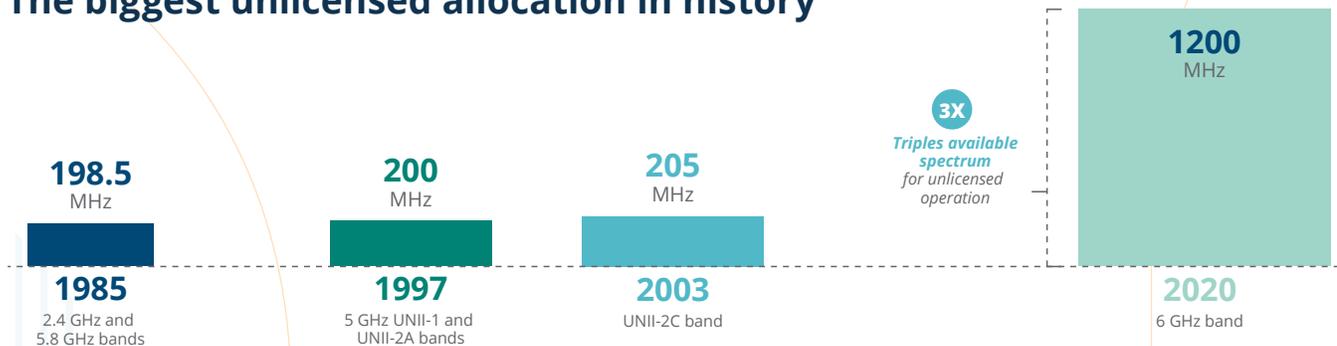


# 6 GHz Reference Card



## 6 GHz is the biggest allocation of spectrum in history

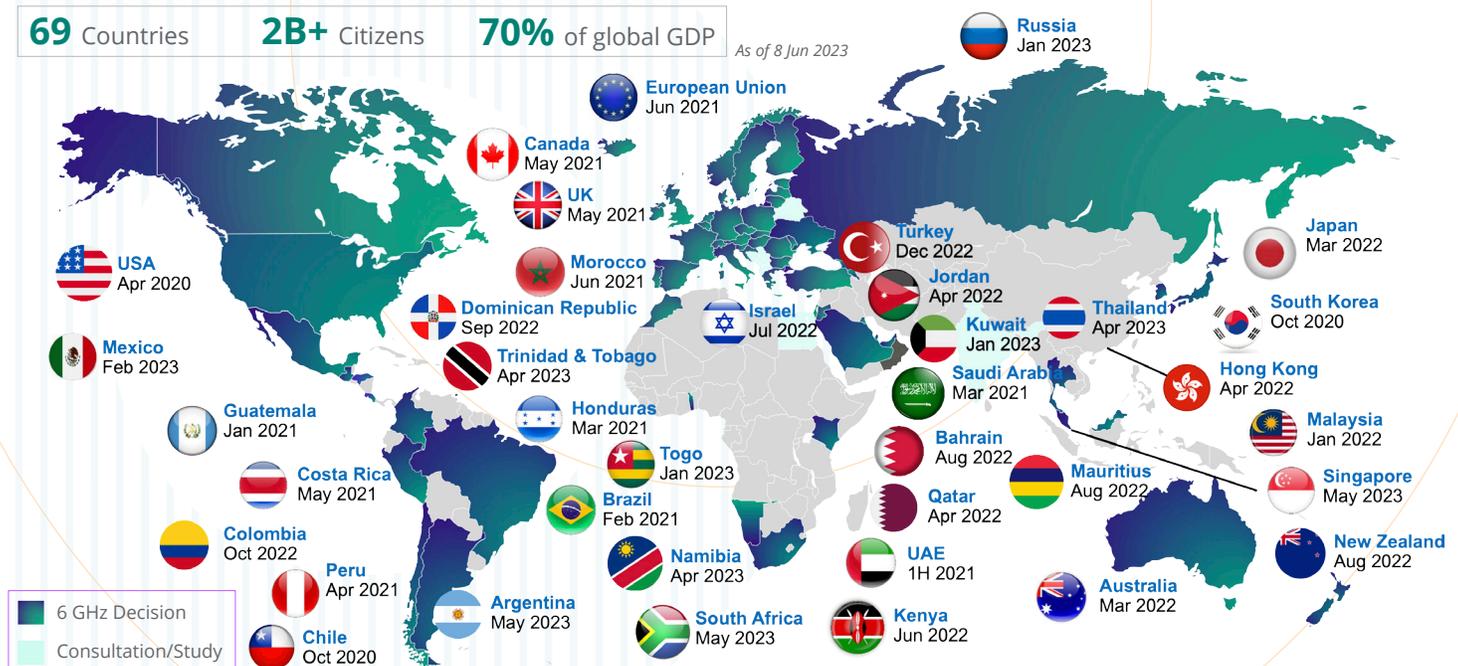
The biggest unlicensed allocation in history



