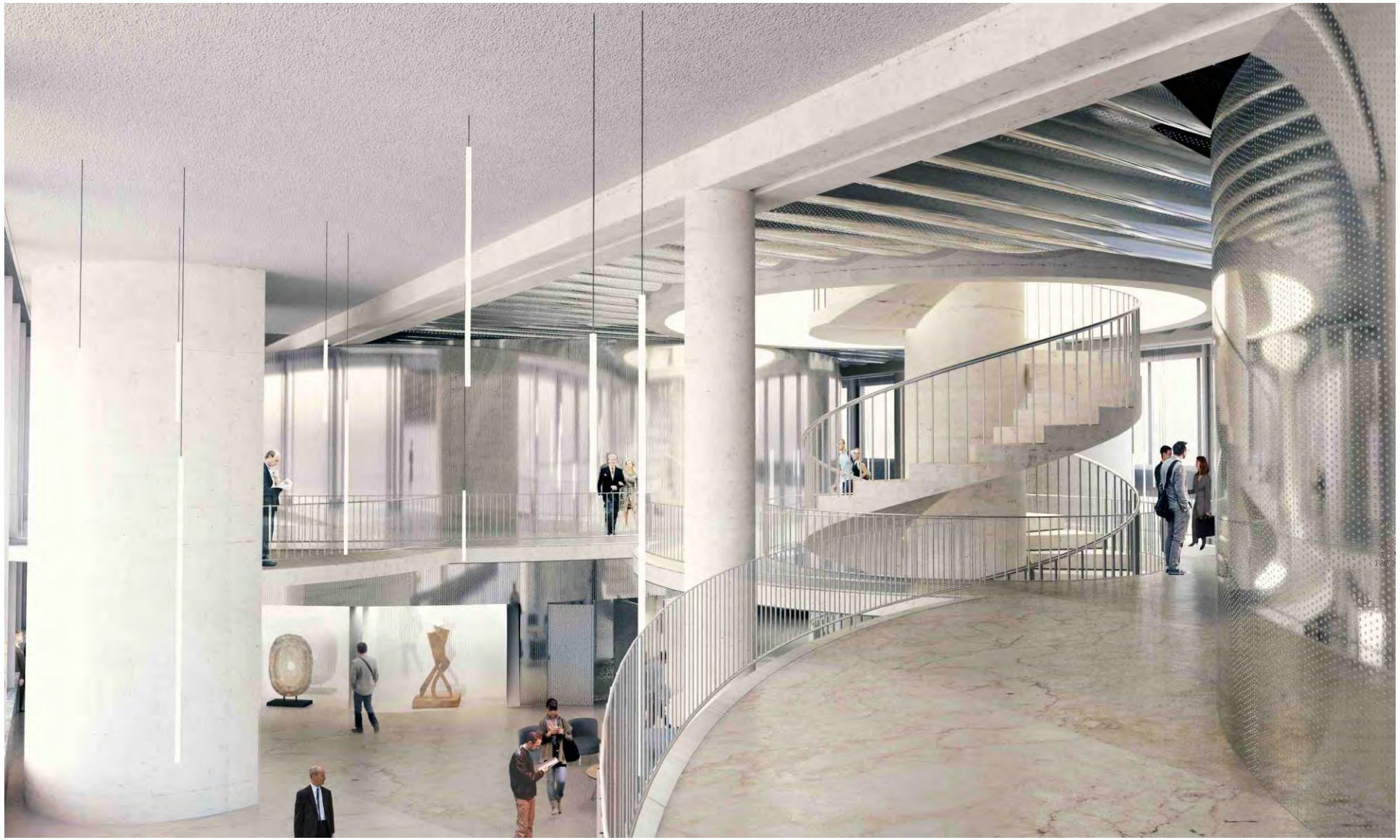
Virtual Ambassadors' Briefing

Monday 10 May 2021
14:00-15:00

ITU Management Team

BUS
TAXI



ITU-R in brief

Briefing

Mario Maniewicz
Director of the Radiocommunications Bureau

Committed to connecting the world

ITU-T

Telecommunication standardization
- network and service aspects
(Bureau: TSB)

ITU-D

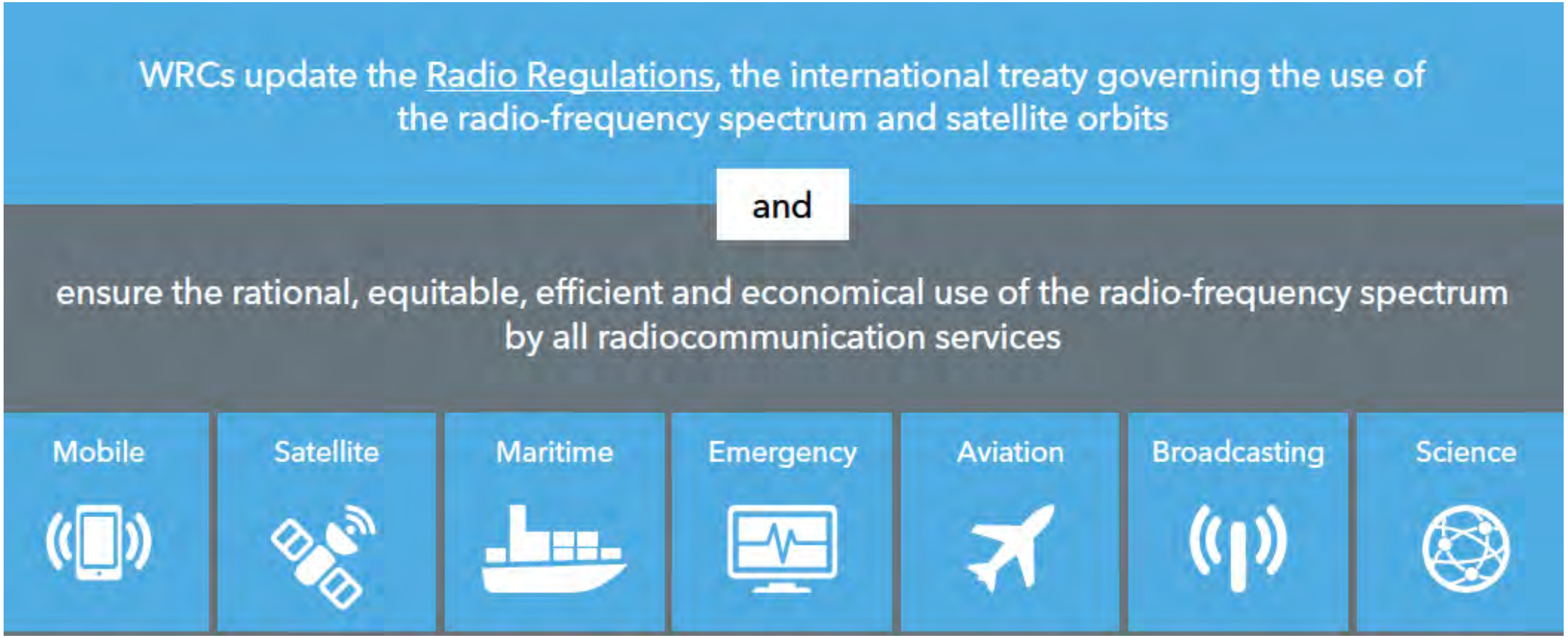
Promote and assist the extension of ICTs to all the world's inhabitants - narrowing the digital divide
(Bureau: BDT)

