

Wi-Fi Spectrum Sharing in the Upper 6 GHz Band

Dynamic Spectrum Alliance (DSA) Global Summit 2026

London, 21st October 2026

Upper 6 GHz band sharing - a path forward for Europe

Current status of the Upper 6 GHz band

- One part of U6 prioritized for WAS/RLAN use, the other one for MFCN use.

Pragmatic way to satisfy the EC Mandate and meet EU connectivity targets

- Leveraging software/database technology that operates successfully in countries using the full 6 GHz band for Wi-Fi will enable Europe to optimize use of the 6585-7125 MHz band by both WAS/RLAN and IMT.

Geolocation database systems

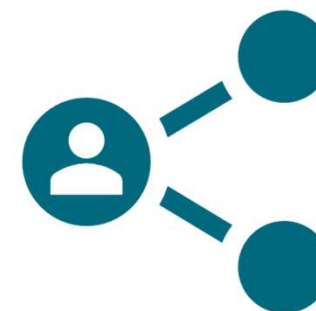
- CEPT studied the feasibility of enabling higher-power (HP*) WAS/RLAN (up to 4 W) in the Lower 6 GHz band via a dynamic spectrum access system with a terrible acronym** and published its findings in ECC Report 377.

Ofcom's approach to Upper 6 GHz

- Ofcom decided to implement an automated frequency coordination (AFC) system to enable Standard Power (SP)* Wi-Fi to operate across the entire 6 GHz band as well as to manage Wi-Fi device access to the mobile-prioritised portion of the Upper 6 GHz band.
- Several EU admins have expressed interest in the UK approach and in exploring practical solutions following the RSPG Opinion.

* Standard Power (SP) and Higher-Power (HP) both denote WAS/RLAN systems with an e.i.r.p. of up to 4 Watt.

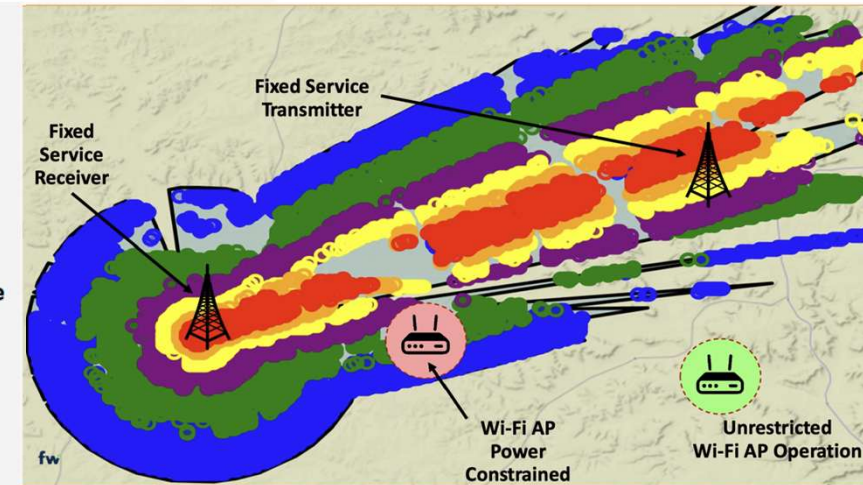
** DSACF = dynamic spectrum access coordination function (DSACF)



Geolocation-based spectrum access systems (AFC/DSACF)

Function and objective:

- Identify available frequencies for Wi-Fi devices based on device location, propagation conditions, and incumbent protection requirements.
- Enable regulators to prioritize future mobile access in designated geographic areas or sub-bands, while still allowing opportunistic Wi-Fi use.
- Eliminate the need for costly spectrum reallocation or hardware changes.
- DSACF comes in two flavours
 1. Dynamic channel-power calculation (corresponds to the 'classic' AFC).
 - Ex. use case: Protection of fixed links from HP WAS/RLAN indoor and outdoor operation
 2. Pre-defined exclusion zones (geo-fencing).
 - Ex. use case: Protection of MFCN and/or RAS from LPI WAS/RLAN in the 6585-7125 MHz band.



