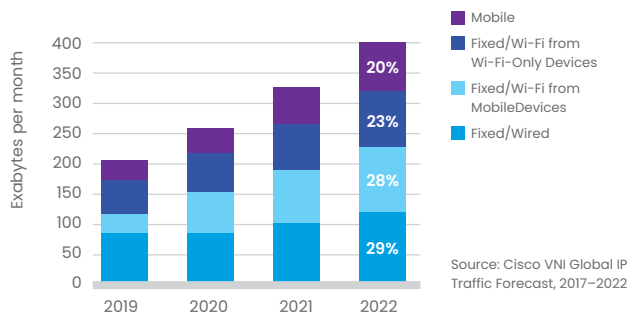


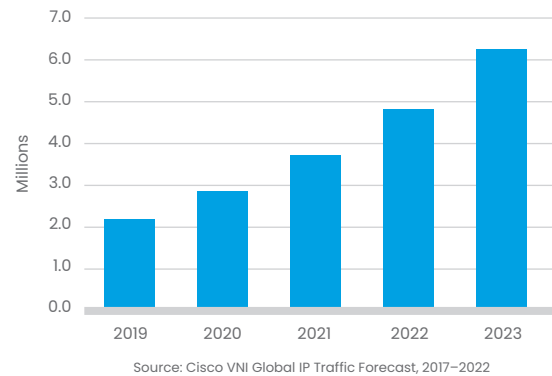
DELIVERING WI-FI IN 6 GHZ IN AFRICA

WI-FI PROVIDES CRITICAL AND COST-EFFECTIVE CONNECTIVITY

Wi-Fi accounts for about half of total IP traffic worldwide and generates enormous economic value.



PUBLIC WI-FI HOTSPOTS IN THE MIDDLE EAST AND AFRICA



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

- MORE, CONTIGUOUS SPECTRUM** (Icon: Waveform)
- WIDER CHANNELS** (Icon: 80 MHz + 80 MHz = 160 MHz)
- LESS INTERFERENCE** (Icon: Smartphone with '6')
- GIGABIT SPEEDS** (Icon: Speedometer)
- VERY RESPONSIVE CONNECTIVITY** (Icon: Stopwatch)
- HIGH CAPACITY & RELIABILITY** (Icon: Smartphone, laptop, and server)

BUT WI-FI NETWORKS ARE GROWING INCREASINGLY CONGESTED



No new mid-band spectrum has been made available for Wi-Fi in Africa since 2004. As a result, Wi-Fi is unable to fulfil its potential: The current Wi-Fi bands (2.4 GHz and 5 GHz) do not provide the contiguous blocks of spectrum for wider channels to deliver optimal performance in terms of speed and latency.

MORE SPECTRUM WILL DRIVE INNOVATION, BENEFITTING CITIZENS AND COMPANIES

With access to the 6 GHz band, Wi-Fi 6E is set to play a pivotal role in the automation of manufacturing plants and other parts of industry. Businesses can use high-speed and responsive Wi-Fi 6E connectivity to both monitor and remotely control machinery and other assets.



OPENING UP THE LOWER 6 GHZ BAND (5925-6425 MHz) NOW FOR LICENCE-EXEMPT USE WILL:

- BOOST AFRICA'S GDP** (Icon: Bar chart with upward arrow)
- ENABLE WI-FI 6E AND 5G TO DELIVER FAST & RESPONSIVE CONNECTIVITY** (Icon: Laptop)
- SUPPORT THE TRANSITION TO A MORE SUSTAINABLE ECONOMY** (Icon: Wind turbines)

HOW TO TAP GLOBAL ECONOMIES OF SCALE

The US and the UK have announced that spectrum in the 6 GHz band will be available for use by Wi-Fi. Australia, Canada, Brazil, Japan, Mexico, Singapore, South Korea and Taiwan are moving in the same direction.

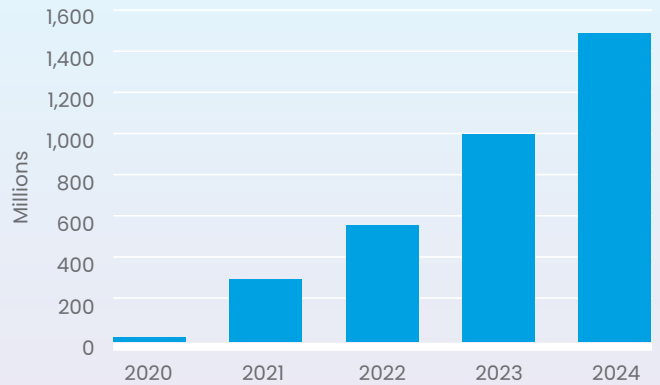
Governments in Africa should consider initiating national consultations on licence-exempt access to the lower 6 GHz band to improve the availability and performance of Wi-Fi.

With Europe and some countries in the Middle East also preparing to open up the lower 6GHz band, device suppliers will be able to achieve economies of scale and reduce the cost of equipment for end-users.

WI-FI 6E DEVICES CLOSE TO LAUNCH

The first Wi-Fi products, which can be used in the 6 GHz band, are set to be launched before the end of 2020.

Research firm IDC has forecast that more than 316 million Wi-Fi 6E devices will enter the market in 2021, with rapid adoption in flagship smartphones, PCs, TVs, and in VR devices.

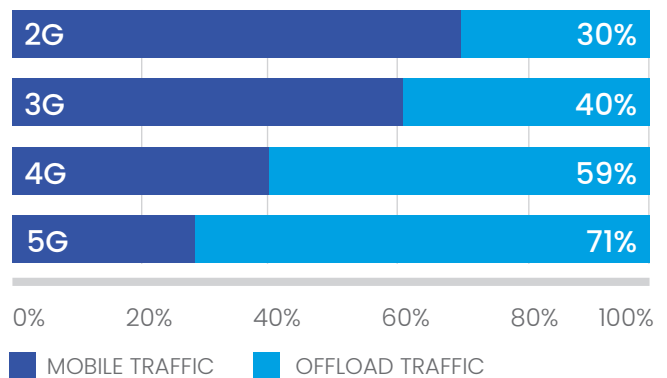


Source: IDC

ACCELERATING 5G IN AFRICA

Opening up the lower 6 GHz band to Wi-Fi in Africa now will accelerate the deployment of 5G-capable networks. In the 5G era, more than 70% of mobile traffic will be

offloaded to Wi-Fi, up from about 50% today (Source: Cisco VNI). Wi-Fi 6E will play a pivotal role in bringing 5G performance to Africa's citizens and enterprises.



REALISING THE FULL POTENTIAL OF THE UPPER 6 GHZ BAND (6425-7125 MHZ)

The existing co-primary mobile allocation in the 6 GHz band allows users to employ technologies that best meet their requirements, be they IEEE-based, 3GPP-based, or something entirely new.

It is important that the outcome of WRC-23 maintains this flexibility.

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 technical 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.

