

First Announcement of

Asia-Pacific Space Cooperation Organization (APSCO) University of Sharjah (UOS) and Arab Union for Astronomy and Space Science (AUASS)

INTERNATIONAL SYMPOSIUM 2024 on Developments in Space Communications-The Regional Balance and Challenges 5-7 November 2024, Sharjah, UAE

Supported by

Sharjah Academy for Astronomy, Space Science and Technology (SAASST)



General Introduction

Space communications play a crucial role in enabling exploration, scientific research, commercial activities, and space security beyond Earth's atmosphere. Advancements in this field are vital for expanding our understanding of the universe and improving our capabilities in space.

Despite its potential benefits, space communications pose several challenges, including security and privacy concerns (e.g., data breaches, unauthorized access), interoperability issues (due to diverse devices and protocols), scalability challenges, power management for battery-operated devices, and ethical considerations related to space property ownership and usage.

On the other hand, the roles of governments and international organizations are multifaceted, encompassing regulation, investment, collaboration, emergency response, exploration, traffic management, and support for commercial activities. By fulfilling these roles, governments help to facilitate the development and utilization of space communications technologies for the benefit of society as a whole.



In this regard, the Symposium on Developments in Space Communications-The Regional Balance and Challenges is being organized by Asia-Pacific Space Cooperation Organization (APSCO) with University of Sharjah (UOS) and Arab Union for Astronomy and Space Science (AUASS), supported by Sharjah Academy for Astronomy, Space Science and Technology (SAASST), in order to improve the space resources usage in the Asia-Pacific region, to get common understanding on space communications amongst the Member States and extend knowledge sharing among experts. The symposium aims to encourage the experts and specialists through open, voluntary participation to share information and exchange views on different aspects related to the symposium theme.

Asia-Pacific Space Cooperation Organization (APSCO)

Asia-Pacific Space Cooperation Organization (APSCO) was established on December 16, 2008, as a not-forprofit, international, inter-governmental organization with full international legal status, having the 'Convention of APSCO' registered with the United Nations. APSCO currently has 14 Member States, including eight Full Member: Bangladesh, China, Iran, Mongolia, Pakistan, Peru, Thailand, Türkiye, one Signatory Member: Indonesia (ratification in process), one Associate Member: Egypt (ratification in process) and Four Observers: Mexico, Inter-Islamic network on Space Science and Technology (ISNET), Arab Union for Astronomy and Space Science (AUASS) and Venezuela. China is the host country for APSCO, and the Headquarters of APSO is located in Beijing, China.

APSCO provides a platform for cooperative activities and capacity building in Member States in the field of space science, technology, and its applications. APSCO also contributes to building capacity in the field of space law and policy and has been biennially organizing international symposiums since 2009 as part of its knowledge exchange platform. These events provide a unique knowledge-sharing opportunity for the executives at the national space agencies and space authorities in the Member States of APSCO.

University of Sharjah (UOS)

The University of Sharjah is an Emirati private national university located in University City, Sharjah, United Arab Emirates. It was established in October 1997 by its founder, the ruler of Sharjah Sheikh Dr. Sultan bin Muhammad Al-Qasimi, to meet the emirate of Sharjah's aim of educational needs. The university's goals constitute becoming a leading academic institution in the Middle East and around the world.

The Arab Union for Astronomy & Space Sciences (AUASS)

The Arab Union for Astronomy &Space Sciences (AUASS) was established in August 1998 as an outcome of the second Arab Conference (AASS), held in Amman, Jordan, from August 29- September 1, 1998. The conference was organized at the time by the IAASS Institute of Astronomy &Space Sciences. Among the participants, there were more than 100 astronomers & scientists from 14 Arab countries, in addition to observers from France, Italy, and the USA. The participants decided to establish the Union with the headquarter to be established in Amman. The aim of the union is to develop (AASS) in the Arab countries through conferences, meeting, publication, joint research projects etc.