ITU-R

International regulation of radio-frequency spectrum and satellite orbits
(Bureau: BR)

193 Member States
299 Private Sector
166 Academia

Radiocommunication Services



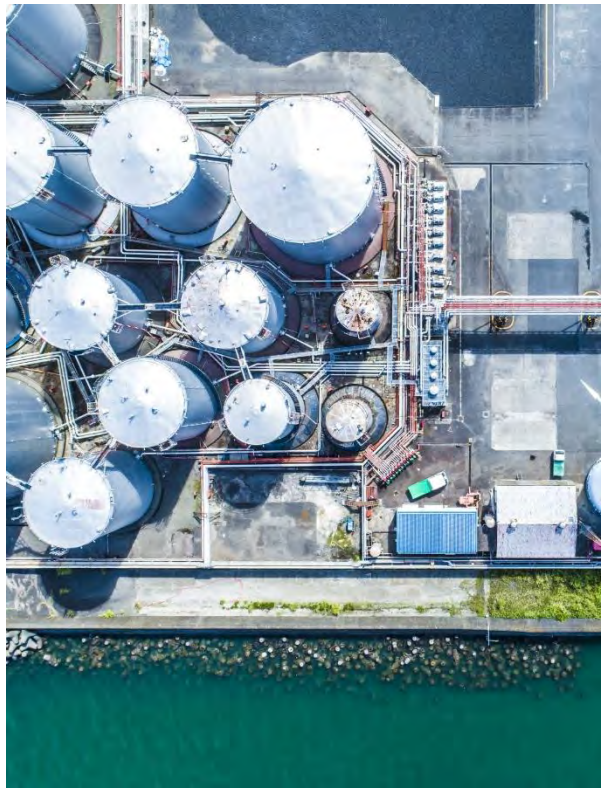
Examples of Radiocommunication Services

IMT-2020

5G

Non-GSO

Satellite Systems



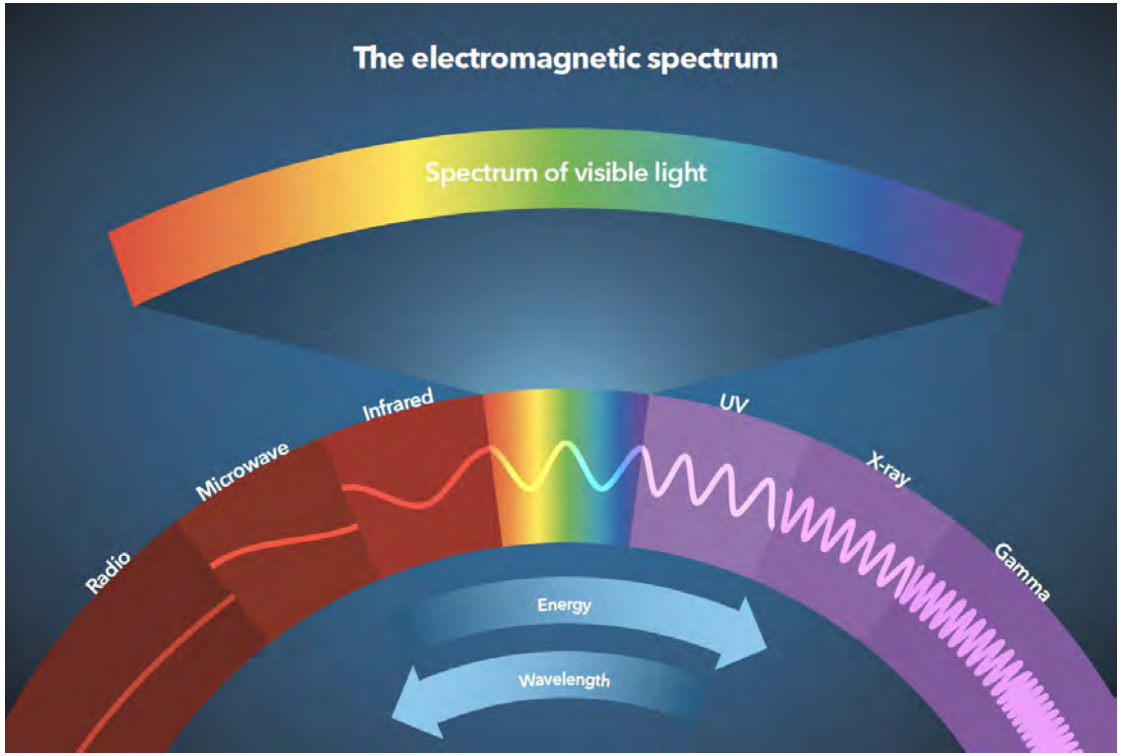
MSS for IoT

Internet of Things

Aeronautical &

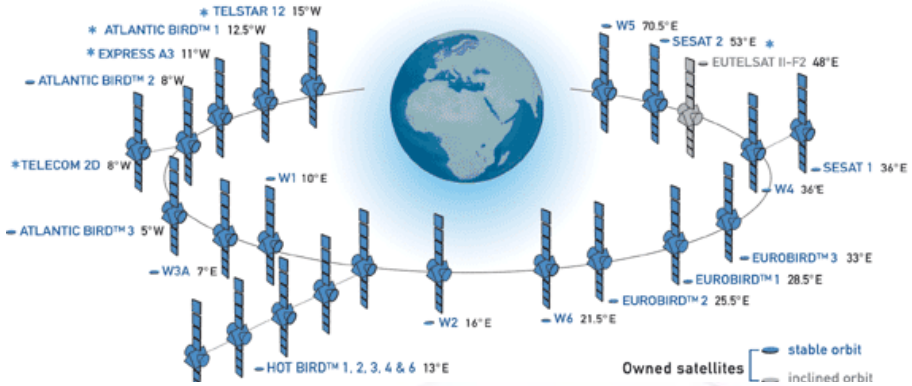
Maritime

