

Please note that this is a draft programme and speakers are not yet confirmed unless specifically mentioned

Latin America Spectrum Management Conference

5th, 6th & 7th December
(All times Colombia local time)

DAY 1

Session 1: Keynote Presentations

09:00 – 09:15 **Keynote Presentation**
Mario Maniewicz, Director, BR, ITU (confirmed)

09:15 – 09:30 **Keynote Presentation**
Oscar Leon, Executive Director, CITEL (confirmed)

Session 2: WRC-23 preparation – key issues, emerging positions and remaining challenges

With WRC-23 now less than a year away, regional positions both across the Americas and elsewhere are starting to become clear. In the Americas, the most recent meeting of the CITEL PCC.II WG for WRC preparation was held in Trinidad and Tobago last month. This session will look at the outcomes from that meeting, and take stock on the progress of preparation work and studies that has been seen and the challenges that still remain. How can stakeholders throughout the Americas work together to ensure a successful outcome for the region?

- Where are we with regards to preparation at the regional (CITEL) level for WRC-23?
- How do these emerging positions compare with those that are starting to be seen elsewhere around the world?
- Are we seeing consensus starting to emerge with regard to the development of common regional proposals across the key agenda items?
- Are we on track with regards to the preparatory studies that have been taking place and the drafting of text for the CPM?
- Which issues are expected to be the most challenging in finding agreement both within the Americas and across other regions of the world?
- What are the key challenges that remain in the final year of preparation for WRC-23, and how can stakeholders in the Americas work together to ensure the most successful outcome at the conference for the region as a whole?
- Looking beyond WRC-23, with WRC-27 expected to be a crucial step in exploring options for the development of 6G, are any early trends or positions being seen here?

Moderator: **Mario Maniewicz**, Director, BR, ITU (confirmed)

09:30 – 10:35 **Panel Discussion**
Victor Martinez, Chairman, PCC.II WG for the Preparation for WRC-23, CITEL (confirmed)
Stephen Talbot, Vice Chair, Conference Preparatory Group, CEPT (confirmed)
Jose Ayala, Chairman of Spectrum Group for CITEL Region, GSA (confirmed)
Catherine Hinckley, Global Spectrum & Regulatory Policy, GSOA (confirmed)

10:35 – 11:00 **Refreshment Break**

Session 3: Connecting the new generation - meeting the spectrum needs of 5G

5G has now become a reality across many countries in the Latin America region, and others are expected to follow very soon. This session will look at the continued progress that is being made on the journey towards 5G, and at the different approaches that are being seen and expected timelines ahead. It will examine the different approaches that are being seen both across the Americas and elsewhere in the world to meet the ever-increasing pressure for additional bandwidth both for 5G and for other technologies, and look at how the future connectivity landscape may differ from that which we see today.

- Where are we with regards to progress that has been made in the rollout of 5G across the region? What deployment costs are being seen in those countries that have already started the process?
- What are the key factors that countries should be considering when considering timings and strategies to launch 5G services in their markets?
- How can regulators decide when the optimum timing is to release 5G spectrum in their country? Is sooner always better?
- What different bands and approaches are being seen across the region as countries look to ensure the timely availability of spectrum for 5G? How can this be balanced with the needs to ensure that sufficient spectrum is available for satellite, wifi and other key technologies as they also move towards their next generations?
- What obligations models are working best - granular obligation selection as the newest Colombian and Brazilian models, or project-based as the upcoming Peru auction or the Mexican Red Compartida, or pre-decided like those in the past in which each spectrum block had specific obligations?
- How can it be ensured that the benefits of next generation connectivity are felt by all citizens across the region, not just those in the more developed countries and regions? What methods are available to help to reduce the digital divide between those countries where 5G is already a reality and those in which it is not?
- What role can innovative new approaches and flexible, collaborative and forward-looking models of accessing spectrum play in helping to maximise the efficiency of the available spectrum and meeting the future connectivity needs of the region?

