



Innovative uses of spectrum

Summary of consultation responses and next steps

Interim statement

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Section 1

Interim statement

Consultation

1.1 We published a consultation document on 9 October 2008 in which we sought views on the general approach that we proposed to take when licensing commercial use of non-liberalised and non-tradable spectrum for which there are no existing suitable licences¹. This followed approaches in recent years from a number of organisations that wished to launch innovative commercial wireless services. The consultation document asked stakeholders about the key features we proposed for an innovation licence, including technical conditions, term, revocation, protection from interference, award mechanism and licence fees.

Responses

1.2 We received 23 responses to the consultation. In general respondents were positive about the need for us to be able to respond effectively to requests for innovative uses of spectrum and the basic proposal to create a new class of licence. Respondents raised a number of points in relation to the detailed proposals which are summarised in Annex 1. Respondents fell into two groups: public sector bodies and commercial spectrum users/representatives. We have published those which were not confidential² and a list of those respondents who did not request their details to be kept confidential is in Annex 2.

1.3 The public sector respondents were the Civil Aviation Authority (CAA), the Ministry of Defence (MOD), the Meteorological Office and NATS. They hold, manage or make extensive use of the spectrum to which the proposed licences would apply (initially at least). They expressed views on preventing and remedying harmful interference and the potential administrative burden imposed by the new licensing processes.

1.4 The commercial respondents were companies already involved in innovative uses of spectrum and/or those with wider spectrum interests. Their responses focused on the availability of innovation licences and the terms and conditions likely to be applied to them.

1.5 We do not respond in this document to the points that have been made. We will do so in full in our final statement after the conclusion of the ongoing discussions described below.

Next steps

1.6 Having considered the responses, we are content that the overwhelming majority view supports the introduction of innovation licences and we shall therefore continue to develop them. We acknowledge that firms are keen to see the licences and that investment decisions will depend, inter alia, on ready access to spectrum via these licences. However we must accommodate competing needs in considering the introduction of these licences and we must address the concerns expressed by the MOD and CAA.

¹ <http://www.ofcom.org.uk/consult/condocs/ius/main.pdf>

² <http://www.ofcom.org.uk/consult/condocs/ius/responses>

- 1.7 When they become available, these licences will provide a framework which will make it easier to use spectrum that has yet to be fully exploited by its holder(s). We must consider any request to use the spectrum. It is therefore more efficient and reduces the burden on spectrum managers and holders as well as applicants to have a specific product with an agreed procedure associated with it and this would be provided by the proposed licences. We are clear, however, that these licences will not remove the need for discussions with public sector bodies about use of this spectrum either in the short or the long term. We should also be clear that not every application for a new licence will be successful.
- 1.8 We do not believe that it would further the interests of citizens and consumers to put in place a system that did not respect the legitimate needs of the public sector bodies who may be using all, or part, of this spectrum and whose use could be adversely affected. Indeed, as noted in the consultation document, granting access to this spectrum would require consulting the public body concerned and ensuring new use did not cut across its current or planned exploitation of the spectrum. A lack of confidence among public sector bodies in the system itself would not facilitate that process. Consequently, the introduction of these new licences must be subject to the satisfactory conclusion of discussions with public sector bodies, to meet the concerns that they have expressed. We remain confident that we can resolve these issues.
- 1.9 We are therefore discussing in detail with the CAA and the MOD how best to introduce innovation licences. This includes the nature of licence conditions and technical limitations, how to minimise the risk (and remedy any occurrence) of harmful interference and what information they need in what form to be able to comment on an application in a timely manner without disproportionate effort.
- 1.10 When we have concluded those discussions, we intend to hold a seminar for interested stakeholders to better understand whether the procedures we are considering introducing are workable and reasonable.
- 1.11 On the working assumption that we shall in due course be introducing the licences, we shall in the meantime develop the necessary legislation and the administrative and technical arrangements. While we cannot predict exactly how long it will take to conclude discussions with the public sector bodies, we are aware that a number of firms are keen to see the new licences and that they need to plan investments. We shall therefore publish our final statement and make the licences available as soon as we can. We shall also publish updates on our website.

Annex 1

Summary of responses

Question 1. Do you agree with our proposal to create a new innovation licence class?

A1.1 Almost all respondents agreed with our proposal. Only one respondent felt that the new licences were not needed. Comments included:

- The spectrum available should be made the subject of an award, rather than being licensed piecemeal, first come first served.
- We should grant innovation licences in more spectrum than just that managed by public sector bodies.
- We must consider the impact on others of spectrum use authorised by the new licences.

Question 2. Do you agree with our proposal to grant innovation licences on a first-come-first-served basis?

A1.2 Respondents generally agreed the approach that we proposed. Comments included:

- We must not allow innovation licensees to hoard spectrum to frustrate others.
- We should clarify what we would do if demand for spectrum through the new licences were to exceed supply.
- There may be resource implications for existing spectrum holders and managers.

Question 3. Do you agree with our proposal that innovation licences be service and technology neutral?

