



### THE EVENT PROGRAM



**14:15 – 15:00** GMT+3

#### WELCOMING AND OPENING REMARKS

Opening remarks from ITU and CITC leadership, the co-hosts of this event.

• **H.E. ABDULLAH ALSWAHA,**

Minister of Communications and Information Technology, Saudi Arabia

• **HOULIN ZHAO,**

Secretary General, ITU

• **H. E. MOHAMMED ALTAMIMI,**

Governor, CITC

• **MARIO MANIEWICZ,**

Director, Radiocommunications Bureau, ITU



**15:00 – 15:20** GMT+3

#### KEYNOTE PRESENTATION 1

• **AJIT PAI,**

Chairman, FCC



**15:20 – 16:20** GMT+3 | **SESSION 1**

#### REVIEW OF KEY SPECTRUM MANAGEMENT GOALS, PRINCIPLES, CHALLENGES, AND BEST PRACTICES

An introductory panel discussion with executives from international and governmental spectrum organizations. It will provide a high-level overview on challenges and opportunities facing future spectrum management practices.

• **MODERATOR: BLAIR LEVIN**

Senior Fellow, Brookings Institution

• **PHILIP MARNICK**

Group Director Spectrum, Ofcom

• **LUONG XUAN TRUONG,**

Radio Frequency Policy and Planning Division, ARFM Vietnam

• **DANIEL OBAM,**

Chairman, Radiocommunication Advisory Group (RAG), ITU & Communications Secretary, CA Kenya

• **XÓCHITL HERNÁNDEZ,**

Deputy Director of Radiocommunications Coordination, IFT Mexico



**16:20 – 16:50** GMT+3

### NETWORKING BREAK



**16:50 – 17:10** GMT+3 | **THINKING POINT**

A holistic spectrum policy that supports innovation and efficiency in our highly dynamic industry requires approaches that enable the development of policy that enable the flourishing of current spectrum users and users that are yet to come. The idea of spectrum governance is derived from the work of the Nobel prize winning economist Elinor Ostrom, whose work showed us that light handed central control over shared resources can result in superior outcomes. This talk will explore what governance means to spectrum regulators, especially in regard to supporting innovation, certainty and investment

• **MARTIN B.H. WEISS,**

Professor of Telecommunications, University of Pittsburgh



 **17:10 – 18:10 GMT+3 | SESSION 2**

### DEVELOPING A SUSTAINABLE NATIONAL SPECTRUM STRATEGY: MEETING THE DEMAND OF ALL SECTORS AND RADIO SERVICES

The many radio services and the different users across national sectors in each country requires the national spectrum manager to develop a holistic approach and inclusive national spectrum strategy to meet all different demands.

- **MODERATOR: HANS IHLE,**  
Director, NERA Economic Consulting
- **MOHAMMED ALOTAIBI,**  
Deputy Governor, Radio Spectrum, CITC
- **JONAS WESSEL,**  
Director, Resource Management Department, Swedish Post and Telecom Agency (PTS)
- **THOMAS SULLIVAN,**  
Chief, International Bureau, FCC
- **AMR BADAWI,**  
Former Executive President of NTRA of Egypt and Chairman of WRC-19

 **18:10 – 18:30 GMT+3**

## BREAK

 **18:30 – 19:40 GMT+3 | SESSION 3**

### SPECTRUM EXCLUSIVE AND OPEN ACCESS: TURNING ARTIFICIAL SCARCITY INTO ABUNDANCE

The old model of exclusive access to spectrum granted to one operator should be re-evaluated in light of technology advancement. Spectrum managers and wireless industry should discover new mechanisms to maximize efficient utilization of the resource.

