

The 18th European Spectrum Management Conference

6 & 7 June | Brussels

DAY 1

09.00 – 09.20 **Keynote Presentation**

Renate Nikolay, Deputy Director General, DG CNECT, European Commission (confirmed)

09.20 – 09.40 **Keynote Presentation**

Eric Fournier, Chairman, RSPG (confirmed)

Session 1: Delivering a new Radio Spectrum Policy Programme (RSPP) for the 5G era and beyond – what should be the overall aims and objectives?

The first Radio Spectrum Policy Programme (RSPP) has been instrumental in shaping spectrum policy and thinking in Europe since its launch in 2012. Now, more than 10 years on, a new RSPP is being prepared to update and revise the guidelines and provide a spectrum framework for Europe that is designed for the 5G era and beyond. An impact assessment study and a public consultation are expected to have been launched by the time of this event, with the Commission aiming to deliver their proposal for the RSPP by the end of September this year. This session will explore what the key aims and objectives of the RSPP should be. Taking into account the extensive technological and regulatory developments that have been seen over the past decade, it will look at what updates and adjustments need to be made in order to deliver a forward-looking roadmap for spectrum in Europe that is suitable for today's 5G society and beyond.

- What should be the overall aims and priorities of the new RSPP?
- What lessons can be learnt from the previous RSPP and what adjustments may need to be made given the extensive technological and regulatory developments over the past decade?
- What strategic priorities should the RSPP be looking to address and how should these compare to those in the last RSPP?
- Where should the balance lie between decision making at a European and a member state level when it comes to spectrum policy, and how should this be reflected in the new RSPP?
- To what extent should sustainability and the role of spectrum initiatives in helping to contribute to environmental targets feature as part of the RSPP?
- How should the RSPP fit into the broader context of European initiatives around spectrum, and in particular some of the other over-arching policy measures such as the Gigabit Infrastructure Act and the targets that have been set as part of the European Digital Decade?
- How does the RSPP interplay with the EU chip act, digital sovereignty and geostrategic alignment close to the EU (UK, Switzerland, Norway, Turkey, but also Russia) and on a global scale (US, Korea, Japan, but also China)?
- To what extent should the RSPP re-examine the institutional structures and mechanisms used when conducting technical preparatory work for EU decisions on spectrum harmonisation or negotiations with other regions?
- What will be the next steps and likely timeframe for implementation following the release of the RSPP? How can EU policymakers, member states and industry representatives come together to ensure that its impact is maximised?

Moderator: **Andy Hudson**, CEO, Spectrivity (confirmed)

09.40 – 10.50 **Panel Discussion**

Julija Varnaite-Kamstra, Policy Officer, Radio Spectrum Policy Unit, DG CONNECT, European Commission (confirmed)

Jonas Wessel, Co-rapporteur, Digital Decade & RSPP, RSPG (confirmed)

Natalia Vicente, Director of Public Affairs & Communications, GSOA (confirmed)

Emma O'Toole, Senior Manager, Spectrum, GSMA (confirmed)

Guillaume Lebrun, Global Connectivity Policy, Meta (confirmed)

Session 2: Meeting the spectrum requirements for direct-to-device satellite connectivity

The global space and satellite sector is evolving massively with a large number of innovative new technologies, services and business models emerging. One area that is already seeing significant interest is direct-to-device satellite connectivity - satellite and mobile operators partnering to connect satellites directly to phones or IoT sensors. Whilst the potential of this is huge, it also raises a number of regulatory and technical challenges, not least when considering the best way to meet the spectrum requirements of these new hybrid networks. Two distinct approaches are emerging - some companies are looking to use spectrum already allocated for mobile satellite services, whilst others are looking to re-use mobile spectrum bands that they would access through partnerships with MNOs. This session will look at the benefits, drawbacks and challenges associated with these two approaches, as well as looking more broadly at the hurdles that will need to be overcome in order to deliver on the potential of this exciting new technology.

- What potential is offered by the new hybrid satellite-terrestrial networks and 'direct to device' satellite connectivity services that are being seen?
- What services will be supported by these networks in the short term and longer term future?
- How can the spectrum requirements of direct-to-device connectivity best be met?
- What are the pros and cons of using mobile or satellite spectrum bands respectively? What are the technical and regulatory challenges associated with each approach?
- What changes could be needed from a regulatory perspective in order to deliver the potential of these new services? How can regulators at a member state, European and global level ensure that they are keeping up with this rapidly developing market?
- What risk is there of cross-border interference with existing services and users, and what needs to be done to deliver a regulatory framework that protects against this?
- How do services in this way fit within the ITU regulations and is this an area that should be addressed at WRC-27 (similarly to HIBS at WRC-23)?
- Ultimately, will one approach to accessing spectrum emerge as the dominant one for 'direct to device' satellite connectivity services, and if so then which has the greatest chance for success?