A1.3 On balance, responses were in favour, though support was qualified. Comments included:

- All possible interference must be removed before a licence is granted.
- Applicants must supply full technical details, so that potential interference can be assessed.
- We must bear in mind the cumulative effect of several licensed uses in the same spectrum.
- Different uses have different impacts on established uses.
- The protection of safety-of-life bands must be of paramount importance.

Question 4. Do you agree with our proposal that innovation licences should include a “non-interference-non protected” licence condition?

A1.4 This was generally seen as a positive proposal. Comments included:

- A degree of protection could foster further innovation.
- The onus must be on the new user to prove that it will not cause interference.
- Apparatus must comply with the Radio and Telecommunications Terminal Equipment Directive to protect, for example, users in adjacent bands.
- Established services would still need protection if an innovative use became popular with a large number of users and therefore widespread.
- The proposal to rely on proof of harmful interference as the prime criterion to justify revocation of an innovation licence was inadequate.

Question 5. Do you agree with our proposal that, in general, innovation licences have an indefinite duration?

A1.5 Commercial respondents broadly agreed. Public sector respondents disagreed. Comments included:

- This would be acceptable if licensees ensured that there was no harmful interference.
- To protect established users, licences should be of limited duration as even commercial trials should not continue indefinitely.
- A finite term could encourage licensees to plan to move to a more permanent licence product.
- An indefinite term may invite licensees to infer security of tenure.
- If a product had widespread use, it would be difficult to recall if it caused harmful interference.

Question 6. Do you agree with our proposal that innovation licences have no initial period?

A1.6 Those who responded broadly agreed with this proposal. Comments included:

- The absence of an initial period may discourage investment, due to the lack of certainty and time for projects to be set up.
- There should be scope for exceptions for ‘special cases’.
- Licences should include a ‘use it or lose it’ clause.
- An initial period may encourage licensees to infer security of tenure.
- An initial period would cause the licensee to plan for finite (only) use of the spectrum.

Question 7. Do you agree with our proposal that innovation licences have a minimum notice period for variation or revocation on spectrum-management grounds of one year?

A1.7 Respondents generally agreed with the proposal. Comments included:

- The notice period must be sufficient to allow a reasonable return on investment.
- There should be provision for 'special cases'.
- Any extension beyond a one year period should require a fresh application.
- The notice period should be assessed and agreed case by case.
- Licensees must realise that stations must be shut down immediately if they cause harmful interference.

Question 8. Do you agree with our proposals for varying or revoking innovation licences during the minimum notice period?

A1.8 Respondents generally agreed with these proposals.

Question 9. Do you agree with our proposal to allow only outright total transfers of innovation licences?

A1.9 We received mixed responses to this proposal. Comments included:

- A register would be needed to cope with trading of UK-wide uses.
- Trading is inappropriate for this sort of use; if spectrum is no longer needed it should be returned to Ofcom (*sic*).
- Transfers can only be justified in cases where a firm is taken over by another.
- Transfers would be acceptable for licences that were technology-neutral.
- Transfers would be acceptable for licences that were not technology-neutral.
- Plans to allow transfers must be compatible with the plans for grants of Recognised Spectrum Access to the MOD.

Question 10. Do you agree with our proposal to charge a fixed fee of £2,000 per innovation licence per year?

A1.10 There were mixed responses to this proposal. Comments included:

- More information was needed on the way the charge would be applied, for example whether it would vary by area or by MHz.
- The fee should reflect the amount of spectrum used or the geographical coverage area.
- Fees should be negotiated case by case.

- The basis of the fee must be transparent.
- For that level of fee, the use should enjoy protection.
- Ofcom must justify the expectation that supply will exceed demand.
- One applicant could secure all available spectrum.
- This fee level may not cover the cost of issuing the licence.
- This price could compete unfairly with awarded spectrum. The fee should reflect those based on Administered Incentive Pricing for other spectrum in the bands being used.

Additional comments made by respondents

A1.11 We received a number of additional comments, for which we thank respondents.

- Ofcom should clarify its relationship with the spectrum holders and managers.
- Licence conditions must be flexible to meet all circumstances encountered by commercial trials.
- Ofcom should convene a workshop to resolve residual concerns.
- Applications should be based on a business case as much as a safety case.
- Users of adjacent bands must have a say in the licensing decision.
- If innovation licensing were passed to a commercial band manager, it would be working to maximise profit from the spectrum.
- This approach runs counter to the market-led approach.
- There could be arguments about what constitutes the 'innovative commercial wireless service' mentioned in the consultation.
- Granting licences at such low fees is inconsistent with the requirement that other users purchase spectrum at market rate and does not promote competition.
- 'Public spectrum' should be only the MOD spectrum and not the civil spectrum used for aeronautical and maritime services.

Annex 2

Non-confidential respondents

Bluenowhere Limited

Broadband Access Strategies

Civil Aviation Authority

Copsey Communications Consultants

Huber + Suhner

Intellect

Meteorological Office

Metranet

Ministry of Defence

NATS (formerly National Air Traffic Services)

Nomad

Plextek

T-Mobile