Radio spectrum and satellite orbits



Limited natural resources

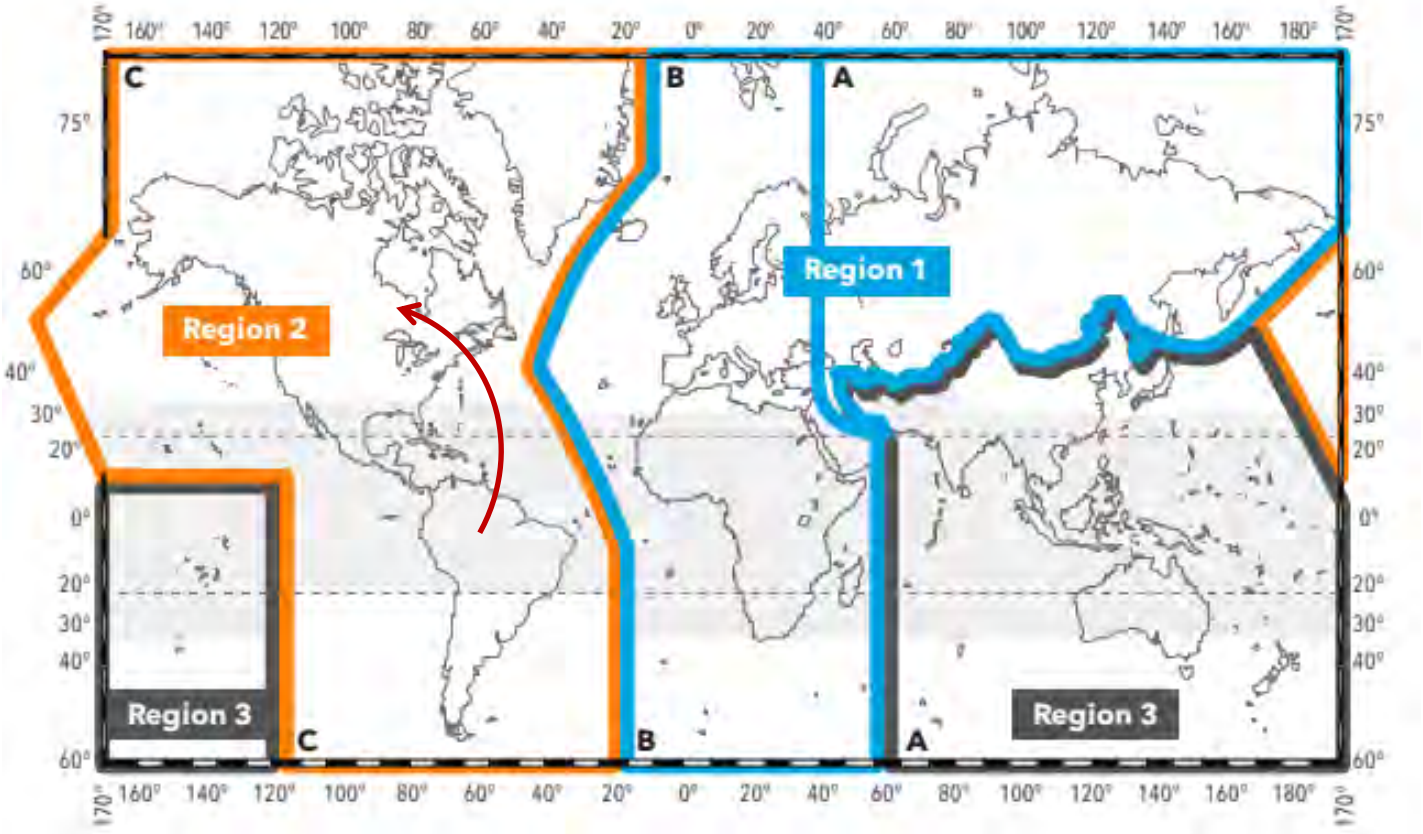
Why regulate?



- So that radio frequencies and any associated orbits are used rationally, efficiently and economically, and **countries** or groups of countries may **have equitable access** to orbits and frequencies

- So that radiocommunication **services** can operate efficiently and effectively **without harmful interference**

Why harmonize?



