The 3rd Annual CIS and CEE Spectrum Management Conference
Covering CIS and Central and South-Eastern Europe

8 – 9 April
Minsk, Belarus

DAY 1

Session 1: Welcome and Keynotes

Moderator: Victor Strelets, Advisor to Director General, Federal State Unitary Enterprise "Morsviazsputnik" (Confirmed)

09:00 – 09:20   **Welcome and introduction**
Kanstantsin Shulhan, Minister, Communications and Informatisation, Republic of Belarus (Confirmed)
Kirill Oparin, Head of office for CIS region, ITU (Confirmed)

09:20 – 09:30   **Keynote Presentation: Coordination and best practices of interregional cooperation**
Nurudin Mukhitdinov, Director General, Executive committee of the Regional Commonwealth in the Field of Communications (RCC) (Confirmed)

09:30 – 09:45   **Keynote Presentation**
Nikolay Varlamov, Member, RRB, ITU (Confirmed)

09:45 – 10:00 **Keynote Presentation**
Sahiba Hasanova, Member, RRB, ITU (Confirmed)

10:00 – 10:15   **Keynote Presentation**
Karlis Bogens, Head of fixed and mobile services division, BR, ITU (Confirmed)

10:15 – 11:15   **High Level Roundtable – How can we ensure that the benefits of spectrum for the region are truly maximised?**
At the inaugural edition of this conference, a panel of experts discussed the best way forward to ensure that the benefits of spectrum for the region are being maximised. This session will revisit this issue, and 2 years on, explore where we currently are, and what needs to be done going forward to ensure the value of spectrum is truly realised for countries, stakeholders and citizens everywhere.

- What level of co-ordination and sharing of best practice is seen across the region and between CIS and CEE countries? What bodies and platforms are available to facilitate this?
- Is this sufficient or are there ways in which it can be improved?
- What should be the key short term and long term goals for regulators and policymakers setting spectrum policy in the region, and how can it be ensured that these are achieved?

Moderator: Victor Strelets, Advisor to Director General, Federal State Unitary Enterprise "Morsviazsputnik" (Confirmed)

Speakers:
Péter Vari, Deputy Director General, NMHH, Hungary (Confirmed)
Albert Nalbandian, Chairman, RCC WG on WRC-19 (Confirmed)
Dimitry Korzun, Head of the Radio Frequency Spectrum Regulation Department, Ministry of Communications and Informatization of the Republic of Belarus (Confirmed)
Xu Weizhong, Chief Strategy Officer of Huawei Wireless Product Line, Huawei (Confirmed)

11:15 – 11:35   Morning Coffee

Session 2:   A focus on the key agenda items to be covered at WRC19
With WRC-19 now only a few months away, the various regional positions are starting to be finalised. This session will look at the current situation within the region. It will hear from a number of key stakeholders on their hopes and priorities ahead of WRC, their thoughts on the key agenda items, and at how a co-ordinated and strong voice for the region can be ensured.

- What are the key WRC-19 agenda items for the region, and what are the positions and priorities within these?
- What work remains to be done in the build up to Sharm-el-Sheikh?
- What challenges and opportunities are appearing for different stakeholders?
- How can CIS countries best ensure a co-ordinated, strong voice at WRC-19?
- What do CEE countries need to be doing to ensure that their voice is heard?

Moderator: Albert Nalbandian, Chairman, RCC WG on WRC-19 (Confirmed)

11:35 – 11:50   Opening Presentation
Albert Nalbandian, Chairman, RCC WG on WRC-19 (Confirmed)

11:50 – 12:05   Presentation
Sergey Pastukh, Chairman of ITU-R SG 1, FSUE NIIR, Russia (Confirmed)

12:05 – 12:20   Presentation: Europe
Alexandre Kholod, Vice Chair for WRC-19 Preparation, CEPT (Confirmed)

12:20 – 12:35   Presentation: Asia
Kyu-Jin WEE, Chairman, APG (Confirmed)

12:35 – 13:15   Response from industry (10 minutes each)
Konstantin Savin, Senior Technology Manager, GSMA (Confirmed)
Andrei Makarov, Spectrum policy regulator, Global Satellite Coalition (Confirmed)
Dmitry Laryushin, lead coordinator CIS, GSA (Confirmed)
HAPS

13:15 – 13:40   Discussion and Q&A

13:40 – 14:30   **Lunch**

Session 3:   **Delivering a forward-looking spectrum framework to meet the needs of today and tomorrow**
The demand for spectrum is continually increasing, and regulators are set with the challenge of ensuring that they are making sufficient bandwidth available to meet these needs. In order to do this, they need to plan ahead with the release of key bands; and also to ensure that the spectrum that is available is being utilised in the most efficient way possible. The next two sessions will look at these aspects in a little more detail, and at best practise in developing a forward-looking spectrum framework for the benefits of all.