- **MODERATOR: RICHARD WOMERSLEY,**  
Director, Spectrum Consulting LS telcom
- **GUILLAUME LEBRUN,**  
Global Connectivity Policy, Facebook
- **FABIEN MIGNERET,**  
Co-Chair, LoRa Alliance
- **HARRI HOLMA,**  
Fellow, Nokia Bell Labs
- **STEPHEN PENTLAND,**  
Group Policy & Public Affairs, Vodafone Group
- **STEVEN DOIRON,**  
Head of Regulatory and Spectrum, YahSat

 **19:40 – 20:40 GMT+3 | SESSION 4**

### SPECTRUM USAGE AND PROPERTY RIGHTS: PRIVATIZATION AND TRADING OF THE RESOURCE

Should regulations decide what radio service and what technology utilize a specific frequency band? To what extent market-based regimes be let to determine the use of frequency bands? Should the spectrum user be given the right to use it only? or the right to earn income from it and transfer it to others?

- **MODERATOR: MOHAMED MOGHAZI,**  
Director, Radio Spectrum Research & Studies, NTRA, Egypt / CPM-23 Vice Chairman, ITU-R
- **SCOTT WALLSTEN,**  
President and Senior Fellow, Technology Policy Institute
- **BRETT TARNUTZER,**  
Head of Spectrum, GSMA
- **MARTHA SUAREZ,**  
President, Dynamic Spectrum Alliance
- **MOHANED JUWAD,**  
Senior Manager, Spectrum Policy, Intelsat

 **20:40 – 21:00 GMT+3**

### KEYNOTE PRESENTATION 2: SPECTRUM AWARDS

- **MARTIN CAVE,**  
Chairman, UK Gas and Electricity Market Authority





**14:30 – 14:50 GMT+3**

### KEYNOTE PRESENTATION 3 - HOW WILL LEO SATELLITE TECHNOLOGY CONNECT THE WORLD?

•**SUNIL BHARTI MITTAL**,  
Chairman, OneWeb



**14:50 – 15:55 GMT+3 | SESSION 5**

### SPECTRUM LICENSING MECHANISMS TO ACCELERATE INNOVATION AND ADOPT EMERGING RADIO TECHNOLOGIES

Adopting innovative ways of managing the spectrum would foster adaptation of wireless emerging technologies. Should regulators try to consider establishing tiered access and sharing frameworks to allow multiple users and technologies coexistence.

•**MODERATOR: MARTIN SIMS**,  
Managing Director, Policy Tracker

•**ALEX ROYTBAT**,  
Vice President of Regulatory Affairs, Wi-Fi Alliance

•**JENNIFER A. MANNER**,  
Senior Vice President, EchoStar

•**RENATO LOMBARDI**,  
Chairman of ISG mWT, ETSI

•**ELIZABETH MIGWALLA**,  
Senior Director and Head of Government Affairs-Middle East and Africa, Qualcomm

•**HIROYUKI ATARASHI**,  
Sr Manager, Radio System Group, Radio Access Network Development Department, NTT DoCoMo



**15:55 – 16:15 GMT+3 | THINKING POINT**

Regulators are allocating Intelligent Transportation System (ITS) spectrum to support connected vehicle communications. This allows vehicles to communicate with each other (V2V), with roadside infrastructure (V2I), and with other devices. Collectively, these communications are known as vehicle to everything (V2X). This presentation will discuss potential efficiencies derived from allowing some (but not all) V2X communications to share spectrum with unlicensed devices, such as Wi-Fi.

•**JON M. PEHA**,  
Professor, Engineering and Public Policy, Carnegie Mellon University



**16:15 – 16:25 GMT+3**

## BREAK



**16:25 – 17:20 GMT+3 | SESSION 6**

### FACILITATING WIRELESS ACCESS AND INVESTMENTS FOR A SMARTER FUTURE

•**MODERATOR: ROBERTO ERCOLE**,  
Director, Spectrum and Telecom Consulting

•**OSAMU KAMIMURA**,  
Vice President and Head of Spectrum Policy Office, SoftBank



Spectrum policies should promote certainty and encourage investment through future-proof planning and allocation, and embracing market-oriented approaches. Facilitating investments will lead to high utilization of the spectrum and building the digital infrastructure of the future.