- Enables **international roaming**, allowing citizens to use the same device in different countries
- Creates **economies of scale**, thereby enabling **affordable devices and services**
- Facilitates **emergency communications**

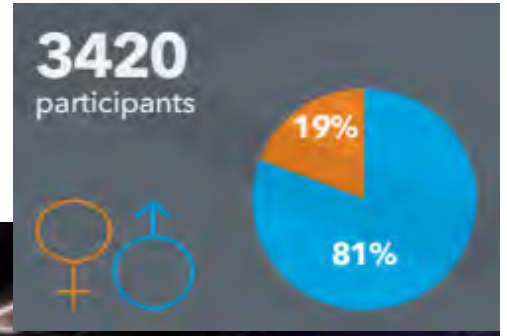
International Regulations

The Radio Regulations is the international treaty on the use of radio spectrum and satellite orbits

- 1st "International Radio Telegraph Convention" was signed in 1906
- The treaty is updated every 4 years during a World Radiocommunication Conference (WRC)
- Next WRC will take place in 2023

https://www.itu.int/pub/R-REG-RR-2020

World Radiocommunication Conference (WRC-19)



International Standards

ITU-R Recommendations constitute a set of international technical standards

- Provide specifications, requirements, data guidance, or procedures for a specified application
- Developed in collaboration between public, private sector, academia and other regional and international organizations
- Approved by ITU Member States
- Their implementation is not mandatory, however they are commonly implemented worldwide

Free online access to all ITU-R Recommendations at:
https://www.itu.int/pub/R-REC

International Mobile Telecommunications towards 2030 and beyond

Preliminary draft **new Report ITU-R** on **Future technology trends of terrestrial IMT systems towards 2030 and beyond**

Development of “Vision for IMT towards 2030 and beyond”

Studies on usage of the terrestrial component of IMT systems for specific applications

Next events

2021

International Space Radio Monitoring - September

1st ITU Inter-regional Workshop on WRC-23 Preparation – November

ITU RRS ONLINE2021

Regional Radiocommunication Seminars (RRS)

Africa - July
Asia & Pacific - October
Arab States - December

2023

The Conference Preparatory Meeting is our 2nd largest ITU-R event (around 1300 delegates). ITU Member States are encouraged to consider the opportunity to host CPM23-2 in May 2023

World Radiocommunication Conference 2023 (WRC-23) UAE

Telecom news (terrestrial services)

Five Emerging Internet Of Things Trends For 2021

ETTelecom

97 telcos now hold 5G mmWave spectrum: Report

TELECOS >

La banda de 700 MHz para 5G se subastará en marzo

Sur la 5G, ce qui est vrai, ce qui est faux et ce qu'on ne sait pas encore

Telecom news (space services)

Explained: What is NISAR, the joint Earth-Observing mission of NASA and ISRO?

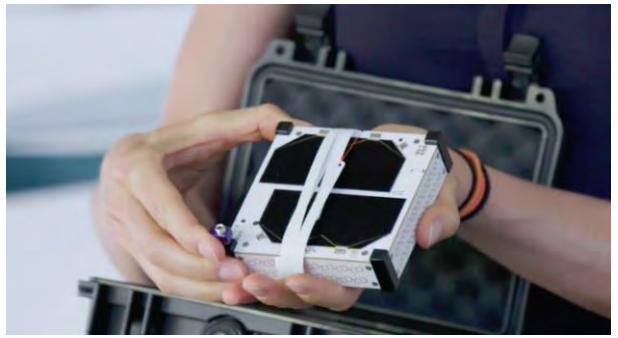
Apr 21, 2020, 07:09am EDT | 1,149,929 views

What Are Those Strange Moving Lights In The Night Sky? Elon Musk's 'Starlink' Satellites Explained

INSPIRE-2: Cubesat

Reaching new heights in a global and collaborative space mission

The 'INSPIRE-2' satellite is a product of a research partnership between the University of Sydney, UNSW and ANU, and is a participant in QB50; a global small satellite research program.



Summary

- Develop and update **international regulations on the use of spectrum and orbits**
- Develop and adopt **standards and best practices** on the use of orbit/spectrum
- **Apply** these regulations (frequency register and coordination)
- **Disseminate information** on these regulations, standards and best practices

ITU
Thank You

Setting the standard

ITU-T and TSB

10 May 2021

Dr Chaesub Lee
Director TSB

Setting the standard

ITUWTSA-20

The World Telecommunication Standardization Assembly is held every four years and defines the next period of study for ITU-T: Rules, Procedures & Study Groups

WTSA-20 is planned to take place in Hyderabad, India, 1 to 9 March 2022 preceded by the Global Standards Symposium on 28 February 2022.

Preparatory work in the Regions and with regional organizations (i.e. with ATU)

WTSA-20 Inter-regional coordination

In the ITU-T Study Groups

In TSAG and, this year especially, in the TSAG Rapporteur Groups Clusters

Setting the standard

ITU-T Study Groups

SG2 - Operational aspects

SG3 - Economic and policy issues

SG5 - Environment and circular economy

SG9 - Broadband cable and TV

SG11 - Protocols and test specifications

SG12 - Performance, QoS and QoE

SG13 - Future networks and cloud

SG15 - Transport, access and home

SG16 - Multimedia

SG17 - Security

SG20 - IoT and smart cities

Setting the standard

Core work of ITU-T SGs / FGs

- IMT-2020/5G networking
- Machine learning for 5G

- Internet of Things
- Smart cities with U4SSC

Blockchain and DLT

Environment and circular economy

Quantum information technology

Digital financial inclusion

Performance, QoS & QoE

Security and trust

Intelligent Transport Systems

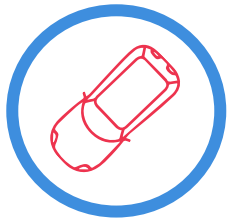
Financial Inclusion Global Ini.

