

## Consultation response form

Please complete this form in full and return to [EHFSpectrumAccess@ofcom.org.uk](mailto:EHFSpectrumAccess@ofcom.org.uk)

or:

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<b>Consultation title</b>	Supporting innovation in the 100-200 GHz range
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<b>Representing (delete as appropriate)</b>	Organisation
<b>Organisation name</b>	Dynamic Spectrum Alliance (DSA)
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## Confidentiality

We ask for your contact details along with your response so that we can engage with you on this consultation. For further information about how Ofcom handles your personal information and your corresponding rights, see [Ofcom's General Privacy Statement](#).

<b>Your details: We will keep your contact number and email address confidential. Is there anything else you want to keep confidential? Delete as appropriate.</b>	Nothing
<b>Your response: Please indicate how much of your response you want to keep confidential. Delete as appropriate.</b>	None
<b>For confidential responses, can Ofcom publish a reference to the contents of your response?</b>	N/A

## Your response

Question	Your response
<p><b>Do you have any comments on our analysis of the current use of spectrum bands in the frequency range 100-200 GHz, or the potential future use of these frequencies? Do you have any comments on current or future use of the specific bands 116-122 GHz, 174.8-182 GHz and 185-190 GHz?</b></p>	<p>Confidential? – N</p> <p>The Dynamic Spectrum Alliance supports the proposal to enable greater access to Extremely High Frequency (EHF) spectrum in the 100-200 GHz frequency range. The physical properties of these bands are particularly suited to shared use between existing and new users, there is limited current use of these bands in the UK and there is good potential for internationally compatible devices to be developed for these bands.</p> <p>The targeted bands have potential to support a range of new wireless services and it is important to make this spectrum available on a flexible service-neutral basis.</p> <p>The DSA shares Ofcom’s vision regarding the many uses that the bands will support, including high-capacity applications, sensing applications, high-precision applications, and high-density applications.</p>
<p><b>Are there any further bands above 100 GHz which you think Ofcom should consider making available on a technology and service neutral basis? Which benefits might be realised from enabling access to further bands?</b></p>	<p>Confidential? – N</p>
<p><b>Do you have any comments on the approach we have used to assess the potential effect of our proposals on EESS?</b></p>	<p>Confidential? – N</p> <p>The DSA acknowledges Ofcom’s approach to constraint the amount of interference that new users could cause to the EESS by introducing [power] limits.</p> <p>The DSA also observes that many of the envisioned use cases are for indoor use; therefore, it is expected that the potential for interference caused by indoor devices would in practice further reduced due to the high building penetration attenuations that occur at these frequencies; moreover, outdoor high capacity data link services would use highly directive narrow</p>

	<p>beam antennas to compensate for the propagation and atmospheric losses, which would reduce the signals radiated into space; finally, the large amount of spectrum that Ofcom is proposing to make available will also help reduce the likelihood of interference from multiple devices at any given frequency.</p>
<p><b>Do you have any comments on our proposals to authorise devices to operate on a licence-exempt basis in the 116-122 GHz, 174.8-182 GHz and 185-190 GHz bands?</b></p>	<p>Confidential? – N</p> <p>The DSA believes that new internationally compatible devices are likely to emerge in the targeted bands and that by authorising devices to operate on a licence-exempt basis, Ofcom is giving UK innovators the opportunity to exploit economies of scale as well as to establish international research collaborations. In fact, this proposal would help position the UK at the forefront of developing new services to use this spectrum and in doing so help deliver benefits to people and businesses.</p> <p>The DSA is pleased to see that Ofcom considered the Federal Communications Commission’s recent decision to make several bands in this range available in the USA, so this proposal increases the likelihood of economies of scale being realised from the development of new internationally compatible devices.</p> <p>Licence -exempt access will allow companies to trial innovative new services, which they could then launch commercially, without needing to worry about access to spectrum being a barrier.</p> <p>It is also very positive to allow both indoor and outdoor use of lower power devices in the 116-122 GHz, 174.8-182 GHz and 185-190 GHz frequency bands on a licence exempt basis. Both usages are important, and this proposal allows the market to find the best use cases in the shortest time.</p>
<p><b>Do you have any comments on our proposal to create a ‘Spectrum Access: EHF’ licence to authorise increased power use in the 116-122 GHz, 174.8-182 GHz and 185-190 GHz bands?</b></p>	<p>Confidential? – N</p>