Session 3i: **Bringing the required spectrum to market – where should the priorities lie?**
Regulators across CIS and CEE countries are continually looking to make more spectrum available to both meet the needs of citizens and consumers today, and also to ensure that they are prepared for the future connected society of tomorrow. This session will look at those bands that are currently in the process of being released, and ask where the priority should lie?

- What are the most pressing bands that countries and regulators across the CIS and CEE region should be looking to release?
- How can the needs of 5G be balanced with the needs of continuing to roll out 3G and 4G services and ensuring that the required spectrum is in place for that?
- How can it be ensured that the requirements of all spectrum users are met?
- To what extent is a coordinated and aligned approach to releasing these bands required, but within the region with the EU?
- To what extent should plans for the release of spectrum be co-ordinated with plans that are formulated in Europe and Asia, and what work is being done in this area?
- How can it be ensured that once spectrum has been identified for release, it is made available as quickly and as efficiently as possible?

Moderator: **Matthew Fried**, Senior Manager, Aetha Consulting (Confirmed)

14:30 – 15:45   **Panel Discussion**
Mindaugas Žilinskas, Deputy Director, Communications Regulatory Authority, Lithuania (Confirmed)
Albina Temirbayeva, Chief Specialist of International Cooperation and Prospective Projects Division, Ministry of Information and Communication of the Republic of Kazakhstan (Confirmed)
Vadim Poskakukhin, LTE Union (Confirmed)
Timur Kadyrov, Engineer in the Space Services Department (SSD) at the Radiocommunication Bureau, ITU (Confirmed)

15:45 – 16:05   **Afternoon Coffee**

Session 3ii: Monitoring spectrum usage and delivering an efficient eco-system – tools and technologies

- How efficiently is spectrum currently being used within the region and what quality of service is being provided?
- What tools and technologies are available to monitor spectrum efficiency and usage?
- What options are available to increase this efficiency and where does the balance lie between efficiency and reliability?
- How can it be ensured that use of spectrum by both industry and government bodies / is as efficient as possible?
- What mix of spectrum allocated on a licenced, unlicenced and shared basis can deliver the most efficient landscape?
- How can spectrum sharing play in being part of the solution and what models for this offer the best solution?

Moderator: **Alexandre Vassiliev**, Scientific Consultant on Management of Radio-Frequency Spectrum and Satellite Orbit, FSUE, NIIR, ITU Expert (Confirmed)

16:05 – 16:20   **Presentation**
Alexandre Vassiliev, Scientific Consultant on Management of Radio-Frequency Spectrum and Satellite Orbit, FSUE, NIIR, ITU Expert (Confirmed)

16:20 – 16:35   **Presentation: Open Net Test**
Jozef Svrcek, Director, Martes Specure International (Confirmed)

16:35 – 16:50   **Presentation**
Maris Aleksandrovs, Technical director at Electronic Communications Office, Latvia (Confirmed)

16:50 – 17:05   **Presentation**
Stanislav Kizima, ITU Expert & Scientific Consultant, Radio Research and Development Institute (Confirmed)

17:05 – 17:20   **Presentation**
Richard Womersley, Director of Spectrum Services, LS Telcom (Confirmed)

17:20 – 17:35   **Discussion and Q&A**

DAY 2

09:20 – 09:40 **Presentation: Delivering the potential of 5G**
Dmitry Laryushin, lead coordinator CIS, GSA (Confirmed)

Session 4:   Charting the CIS and CEE region's path to 5G

5G has the potential to enable a long-term digital transformation and contribute to the emergence of smart societies across CIS and CEE countries. If harnessed in the right way, the capacity, speed and reliable connections that it can provide could be crucial in key sectors for the overall development of countries, such as healthcare and education. But for this potential to be reached, there needs to be a concrete and deliberate plan in place that takes into account the needs of all users throughout the region. This session will look at the challenges and opportunities that 5G offers to the diverse economies of the CIS and CEE region, and how to best chart the journey ahead to maximise the benefits that it can bring in both developed and developing regions.