Moderator: **Juan Ignacio Crosta**, Director, BlueNote (confirmed)

11:00 – 12:15 **Panel Discussion**

Sidney Nince, Advisor, Superintendency of Spectrum, Anatel Brazil (confirmed)

Marco Vasquez Tello, Representative, MTC Peru (confirmed)

Alberto Delgado, Radio Spectrum Director, INDOTEL, Dominican Republic (confirmed)

Cesar Funes, VP Public Affairs and Communications, LatAm, Huawei (confirmed)

Ryan Johnson, Global Spectrum & Regulatory Policy, GSOA (confirmed)

Session 4: Developing a blueprint for award and licencing of mmWave spectrum

Frequencies in the mmWave range were the first bands to be released for 5G in the US, with regional licences covering the whole country being allocated across a number of different bands (24GHz, 28GHz upper 37 GHz, 39 GHz, and 47 GHz). Once spectrum became available in the mid-band however, it can be argued that the focus switched for 5G rollout moved away from the mmWave towards these lower frequencies, and taking things a step further, there is evidence that recent trends in Europe and USA suggest mobile deployment of mmWave and integration of mmWave frequencies into mobile handset ecosystem has stalled. Against this backdrop, and with countries across the Latin America region are now starting to consider their own national approach to mmWave spectrum, this fireside chat will discuss the different trends that are being seen in the deployment models and overall demand for mmWave spectrum both in the region and across the world.

- What trends in the deployment models and overall demand for mmWave across the Americas and the rest of the world are being seen?

- What experiences have been seen in Brazil and Chile – 2 countries that have successfully allocated mmWave spectrum? What measures are being taken in these 2 countries to attract the required investment to rollout services in these bands and how successful have they been?
- What is the likely short-term and long-term future of 5G in the mmWave frequencies? Will we see wide-spread deployment across cities and maybe even outside urban areas, or should it be considered as a complementary band, predominantly used in high-traffic locations?
- If the latter is the case, then could an alternative model, of only licensing spectrum in “high density” (urban) areas, and making spectrum elsewhere available on a lightly licensed, first-come-first-served basis (as is proposed in the UK) be an approach to consider?
- What is the deployment of satellite services in the mmWave bands and what is happening next? How can it be ensured that the needs of these and other key users in the band are protected in a future mmWave ecosystem?

Moderator: **Sebastian Cabello**, CEO, SmC+ Digital Public Affairs (confirmed)

12:15 – 13:20 **Panel Discussion**

Edgar Souza, Regulation Specialist, Anatel Brazil (confirmed)

Lara Singer, Project Director, mmWave Award, Ofcom UK (confirmed)

Fernando Carrillo, Global Spectrum & Regulatory Policy, GSOA (confirmed)

Cesar Heyaime, Head of Mobile Networks Technology, Latin America, Nokia (confirmed)

DAY 2

Session 5: Best practice in spectrum pricing in awards and renewals

There is huge variation in approaches to pricing spectrum acquisitions and renewals that are being seen across Latin America. A number of countries still use legacy practices, which are arguably now not optimal from a social or economic perspective in today's modern connectivity environment. This session will look at some of the different approaches that are being seen across the region, and at how legacy challenges can be overcome. It will move on to look more broadly at processes that should be used to ensure spectrum prices for both initial spectrum awards and renewals of licences, and at the effect that high spectrum prices can have on consumers and on aspects such as the level of investment and speed of rollout of networks. Where does the best practice lie in setting fair and reasonable spectrum prices?

- What recent spectrum awards have been seen across the region? What approaches were used, and what results were seen?
- What different approaches are being seen when setting prices for the acquisition or access to spectrum for both IMT and satellite operators?
- What specific issues are raised when looking to set fair pricing for the renewal of spectrum licences, and where does the best practice lie in this area? Are there any market-based alternatives to renewals that can be considered?
- What examples of legacy practices are still in place in countries across the region that it could be argued are not optimal today, and how are these affecting prices that are being seen?
- What challenges are being seen in terms of balancing competition with the needs to encourage innovation and the development of new business models in the digital ecosystem?
- Are there best practices to pricing that LatAm countries could adopt and what would they need to do to migrate to modern approaches?
- To what extent should regulators be looking to include incentives in their pricing models to encourage investment across networks, and what positive impact can approaches such as this have?

