

# THE BENEFITS OF DYNAMIC SPECTRUM SHARING



DynamicSpectrumAlliance



DynamicSpectrum



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# WHAT WE DO

The Dynamic Spectrum Alliance (DSA) is a global, cross-industry, not for profit organization advocating for laws, regulations, and economic best practices that will lead to more **efficient utilization of spectrum**, fostering **innovation** and affordable **connectivity for all**.

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# OUR MISSION

## **Make spectrum abundant for broadband**

- Connect the next 4 billion people
- Stimulate wireless innovation for next generation broadband
- Accelerate an inclusive digital economy

# Spectrum sharing

## The importance and benefits

# Efficient use of spectrum



# A wider ecosystem





# Innovation

# Rural broadband





# Changing history with advocacy

- TVWS / Database
- CBRN / SAS
- Wi-Fi / AFC
- mmWave



## TVWS

Supports increasing shared spectrum use in TV whitespace that enables cost effective broadband deployment in rural areas.

TVWS also provides good building penetration that is critically important for IoT and smart city applications.



## CBRS and 3.7-4.2 GHz

Ensure all parties have access to both PAL and GAA spectrum.

Supports efficient use of the band through shared access that protects incumbent services.

Supports a light-weight database to facilitate dynamic sharing in a 3-tiered framework.



## 5 GHz and 6 GHz

Supports allocation of the band for unlicensed services to meet the demand for Wi-Fi and unlicensed services that require larger channel bandwidths.

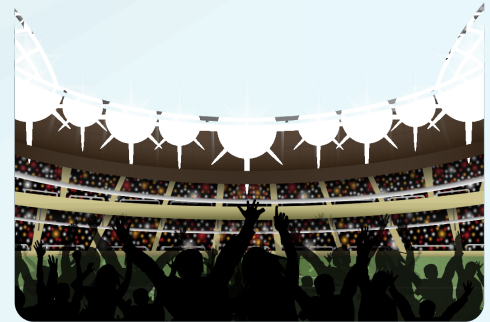
Technology management of the band can protect incumbent services while allowing greater access to Wi-Fi.

## mmWave

The propagation characteristics of mmWave bands make dynamic sharing ideal and critical to enable efficient use of spectrum.

Supports unlicensed use of the 57 – 71 GHz band, including Wi-Gig and P2M mesh network services.

Supports flexible licensing rules like those adopted by the FCC in the 37GHz band.





# Automated Spectrum Sharing

# Automated Frequency Coordination

Manual  Automated

A simple, cost-effective database solution with clear rules for efficient spectrum sharing

NRAs should work towards a Dynamic Spectrum Access approach in any underutilized band where coordinated sharing is appropriate and practical to implement.

- The DSA promotes a balanced regulatory approach between licensed, license-exempt (unlicensed), and lightly licensed, to enable making unused spectrum available for broadband.
- Spectrum sharing is an effective addition to the connectivity toolkit and DSA is ready to support regulators in enabling the regulatory framework for dynamic spectrum access technologies according to their local context.

# Let's exchange ideas!



The poster for the Global Summit 2020 in Paris, France, is designed to look like a 3D cube. The top face of the cube features a line-art skyline of Paris, including the Eiffel Tower and Notre-Dame, with the text "GLOBAL SUMMIT" in large white letters. Below this, the dates "NOV • 3 4 5" and "2 0 2 0" are displayed, followed by "PARIS - FRANCE". The front face of the cube shows a night-time photograph of the Paris skyline with the Eiffel Tower illuminated. This face is divided into three horizontal sections by diagonal lines. The top section is labeled "GOLD" and contains logos for Amazon, CUBIC, federated wireless, and Google. The middle section is labeled "PLATINUM" and contains logos for Aruba (a Hewlett Packard Enterprise company), Facebook, and Microsoft. The bottom section is labeled "SILVER" and contains logos for Access Partnership, DSA (Dynamic Spectrum Alliance), and the Internet Society. The DSA logo is prominently displayed at the bottom center of the front face. The website "WWW.DYNAMICSPECTRUMALLIANCE.ORG" is printed at the very bottom of the poster.

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