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RADIO SPECTRUM POLICY GROUP

Progress Report of the RSPG Working Group on European Spectrum Strategy

RPSG Working Group European Spectrum Strategy

Progress Report to RSPG Plenary

January 2019

The RSPG Working Group on European Spectrum Strategy (WG ESS) has identified 6 key themes that should be considered under this workstream. The six themes are:

- Innovation
- Sharing
- Harmonisation
- The role of market mechanisms
- Meeting the needs of all spectrum users
- Receivers and Standards.

Work in the Group has thus far focused on the first two of these themes: innovation and sharing. These two topics were discussed at a stakeholder workshop held in Dublin in September 2018 which provided an excellent platform for stakeholders to exchange views and contribute to the early stages of this work. Both topics were also presented at the RSPG Stakeholder Briefing held in Budapest in December 2018 which provided a further opportunity for broader discussion with interested parties about the direction of this work.

In addition to the engaging with stakeholders, the Rapporteurs for this Group have discussed how the work may be taken forward, paying particular attention in the first instance to the topic of spectrum sharing. Based on this discussion a set of slides have been developed which we are presenting to this Plenary. The slides explain the need for more spectrum sharing to support increased demand for spectrum and set out some of the barriers and challenges that are often cited as needing to be addressed. The slides set out some ideas and initiatives which are designed to facilitate and promote greater opportunities for spectrum sharing in Europe.

The RSPG Plenary is asked to:

- Consider the current realities as described in the attached slides and comment on the situation as described
- Note the questions and challenges identified and offer views on the proposed solutions as to how we might address some of these challenges
- Consider the initiatives proposed in the attached slides, including the establishment of a Sharing Task Force and the development of a Roadmap for Dynamic Spectrum Use.

Next steps:

- RSPG Plenary to agree framework and proposals to address topic of spectrum sharing so that this can then be progressed by the Working Group
- Working group meeting to be held to brainstorm next topics on list (likely ‘harmonisation’ and ‘the role of market mechanisms’) and consider the need for future stakeholder workshop(s).

Sharing: From Static to Dynamic

Current realities

- Demand for spectrum continues to grow significantly, driven by both existing and new services and applications
- Greater and more intense spectrum sharing is becoming possible because of more sophisticated technology and new authorisation approaches
- There is not a single solution, judgements will be required to identify barriers, tools and enablers dependant on the spectrum options and characteristics
- Many of the solutions will, invariably, need to be done on a national level but a framework for this could be set multilaterally

Current realities

- Lack of information about spectrum use and spectrum demand is widely cited as a considerable barrier – including information about public sector use
- Authorisation constraints, including differing models, also mooted as a barrier
- Some previous sharing models could be revisited (White Spaces, LSA) as both a learning opportunity and potentially a loose framework / model
- Acknowledgement that coexistence can currently add complexity and therefore cost. However, potential for technology to assist with complexity and therefore lower cost.
- Risk appetite (in terms of interference) varies and QoS in the bottom line. Incentives are needed to ameliorate risk and enforcement needs to be resolute (carrot and stick).

The Challenges, the Vision and the Journey

- i. What is the current situation? –the challenges
- ii. Where do we want to get to (what does good look like)? –the vision
- iii. How do we get there? – the journey

The big questions:

- Authorisation issues - Who can do what with the spectrum rights they hold?
- Information issues - How do we identify new sharing opportunities?
- What are the incentives?

Authorisation issues - who can do what with the spectrum?

Current situation

- Diverse nature of property rights across the EU
- Lack of data on actual usage data
- Low appetite for risk from both rights holder and Regulators
- Administrative barriers

Authorisation issues - who can do what with the spectrum?

Where do we want to get to?

(what does a pro sharing authorisation environment look like?)

- Regulatory commitment to sharing
- Mature trading / leasing environment – more than lip service
- Sharing is a norm – exclusive use only when necessary
- Spectrum assignments are not a right to prevent sharing

How do we get there?

Are there any models we could revisit? LSA? White Spaces?

Or models we can import from other regions? (eg. CBRS)

What about a tiered authorisation model?

Do we need 'braver' regulation and space to fail?

More efficient ways of sharing enabled by new technologies

Change in the way spectrum assigned at international level?

What are the incentives?

Current situation – there are more barriers than incentives;

- Trust / confidence
- (perceived?) lack of enforcement
- Receiver sensitivity in adjacent bands
- Risk of losing competitive advantage

Where do we want to get to?

(what do 'good incentives' look like?)

There is positive incentives and adequate enforcement to foster confidence in the regime and allow rights holders to explore the full range of sharing opportunities

How do we get there?

Pricing

Enforcement

Share it or use it???

Information issues - How do we identify sharing opportunities?

Current situation

- lack of reliable, accessible data about spectrum use, demand and supply
- cost and business confidentiality issues highlighted as challenges

Where do we want to get to?

- information is not a barrier to enhanced sharing
- information becomes an enabler by providing clarity and highlighting opportunities.

Information issues - How do we identify sharing opportunities?

How do we get there?

- new types of, and better access to, information – both on use, demand, supply and interference
- Recognition that there is a cost but acknowledgment that it is necessary
- Information about interference could help refine and realign sharing frameworks
- Information about spectrum supply, and the characteristics of available spectrum, would help users to compare sharing opportunities
- Technology to provide new solutions

A proposal: what can the RSPG do in the short – medium term to facilitate a progressive spectrum sharing regime?

1. Sharing Task Force (STF)

- Co-chaired by a representative from a MS and a representative from industry
- Made up of representatives from all sectors of spectrum users and Member States / Regulators
- To use the 2011 RSPG 'Best Practice Report on Collective Use of Spectrum and Other Sharing Approaches' as the starting point for the work
- STF to facilitate engagement between MS and Stakeholders and between Stakeholders in order to build knowledge and trust and to build consensus around a way forward for spectrum sharing
- This work should feed into a Roadmap for Dynamic Spectrum Use

2. Roadmap for Dynamic Spectrum Use

- Propose that the focus of the RSPG's work in the sharing arena should be to develop a 'Roadmap for Dynamic Spectrum Use'
- This work should draw upon the work of the Sharing Task Force
- Essentially a WG of the RSPG responsible for identifying the vision of the RSPG for an ambitious future sharing environment with best practice evaluation and tangible action points

Proposed timeline for next phase of work