Moderator: **Hector Lopez**, Associate Director, NERA Economic Consulting (confirmed)

09:00 – 09:15 **Spectrum pricing and availability - make or break the 5G momentum?**

Stefan Zehle, CEO, Coleago Consulting (confirmed)

09:15 – 09:30 **Presentation**

Lucas Gallitto, Head of Latin America, GSMA (confirmed)

09:30 – 09:50 **The response from regulators (10 minutes each)**

Carlos Sánchez Breton, General Director, Spectrum Economy, IFT Mexico (confirmed)

Miguel Felipe Anzola Espinosa, Director General, ANE Colombia (confirmed)

09:50 – 10:30 **Panel Discussion**

All speakers from the session

10:30 – 10:50 **Refreshment Break**

Session 6: Meeting the needs of all users in the 3.5GHz range – time for a rethink?

The Latin America region is a big user of the 3.5GHz C-band frequencies for a variety of different users. It is vitally important for satellite, whilst at the same time many countries have existing FWA licensees in the band. Increasingly it is also being seen as one of the key bands both in the region and around the world for the launch of 5G; and the US's 'CBRS' approach to the 3.55-3.7GHz portion of the band opens up the potential of it also being used to meet some local / vertical needs for connectivity. This session will look at the best approach across the entire 3.3GHz – 4.2GHz range in order to ensure that the needs of all the key users in this band can be met. It will look at the progress that has been made in rolling out 5G services in the band, examine the impact that delays in the supply chain and potential interference with aero equipment have had on this, and look how these needs of IMT can be balanced with the key needs of other users. Looking to the future, given this crowded and now somewhat piecemeal approach that is seen across the band, it will pose the question of whether there is an argument to explore a reorganisation or reconfiguration of some kind across the band in order to ensure the most efficient and valuable usage of the bandwidth that is available.

- What is the current shape of the 3.5GHz range? What different levels of usage are being seen across the different frequencies and users that are present in the band?
- To what extent is the range being used to its maximum potential?
- What progress has been made in the rollout of 5G services in the band? What impact have challenges with aspects such as delays in the supply chains and potential interference with altimeters had on this, and how can these be overcome?
- How can the needs of IMT be best balanced with those of other key users in the band?
- Is there an argument to consider a reconfiguration to some extent of services across the band in order to best meet the needs of satellite, mobile, fixed wireless access and potentially vertical uses?
- To what extent could spectrum initially allocated for one use (for example FWA) potentially be refarmed and used for the deployment of 5G?
- How important is it that a coordinated approach across the 3.5GHz range is seen in the region?

Moderator: **Amit Nagpal**, Partner, Aetha Consulting (confirmed)

10:50 – 12:00 Panel Discussion

Chantal Davis, Regulatory Policy, Spectrum Policy Branch, ISED Canada (confirmed)

Ruben Isla Fasanando, Infrastructure Specialist, Office of Regulation and Communications Policies, MTC, Peru (confirmed)

Eric Fournier, Chairman, RSPG (confirmed)

Mohaned Juwad, Director Spectrum Policy, Intelsat (confirmed)

Luciana Camargos, Head of Spectrum, GSMA (confirmed)

DAY 3

Session 7: 6GHz band: maximising the socio-economic value of this key spectrum

Discussion in the region around the future of the 6GHz band are ongoing. Whilst some countries have now taken the decision to make the whole band available on an unlicensed basis, many others remain undecided and are waiting for discussions that will take place at WRC-23 before deciding to go the unlicensed route for the whole band or to go for a 'half and half' approach, with the lower portion of the band (5925-6425 MHz) available on an unlicensed basis, and then licensing the upper half (6425-7125 MHz). This session will look at the current situation across the region and the future of the band from 2 different angles. It will look at the emerging positions in countries within the region for allocating the top-portion of the band on a licensed and unlicensed basis, and the pros and cons of each approach. Given that the lower portion of the band at least will be made available on an unlicensed basis across the region, it will also look at the work that is being done to develop the technical parameters, power limits and standards to help enable the most efficient and interference-free use of the band.