Moderator: **Aarti Holla-Maini**, Senior Advisor - Space Policy, Forum Europe (confirmed)

11.20 – 12.30 **Panel Discussion**

Jorge Cicciorossi, Senior Radiocommunication Engineer, Radiocommunication Bureau, ITU (confirmed)

Alexander Kühn, Head of Section, International Spectrum Affairs, Spectrum Planning and Innovative Spectrum Usage, BNetzA (confirmed)

Ivan Suarez, Head of Space and Spectrum Policy, Access Partnership (confirmed)

Hazem Moakkit, Vice President, Spectrum Strategy, Intelsat (confirmed)

Stephen Pentland, Head of Market Structure & Networks Policy, Group Policy and Public Affairs, Vodafone (confirmed)

12.30 – 13.30 **Lunch**

Session 3: Spectrum sharing in the 5G era – should Europe be more adventurous?

Spectrum sharing provides a complementary approach to exclusive licensing and, if planned correctly, can increase the efficiency of spectrum and open up access to bandwidth for emerging services, including in bands that cannot be cleared of incumbent services. To date however, whilst there has been much talk in Europe about spectrum sharing, we are behind both the US and Asia when it comes to implementing concrete sharing solutions, and have arguably had difficulty in identifying the best technical and economic models to use. This session will examine the approach to spectrum sharing that is being seen in Europe, at how this compares to that taken in other regions, and whether there is an argument that we should be taking a more adventurous approach. It will look at the different sharing models and environments that are available and examine current attitudes to sharing across member states and different industry sectors. By identifying some of the factors that have delayed the implementation of sharing to date, it will look at what needs to be done to address

the challenges and move forward the development of a wide-scale harmonised shared spectrum regime across Europe.

- What factors have led to delays in the development of a common harmonised shared spectrum regime in Europe?
- Why is the EU falling behind other (developed) regions, particularly compared to the US when it comes to making spectrum sharing happen? What measures could be taken to help address this issue?
- Are there any areas in which Europe is seeing good progress in the implementation of sharing models?
- What attitudes to spectrum sharing are generally being seen across regulator and different industry stakeholder groups? Is there a genuine desire to move forward and make a success of spectrum sharing? If not, then what can be done to help incentivise this?
- To what extent should decisions around the introduction of spectrum sharing be taken at either a European or individual member state level? How can it be ensured that both national and regional interests are being taken into account?
- What role can sharing play in helping to meet the needs of different vertical users, and how can stakeholders work together to help accelerate this?
- How has the arrival of 5G changed approaches to sharing both in Europe and elsewhere, and how can it be ensured that any sharing that is introduced is beneficial to 5G rollout rather than a hindrance?
- With 3GPP Release 18 set to herald an increased focus on spectrum flexibility and dynamic sharing as we move towards 5G Advanced, to what extent does Europe need to change its approach to spectrum sharing in order to keep up with other regions?
- What impact can advancements in technologies (such as Next Generation Massive MIMO & AI Driven Systems) have on the feasibility of sharing, and how can Europe ensure that we are in a position to take advantage of these?

Moderator: **Chris Nickerson**, Manager, Analysys Mason (confirmed)

13.30 – 14.40 **Panel Discussion**

David Willis, Group Director, Spectrum, Ofcom (confirmed)

Joel Taubenblatt, Chief, Wireless Telecommunications Bureau, FCC (confirmed)

Luigi Ardito, Senior Director, Government Affairs, EMEA, Qualcomm (confirmed)

Roberto Rodriguez Dorrego, Head of Spectrum Strategy, Telefonica (confirmed)

Dave Wright, Board Member, Dynamic Spectrum Alliance (confirmed)

14.40 – 15.20 **Spectrum short i: The long-term future of the sub-700MHz UHF band**

The DTT broadcast, PMSE and mobile communities all see access to spectrum in the lower UHF (470—694 MHz) band as essential for their future connectivity needs. Work is currently ongoing at an RSPG level on the long-term future of the band beyond 2030, and a number of reports have also recently been released focussing on the same issues. Looking at the technological, service and market developments and likely future trends that can be expected both in these sectors and in spectrum databases and equipment over the next few years, this session will explore the different future scenarios that are being considered for the band, and more broadly at its likely long term future beyond 2030.