## 6 GHz global momentum

### 6 GHz Unlicensed (License-Exempt) Decisions

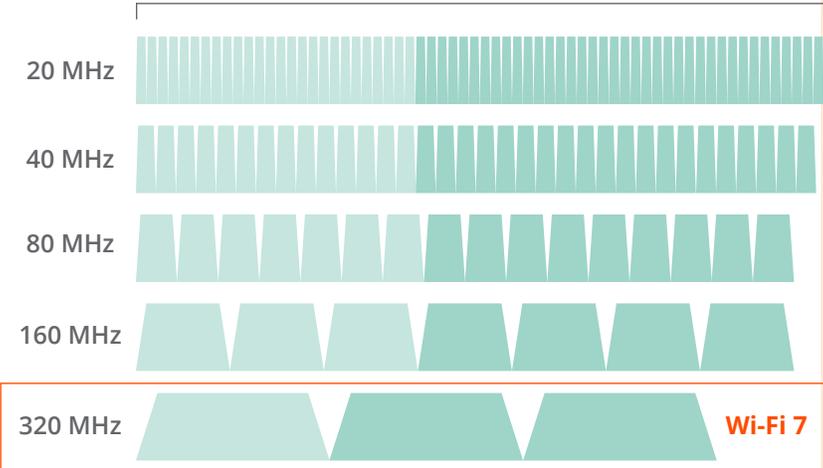
This is unprecedented global momentum





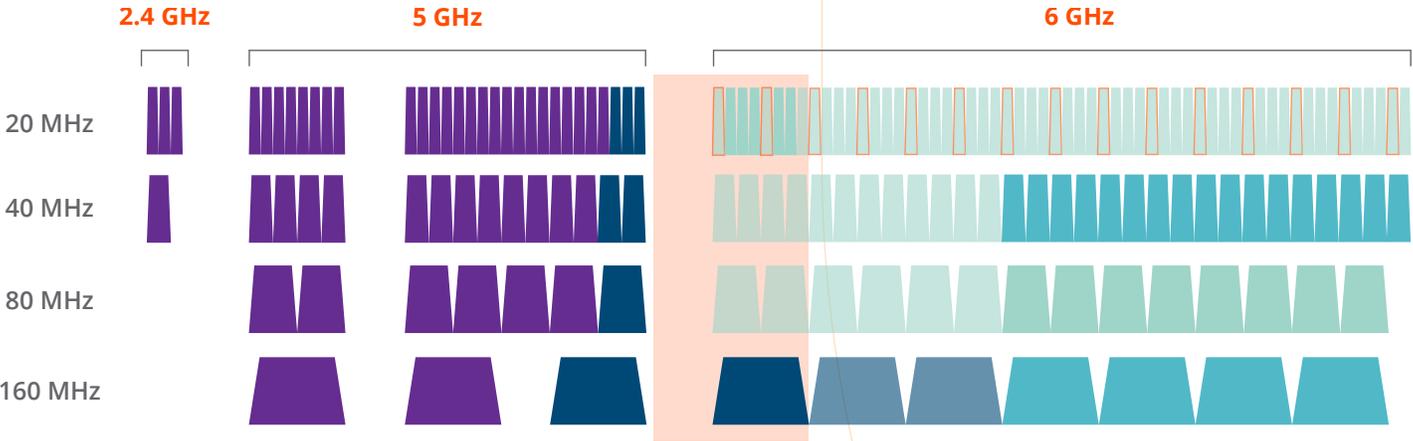
# Channels in 6 GHz

Both Wi-Fi 6E (802.11ax) and Wi-Fi 7 (802.11be) will leverage 6 GHz. This allows for more ultra-wide channels (160MHz wide channels in Wi-Fi 6E, 160MHz/320MHz wide in Wi-Fi 7).



# Managing 5 GHz/6 GHz channel interference

Traditional filtering solutions sacrifice channels at the lower end of the 6 GHz band.