- Where do we currently stand both across the Americas and elsewhere around the world when it comes to decisions on the future use of the 6GHz band?
- What national positions are emerging across the LatAm region, and to what extent is work being done to deliver a co-ordinated regional approach? How important is it that a harmonised approach is achieved across the Latin Americas region?
- What factors led to the move in Chile to reverse their original decision to allocate the entire band for unlicensed use? Could this have any impact on the future of the band in the region more broadly?
- To what extent is co-existence between incumbent and potential new users such as WiFi and 5G feasible? What are some potential challenges would this present and how could these be overcome?
- What progress has been made in setting technical parameters, power limits and other measures designed to prepare for unlicensed use in the band?
- Where does the balance lie in ensuring an approach that protects incumbent users in the band (eg satellite and fixed links/backhaul) and in adjacent bands; and also ensuring the most efficient possible use of the available spectrum?
- Ultimately, which approach to the upper portion of the band would best help to maximise the socio-economic benefits of this key spectrum across the region?

Moderator: **Carolina Limbatto**, Head of Americas, Cullen International (confirmed)

08:30 – 09:50 **Panel Discussion**

Esteban Gonzalez, Chief, Spectrum Unit, Sutel Costa Rica (confirmed)

Meta Pavsek Taskov, Head of Mobile Service Department, AKOS Slovenia (confirmed)

Celedonio von Wuthenau, Director, Government Relations, Latin America, Nokia (confirmed)

Lester B. Garcia, Head of Connectivity and Access Policy LATAM and Caribbean, Meta (confirmed)

Carlos Rebellon, Director Americas, Mexico & Canada | Global Government Affairs, Intel (confirmed)

Luiz Felipe Zoghbi, Senior Spectrum Policy Manager, GSMA (confirmed)

09:50 – 10:20 **Refreshment Break**

Session 8: Connecting unserved and underserved areas – key spectrum bands, technologies and strategies

Closing the digital divide and ensuring that citizens across Latin America have reliable access to fast, reliable and affordable broadband services has been a long-standing challenge for regulators across the region. There is no one-size-fits-all approach to tackling the problem, and a mix of different technologies and connectivity solutions will be required to find a solution and meet the varied connectivity requirements of communities in unserved and underserved areas. This session will discuss the work that is being done across the region to increase broadband coverage, and look at examples of how policymakers and

industry stakeholders are coming together to advance the accessibility of broadband in unserved parts of Latin America. With the mobile community stressing the importance of 600MHz spectrum as a 'coverage' band to deliver connectivity across the continent, it will look at the progress that is being made in making this spectrum available, and at what can be done to overcome the somewhat slow progress that is being seen. It will also then explore recent advancements in technologies such as fixed wireless access and advanced satellite systems, and the role that these can play in delivering a solution.

