

## هيئة الاتصالات وتقنية المعلومات Communications & Information Technology Commission

## Radiocommunication Bureau (BR)

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To Administrations of Member States

of the ITU, Radiocommunication Sector Members, ITU-R Associates

and ITU Academia

Subject: Joint ITU-CITC Forum on "Connecting the World from the Skies", 8-10 November 2022,

Riyadh (Saudi Arabia) / Hybrid event

Dear Madam/Sir,

We are pleased to invite you to participate in the Joint ITU-CITC Forum on "Connecting the World from the Skies", which is co-organized by the ITU and the Communications and Information Technology Commission (CITC) of the Kingdom of Saudi Arabia.

The forum will be held physically from 8 to 10 November 2022 in Riyadh, Saudi Arabia. CITC will provide online facilities for remote participation.

This forum will extensively address airborne and space-borne communication networks from technology, space and science policy perspectives. It will be of interest to representatives from both the public and private sectors, and in particular radiocommunication and space industry innovators, researchers, ICT and technology stakeholders, as well as spectrum policy makers from national regulators and other relevant international bodies.

## Introduction

The evolution of wireless connectivity is accelerating as a mesh of different wireless infrastructures are being deployed beyond the Earth's surface. These include GSO and HEO satellites, MEO and LEO satellite constellations, as well as High Altitude Platforms (HAPs), Low Altitude Platforms (LAPs), and air-to-ground (A2G) networks. All of these are currently being developed, tested and in some cases, deployed in an operational capacity.

Each of these types of wireless networks has a role to play in addressing connectivity gaps and use cases through integration with each other as well as with other terrestrial network components. These network components and infrastructures are simultaneously evolving and coming together to form new types of integrated wireless network topologies.

In order to connect the unconnected in a sustainable manner worldwide, the impact of these technological evolutions on the outer space environment as well as the impact of space-borne and airborne infrastructure on scientific observations and gathering of celestial and atmospheric information needs to be managed under certain internationally agreed protocols: among other subjects, the forum will also discuss how open skies policies can be complemented by dark and quiet skies policies.

Through a mix of keynote presentations, moderated panel discussions and technology demonstrations that will showcase the variety of technological solutions that can provide connectivity through airborne and space-borne networks, the forum will provide insights on:

- status, challenges and opportunities of current and future airborne and space-borne technologies,
- open skies policy in order to help achieve sustainable connectivity for the unconnected,
- how multiple satellite clusters at different orbits can be integrated into hybrid space-terrestrial networks within a unified topology,
- interoperability and complementarity of space, air and land communication technologies to achieve seamless and integrated connectivity,
- evolution of satellite to provide fixed or mobile connectivity directly to devices,
- satellite IoT connectivity bringing the benefits of innovative IoT applications and use cases to remote and unconnected areas,
- how stratospheric connectivity using HAPs can bring new coverage opportunities for cellular network deployment,
- air-to-ground technology capabilities to bring broadband connectivity to airplanes,
- recent developments of LAPs and how they can be integrated in the overall wireless connectivity landscape,
- spectrum needs for future space-borne and airborne technologies and potential innovative spectrum access and sharing mechanisms,
- the environmental impact of space-borne and airborne technologies and the importance of adopting green ICT standards.
- The latest trials and use cases of space-borne and airborne technologies.
- global competition on of space-borne and airborne technologies, In collaboration with IEEE Future Networks Initiative.

## Registration

Please note that all the information related to the Forum, as well as the Online Registration link will be available on the ITU website:

http://www.itu.int/go/ITU-R/Connecting-World-from-the-skies

We encourage participants to register for this event at their earliest convenience by using the link provided above.

Yours faithfully,

Mario Maniewicz Director, BR Mohammed Al-Tamimi Governor, CITC