

Consultation response form

Question	Your response
Question 1: Do you agree with our assessment of the business models that could potentially emerge?	Confidential? – N No comment
Question 1(a): Are there any other business models that you think could deliver benefits for people and businesses in the UK?	Confidential? – Y / N No comment
Question 1(b): Are there any business models that could not operate under our proposed approaches?	Confidential? – Y / N No comment
Question 2: Do you agree with our assessment of the benefits that could be realised through authorisation of D2D services?	Confidential? – N I do not agree that the assessment is complete. Ofcom's consultation paper has many strengths and deserves recognition for its forward-leaning approach: <ul style="list-style-type: none"> Ofcom is right to act early. The proactive timing of this consultation reflects appropriate regulatory foresight. The support for LEO satellite innovation is welcome and well judged, particularly given the UK's interest in remaining competitive in the evolving space and connectivity landscape.

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	<ul style="list-style-type: none"> • The paper contains a first-rate analysis of radio interference issues. Spectrum sharing always involves a trade-off between enabling innovation and managing disruption to incumbent services. Since MNOs may be on both sides of that equation, their input will be critical in determining the optimal balance. • Most importantly, Ofcom’s preference for a partnership-based mobile spectrum sharing model — encouraging commercial collaboration between MNOs and LEO operators — is exactly the right regulatory instinct. This approach can deliver a more seamless user experience, while reducing friction. <p><u>However, one important dimension is under-addressed in Ofcom’s benefits assessment: the systemic risks that could negate these benefits abruptly and at scale.</u> These are not ordinary commercial risks in an ordinary commercial market, but current structural vulnerabilities particular to the current LEO satellite market:</p> <p>1. Strategic Distortion of Market Forces The LEO satellite sector is undergoing a “gold rush” phase, with dozens of constellations under development. Crucially, at least four major LEO players are backed by governments or billionaires pursuing strategic or prestige objectives rather than financial returns. This creates a distorted playing field and heightens the risk that viable commercial providers — including those the UK might rely on — could be squeezed out or destabilised. In a world of rising economic nationalism and digital trade conflict, dependence on a single proprietary platform not under UK sovereign control would be highly imprudent if LEO D2D is ever to be viewed as part of a critical national infrastructure.</p> <p>2. Lack of Global Space Traffic Governance If all planned LEO constellations launch, we could soon have 100,000 satellites in orbit, many travelling at 28,000 km/h without binding global coordination. Current conjunction alert systems</p>

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	<p>already flag thousands of potential collision risks per week. Yet the current global governance framework does not match the scale of the challenge. There is no enforced system for real-time data sharing, standardised avoidance protocols, mandatory deorbiting, or coordinated orbital traffic rules. This vacuum increases the likelihood of a catastrophic event — such as a cascade collision scenario (Kessler Syndrome) — which could render entire orbits unusable and cause widespread service loss.</p> <p>3. Rising Hybrid Conflict and Space Weaponisation</p> <p>Several major powers — including Russia, China, and the United States — have demonstrated anti-satellite (ASAT) capabilities, confirming that space-based infrastructure is now part of strategic military doctrine. These are no longer hypothetical threats: real ASAT tests have already created orbital debris and signalled intent.</p> <p>Notably, in 2023, North Korea successfully launched a satellite into Low Earth Orbit and announced plans to expand this capability. This development underscores how space access is now within reach of states operating outside international norms. It also highlights the growing unpredictability of the LEO threat environment, as lower-cost access to space reduces the barriers to entry for disruptive actors.</p> <p>In this context, LEO satellite systems — particularly those supporting civilian connectivity — face increasing risk of interference, disruption, or direct targeting. Platforms that serve both civilian and military users will likely become priority targets in a hybrid conflict scenario.</p> <p>As geopolitical tensions escalate, LEO infrastructure could become a first-strike target. Ofcom’s resilience assumptions must be stress-tested against this emerging threat landscape, particularly where critical services such as 999 access or rural connectivity could be affected.</p> <p>Why This Matters for Ofcom’s Licensing Approach</p>

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	<p>Ofcom's licensing framework must not only enable innovation but actively promote resilience to the extent practicable. In my response to Question 12, I propose a straightforward resilience measure: that is, requiring all authorised D2D services to conform to open, public technical standards developed by recognised bodies such as 3GPP or ETSI. This would ensure that consumers can switch seamlessly between LEO platforms using their existing smartphones, and that resilience and competition are preserved even in the face of geopolitical or commercial shocks.</p>
<p>Question 2(a): Are there any other benefits for UK citizens and businesses that could be realised?</p>	<p>Confidential? – Y / N</p> <p>No comment</p>
<p>Question 3: Do you have comments on how emerging D2D technology should support 999 service provision?</p>	<p>Confidential? – Y / N</p> <p>No comment</p>
<p>Question 4: Are there any mobile spectrum bands not in scope of our proposals that you think we should consider?</p>	<p>Confidential? – Y / N</p> <p>No comment</p>
<p>Question 5: Does deployment in supplementary downlink spectrum (SDL) present any challenges in comparison to other bands? Is there interest in deploying in this spectrum?</p>	<p>Confidential? – Y / N</p> <p>No comment</p>
<p>Question 6: Do you agree with our proposal to limit this authorisation to the UK mainland and territorial waters? If not, please explain why.</p>	<p>Confidential? – Y / N</p> <p>No comment</p>
<p>Question 7: Do you agree that our proposed technical conditions for D2D satellite emissions will protect mobile services delivered by other operators in adjacent areas and in adjacent spectrum?</p>	<p>Confidential? – Y / N</p> <p>No comment</p>
<p>Question 8: Do you agree with our high-level co-existence assessment for other services in adjacent spectrum to D2D?</p>	<p>Confidential? – Y / N</p> <p>No comment</p>

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<p>Question 9: Are there other services co-channel or in adjacent spectrum that you think we should take into account when assessing coexistence? If so, please provide evidence of the nature of interference and what level of protection you consider is necessary.</p>	<p>Confidential? – Y / N</p> <p>No comment</p>
<p>Question 10: Do you agree with our preferred authorisation approach (option 2)? If not, please set out your reasoning.</p>	<p>Confidential? – Y / N</p> <p>No comment</p>
<p>Question 11: Are there any alternative authorisation options, not discussed here, that you believe are worth considering?</p>	<p>Confidential? – Y / N</p> <p>No comment</p>
<p>Question 12: Do you agree with the proposed conditions?</p>	<p>No comment on the proposed conditions.</p> <p>An additional condition should be added to the proposed licence terms: the D2D radio access technology used must conform to an open, public technical standard developed by a recognised standards body such as 3GPP or ETSI.</p> <p>Open standards allow all smartphones to access all compliant satellite networks. This is the clearest path to a robust and future-proof D2D ecosystem — one that delivers the promised benefits without exposing the UK to unacceptable systemic risk.</p> <p>This requirement is not about Ofcom selecting a technology; it is about ensuring interoperability through established, transparent, industry-led processes. It would enable consumers to retain service continuity even if a given LEO satellite provider fails or becomes unavailable due to geopolitical factors.</p> <p>In a high-risk environment marked by strategic instability, open standards are the only realistic means to avoid consumer lock-in, preserve long-term competition, and, most of all, spread the risks in what has become a very uncertain world.</p>

Question	Your response
Question 13: Do you have any other comments on the proposals set out in this document?	Confidential? – Y / N No comment

Please complete this form in full and return to mobilefromskyandspace@ofcom.org.uk.