- What different approaches to tackling the digital divide are being seen across the region, and which are having the most effect?
- What examples are being seen of policymakers and industry representatives from different sides working together to increase connectivity across the region?
- What countries are leading the way in this area, and are there lessons that can be taken from the approaches that they are using?
- What targets are being set across the region when it comes to digital development? How can it be ensured that the connectivity requirements of communities is understood, and that delivery of connectivity is coupled with addressing issues that ensure that businesses and households are in a position to take advantage of this (eg digital education, affordability etc.)?
- What is the situation across the region with regards to the 600MHz band and progress that has been made there? To what extent is this band still seen as a priority both by regulators and mobile operators across the region, and what role can its release play in helping to tackle the digital divide?
- How much UHF spectrum does IMT require in order to help deliver meet coverage goals that are being set across the region and how can it be ensured that the needs of broadcasters, PMSE and other key incumbents in these frequencies be met?
- What other spectrum bands are key to delivering the required connectivity for the various solutions that will play a part in delivering connectivity to unserved and underserved areas? To what extent is the required bandwidth available in countries across the region?
- What technological advances have been seen across crucial technologies such as fixed wireless access (FWA), advanced satellite broadband and WiFi? What potential do these have to be part of the solution?
- How can spectrum policy help to facilitate faster rollout of networks and ensure that underserved communities and homes are brought online as soon as possible?
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Moderator: **Allan Ruiz**, Independent Consultant (confirmed)

10:20 – 11:25 **Panel Discussion**

Nathalia Lobo, Secretary of Telecommunications, Brazil (confirmed)

Juan Gnius, National Director, Convergence, Universalisation and Technical Planning, TIC Argentina (confirmed)

Suzanne Malloy, VP Legal and Regulatory Affairs, SES (confirmed)

Ana Valero, Director, Regulatory Policy, Latin America, Telefonica (confirmed)

Session 9: A focus on the 7GHz - 24GHz range – is this the next spectrum battleground?

Whilst work is still continuing on the rollout of 5G networks in already identified existing spectrum, some attention is already starting to be given to what comes next, and whether there is a need to identifying more spectrum to start out on the path beyond 5G towards the launch of 6G, which is expected around 2030. Whilst initial research around 6G were focussed on the possibilities of Sub-THz and THz frequencies, more recently, attention has shifted more towards 7GHz – 24GHz 'centimetric' frequencies, which are now being described by some as the 'essential' 6G range. However these bands are already intensively used by many well-established services, and against this background, this session will assess the potential that they could offer in providing large contiguous bandwidth, whether they are a key pioneer band for 6G, and whether it is something that is either suitable or required for the LatAm region. Will these frequencies become the next spectrum 'battleground', and what will this mean for the future shape of the range and of the key incumbent users in the band?

- What specific factors have led to the IMT community coining spectrum in the 7GHz – 24GHz frequencies as the 'essential' 6G range? What new use cases could access to these bands open up?
- To what extent is this range either suitable or necessary for the Latin Americas region?
- Given that the 3.5GHz band has already been identified for IMT to deliver coverage and mmWave frequencies to deliver capacity, what additional benefits could be gained by looking at these already congested frequencies?
- What current users are active in the 7GHz – 24GHz frequencies, and how intensively is the spectrum in these bands used?
- What scope could there be in the future for potential sharing between any of these users and IMT? How could it be ensured that the needs of these key users are met and balanced with the potential need for 6G?
- What specific frequencies in the range are being looked at as options to provide the most potential as pioneer bands for 6G, and what initial work is being done to study and analyse their availability?
- What advancements in technologies are being seen and are expected to be seen in coming years in order to increase the feasibility and efficiency of spectrum sharing in these bands?
- Beyond sharing, what innovative new licencing models and approaches could emerge as we move beyond 5G?
- What role will WRC-27 play in identifying key spectrum bands for the future? To what extent can a harmonised global bandplan be a realistic objective?
- Will these frequencies become the next spectrum 'battleground', and what would this mean for the future shape of the range and of the key incumbent users in the band?

Moderator: **Richard Marsden**, Managing Director, NERA (confirmed)

11:25 – 12:30 **Panel Discussion**

Hector Bude, Head of Spectrum Management Department, URSEC Uruguay (confirmed)

Christopher Casarrubias, Head of Regulatory and Government Affairs, OneWeb (confirmed)

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

Carl Povelites, Assistant Vice President, Global Public Policy, AT&T (confirmed)

Mohaned Juwad, Director Spectrum Policy, Intelsat (confirmed)

12:30 – 13:00 **The Final Word...**

Final thoughts and conclusions.