

WI-FI IN 6 GHZ IN THE MIDDLE EAST

WI-FI PROVIDES CRITICAL CONNECTIVITY

Wi-Fi plays a central role in connectivity, generating enormous economic value. Globally, 18 billion Wi-Fi-enabled devices are in use today and a further 4.4 billion

are shipped every year, (according to IDC). Wi-Fi traffic is doubling every three years (according to ASSIA).

ECONOMIC VALUE GENERATED BY WI-FI

EGYPT		JORDAN		MOROCCO		OMAN		SAUDI ARABIA	
2021	2025	2021	2025	2021	2025	2021	2025	2021	2025
\$9	\$17	\$2	\$4	\$6	\$8	\$2.6	\$3	\$17	\$24
BILLION	BILLION	BILLION	BILLION	BILLION	BILLION	BILLION	BILLION	BILLION	BILLION

Source: Telecom Advisory Services

A NEW GENERATION – WI-FI 6E – OFFERS A STEP CHANGE IN PERFORMANCE

- MORE, CONTIGUOUS SPECTRUM
- WIDER CHANNELS (80 MHz + 80 MHz = 160 MHz)
- LESS INTERFERENCE
- GIGABIT SPEEDS
- VERY RESPONSIVE CONNECTIVITY
- HIGH CAPACITY & RELIABILITY

BUT WI-FI NETWORKS ARE GROWING INCREASINGLY CONGESTED



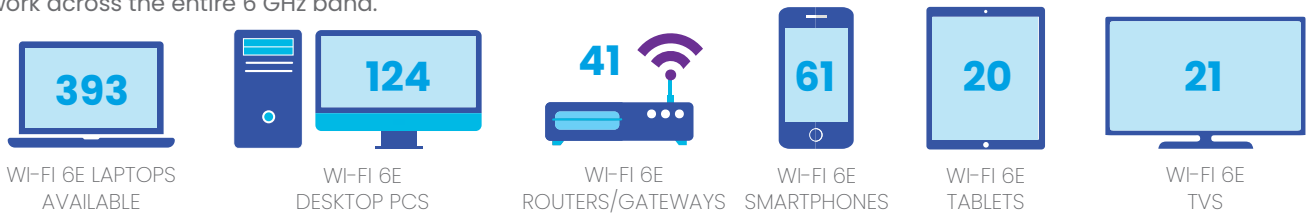
Studies point to major spectrum shortfalls for licence-exempt technologies, impacting quality of service. In a report published in June 2021, ASSIA concluded that “the 5 GHz band is now saturating, and more Wi-Fi spectra is needed.”

Source: <http://dynamicspectrumalliance.org/wp-content/uploads/2021/06/ASSIA-DSA-Summit-Presentation-v7.8.pdf>

WI-FI 6E DEVICES AVAILABLE NOW

Almost 800 Wi-Fi 6E consumer and enterprise products are now on the market. All this equipment is designed to work across the entire 6 GHz band.

The Wi-Fi Alliance projects more than 350 million Wi-Fi 6E devices will be shipped in 2022.



Source: Intel. Disclaimer: This data is compiled from vendor websites, press releases, and third-party device reviews. Intel provides this assessment for informational purposes only, does not guarantee its accuracy, and it is subject to change without notice.

OPENING UP THE 6 GHZ BAND (5925-7125 MHz) NOW FOR LICENCE-EXEMPT USE WILL:

- BOOST GDP
- ENABLE WI-FI 6E AND 5G TO DELIVER FAST & RESPONSIVE CONNECTIVITY
- SUPPORT THE TRANSITION TO A MORE SUSTAINABLE ECONOMY

HOW TO TAP GLOBAL ECONOMIES OF SCALE

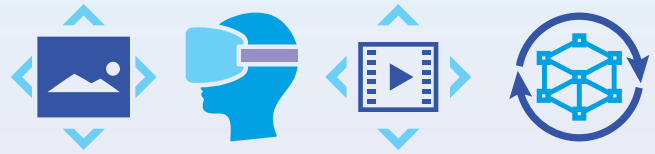
The US, Saudi Arabia, Brazil, Canada, Chile and South Korea are among the countries making the entire 1200 MHz in the 6 GHz band available for licence-exempt Wi-Fi use.

More governments in the Middle East should consider initiating national consultations on licence-exempt access to the 6 GHz band to improve the availability and performance of Wi-Fi.

As more and more countries open up the 6 GHz band, device suppliers will be able to achieve economies of scale and reduce the cost of equipment for end users.

MORE SPECTRUM WILL DRIVE INNOVATION, BENEFITTING CITIZENS AND COMPANIES

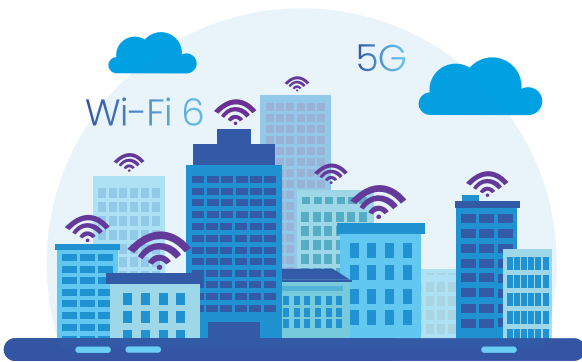
With access to the 6 GHz band, Wi-Fi 6E can enable a raft of exciting new applications, such as advanced wearables and in-home devices, and augmented reality (AR) and virtual reality (VR) services, encompassing entertainment, navigation, health, enterprise and industrial applications, product design and training.



ACCELERATING 5G IN THE MIDDLE EAST

By handling the vast majority of indoor connectivity, Wi-Fi ensures 5G networks have sufficient capacity to provide high-quality connectivity to mobile users.

Saudi Arabia's regulator CITC has said that the 3 GHz band "will be sufficient to cover the mid-band spectrum needs of IMT for the foreseeable future. The existing mid-bands for exclusive IMT use have robust ecosystems already, as well as superior propagation characteristics."



REALISING THE FULL POTENTIAL OF THE ENTIRE 6 GHZ BAND

WRC-23 should not identify the upper 6 GHz band (6425–7125 MHz) for IMT, as that would prevent countries from maximising the potential of this important spectrum.

If IMT networks were deployed in the upper 6 GHz band, they would be very likely to interfere with fixed and fixed satellite links in that band due to their high power usage.

A VALUABLE RESOURCE

Licence-exempt spectrum, which can be harnessed by any wireless technology, is a great resource that both large and small innovative companies can use to develop compelling new services. Extensive studies have shown that, with appropriate technical and operational rules, Wi-Fi can co-exist with fixed systems and other existing users of 6 GHz spectrum.