Artificial Intelligence

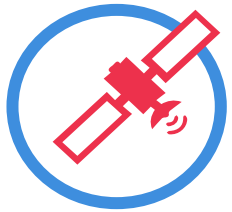
Setting the standard

Welcoming new communities 2017-2021

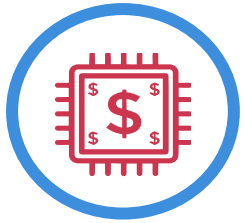
Automotive



Space



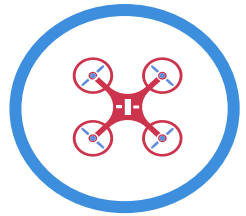
Fintech



IoT/M2M

Quantum

UAVs



OTTs

MVNOs/MVNEs

Smart cities

Utilities

Esports

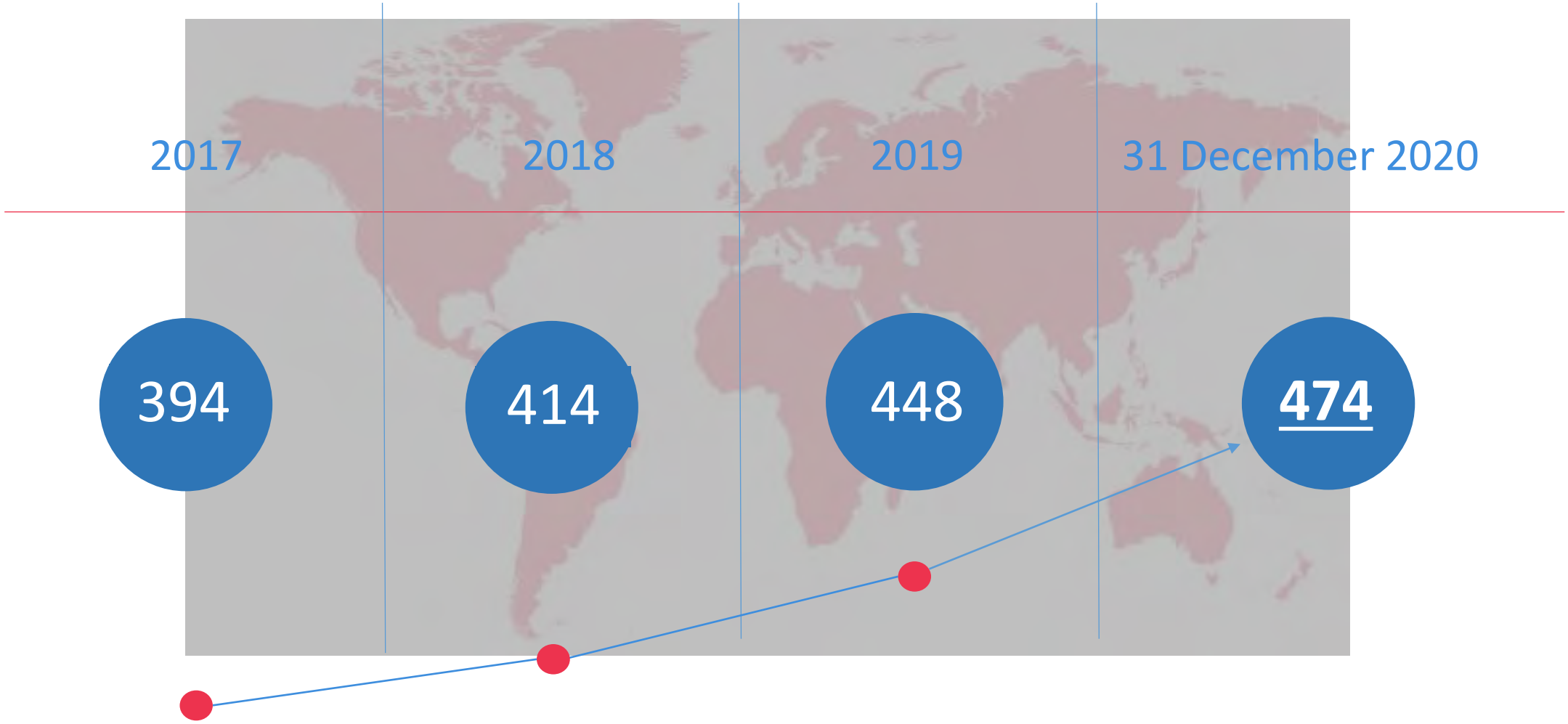
LiFi

Blockchain

IP speed

Setting the standard

ITU-T Sector Members and Associates 2017 - 2020



Setting the standard

ITU-T activities @2020

↑33%
32
SG/WP/TSAG MEETINGS

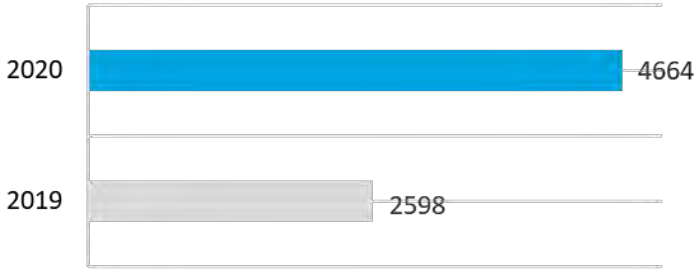
↑18%
358
ITU-T RECS & SUPPLEMENTS

↑9%
200
ITU-T ASSOCIATES

↑8%
110
COUNTRIES REPRESENTED

↑2%
273
ITU-T SECTOR MEMBERS

Participation



Setting the standard

Virtual meetings

MyWorkspace https://itu.int/net4/itu-t/myworkspace

MyMeetings remote participation

MyEvents agenda and networking

All Events calendar view

ITU Translate trained on ITU documents

ITU-T Cloud 10GB per user

Mailing list management with search

Community user directory

Profile for user information and interests

+ Suggested meeting documents based on pre-set user interests & option to **bookmark** favourites

ITUSearch https://www.itu.int/search

Search All ITU resources by sector and type

Social media search ITU Facebook and Twitter

Multimedia search ITU Flickr and YouTube

ITU basic texts full text search

Feedback from ITU-T Study Groups driving TSB development

Setting the standard

Artificial Intelligence

ITU standards AI/ML in networking, multimedia, service quality assessment, datacentre energy efficiency…

AI for Good Global Summit All year, always online, supporting partnerships for global impact