- What options are on the table across Europe for the long-term future usage of the sub-700MHz band (beyond 2030)?
- What technological, service and market developments and likely future trends are expected in the terrestrial TV and PMSE sectors over the next few years (including UHD and 5G Broadcast) and how may this impact spectrum usage?
- Could the mobile industry consider introducing supplemental downlink applications, avoiding the difficulty of a mobile uplink band?
- To what extent could these aspects and other external factors open up the possibility of coexistence of DTT and PMSE users with the mobile industry in the future?
- What impact could an approach in this way have on each user, and to what extent would it be possible to deliver a shared ecosystem that ensures full protection against interference?
- Given the very varied situation in the band that is seen across different member states, where does the balance lie between the delivery of a coordinated approach and taking account of these national differences?

Moderator: **Andy Hudson**, CEO, Spectrivity (confirmed)

14.40 – 15.20 **Fireside Chat**

Eric Fournier, Chairman, RSPG (confirmed)

Eiman Mohyeldin, Global Head, Spectrum Standardization, Nokia (confirmed)

Jaume Pujol, Chair, Policy Working Group, Broadcast Networks Europe (confirmed)

15.20 – 15.45 **Refreshment Break**

Session 4: Upper 6GHz – can a consensus be reached?

One of the most discussed spectrum issues at the moment is the future of the upper 6GHz (6425-7125 MHz) band, with stakeholders arguing strongly for it to be made available for either 5G mobile use or for licence-exempt (Wi-Fi, 5G NR-U) use. Looking at the current situation globally, some countries (e.g. US, Brazil, South Korea, and Saudi Arabia) have already allocated the band for unlicensed use; China has recently announced that it will licence at least part of the band for IMT; and many others are keeping their decisions on hold whilst waiting for the outcome from WRC-23 discussions. In Europe too, a number of different perspectives are being seen across member states, with the future use of the band not yet clear. As we move towards the vital WRC-23 in which key decisions are going to be taken for the future of the band, and against the backdrop of the RSPG an opinion and recommendations on the future of the band that were released at the end of last year, this session will look at the different visions that are taking shape in Europe (at both a regional and Member State level), and at the perspectives that are being seen around the rest of the world. With such varied approaches being seen, it will explore the extent to which a consensus on its use is likely to be reached (licensed, unlicensed or a solution that involves some element of sharing between the two), and at what is the best use of the key spectrum in the band for the long-term future of consumers and societies everywhere.

- Where should the balance lie between licensed and unlicensed use in the 6GHz band?
- What would be the impact for the development of IMT and WiFi if the technologies are not able to access the spectrum that they hope for in the upper 6GHz band?
- What different visions and proposals for the use of the band are emerging across Europe? What were the recommendations that RSPG made for the band, and to what extent will these help to guide decisions across member states?
- How can the socio-economic benefits of the 6GHz band be best maximised across Europe?
- To what extent is a sharing framework between 5G and WiFi in the band a possibility? Would this approach provide both the mobile and unlicensed communities with the access to the spectrum that they require from this band?
- If so, then what could this look like and what different technological and geographical sharing models and frameworks could be options to explore? Is the issue being address in CEPT or in ITU?
- To what extent could it be an option for mobile operators to access the band on a licence-exempt basis using NR-U?
- How important is it that a harmonised approach is reached across Europe and more broadly in order to ensure the interoperability of equipment and services across member states? Can this be a realistic objective?

Moderator: **Lee Sanders**, Managing Partner, Aetha Consulting (confirmed)

15.45 – 16.55 **Panel Discussion**

Giles Bregant, CEO, ANFR (confirmed)

Pavel Sístek, Head, Policy and Strategy Unit, CTU Czech Republic (confirmed)

Detlef Fuehrer, Senior Manager, Spectrum Management & Regulatory Affairs EMEA, HPE (confirmed)

Stephen Pentland, Head of Market Structure & Networks Policy, Group Policy and Public Affairs, Vodafone (confirmed)

Spectrum Short ii: The Future of the 5.9GHz band (5.875 – 5.935)