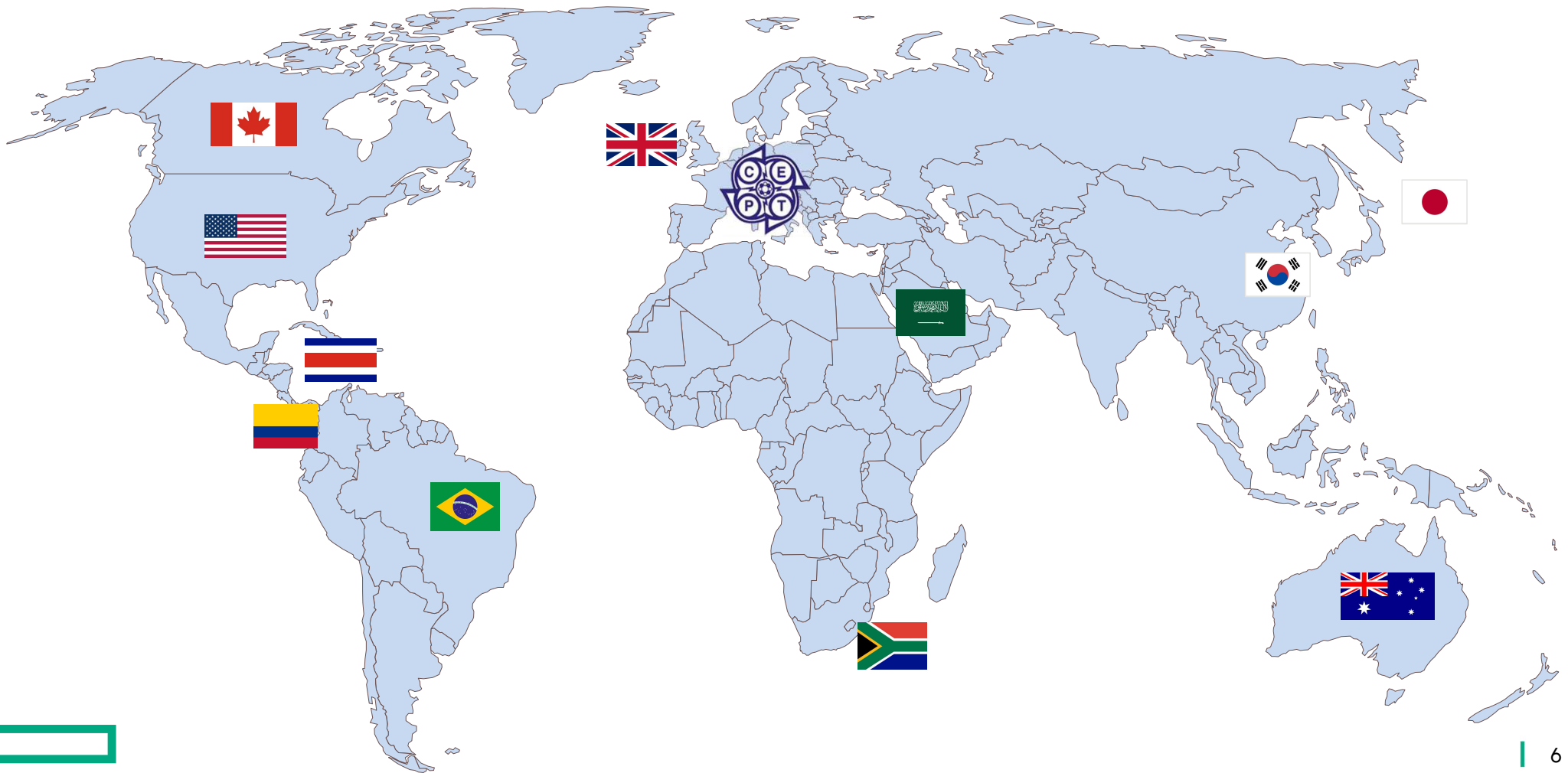
The map shows the location of the MFCN BS (red triangle) and the exclusion zone (red dashed line). The exclusion zone covers a large area of the city center, including streets like Botter Straße, Breite Straße, Oxfordstraße, Konrad-Adenauer-Platz, Bahnhofstraße, Poststraße, Hermannstraße, Markt, Wenzelgasse, Kolpingstraße, Adenauerallee, and Aufgartenstraße. A green box indicates that operation in the BS band is permitted outside the exclusion zone, while a black box indicates that operation in the BS channel is prohibited inside the exclusion zone. The Rhine river is visible on the right side of the map.

DSACF Exclusion zones

6 GHz AFC / DSACF around the World

CEPT area (except UK): DSACF

UK and RoW: AFC



HPE self-locating Wi-Fi Access Points supporting AFC

● HPE Networking (Aruba)

WI-FI 6E SERIES

AP-634: Indoor, external antennas

AP-654: Indoor, external antennas

AP-655: Indoor, internal antennas

AP-670 series: Outdoor



AP-634



AP-654



AP-655



AP-675



AP-674/677/679

WI-FI 7 SERIES

AP-754: Indoor, internal and external antenna versions

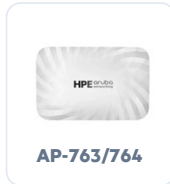
AP-763: Indoor, LPI/SP (composite)

AP-764: Outdoor, external antennas

AP-765: Outdoor



AP-754



AP-763/764



AP-765

● HPE Networking (Juniper)

WI-FI 6E SERIES

AP34: Indoor, internal antennas

AP45: Indoor, internal and external antenna versions

AP64: Outdoor, internal antennas



AP34



AP45



AP64

WI-FI 7 SERIES

AP27, AP36, AP47: Indoor, internal and external antenna versions

***AP37:** Indoor, internal antennas

AP66: Outdoor, internal antennas



AP27



AP36/37*



AP47



AP66

Preparing the market

- A standardized System-Device Interface (SDI) will be essential for keeping equipment cost down and enabling swift market introduction.
- A European DSACF standard to be developed by ETSI needs to be aligned with existing standards.
- The UK stayed very closely to the WinnForum and WFA standards which have been adopted in other countries.
- Another important pre-requisite is the early certification of client devices for the entire 6 GHz band (5925/5945 - 7125 MHz).
- Administrations that do not wish to allocate the Upper 6 GHz band to MFCN should not have to implement a DSACF system. In these cases, a Country Determination Capability (CDC) should be sufficient.
- Currently, Wi-Fi AP antenna directivity is not considered. Omnidirectionality is assumed which can lead to unnecessarily large exclusion zones. This is something to be looked into in the future.



Celebrating WLAN

- The new Australian 1\$ coin

