

Turning old TV channels into super Wi-Fi

Advances in *TV white space* (TVWS) broadband technology have allowed disused TV channels to be repurposed as wireless internet connections

HOW TV WHITE SPACE WI-FI WORKS

Base station:

Antenna does not need line of sight

Signal: Follows terrain, through obstacles such as buildings and trees



Successfully tested in Scotland

Avoiding congestion:

Geolocation database tells base station which frequencies in its vicinity are free and can be used

10km

Free space

Rural home:

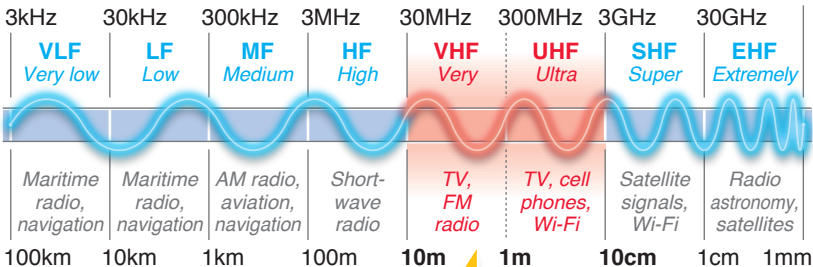
Client radio (speeds of up to 35 megabits per second)

WHERE IS TV WHITE SPACE?

Partners: Nominet and Microsoft are taking TVWS to Africa

▼ Frequency

300GHz



▲ Wavelength

Illustrations not drawn to scale



TV white space: Unassigned frequencies, vacated when TV stations switched from analogue signals to digital services

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Sources: Nominet, Encyclopaedia Britannica, Carlson Wireless Technologies, E&T, wire agencies