uk spectrum policy forum

Invitation to Tender (ITT)

Independent study on The Future of Spectrum Sharing, Wireless Networks and Connectivity

10/11/2026

Background

Wireless networks are becoming increasingly interconnected. Mobile, Wi-Fi, fixed, private and satellite networks are no longer operating as entirely separate systems. Instead, they are increasingly being combined to deliver a single service experience, with users often moving between different networks without being aware of the underlying technology.

This convergence is being enabled by advances in connectivity technologies, increasing demand for ubiquitous coverage and performance. It is creating new opportunities to improve how spectrum is used, while also introducing more complex relationships between technologies, operators and services.

At the same time, spectrum access is evolving. New sharing approaches, automation tools and coordination mechanisms are emerging across both terrestrial and satellite sectors. As networks become more integrated and spectrum use becomes increasingly dynamic, traditional approaches to spectrum access, coordination and coexistence may come under growing pressure.

Moreover, the boundaries between different technologies, services and networks are becoming less distinct. For consumers, connectivity is increasingly experienced as a single service delivered across terrestrial and satellite networks. For spectrum management, however, those networks may rely on different spectrum allocations, licensing regimes and interference frameworks. As the technologies converge, regulators will increasingly need to consider how spectrum can be accessed and shared across those traditional boundaries.

Scope

The study will consider four areas relevant to the UK. These areas form a non-prescriptive list of priorities.

1. Hybrid Networks and Consumer Experience: mobile, Wi-Fi, fixed, private, neutral-host and satellite networks are increasingly being combined to deliver a single connectivity experience (combining terrestrial broadband with direct-to-device satellite connectivity). This area should describe how end users make use of these hybrid services in practice, including user experience and use cases, and how users move between networks.
2. Sharing Modalities and Coexistence: connectivity through different technologies is expected to provide a seamless experience, while access to spectrum is expected to become more dynamic. This area of study should examine sharing modalities, including the environments and use cases where shared use conflicts with traditional exclusive licensing models, and whether current policy enables different technologies to share spectrum efficiently. As spectrum use becomes more dynamic, existing approaches to access, coordination and interference management may need to evolve. The study should cover currently proposed or deployed dynamic sharing mechanisms and frameworks, as well as providing horizon scanning of such

mechanisms, for the relevant technologies, highlighting the policy and spectrum management implications.

3. Next-Generation Spectrum Sharing Technologies: this area should examine spectrum sharing, from the technology perspective, highlighting how next-generation sharing technologies, e.g. cross-technology sensing, AI-enabled coordination and automated databases could transform how spectrum is shared. This area of study should be framed as horizon scanning. Bidders should assess the maturity of these technologies and what is proven in practice, together with their potential applications and implications for UK spectrum policy, regulation and experimentation.
4. Market and Governance Implications: this area of study should examine the implications of network convergence and increasing use of sharing mechanisms for competition, investment, business models, customer relationships and industry-government collaboration. It should also consider how governance arrangements may need to evolve to support future wireless ecosystems. These developments raise wider questions beyond spectrum management alone.

In this ITT, “coexistence” means the ability of different networks and services to share spectrum without harmful interference. Coexistence sits between spectrum sharing and spectrum access.

It does not refer to particular technologies or techniques (e.g. spread spectrum). Bidders should state which dimension of spectrum their analysis addresses: frequency, geography and space, time or licence conditions (or a combination of them). Bidders can choose their depth of analysis, e.g. either reviewing existing mechanisms and how they fit a seamless user experience, or proposing new approaches. They should explain that choice by reference to technology maturity, the characteristics, specificities and relevance of the UK ecosystem or other relevant factors.

For each technology, the analysis should distinguish what exists now from what is possible later. Where a technology is not yet well defined, bidders should define it before assessing it. Bidders may prioritise a subset of technologies, explaining their choice. The analysis should not re-explain established frameworks such as the Citizens Broadband Radio Service (CBRS) or Automated Frequency Coordination (AFC).

Expected deliverables

The final report should:

- Provide a clear description of how hybrid connectivity ecosystems are evolving across mobile, Wi-Fi, fixed, private, neutral-host and satellite networks, including user experience and use cases.
- Set out future options for spectrum access, sharing and coexistence, and their policy and spectrum management implications. Assess whether policy gives shared spectrum sufficient weight relative to exclusive licences, judged against spectrum efficiency, interference protection and investment certainty, and how coexistence is achieved across frequency, geography and space, time and licence conditions.
- Evaluate the maturity of next-generation sharing technologies, including cross-technology sensing, AI-enabled coordination and automated databases, distinguishing what is proven in practice from horizon-scanning options, and their relevance to the UK spectrum policy environment and characteristics.

- Assess the implications for competition, investment, business models, customer relationships and industry-government collaboration, including how governance arrangements may need to evolve, with a focus on network operators.

Cost:

- Total budget is of the order of £35,000 (+VAT)

Timetable:

- ITT issued: 12 November 2026
- Deadline for clarification of questions: 11 December 2026
- Deadline to submit your tender[1]: 14 January 2027

Duration:

- Expected duration of the study: approximately four months, including delivering the report.
- To enable transparency and more efficient delivery management, it is suggested, at the start of the study, to establish monthly checkpoint meetings, during which UK SPF could provide updates on the progress and the findings of the research and invite the successful bidder to a mid-point peer review of a draft of the final report, with an interim scoping note delivered at the first checkpoint.

Evaluation:

- The scoring system is as follows:

Criteria	Weight
Understanding the requirements	20%
Relevant experiences	20%
Methodology and approach	20%
Project management	10%
Resources allocated (CVs)	20%
Price	10%

Notes for bidders:

- Individual bidders are not discouraged; however, given the data requirements we will prioritise organisations/group submitters
- Unsuccessful bidders will receive their scores to help inform future tenders
- The successful bidder will be required to meet (in person or virtually) with the UK SPF drafting group to provide regular updates and feedback
- The successful bidder is expected to work with the UK SPF secretariat to create a press release and publicise the report and its findings
- Disclaimer: the areas set out in this ITT are a non-prescriptive list of priorities. Bidders are invited to propose how to combine, prioritise and trim the areas to fit the budget and timeline, and to explain their approach in the bid.

[1] Submissions are due at 17:00 GMT on Thursday 14 January.

- Interested companies should contact Tales Gaspar at tales.gaspar@techuk.org for Terms and Conditions. Any contract or order awarded as a result of this ITT shall be subject to these Terms and Conditions. Any reference to your own conditions of contract/conditions of sale in your standard bid documentation shall be specifically withdrawn.
- Interested companies should submit one electronic copy of their quotation per proposal – including financial and technical proposals – to Tales Gaspar at tales.gaspar@techuk.org by 17.00 BST on the date stated in the Timetable. Your quotation is expected to include all required information, or clearly state the reason for being unable to do so. Any assumptions used in preparing responses should be clearly stated.
- The technical response, covering aspects such as understanding the requirements, relevant experiences, methodology and approach should be limited to a maximum of 5 pages. Your quotation shall be firm, fixed and capable of acceptance.
- Please direct any questions relating to clarification of the ITT by email to Tales Gaspar (tales.gaspar@techuk.org).
- By submitting a response, you confirm that you understand the requirement, have sufficiently addressed all aspects of the tender and the information provided, and have checked all stated details, such as prices, to be correct and as intended.