- What is the path ahead as CIS and CEE countries continue towards the roll-out of 5G?
- How important is it that CIS takes a harmonised approach when it comes to roll-out of 5G, and what work is being done to achieve this?
- What lessons can be learnt from the experiences of rolling out 5G networks that are being seen in other regions?
- How can it be ensured that 5G does not just become a technology for cities and developed areas in the region, but also truly serves the development needs of the region as a whole?
- What benefits can 5G bring to developing areas and low-income consumers, and how can the roll-out of 5G networks be coordinated with continued roll out of 3G and 4G services?
- What mix of technologies and solutions are best going to meet the needs of region's 5G future, and how can it be ensured that the infrastructure is in place to deliver this?
- What are the spectrum requirements that will be needed to deliver this, and how can regulators start planning now to ensure that the required bandwidth is made available?

Moderator: Farid Nakhli, Programme Officer, ITU Regional Office for CIS (Confirmed)

09:40 – 11:00   **Panel Discussion**
Valery Tikhvinskiy, Deputy General Director on Innovation Technologies, JSC National Research Institute of Technologies and Communications (NIITC) (Confirmed)
Sergiu Bocancea, Head of Communications Infrastructure Department, Ministry of Economy and Infrastructure of the Republic of Moldova (Confirmed)
Chris Woolford, Director of International Spectrum Policy, Ofcom (Confirmed)
Ivan Zaitsev, Global Spectrum & Policy Regulator, ESOA (Confirmed)
Mikhail Pakhomov, Head of Government & Industry Relations Customer Unit Eastern Europe and Central Asia, Ericsson (Confirmed)

11:00 – 11:20   **Morning Coffee**

Session 5: Developing a forward looking regional plan for the C-Band: Avoiding interference and meeting the needs of all users
The mid-range 'C-Band' is seen as providing vital spectrum for 5G rollout and IMT capacity both in the CIS region and all around the world. At the same time however, it is already being extensively used for a number of key services (for example fixed satellite, satellite distribution of DTV and satellite TT&C). This means that regulators are faced with the challenge of identifying spectrum in C-band for IMT, whilst also protecting the needs of existing users and avoiding interference.

In much of Europe and Asia, the 3.4 Ghz–3.8 Ghz band is being designated for IMT, but this is problematic for some CIS countries. In Russia for example, this portion of the C-band is used extensively for fixed satellite service including distribution of DTV to regional TV stations, which has led to them instead exploring the another part of C-band 4.4 Ghz –5 Ghz band (the 4.8 Ghz–4.99 Ghz portion of the C-band was already designated for IMT in Russia in late 2018).This session will look at the future shape of the C-band in the region. Looking at the options of designating the 3.4 GHz – 3.8 Ghz, 4.4 Ghz –5 Ghz and other portions of the C-band for IMT, it will discuss the importance of coordination both within the region and with neighbouring countries to avoid interference, and ultimately look at the best way forward to serve the needs of all users.

- What is the current situation with regards to the allocation of C-band spectrum across CIS countries?
- How can it be ensured that the needs of important military and satellite services in the band are protected, whilst the needs of IMT and 5G are also met?
- To what extent do either the 3.4Ghz - 3.8GHz or 4.4Ghz - 5Ghz portions of the bands offer viable options for IMT?
- What challenges would each of these options raise? Are there any other portions of the C-band that could be considered in either the short or the long term?
- With Russia taking the decision to allocate at least part of the 4.4 – 5GHz band to IMT, and many countries in Europe allocating the 3.4GHz – 3.8GHz band to IMT, how can interference be avoided (particular in border areas, for example with Finland)?
- What work is being done to co-ordinate the approach to the C-band across the CIS region, and with European countries?
- What is the likely shape of the C-Band in the long-term, and how can it be ensured that an approach is found that best meets the needs of all?