The Sharjah Academy of Astronomy, Space Sciences & Technology (SAASST)

The Sharjah Academy of Astronomy, Space Sciences & Technology was inaugurated in 2015 under the patronage of His Highness Sheikh Dr. Sultan Bin Mohammed Al Qasimi, Member of the Supreme Council, Ruler of Sharjah, and Founder of the University of Sharjah, to crown the celebrations of Sharjah as the Capital of Islamic Culture. The Center aims at developing and promoting education about astronomy and space sciences in the Arab World in general and the UAE in particular in order to be a destination for science, research, heritage, and education.

Event Dates and Venue

The symposium shall be organized on **5-7 November 2024** in Sharjah, UAE. The theme of the symposium is *Developments in Space Communications-The Regional Balance and Challenges*. The symposium shall be held at Sharjah University, Sharjah United Arab Emirates (UAE).

Targeted Audience and Expected Participants

The symposium is planned for a total of **80-100 onsite** participants, including decision-makers- and policy-makers from national space agencies, governmental bodies, experts from the space community, private sector representatives, researchers/students from academia who are involved in space activities, representing developing and developed nations.

Symposium Objectives

The objectives of the symposium are as follows:

- (a) To gather scientists, practitioners, scholars, and experts to discuss and envision future developments in space communications in a holistic, global way.
- (b) To provide a platform for researchers, practitioners, and educators to present and discuss the most recent innovations, trends, and concerns, as well as practical challenges encountered and solutions adopted in the fields of space communications.
- (c) To provide a key platform for the development of researchers with international and diversified knowledge and experiences, enhancing the quality decision-making of policymakers and promoting the highest utilization of research knowledge.

Preliminary Program of the Symposium

A tentative outline of the program is attached to the announcement.

Working Methods

The symposium will mainly comprise presentations followed by questions and answers. Participating institutions and interested experts are expected to submit an abstract on the topics of the symposium in English, with 300-400 words, including the following details: Presentation Title, Author Name, Affiliation, and email address of the Speaker from the topics listed below:

- Space Communications Newly Emerging Trends, Challenges and Opportunities
- Space Communication and the Role of Intergovernmental Organizations
- Emerging Trends in Commercial Space Communications
- Legal and Regulatory Issues in Space Communications

Important dates to remember are:

a.	Deadline for submission of abstracts	July 30, 2024
b.	Announcement of the abstract selection	August 30, 2024
c.	Submission of Presentations	October 15, 2024
d.	Deadline for Registration	September 30, 2024
e.	Final Announcement	October 15, 2024

f. Symposium 5-7 November 2024

<u>Language</u>

The working language of the symposium is English.

Contact Information

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Developments in Space Communications-The Regional Balance and Challenges

5-7 November 2024

Preliminary Programme of the Symposium			
DAY 1 – TUESDAY, November 5, 2024			
OPENING SESSION			
0930-1030 hrs	Opening Remarks/ Keynote Speeches • Secretary- General APSCO • President, Sharjah University • Secretary- General, AUASS • Chief Guest Remarks		
Group photo and coffee break			
SESSION 1 Space Communications – Newly Emerging Trends, Challenges and Opportunities			
1030 – 1300 hrs	Moderator Rapporteur Speakers (4-5 Speakers)		
13:00-1400 hrs	Lunch Break		
SESSION 2 Space Communications and the Role of Intergovernmental Organizations			
1430 -1700 hrs	Moderator Rapporteur Speakers (4-5 Speakers)		
1900 hrs	APSCO Reception		
DAY 2 - WEDNESDAY, November 6, 2024			
SESSION 3 Emerging Trends in Commercial Space Communications			
1000-1300 hrs	Moderator Rapporteur Speakers (4-5 Speakers)		
13:00-1400 hrs	Lunch Break		
SESSION 4 Legal and Regulatory Issues in Space Communications			
1400-1510 hrs	Moderator Rapporteur Speakers (4-5 Speakers)		
1510 -1530 hrs	Coffee break		
CONCLUSIONS			
1530 -1700 hrs	 Session-1 Session-2 Session-3 Session-4 		
CLOSING CEREMONY			
DAY 3 –THURSDAY, November 7, 2024			
1000-1700 hrs	Cultural Tour/Technical Visit		