

Your response

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Question 1: Do you have any comments on our impact assessments as set out in Annex 1? Please specify whether your comments relate to: • our wider impact assessment; • our equality impact assessment; or • our Welsh language impact assessment.	The wider impact assessment is incomplete. It tests whether the proposed bands can be authorised, but does not compare them with the lower-cost alternative of reusing nationwide licensed mobile infrastructure. Ofcom should assess duplicated radios/infrastructure, certification and lifecycle cost, interim-equipment migration risk and spectrum fragmentation. Confidential? – N
Question 2: Do you agree with our assessment of the 450 MHz and 5030-5091 MHz bands for drone control links? Do you agree there is demand for these bands in the UK (please identify any relevant use cases and locations in your response)? Are there any other frequency bands we should consider for control links?	No. 450 MHz is not suitable as a scalable national drone C2 layer: Ofcom records 39,290 business-radio licences, proposes 12.5 kHz airborne channels, and identifies limited availability in urban areas and much of England. Furthermore, in the long term, this band may be earmarked for use in providing mission-critical mobile broadband services to Utilities. 5030-5091 MHz may be relevant in a few countries, but Ofcom's proposed UK regime is explicitly interim, ahead of completed global harmonisation. Priority should be existing licensed 4G/5G spectrum, with harmonised mid-band TDD (including 2.3, 2.6-3.8 GHz where appropriate) assessed before creating drone-only spectrum. Confidential? – N
Question 3: Do you have any comments on our proposed approach to coordinating drones with other users of the 450 MHz band? In your response, please indicate whether it relates to co-channel or adjacent channel use, and provide evidence for any coexistence issues raised.	450 MHz should not be considered for a scalable national drone C2 framework. The limitations are fundamental: • Very narrow bandwidth: Ofcom proposes 12.5 kHz channels, which severely limits capacity and future service evolution. • Poor spectrum efficiency: the proposed narrow-band architecture does not provide a practical path to broadband MIMO, beamforming or other capabilities used in modern 4G/5G networks to increase capacity, performance and reliability. • Large coordination footprint: Ofcom's own model shows that a 10 km service area at 100 m

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	AGL and 10 W ERP can require a blocking area extending about 100 km from the base station and typically sixteen 50 km × 50 km grid squares. • Heavy coexistence constraints: co-channel separation, adjacent-channel protection and international coordination further reduce usable spectrum. • Fragmented availability: the band is already heavily used and availability is particularly limited in urban areas and much of England. In Ericsson's view, these constraints make 450 MHz unsuitable as a scalable, efficient or future-proof C2 solution. We therefore do not support a general 450 MHz drone authorisation framework. Specialist, temporary trials may be considered case-by-case. Confidential? – N
Question 4: Do you have any comments on our proposed 450 MHz drone authorisation approach? Please provide any specific views (including technical justification where relevant) on: • the proposed technical conditions, including operating height AGL, power, channel bandwidth, designated service area, and number of base stations; • the proposed non-technical conditions, including licence fees and term, frequency flexibility and complying with CAA rules and radio equipment standards; and • reviewing our initial authorisation approach.	Ericsson recommends that Ofcom does not proceed with a general 450 MHz drone authorisation. The proposed 100 m AGL, 10 W ERP, 12.5 kHz channels, location-dependent availability and three-year licence term are appropriate only for narrow specialist applications, not a scalable BVLOS platform. Ofcom should instead focus on aerial use of licensed mobile networks, including mobility, MIMO/beamforming, QoS, multi-network resilience and network APIs. Confidential? – N
Question 5: Do you have any comments on our proposed 5030-5091 MHz drone authorisation approach?	Ericsson does not support 5030–5091 MHz as a dedicated drone C2 band for the UK. The technical and ecosystem limitations are significant:

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Please provide any specific views (including technical justification where relevant) on: • the portion of the band proposed for early release (5040-5060 MHz); • the proposed technical parameters and approach to coordinating drones and/or protecting other users of the band; and • the proposal to phase out licences once there is global harmonisation, the required transition period and sunset clause.	• No mature harmonised framework exists today. Ofcom itself notes that ITU/ICAO work is still ongoing and that there is no agreed timetable for completion. • Current international approaches are fragmented. Other markets are evaluating using different sub-bands and technical conditions, which limits equipment scale and interoperability. • The proposed UK release is narrow and interim: only 5040–5060 MHz initially, with 250 kHz maximum channels and a 2032 sunset. • It requires a separate radio infrastructure and device ecosystem rather than reusing nationwide 4G/5G infrastructure already available for BVLOS connectivity. • It offers no clear efficiency advantage over mobile mid-band. Existing licensed mobile spectrum already supports broadband capacity, mobility, QoS, MIMO, beamforming, positioning and network APIs. • There is a clear migration risk. An interim UK framework could require later changes to radios, ground systems and certification once international standards evolve. In Ericsson’s view, 5030–5091 MHz should not be established as a general commercial drone C2 layer. Trial access may continue where justified, but scalable BVLOS should prioritise existing licensed 3GPP mobile spectrum, particularly harmonised mid-band TDD, rather than creating a separate, potentially proprietary aviation radio ecosystem. Confidential? – N
Question 6: Do you have comments on our proposal to create a new drone detection radar licence for the 24 GHz band, including the proposed technical and non-technical conditions, the proposed draft licence in Annex 12, and our coexistence analysis in Annex	Ericsson does not support 24 GHz standalone radar as the strategic national drone-detection architecture. Radar remains useful at selected airports, prisons, defence sites and critical infrastructure, but detection alone does not provide trusted identity, authorisation, network status or UTM integration. The scalable approach is layered: network-derived identity/location, electronic conspicu-