- **ANDREW RUSZKOWSKI**,  
VP for 03b mPOWER, SES
- **DETLEF FUEHRER**,  
Senior Manager, Spectrum Management and Regulatory Affairs, EMEA, HPE
- **MOHAMMED ALABDULQADER**,  
General Manager, Spectrum Monitoring, CITC

### 17:20 – 18:25 GMT+3 | **SESSION 7**

#### **REDEFINING SPECTRUM USERS TO MEET VERTICAL NEEDS**

The growing demand and dependency on 5G capabilities put pressure on 5G service providers to cater to these evolving use cases. Ex-ante regulation might be necessary to ensure such use-cases are realized through different scenarios, like setting aside mobile spectrum for private licensing.

- **MODERATOR: RICHARD MARSDEN**  
Managing Director, NERA Economic Consulting
- **THOMAS HEUTMANN**,  
Head of Spectrum for Fixed Services, BNetzA
- **ULRICH REHFUESS**,  
Head of Spectrum Policy, Nokia
- **MICHAEL KRAEMER**,  
Technology Advocacy and Spectrum Strategy, Intel
- **PAULO RICARDO HERMANO BALDUINO**,  
Director Spectrum Planning, ABERT
- **ANDREW AROWOJOLU**  
Chief Regulatory Officer, Zain Group

### 18:25 – 18:35 GMT+3

## BREAK

### 18:35-18:55 GMT+3

#### **KEYNOTE PRESENTATION 4**

- **IBRAHIM KADI**,  
Member of the Board of Directors, STC

### 18:55 – 19:45 GMT+3 | **SESSION 8**

#### **ENABLING SPECTRUM INNOVATIVE USE AND ALLOWING FAIR ACCESS TO ADJACENT SECTORS**

It is important for regulators to enable commercial and innovative use of spectrum for 5G and other emerging wireless technologies. It is also important for the national spectrum manager to ensure that all other radio services in adjacent sectors also enjoy fair access to spectrum.

- **MODERATOR: DIRK LINDEMEIER**,  
CCO & Founder, SkyFive
- **AMY MEHLMAN**,  
Vice President, Government Affairs and Policy, Viasat
- **DEAN BRENNER**,  
SVP, Spectrum Strategy, Qualcomm
- **WALID SAMI**,  
Senior Project Manager | Technology & Innovation EBU
- **MOHAMMED ALJNOOBI**  
Director, Spectrum Allocation, CITC



 **19:45 – 20:40 GMT+3 | SESSION 9**

### EMERGING RADIO TECHNOLOGIES: COMPETITION OR COMPLEMENTARITY?

Different technologies may compete for access to spectrum while they can also have mutual dependencies and synergies with each other. Enhancing co-existence of future radio technologies is the way forward to make the best use of technology.

• **MODERATOR: BRUNO TOMAS,**

Program Director, Wireless Broadband Alliance

• **JAMESON DEMPSEY,**

Counsel, Loon

• **DAVID GOLDMAN,**

Director, Satellite Policy, SpaceX

• **LIU GUANGYI,**

6G Director, Leading Specialist, China Mobile

• **DANIEL HAMADEH,**

Regional Director - Spectrum Policy and Regulatory Affairs, EMEA, Motorola Solutions

 **20:40 – 21:00 GMT+3**

### KEYNOTE PRESENTATION 5: HOW WILL FUTURE SATELLITE TECHNOLOGY CONNECT THE WORLD?

• **RUPERT PEARCE,**

CEO, Inmarsat





**14:30 – 14:50** GMT+3

#### KEYNOTE PRESENTATION 6

### HOW WILL UNLICENSED TECHNOLOGIES ADVANCE THE DIGITAL TRANSFORMATION OF THE WORLD?

•**ASHA KEDDY**

Corporate VP, Intel



**14:50 – 16:00** GMT+3 | **SESSION 10**

#### IMT-2020 AND BEYOND: LOW SPECTRUM BANDS

Different innovative technologies and many services can be provided across the UHF band from 400 MHz up to 1 GHz (including IMT, PPDR, DTV, LPWAN). This session will explore how the connectivity requirements of both these new technologies and incumbents in the band can be met.

