia and many Latin America's countries have already designated the full 6 GHz band for licence-exempt access, and many other countries like Japan, UK and Australia actively considering or progressing towards licence-exempt Wi-Fi access for the upper 6 GHz band.

It is also important to note that commercial IMT devices and base stations designed for the upper 6 GHz band are not yet commercially available at scale. Reserving the spectrum for licensed mobile service could delay deployment and create significant opportunity costs. The Wi-Fi device ecosystem, by contrast, is mature and already present in Bangladesh. Over 1.1 billion 6 GHz-capable chipsets shipped globally in 2025 alone, with annual shipments projected to reach 2.6 billion annually by 2030<sup>6</sup>. Wi-Fi 7 devices are already available to consumers and businesses in Bangladesh, demonstrating that the ecosystem is ready to deliver benefits now.

#### **Recommendations**

---

To maximise the long-term benefits of the upper 6 GHz band for Bangladesh's digital economy, the DSA respectfully recommends that the Government of Bangladesh maintain long-term regulatory certainty for licence-exempt access to the 6425 – 7125 MHz band and support the rapid deployment of affordable Wi-Fi technologies across the country. Bangladesh ICT policymakers should encourage mobile operators leveraging both cellular and Wi-Fi technologies to enable more efficient use of spectrum resources while improving broadband affordability and user experience. In addition, the DSA also encourages continued support for advanced public Wi-Fi deployment across education, healthcare, transportation, and community centres. With the right policy approach, the upper 6 GHz band can become a strategic national asset supporting affordable connectivity, digital inclusion, economic competitiveness, and long-term technological innovation in Bangladesh.

---

<sup>6</sup> ABI Research: [6 GHz and Wi-Fi 8 Are Redefining the Future of Enterprise Connectivity](#)