11:20 – 12:40   **Panel Discussion**

Moderator: **Sergey Pastukh**, Chairman of ITU-R SG 1, FSUE NIIR, Russia (tbc)

Ganbat Delgermaa, International Spectrum Coordinator, Radio Frequency Regulation and Monitoring Dept, Communications Regulatory Commission of Mongolia (Confirmed)
Alexei Ivashkin, Head, Department of Fixed Service and International Service Protection, Belarus (Confirmed)
Pavel Mamchenkov, Director of the Department of Radio Frequencies and Licenses, Megafon (Confirmed)
Mikhail Kaigorodov, Global Spectrum & Policy Regulator, ESOA (Confirmed)

12:40 – 13:40   **Lunch**

Session 6:   Meeting up to the connectivity challenges for urban and rural communities
Regulators across the region are tasked with meeting connectivity for a huge range of different users and communities. In urban areas and emerging smart cities, the challenge is of capacity; whilst in rural areas, it is more focussed on coverage, and still in some areas, connecting the unconnected. The next two sessions will look at the specific challenges in these varied environments in more detail.

Session 6i: Delivering the required connectivity for the smart cities of the future

Smart cities are no longer a futuristic concept. All around the world, we are starting to see examples of a wide range of connected smart city applications coming into use, linking business, public infrastructure and citizens together. In order for these to continue to grow, it is vital that affordable, reliable and high capacity connectivity systems and infrastructures are available. This session will look at the work that is being done by regulators and other stakeholders across the region to deliver the smart cities of tomorrow.

- What work is being done across the region to start developing the smart cities of tomorrow? What examples of 'smart cities' are already emerging today?
- What possibilities are 5G and IoT going to open up for the development of smart cities?
- What other technologies are going to play a part in delivering the required connectivity both in the short term and the long term?
- What infrastructure requirements need to be in place to ensure the potential of 5G in cities is realised, and how can regulators help to simplify the roll-out of small cells and other infrastructure?
- What spectrum bands are going to play the biggest part in delivering the capacity that will be required in the connected cities of today and tomorrow?

Moderator: **Stanislav Kizima**, ITU Expert & Scientific Consultant, Radio Research and Development Institute (Confirmed)

13:40 – 13:55   **Case Study: Development of Smart Cities in Belarus**
Dmitry Shedko, First Deputy Minister, Ministry of Communications and Informatization of the Republic of Belarus (Confirmed)

13:55 – 14:10   **Working together to create the smart cities of the future**
Farid Nakhli, Programme Officer, ITU Regional Office for CIS (Confirmed)

14:10 – 14:25   **Delivering the densification of networks that is required by smart cities**
Mirela Doicu, Chairperson, Policy Working Group, Small Cell Forum (tbc)

14:25 – 14:40   **Discussion and Q&A**

Session 6ii: Connecting the unconnected – innovative tools and solutions
Connecting the unconnected, especially in those most remote areas, will require a mix of different technologies and solutions in additional to mobile broadband. This session will look at the work that is being done across the region to meet the connectivity requirements of rural and outlying regions, and the different approaches that are being seen.

- What examples are being seen across the region of regulators and different connectivity providers working together to connect these outlying communities?
- What will be the most important lower frequency 'coverage' bands in order to deliver mobile broadband to the most remote areas? What progress has been seen in the past 12 months with analogue switch-off in the region, and what challenges still lie ahead?
- What other innovative new technologies and solutions are emerging that are going to help meet the challenge of delivering the last mile of connectivity?

- How can it be ensured that the right technology mix is put in place in each case to meet the needs of specific communities and regions in the most affordable and efficient way?

Moderator: **Stanislav Kizima**, ITU Expert & Scientific Consultant, Radio Research and Development Institute (Confirmed)

14:40 – 14:55　**Presentation**
　　　　　　　Mabetaliev Zamir Sayakbaevich, Deputy Director, State Agency of Communication, Kyrgz Republic (Confirmed)

14:55 – 15:10　**Presentation**
　　　　　　　Inga Popovici, Legal adviser, National Authority for Management and Regulation in Communications of Romania (ANCOM) (Confirmed)

15:10 – 15:25　**Presentation: Fixed Mobile**
　　　　　　　To be confirmed

15:25 – 15:40　 **Discussion and Q&A**

15:40 – 16:00　**Afternoon refreshments**

16:00 – 17:00　**Room Wide Discussions: Event summaries and conclusions**
Led by **Albert Nalbandian**, this session will provide an opportunity for final discussions on the key issues that have been raised during the conference. The aim will be to gain consensus on summaries, outcomes and conclusions and to deliver a final event report.

Led by: **Albert Nalbandian,** Chairman, RCC WG on WRC-19 (Confirmed)

17:00　　　　　**End of conference**