AI/ML in 5G Challenge Global competition for problem-solving with AI

Focus Group AI and environmental efficiency

Focus Group AI for health, with World Health Organization

Focus Group AI for autonomous and assisted driving

Focus Group AI for natural disaster management, with WORLD METEOROLOGICAL ORGANIZATION, UN environment programme

Focus Group Autonomous networks

Global Initiative AI and Data Commons

ITU Events

AI for Good

Accelerating the United Nations Sustainable Development Goals

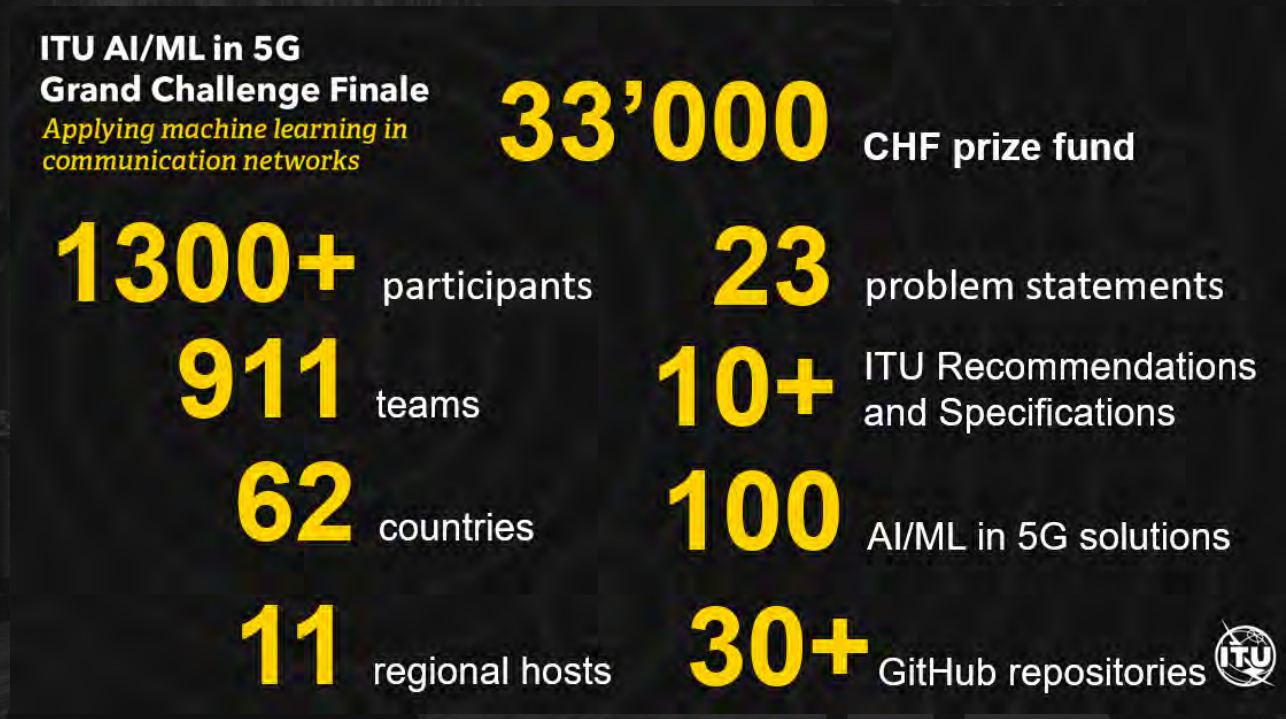
ALL YEAR
ALWAYS **ON**LINE

aiforgood.itu.int

38 UN PARTNERS

AI for Good | 2021: Expand ITU AI/ML in 5G Challenge

- ML5G Challenge 2020



- Launching now **ML5G Challenge** 2021
- In preparation: AI for **Health Challenge** with

AI for Health ITU-WHO Focus Group + World Health Organization + HARVARD MEDICAL SCHOOL

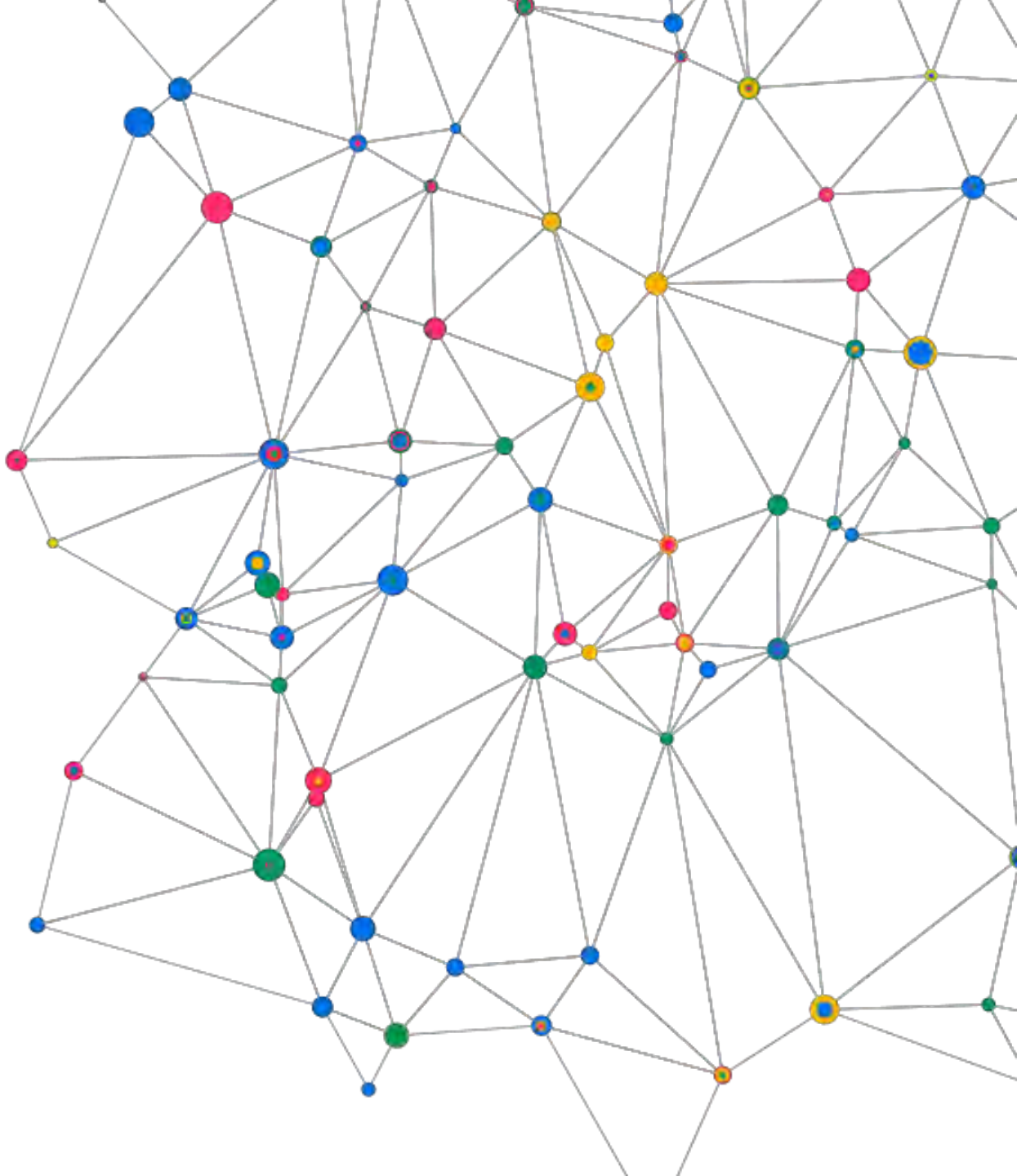
Connecting the world, together.