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6? Please provide evidence for any issues raised.	ity, UTM information, ISAC (Integrated Sensing and Communications) and targeted radar where operationally justified. Confidential? – N
Question 7: Do you have comments on our proposal to create a new drone detection radar licence for the 16 GHz band on a case-by-case basis, including the proposed technical and non-technical conditions and proposed draft licence in Annex 12? Please provide evidence for any issues raised.	Ericsson recommends limiting 16 GHz to specialist, case-by-case deployments. Ofcom's own proposal requires MOD coordination and envisages fixed use, confirming that this is not a scalable national detection layer. The UK should prioritise interoperable 'sensing' capabilities that reuses existing infrastructure, with dedicated radar retained only where the operational/security case requires it. Confidential? – N
Question 8: Have you identified any other frequency bands we should consider for drone control links in the longer term?	Yes. Ofcom should prioritise existing harmonised licensed mobile spectrum, particularly mid-band TDD, rather than a new drone-only allocation. Mid-band provides useful bandwidth and supports mature 3GPP capabilities including MIMO, beamforming, mobility, QoS and positioning. The objective should be seamless integration from low-altitude drones into air-to-ground/air-ground-air services using a common 3GPP architecture. Confidential? – N
Question 9: Do you have any comments related to the existing satellite frequencies available for drone control links?	Satellite/Non-Terrestrial Networks (NTN) should be complementary resilience, not the default primary C2 layer. Ofcom should preserve technology neutrality and align with 3GPP NTN standards and globally harmonised satellite frameworks. Operations should be able to combine terrestrial mobile, low-/mid-band coverage and 3GPP NTN according to the safety case, without mandating a separate UK-specific backup radio. Confidential? – N
Question 10: What are your needs and priorities for accessing spectrum for drone safety? Do you have interest in future use of 15 GHz and/or 76 GHz, or other specific frequencies and bands for similar drone safety use?	Onboard radar can be valuable for specific DAA safety cases, but should be one layer in a wider solution architecture combining electronic conspicuity, UTM information, network positioning/verification and assured communications. Ericsson supports continued international harmonisation work at 15 GHz and 76 GHz and

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	recommends avoiding premature UK-specific spectrum constructs. Confidential? – N
Question 11: Do you have any interest in ground based UAT to complement the aerial component in 978 MHz licences?	Potentially, as a complementary safety layer. Before creating a nationwide ground-UAT infrastructure, Ofcom should compare its deployment and lifecycle cost with network-based electronic-conspicuity approaches. Mobile networks can distribute traffic information and expose identity, location, QoS and connectivity status through standardised APIs at scale. Confidential? – N
Question 12: Are you interested in or do you have any plans to trial the use of ISAC for drone detection purposes?	Strongly supportive. Ofcom should move from seeking expressions of interest to establishing a structured UK ISAC trial programme. Ofcom already identifies ISAC as a potential means of detecting and tracking drones using mobile-network infrastructure and spectrum. Ericsson supports this direction and recommends a fast-track UK trial programme during 2026/27, coordinated between Ofcom, CAA, relevant Government/security stakeholders, MNOs, infrastructure owners and technology suppliers. Initial trials should reuse existing mobile sites, transport and spectrum, including the 3.4–3.8 GHz band identified in the European Commission mandate to CEPT for detecting and tracking flying objects, including unconnected drones. The trials should validate a small number of practical metrics: detection range and probability, localisation accuracy, false alarms, coexistence with mobile services, security, and integration with Remote ID/e-conspicuity/UTM. This should also feed international standardisation rather than create a UK-specific solution. 3GPP Release 19 already includes Integrated Sensing and Communication, together with Release 19 study work on ISAC channel modelling for NR. Ericsson would welcome the opportunity to work with Ofcom and UK stakeholders on such trials.

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Question 13: Do you have any other comments on this consultation document?	Ericsson recommends reframing the policy from 'additional drone spectrum' to an integrated Digital Airspace framework. Reuse licensed MNO spectrum where possible; prioritise mid-band TDD where additional aerial capacity is needed; use MIMO/beamforming, positioning and standardised APIs; integrate low-altitude operations seamlessly with air-to-ground/air-ground-air; use 3GPP-compliant NTN for additional resilience; and develop ISAC for non-cooperative detection. Dedicated 450 MHz, 5 GHz, 16/24 GHz — and any future 26 GHz drone-only allocation — should not become separate national silos. Ericsson would welcome an Ofcom-led technical roundtable with CAA, Government, MNOs and aviation stakeholders before final decisions. Confidential? – N