

UK Universities 6G Spectrum Research Initiative

Collaboration Model: SPF Cluster 2 Consultation Meeting – 5th Oct 2021

Breakout Session: 10am to 11am – UK Universities 6G Collaboration Model Discussion

Objective of the Breakout Session:

To discuss and review the options, the benefits and key goals for a UK 6G Spectrum Research Initiative Collaboration. A series of slides and discussion points will be shared and open to the meeting for discussion. Section 5 of the Consultation report (link below) outlines key areas for a collaboration model to consider and captured in the 8 key recommendations.

SPF Consultation information: <https://www.techuk.org/resource/public-consultation-on-recommendations-to-government-on-how-to-harness-the-potential-of-6g.html>

Consultation Report: <https://www.techuk.org/asset/7A40E624-F5FC-4833-BDBAFCAB19D9A1CC/>

Expert Panel Recommendation 3

This third recommendation (see Consultation Report Section 3 for the 8 key recommendations) recommended that for UK Universities 6G Spectrum Research:

The government should take action that would secure critical mass of research activity and be globally competitive, thus enabling the UK to be an attractive and leading partner in international collaborations. An additional government funding of £25 million per year for 6G spectrum related research would be an excellent investment as there are few better opportunities for matching known long-term national mobile and wireless infrastructure problems with UK research excellence to create and supply solutions.

Requests to Attendees on 5th October 2021 Open Meeting

The UK Universities 6G Spectrum Research Expert Panel Chair (Bob Stewart) will lead a discussion and share some presentations and options and opportunities for a collaboration model. *All are invited to make comment on this collaboration model and contribute to review, best practice options and ideas for creating optimum conditions for an internationally leading endeavour in the UK.* Key elements that will be presented for structured discussion include:

Clustering/Partnering models: Options include, (i) one University become the UK 6G Centre of Excellence and research teams relocate to that one centre, or (ii) Three or so Universities with complementary expertise form a partnership and become the hub of a UK 6G Centre of Excellence that manage research clusters of a wider number of research associates (other universities) focussing on the same topic; or (iii) Research distributed across unlimited number of Universities (20 or more, and perhaps the current status quo).

Best Practice for:

- Collaboration, common purpose and engagement across academia, industry, and government.
- Building advisory and partnerships with UK regulator Ofcom and MNOs and other 'public' network stakeholders.
- Integrating the existing 6G relevant national activities and capabilities.
- Running UK national 6G workshops and events open to all partners and stakeholders.
- Supporting mutually agreed contributions to international standard bodies.
- Strategic and supportive strategy for UK participation in Horizon Europe.
- Driving international collaboration and building UK influence in 6G spectrum and technology.
- Creating complementarity to EPSRC/UKRI and Innovate UK funding portfolios on advanced communications.
- Creating a 6G SME engagement programmes with accessible (low cost), workable and 'easy' points of entry.
- Support momentum of existing work and activities unearthed in the initiative workshops and more.
- Budget considerations – What could be achievable momentum and activity with proposed £25m per year?
- Supporting and dovetailing with the UK DCMS Telecommunications Diversity Strategy.
- Management of IPR and licensing strategies to support UK industry and particularly SMEs.
- Mechanisms to support both low TRL and high TRL, and research of both theoretical and experimental nature.
- UK 6G Testbeds and Trials – considering 'pioneer' frequency bands for the future.
- Frequency bands for 6G Spectrum Research: from low band to terahertz to visible light.