In Europe, the 5.9GHz band has been primarily allocated for use by Intelligent Transport Systems (ITS), such as connected and autonomous vehicles, and to support the deployment of safe and efficient rail systems. There are 2 competing standards for road ITS – G5-ITS and Cellular Vehicle-to-Everything (C-V2X) technology, and with industry split in their support for these, no consensus has been reached on how to use the band in an interoperable way and therefore only very limited rollout has been seen. A similar situation in the US and Canada has seen moves towards reallocating the spectrum for unlicensed / WiFi use, given its position immediately below the 6Ghz band. This session will look at the current situation in the band and the work that is being done to find a consensus on an ITS standard in the band. Against this backdrop, it will explore the long-term future of the band, and at the best way forward to balance the competing demands for this valuable spectrum.

- What is the current situation in the band and of the different ITS stakeholders who have access to it? What rollout of services has been seen?
- What is the current situation in the discussion around the 2 competing road ITS standards that are seen? Are we getting closer to reaching a consensus?
- What approach is being seen in North America with regards to potential reallocation of spectrum in the band for WiFi use, and to what extent should this be an approach that could be considered in Europe?
- What is the long-term future of the band and how can the needs of all the different competing users be met?

Moderator: **Graham Louth**, Partner Aetha Consulting (confirmed)

16.55 – 17.30 Regulator's Corner

Franz Ziegelwanger, Head of Department, Ministry of Finance, Austria (confirmed)

Andrea Mora, Radio Spectrum Regulation Expert, ANFR (confirmed)

Maxime Flament, CTO, 5GAA (confirmed)

El Khamis Kadiri, Innovation & Advanced Technologies Manager, Connected Vehicle & EE Systems, Stellantis (confirmed)

17:30 – 19:05 Cocktail Reception

DAY 2

Session 5: Finalising preparation for WRC-23 in Europe – what common positions have been set and what challenges still remain?

This conference takes place in between the final 2 CEPT preparatory meetings for WRC-23, and as we enter this last period of preparation, most regional positions are now starting to become clear. This session will provide the opportunity to look at the areas in which European positions have now been fixed, and at those that are still under consideration. Focussing on key agenda items such as AI 1.2, 1.5 and 10, it will hear from both policymakers and industry stakeholders on the extent to which they support the common positions that are emerging on different agenda items, and on the work that they feel still needs to be done.

- What common European positions have now been agreed on the key agenda items for WRC-23?
- What were the key outcomes of the RSPG opinion on WRC-23?
- What challenges still remain, and what will be the key focus of discussion at the final meeting of the CEPT conference preparatory group in Dublin in September?
- What are the opinions of different stakeholder groups on the positions that have emerged, and what now needs to be done to ensure that Europe achieves its key objectives from WRC-23?
- With WRC-23 also set to see the setting of future agenda items to be discussed at WRC-27, what should be the priorities here, and what will likely be the next 'wave' of bands and issues to be focussed on?

Moderator: **Laura Sear**, Senior Journalist and Analyst, PolicyTracker (confirmed)

09.00 – 09.20 Common European Positions & Challenges still remaining

Alexandre Kholod, Chairman of Conference Preparatory Group, CEPT (confirmed)

09.20 – 10.25 Panel Discussion

Glyn Carter, Director, Future Spectrum, GSMA (confirmed)

Silke Lalvani, Head of Public Affairs, Pearle* Live Performance Europe, on behalf of the Wider Spectrum Group (confirmed)

Patrick van Niftrik, Chair, ITU Working Group, GSOA (confirmed)

Martha Suarez, President, Dynamic Spectrum Alliance (confirmed)

Elena Puigrefagut, Senior Engineer, EBU (confirmed)

10.25 – 10.30 Final thoughts and comments on the discussions

Alexandre Kholod, Chairman of Conference Preparatory Group, CEPT (confirmed)

10.30 – 10:55 Refreshment Break

Session 6: The future shape of the 3.8 – 4.2 GHz band – what scope for a harmonised local licencing approach?

There has been growing momentum in Europe to use the 3.8-4.2GHz band for local private networks. A number of member states have already made spectrum in the band available on a local basis, and at a European level, CEPT is working on technical conditions to harmonise the band for local use, with the decision taken to use parameters seen in the UK and Norwegian approaches as a starting point for this. The band is also used by a number of incumbent users however, including fixed link and satellite services; and in addition to this, adjacent spectrum is used for broadband services below 3.8GHz, and by key services such as radio altimeters above 4.2GHz. This session will look at the work that is being done to explore the compatibility of local private networks with all these other key services, and the technical conditions that would need to be in place to ensure protection against interference. It will explore what a decision of this kind and the introduction of strict power level limits would mean for the long-term future of the band, and the extent to which it helps to meet the objective of obtaining the best socio-economic value from these key frequencies.