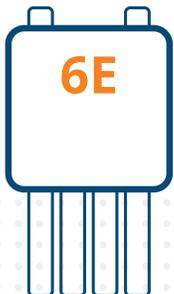


HPE Aruba Networking’s ultra tri-band (UTB) filtering uses patented technology to deliver:



peak throughput improvement in the EU and other countries using the lower half of the 6 GHz band

# Outdoor 6 GHz use

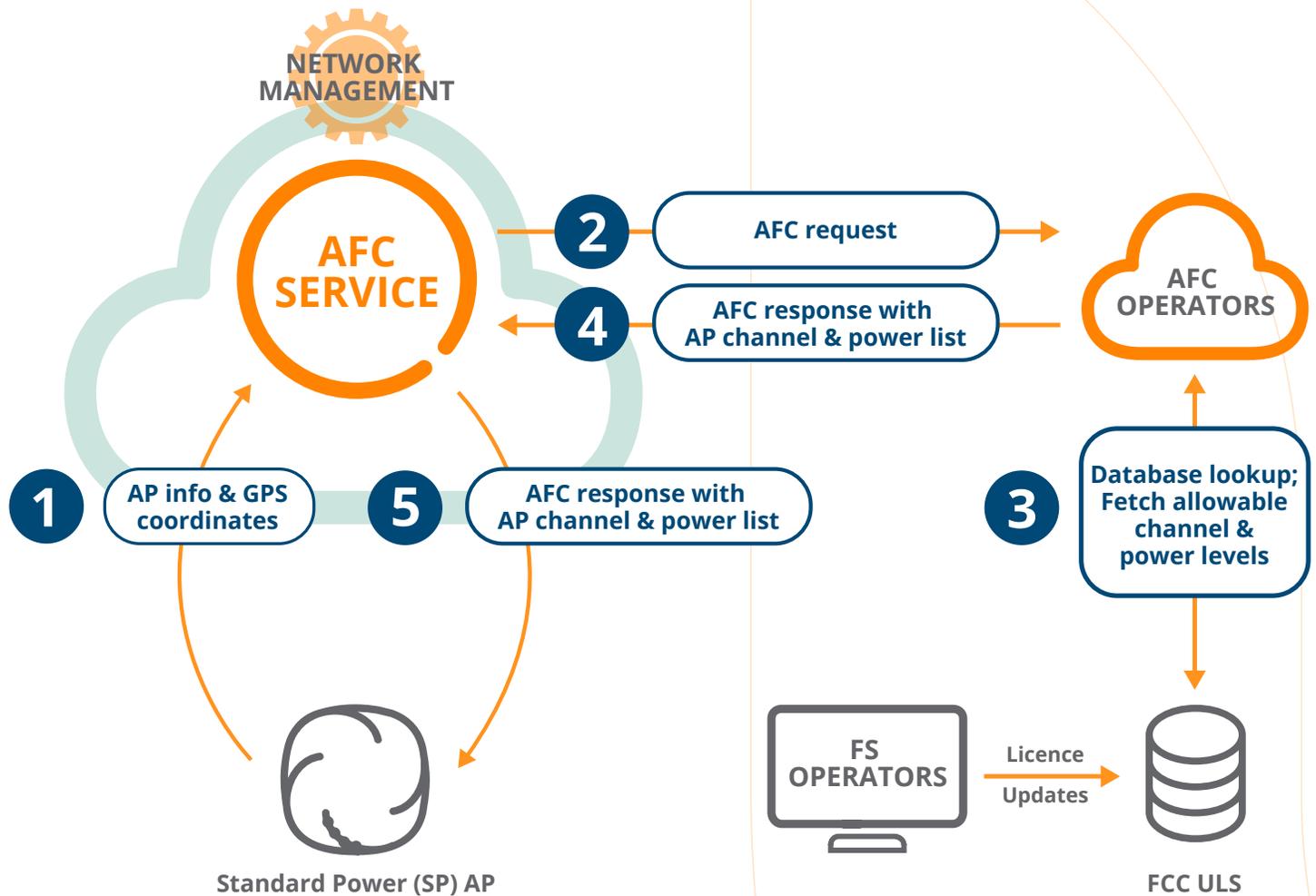


Although Low Power Indoors (LPI) is already deployed, outdoor use requires Standard Power (for higher power and greater range), which is still under regulatory reviews.

- Standard Power (SP) utilizes an Automated Frequency Coordination (AFC) service to protect incumbents in the 6 GHz band. Incumbents include:
- Microwave links: MNOs, Utilities, Public Safety, and Transportation
  - Broadcast Auxiliary Service
  - Cable Television Relay Service



## How AFC works



- AP determines its location and uses a frequency coordination orchestrator service to communicate with the AFC.
- The AFC service computes an incumbent protection contour and authenticates against the FCC database.
- This information is communicated back to the AP to protect incumbent transmissions.
- If the AP is unable to communicate with the AFC, the AP will cease operations in the 6 GHz band until communications are resumed.

Explore 6 GHz at [arubanetworks.com/faq/what-is-wi-fi-6e](https://arubanetworks.com/faq/what-is-wi-fi-6e)