Updates from the Telecommunication Development Bureau (BDT)

10 May 2021

BDT Priorities

- Improve basic connectivity
- Forge new partnerships
- Increase impact of BDT work on the ground
- Shaping a Fit-4-Purpose BDT



Engagement during Covid-19

Held over 100 events in the last 12 months including:

- Global Symposium for Regulators
- Broadband Commission Meetings
- TDAG and respective Working Groups
- Study Groups
- Regional Preparatory Meetings for WTDC-21

Ongoing BDT Initiatives

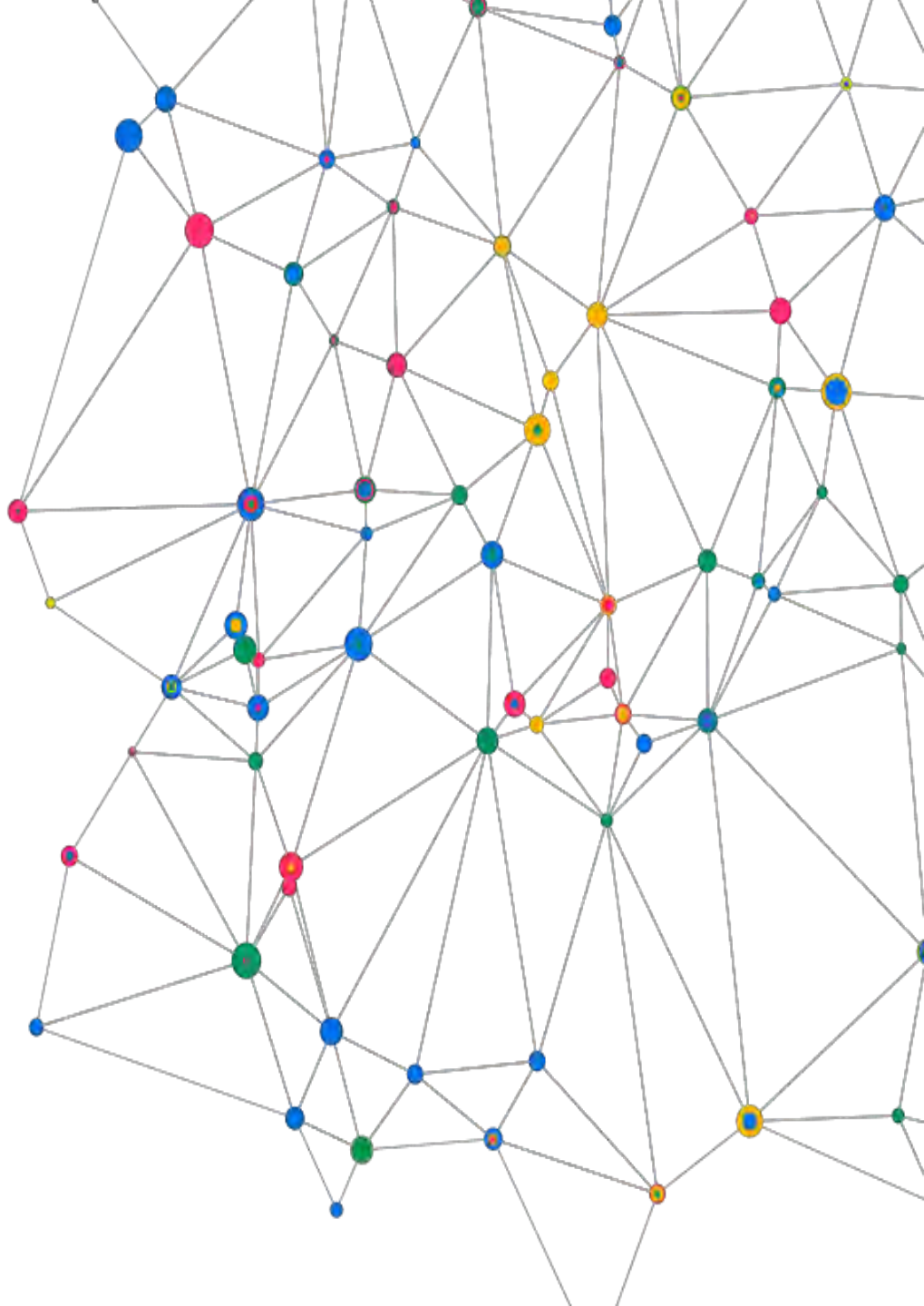
- Global Network Resiliency Platform (Reg4Covid): Creating vital space for rapid information exchange to help keep digital networks in operation.
- Connect to Recover : helping countries build back better.
- Partnership with UNICEF on Giga for schools connectivity.
- Digital Transformation Initiative .
- Smart Villages in Niger .

