

ACNI input to Ofcom Consultation – Enabling Drone Innovation and Security

Consultation: Enabling drone innovation and security – Additional frequency bands for drone control and drone detection radar

Ofcom's Advisory Committee for Northern Ireland (ACNI) advises Ofcom on the interests and opinions of citizens and consumers in Northern Ireland in respect of communications matters. We are independent and our views do not represent the views of Ofcom or its staff.

Please accept this document as the Committee's submission to the above consultation, with particular reference to the implications and opportunities arising from the proposed use of additional spectrum for drone operations in Northern Ireland.

THE CONTEXT

Northern Ireland has specific characteristics which warrant consideration in the development of the UK's approach to drone spectrum. It has a significant rural population and dispersed settlements, alongside a land border with the Republic of Ireland. These characteristics are particularly relevant to the proposed use of the 450 MHz band, which Ofcom identifies as being well suited to longer-range operations in rural and remote areas and in locations where mobile coverage may be unavailable.

Ofcom's analysis is particularly noteworthy in respect of Northern Ireland. It indicates that, unlike many urban areas of mainland GB, a greater number of 450 MHz channels are expected to be available in Northern Ireland.

ACNI therefore considers that Northern Ireland presents both particular regulatory considerations and a potentially significant opportunity to support the development and testing of emerging drone technologies.

CROSS-BORDER OPERATIONS AND COORDINATION

The land border between Northern Ireland and the Republic of Ireland creates unique considerations for drone operations, especially where operations are Beyond Visual Line of Sight (BVLOS) or where drones may operate close to, or potentially across, the border.

ACNI welcomes the fact that Ofcom has recognised this issue in the consultation. Ofcom notes that it is already consulting with ComReg to establish appropriate arrangements for protecting services in Ireland, including along the land border with Northern Ireland.

However, ACNI considers that this should extend beyond spectrum co-ordination alone. As drone operations develop, operators should have clarity about the licensing and operational requirements that apply when operating close to, or across, the border. The potential interaction between Ofcom, ComReg, the UK Civil Aviation Authority and the Irish Aviation Authority should therefore be considered as part of a co-ordinated approach.

This is particularly important for commercial and public-service applications where a drone may routinely operate over significant distances. A regulatory framework which works effectively on one side of the

border but creates uncertainty when an operation approaches or crosses the border could become a barrier to innovation.

ACNI therefore encourages Ofcom to work with ComReg and the relevant aviation authorities to develop a clear and co-ordinated framework for cross-border drone operations, with Northern Ireland specifically considered in the development and testing of that framework.

COMMUNITY SENSITIVITY AND PUBLIC ACCEPTANCE

ACNI recognises that the consultation identifies a wide range of potential applications for drone technology, including infrastructure inspection, agriculture, logistics, emergency response and public safety. However, ACNI also recognises that Ofcom's role in this consultation is not to advocate or promote particular uses of drone technology. Rather, Ofcom is considering whether and how additional spectrum should be made available to enable drone operations. The market, public authorities and other potential users will ultimately determine which applications are viable and whether sufficient demand exists for particular drone-enabled services.

Against that background, ACNI considers it appropriate to highlight some wider considerations that may become relevant if drone use increases.

The presence of drones may not always be welcomed by the communities or individuals over which they operate. In some circumstances, a drone may be perceived as intrusive, particularly where it operates close to homes, community facilities or locations where people have particular concerns about privacy, security or surveillance. This may be especially relevant where the purpose of an operation is not immediately apparent to those on the ground.

ACNI is not suggesting that these considerations should create additional barriers to the development or deployment of drone technology. Rather, they are issues which ACNI believes should be recognised by those developing and implementing future drone services, alongside the technical and commercial considerations that will determine whether particular applications are viable.

Where sustained or repeated operations are proposed in areas where the presence of drones may be sensitive, appropriate engagement with affected communities could help build understanding and public confidence. A proportionate approach of this nature may also help avoid otherwise beneficial applications becoming controversial because of a lack of public awareness or sensitivity to local circumstances.

ACNI therefore suggests that, as the drone ecosystem develops, consideration should be given not only to the availability of spectrum and the technical feasibility of operations, but also to the wider context in which that spectrum may ultimately be used. This is consistent with Ofcom's wider responsibilities to consider the different interests of people in different parts of the UK and to ensure that regulatory activity is proportionate and appropriately targeted.

NORTHERN IRELAND AS A POTENTIAL TEST ENVIRONMENT

ACNI considers that Northern Ireland could provide an attractive environment in which to trial some of the proposals contained within the consultation.

Northern Ireland's proximity to the Republic of Ireland also presents an opportunity. Ireland has been an

early testbed for commercial drone services and has developed significant expertise in drone technology, R&D and real-world operations. The availability of suitable spectrum and opportunities to pilot new applications in Northern Ireland could help attract some of this expertise, investment and commercial activity. Combined with Northern Ireland's rural geography, relatively dispersed population and existing aerospace and technology capability, this could strengthen its position as a location for testing and developing advanced drone technologies and the proposed new spectrum arrangements.

The proposed characteristics of the 450 MHz band appear particularly relevant to Northern Ireland. Ofcom identifies the band as offering good propagation, longer range and resilience in poor weather, while also noting that its availability is generally better in rural and remote areas. Ofcom's own analysis indicates that a greater number of channels may be available in Northern Ireland than in many parts of England, Wales and Scotland.

These characteristics, combined with Northern Ireland's rural geography and dispersed communities, could provide an opportunity to test applications such as:

- Beyond Visual Line of Sight (BVLOS) operations in areas where mobile coverage may be limited;
- medical, postal and other deliveries to remote communities;
- agricultural applications;
- infrastructure inspection; and
- emergency and public safety applications.

Northern Ireland also has a well-established aerospace, defence and advanced manufacturing sector, supported by significant engineering capability, research expertise and university links. Invest NI describes the sector as having expertise across aerospace, defence, security and space, with a strong research and manufacturing base.

ACNI therefore considers that Northern Ireland could provide a valuable real-world test environment for the proposed 450 MHz framework, potentially bringing together spectrum users, drone operators, the aerospace and technology sector, universities, public bodies and communities.

Such trials could provide useful evidence not only on spectrum co-existence, but also on the practical operation of licensing arrangements, BVLOS deployment, cross-border co-ordination and public acceptance. This could help inform Ofcom's proposed review of the 450 MHz approach within three years of the first licences being issued.

ACNI would therefore encourage Ofcom to consider whether Northern Ireland could be included explicitly within any programme of trials or early deployments arising from these proposals.

SUMMARY

ACNI broadly supports the proposals to make additional spectrum available to support innovation in drone operations and recognises the potential benefits for Northern Ireland.

ACNI requests that:

- Ofcom develops a coordinated approach with ComReg and the relevant aviation authorities to address the licensing, spectrum and operational implications of drone operations close to or across the Northern Ireland/Republic of Ireland border;
- appropriate consideration is given by those developing and deploying future drone services to community sensitivity, privacy and public acceptance, recognising that the availability of spectrum does not itself determine which drone applications will ultimately be viable or adopted; and
- Ofcom considers Northern Ireland as a potential location for early trials of the proposed drone spectrum arrangements, particularly the 450 MHz band, given its anticipated spectrum availability, rural geography, potential operational use cases and established aerospace, technology and advanced manufacturing capability.

ACNI considers that a targeted programme of trials in Northern Ireland could provide valuable evidence to inform the wider UK framework while also supporting innovation and economic development within Northern Ireland.

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