- What is the future of the 3.8 – 4.2 GHz band and of the different users in it?
- To what extent can the band become a harmonised band for local and vertical connectivity across Europe?

- What challenges would need to be overcome in order to deliver this, and how would this fit with alternative approaches seen both in Europe and elsewhere to use different spectrum bands to offer vertical connectivity?
- What work is being done at the CEPT level to study the compatibility of these services with existing users both within the band and also in adjacent frequencies?
- What studies are being conducted into the technical conditions and power limits that may be required to make this possible and to protect against interference?
- To what extent would a harmonised approach and the use of strict power limits in this way offer the best socio-economic use of this spectrum both now and in the future?
- Are there alternative approaches that could be considered which would allow higher power devices to be used in the band, and what impact could this have on compatibility with other users?

Moderator: **Jonathan Wall**, Manager, Aetha Consulting (confirmed)

10.55 – 12.15 **Panel Discussion**

Alexander Kühn, Head of Section, International Spectrum Affairs, Spectrum Planning and Innovative Spectrum Usage, BNetzA (confirmed)

Chris Woolford, Director, International Spectrum Policy, Ofcom (confirmed)

Javier Dominguez Lacasa, Head of Spectrum Policy, Telefonica (confirmed)

Andreas Mueller, Chairman, 5G-ACIA (confirmed)

Axel Schmidt, Head of Standardization, Shure, on behalf of WinnForum (confirmed)

Kevin Eisenhauer, Principal Regulatory Engineer, Intelsat (confirmed)

12.15 – 13.05 **Lunch**

Session 7: A strategic roadmap for future connectivity – finding the spectrum to deliver the European 6G vision

Discussions are well underway on identifying the key spectrum bands to provide the required connectivity for the initial rollout of 6G. The mobile industry is targeting spectrum in the 7-15GHz range to deliver the additional bandwidth that they say will be required (supplemented with sub-terahertz frequencies in the 92–114 GHz and 130-175 GHz for niche scenarios). Spectrum in this target range is however already intensively used by many well-established services, including satellite, commercial radar, fixed links services and more, and opening the band for IMT use would not be simple. There are also differences between the usage across different sections of the range Europe and elsewhere in the world, meaning that a divergence in global approaches is a strong possibility. Against this backdrop, and ahead of WRC-23, which will identify spectrum to be studied for 6G at WRC-27, this session will look at the early work that is being done in order to deliver a strategic spectrum roadmap for 6G. It will examine the candidate bands and the likely timeframe ahead as stakeholders across the region look to identify the spectrum to drive forward the European 6G vision.

- How much spectrum is it predicted will be initially needed for the rollout of 6G networks?
- What initial work is being done at a European and a member state level to identify spectrum bands and to develop a strategic spectrum roadmap to deliver the connectivity that is required?
- Have any specific bands within the 7GHz – 15GHz range been identified by the IMT industry as offering the best potential in Europe to find the contiguous blocks of spectrum that will be required for 6G? If not, then which are the most likely candidates?
- What usage is currently seen across this 7GHz – 15GHz range in Europe, and how does this differ from usage that is seen elsewhere in the world?
- How may these regional variations affect the approaches that are being seen, and are we likely to see a divergence and the emergence of different regional bandplans?
- What would be the impact of introducing 6G into these frequencies on incumbent users in the bands? How could any disruption be minimised and how could the cost of any possible relocation of services that is required be met?
- Are there other options outside the scope of this frequency range that could also be considered to deliver the required bandwidth for the rollout of 6G? Could the refarming of legacy 2G and 3G bands potentially play a part in finding a solution?
- What are the 'niche' use cases that mobile say will require spectrum in the sub-terahertz frequencies? What technical and regulatory challenges need to be overcome in order to free

up spectrum in these ranges, and what role will sub-terahertz spectrum play in the long-term 6G connectivity ecosystem?

- How can policymakers at a member state and European level work alongside industry stakeholders to deliver a spectrum roadmap that drives forward the delivery of both 6G and other key future technologies?