BDT Partners

50 new partnerships and projects established in the last 2 years

Examples:

- UAE
- Saudi Arabia
- Japan
- UK Foreign Commonwealth and Development Office
- USAID
- Estonia, GIZ, Digital Impact Alliance
- Norway/Cisco



World Telecommunication Development Conference

- Leading quadrennial policy conference to shape the future of digital development
- Setting strategies & objectives
- Developing innovative models of collaboration

https://www.itu.int/en/ITU-D/Conferences/WTDC/WTDC21/Pages/default.aspx

WTDC-21 Theme

Connecting the unconnected
to achieve sustainable development

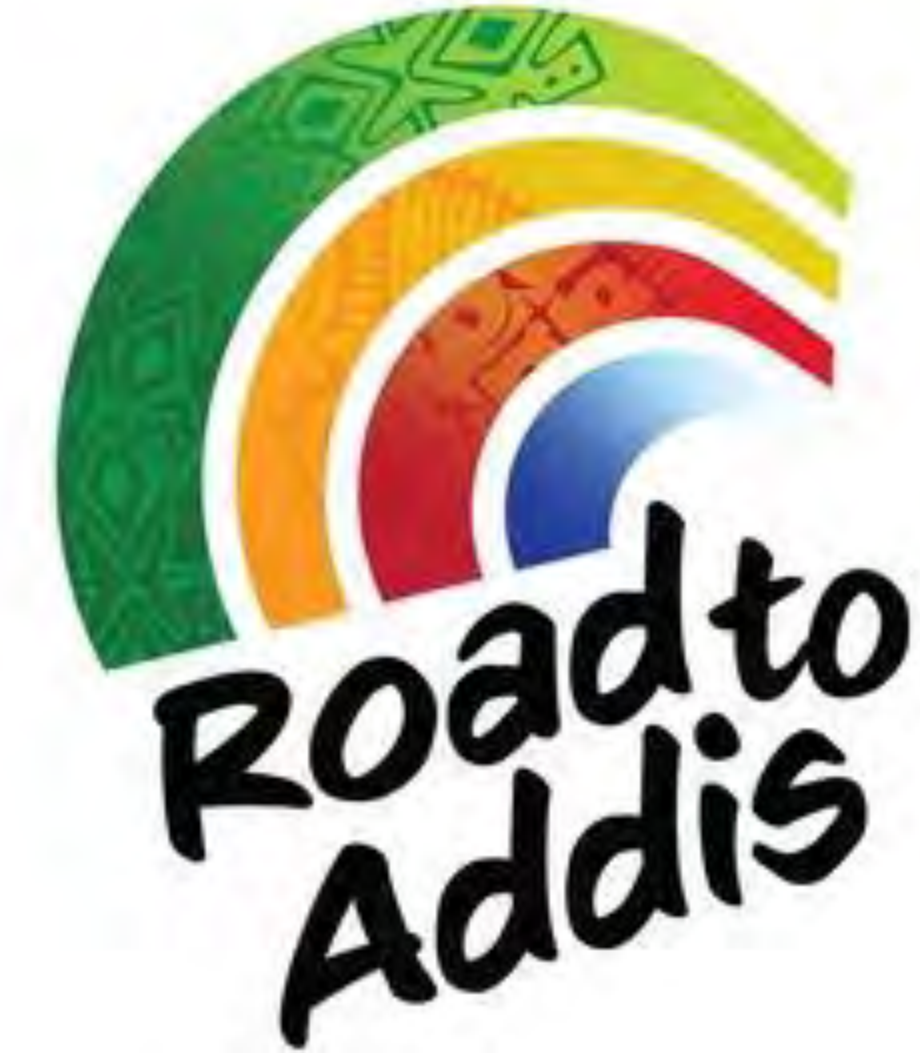
Preparations for WTDC-21

Host: Ethiopia

- Proposal from host to postpone WTDC-21 to June 2022
- 1st round of Consultations with Council Members completed
- 2nd Round of Consultations with full membership to begin immediately

New Features of WTDC

- Key focus on partnerships – Partner2Connect for Digital Transformation
- Commitment to Digital Inclusion
- Network of Women for WTDC
- Generation Connect Youth Summit
- Road to Addis events



Generation Connect Global Youth Summit

Addis Abba, Ethiopia

Bringing the voices of young people into the WTDC-21 discussions, sessions, and activities.

Generation Connect

Aims to engage global youth and encourage their participation as equal partners alongside the leaders of today's digital change, empowering young people with the skills and opportunities to advance their vision of a connected future.

https://www.itu.int/generationconnect/

Youth Engagement

Generation Connect

Visionaries Board

Regional Youth Groups

Virtual community

Network of Women for WTDC

- Build a community of female delegates in the activities leading up to WTDC and beyond.
- Platform for female delegates to support each other, expand their network, share experiences and knowledge.
- Empower women to take up leadership roles in ITU-D activities.
- Mentorship.

Partner2Connect for Digital Development Event

Provides an opportunity for high level leaders from all BDT constituents to discuss the key digital development challenges and opportunities to achieving universal meaningful connectivity

Recent BDT Publications

With Access Links

- Digital Trends Reports
- Digital Regulation Handbook
- Connecting Humanity Report
- Last Mile Internet Connectivity Solutions Guide
- Measuring Digital Development
- ICT Price Trends
- Global Cybersecurity Index - v4
- BDT 2020 Year in Review

Thank you!

BDTDirector@itu.int

Thank you !

For any questions or general requests, please contact:

protocol@itu.int