•**MODERATOR: UWE BAEDER,**

Director International Relations, Rohde & Schwarz

•**GÖSTA KALLNER,**

Executive Chairman, 450 MHz Alliance

•**SVERKER MAGNUSSON,**

Head of Spectrum and Technology Regulation, Ericsson

•**ANDREW CLEGG,**

Spectrum Engineering Lead, Google

•**JAVAN ERFANIAN,**

Distinguished Member of Technical Staff, Bell Canada

•**JEAN-PIERRE FAISAN,**

Head of Communications Working Group, Broadcast Networks Europe



**16:00 – 16:20** GMT+3 | **THINKING POINT**

Exploring how the emergence of secondary spectrum sharing markets will impact wireless industry economics, and understanding implications of advances in wireless technologies on future of spectrum management.

•**WILLIAM LEHR,**

Research Associate, Massachusetts Institute of Technology



**16:20 – 16:40** GMT+3

## NETWORKING BREAK



**16:40 – 17:40** GMT+3 | **SESSION 11**

#### IMT-2020 AND BEYOND: MID SPECTRUM BANDS

The mid spectrum bands from 1GHz to 10GHz are hugely sought after both for IMT-2020 and by a number of other different users. A number of innovative approaches are being seen in order to maximise the efficiency of the spectrum in these bands. This session will look at some of these and how the needs

•**MODERATOR: AMIT NAGPAL,**

Partner, Aetha Consulting

•**JENNIFER MCCARTHY,**

VP, Legal Advocacy, Federated Wireless

•**FATIMA KARIM-PETERS,**

Senior Manager Spectrum Regulation Policy, Huawei

•**AARTI HOLLA-MAINI**

Secretary General, ESOA



of all the different users (including IMT, satellite, V2X, WiFi, FWA, HAPS, A2G and more) can all be met.

**•ALEXANDER KUEHN,**

Assistant Head of Section, International Frequency Matters, BNetzA

**17:40 – 18:40 GMT+3 | SESSION 12****IMT-2020 AND BEYOND: HIGH SPECTRUM BANDS**

New allocation of IMT to utilize mmWaves will face new challenges and limitations. How are mmWaves important for connectivity? How these bands will be utilized for other technologies like HAPS, Fs, FSS, Wi-Gig and NR-U?

**•MODERATOR: AHMED ALSOHAILI,**

Chief Technology Advisor, CITC

**•SULTAN AL-BALOOSHI,**

Spectrum Policy Manager, TRA UAE

**•STUART COOKE,**

Chair, Global Spectrum Team, GSA

**•MASSIMILIANO LADOVAZ,**

CTO, OneWeb

**•CARL POVELITES,**

AVP, Global Public Policy, AT&T

**•SERGIO BOVELLI,**

Head of Spectrum for Aero-Connectivity, Airbus - speaking on behalf of HAPS Alliance

**18:40 – 19:00 GMT+3****BREAK** **19:00 – 19:20 GMT+3****KEYNOTE PRESENTATION 7****•BOCAR BA,**

CEO, SAMENA Telecommunications Council

**19:20 – 19:40 GMT+3****KEYNOTE PRESENTATION 8  
HOW CAN 5G CHANGE THE  
WORLD?****•MATS GRANRYD,**

Director General, GSMA

**19:40 – 20:30 GMT+3 | SESSION 13****HAVE YOUR SAY - WRAP-UP DISCUSSION  
PANEL**

The opportunity to hear direct from representatives of different stakeholder groups and audience members who will be asked to bring their audio and video feed live to provide their impressions from the workshop and the key take-away messages.

**•WILLIAM WEBB,**

Independent Consultant and CEO, Webb Search

**•PHILIPPE DEFRAIGNE,**

Founding Director, Cullen International

**•REPRESENTATIVES FROM DIFFERENT  
STAKEHOLDERS...**