Moderator: **Matthew Newman**, Chief Correspondent, MLex (confirmed)

13.05 – 14.15 **Panel Discussion**

Christos Datsikas, Policy Officer, Future Connectivity Systems, European Commission (confirmed)

Heidi Himmanen, Co-Chair, Subgroup for 6G Development, RSPG & Chief Adviser, Digital Connections, Traficom (confirmed)

Eliane Semaan, Director, Spectrum & Technology Regulation, Ericsson (confirmed)

Hazem Moakkit, Vice President, Spectrum Strategy, Intelsat (confirmed)

14.15 – 14.35 **Refreshment Break**

Session 8: Looking back, looking forward – perspectives on spectrum licencing and awards

The last few years have seen a huge swathe of 5G auctions all around the world, and whilst in some regions these are still continuing at pace, in Europe the indications are that there are now trends towards this 'cycle' of 5G auctions coming to an end. Against this backdrop, this session will look at what has been learnt from the 5G auctions that have been seen, and what can be expected to come next. It will look at the situation regarding licence renewals across the region and the best approach to this, as well as looking forward towards the 6G spectrum cycle and at how approaches evolve.

Moderator: **Jonas Wessel**, Co-rapporteur, Digital Decade & RSPP, RSPG (confirmed)

14.35 – 14.50 **Presentation: learnings from the first 35 years of spectrum auctions**

Richard Marsden, Managing Director, NERA Economic Consulting (confirmed)

14.50 – 15.05 **Presentation: spectrum licencing and renewals in the era of 5G and beyond**

Stefan Zehle, Chairman and CEO, Coleago Consulting (confirmed)

15.05 – 15.25 **Fireside Chat**

- Is the 5G spectrum cycle now pretty much complete in Europe?
- What can be learnt from auctions of 5G spectrum that have been seen – what has worked well and what could potentially be improved on?
- What changes may be seen as we move towards a new 6G spectrum cycle, and how may this look different to what has been seen with 5G?
- Are we likely to see a move to increased sophistication in how licences are issued and used (local licences, more flexibility – satellite using mobile spectrum)?
- Is there a need to revisit licence renewal procedure?

Session 9: Greening of Spectrum Policy - What role can spectrum play in helping to tackle Climate Change?

The overarching goals of increasing sustainability and tackling climate change has become a key objective across almost all areas of European policy. Whilst in the past, sustainability has arguably not been a key consideration when making decisions on spectrum policy, there are signs that this is changing. Work has recently been conducted at the RSPG level on the role of spectrum in helping to tackle climate change, and the issue of sustainability was also brought up as part of the Commission's Connectivity Package, released at the start of this year. Against this backdrop, this session will explore the relationship between spectrum policy and climate change. It will discuss the different ways in which decisions taken around spectrum can impact energy consumption and carbon emissions, and at how policymakers and industry representatives can ensure that sustainability is factored into decisions that are being made around networking planning and rollout, and around spectrum more broadly.

- What role can spectrum policy play in helping to tackle climate change, and which are the key areas in which decisions can have the most impact?

- To what extent are regulators currently considering issues relating to sustainability and climate change when looking to make decisions on spectrum allocation and assignment?
- How can it be ensured that decisions taken on the management and allocation spectrum policy are aligned with broader EU targets on sustainability and climate?
- To what extent can different licencing approaches (licenced, local licenced, unlicenced, shared) help to play a part in tackling the problem the problem?
- What were the key outcomes from the recent RSPG opinion in this area, and what will be the likely next steps?
- What metrics and indicators are currently available to gauge the impact of wireless technologies on the climate? How can it be ensured that the necessary data and information is available to help guide policymakers and connectivity providers towards making more sustainable decisions?
- As focus switches towards 6G, to what extent is there a need to explore an alternative approach to frequency management in order to increase possible carbon savings?

Moderator: **Abhaya Sumanasena**, Chairman, UK Spectrum Policy Forum (confirmed)

15:25 – 15:40 **Thinking Point: Modelling the Impact of Spectrum Policy on Carbon Emissions**
Jakub Zagdanski, Senior Economist, GSMA Intelligence (confirmed)

15.40 – 16.40 **Panel Discussion**
Rory Hinchy, Co-rapporteur, Climate Change Subgroup, RSPG (confirmed)
Sylvain Loizeau, Principal, Analysys Mason (confirmed)
Jean-Pierre Faisan, Chair, Communications Working Group, Broadcast Networks Europe (confirmed)
Jakub Zagdanski, Senior Economist, GSMA Intelligence (confirmed)