

FCC ruling paves the way for the biggest Wi-Fi upgrade in 20 years

Article

The news: A ruling last week from the US Court of Appeals for the District of Columbia Circuit enables the FCC to open up 1,200MHz of spectrum in the 6GHz band for general use, ostensibly clearing the way for faster, more reliable **Wi-Fi 6E** home networks.

More on this: The [ruling](#), which backs up a 2020 decision expanding the 6GHz Wi-Fi band, could make existing Wi-Fi 6E routers more efficient by enabling multiple streams to broadcast

simultaneously without interference, [per](#) The Verge.

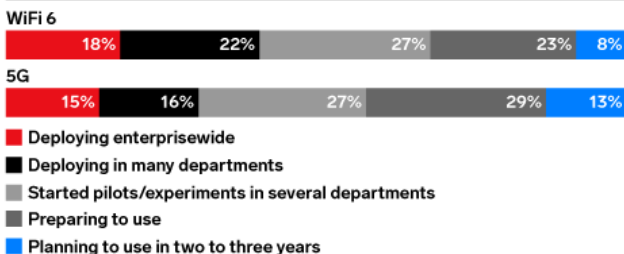
- Top speeds for Wi-Fi 6 are 30% faster than the fastest speeds for Wi-Fi 5. The standard's performance excels in busy networks with lots of connected devices.
- Current Wi-Fi devices operate on two spectrum bands, 2.4 GHz and 5 GHz. Wi-Fi 6E adds a third spectrum band, 6 GHz, quadrupling the overall airwaves utilized for Wi-Fi.
- Computers and phones with support for Wi-Fi 6E trickled into the market during 2021, but not at a rate or magnitude required for mass adoption. Smart TVs and VR headsets, which could benefit from the boost in bandwidth, haven't adopted it yet.
- Various Wi-Fi 6 routers are on the [market](#); however, only [a handful](#) of smartphones and PCs currently support the standard out of the box.

The bigger picture: The continued reality of [remote work](#), compounded by the recent Delta and Omicron variant [surges](#), will make robust and resilient Wi-Fi connections more important than 5G wireless adoption, at least for the short term. The FCC's unlocking of Wi-Fi 6 bandwidth could help promote greater standardization.

- Wider Wi-Fi 6 adoption will require investment in updated routers as well as smartphones, PCs, and smart home devices that can work with the [standard](#). **Wi-Fi 7**, which could offer [2.4 times the speed](#) of Wi-Fi 6, is also around the corner, further complicating plans for near-term adoption.
- Faster Wi-Fi will not speed up current ISP speeds and might compound an already [overburdened](#) network infrastructure.

Organizational Adoption Progress for Wi-Fi 6 vs. 5G Wireless Solutions According to Business and IT Executives Worldwide, Q4 2020

% of respondents



Note: numbers may not add up to 100% due to exclusion of "no plans to use" responses
Source: Deloitte, "2021 Study of Advanced Wireless Adoption, Global Edition," March 22, 2021

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