

## *Country Report focused on Space Policy*

*(Plenary, November 16)*

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In recent years, Space research and development activities have rapidly increased worldwide. The growth has been noteworthy in the Asia-Pacific region and the activities are expanding day by day. With this context, each speaker will introduce recent major activities towards space research, development, utilization and related topics.

Also, “Space Capability” is widely recognized as a fundamental area to support the sustainable development of human activities. Many countries have either already established or are planning to establish a comprehensive framework for exploration and utilization of outer space through their national space policies.

Based on these principles and in recognition of this necessity, the country report at APRSAF-24 will covers the background and motivation to establish related policies at the national level.

Accordingly, speakers from each country will introduce their recent major activities with trends and background of national policies, including the structure and relations of each policy, for accessing Space Capability.

## *Space Cooperation in Asia - Pacific Region*

*(Plenary, November 16)*

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We believe that international cooperation is one of the corner stones for the success of long term sustainability of space endeavors of mankind. While cooperation between major space faring nations is vital, the cooperation at a different platform is emerging as a new trend in ensuring that benefits of space applications are available to larger masses. This platform is regional cooperation in space. Across the globe, some countries have taken up a lead role in ensuring that there are fruitful interactions and initiatives to ensure a strong regional cooperation in space.

In this direction, Asia Pacific is an important region which stands to contribute and gain from strong cooperative efforts in space applications. The following

major factors strongly support more initiative in this region:

- Large geographic region in terms of land and ocean
- Diverse ethnic groups requiring multiple applications
- Bio diversity and wide range of climatic conditions
- Large population
- Significant emergence of space players in the region
- Very good space technology expertise available in the region

Considering the above, it is appropriate and prudent to organize a discussion on the topic of ‘Space Cooperation in Asia Pacific’. This would ensure that views are expressed and ideas are exchanged on the current trends and way forward in this area. Accordingly, a panel comprising of representatives from the stake holders, the space agencies and multi-nation organizations has been organized for this discussion.

## *Heads of Agency Session*

*- Space Technology Inputs for Resolving National Priority Issues toward Achieving Sustainable Development Goals (SDGs) -*

*(Main Plenary, November 17)*

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The 2030 Agenda for Sustainable Development is a set of international development goals from 2016 to 2030, which was adopted by the UN Sustainable Development Summit held in September 2015. The 2030 Agenda listed “Sustainable Development Goals” consisting of 17 goals and 169 targets to realize a sustainable world. SDGs are universal goals applicable, not only to developing countries but also developed countries.

Space science and technology can play an innovative role in achieving the SDGs.

Prominent speakers from major space agencies will present on good practices by them and future possibilities/expected contributions of space technology in resolving their National priority issues toward achieving the SDGs.

# *Special Session on Space Technology for Enhanced Governance and Development*

*(Main Plenary, November 17)*

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Indian Space Research Organization (ISRO) has always been striving to accelerate the use of space technology based inputs in governance and development in the country, and also to deepen the involvement of State Governments in reaping the benefits of space technology.

In order to maximize the utilization of Space Technology for Governance and Development, ISRO has proactively interacted with various Ministries/Departments of the Central Government and chalked out definite action plans. Further, a National Meet was organized on 7th September 2015, where the Secretaries to the Government presented the Plan of Action for enhanced space technology utilization in the respective Ministries/Departments. These initiatives culminated in about 160 Space Application projects in 60 Ministries/Departments of Government of India.

During the last 24 months, more than 100 Memorandums of Understanding (MoUs) have been signed towards realizing the identified activities and most of the projects have progressed successfully, resulting in development of new methodology, web & mobile applications, online & offline geospatial database creation and capacity building.

The new initiatives have benefitted the stakeholder Ministries/Departments in utilizing the Space Technology based tools and applications for effective implementation, monitoring and evaluation of development programmes and also as input for decision making in flagship schemes and beneficiary oriented programmes.

The State Governments also have shown higher involvement in utilizing space technology for Governance and Development, by identifying newer application potential and requirements.

During APRSAF-24, a special session is being organized in the forenoon of 17th November, 2017, on "Space Technology for Enhanced Governance and Development". This session is aimed at showcasing a few of the success stories that emerged out of the recent efforts of ISRO to deepen and widen the utilization of space technology in the country. The highlights of space applications by a few of the Government Ministries / Departments & State Government will be presented in this session, for the benefit of the forum at large.

## *Space Policy Session*

*(Main Plenary, November 17)*

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Today many countries in the Asia-Pacific region, including emerging space faring countries, are engaged in the development of their national space policies and updating them, consistent with the national requirements and international developments on policy matters. It would be appropriate for us to start exchanging information on national efforts on space policy and views on the possible areas for future cooperation at regional level.

In this special session, the distinguished space policy experts gathering from the governments in the region will share how their country are evolving their space policy in response to their national requirements and discuss the possibility of future cooperation in the region.

## *Space Exploration Session*

*(Main Plenary, November 17)*

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Today, there is an ever-increasing momentum towards promoting space activities beyond Low-Earth Orbit (LEO) in the world. Several deliberations on the significance, scenarios and global co-operation framework for space exploration are actively made at the international platforms such as UNISPACE+50, International Space Exploration Forum (ISEF), etc.

For the future of sustainable and truly global space exploration, a wider range of participants, besides space faring nations, is essential. Particularly, emerging space nations in the Asia-Pacific region will have a vital role to play in providing many possibilities for the realization of sustainable and truly global space exploration. The private sector, both space and non-space industries, is also expected to be a new and significant player.

In this session, speakers from six space faring nations of the Asia-Pacific region will introduce their space exploration plans and current activities (e.g. missions to Moon, Mars, and other planetary bodies) and also talk about the challenges as well as the potential opportunities for emerging space nations to participate in

these endeavors. The discussions will include the utilization of LEO space stations for demonstrating the technologies related to space exploration, and capacity-building opportunities to prepare for the future space exploration.

## *Space Leader's Roundtable*

*(Workshop, November 13)*

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Following all the sessions of APRSAF-24, the space leaders in the Asia-Pacific region including the heads of space agencies and the senior officials of the governments/international organizations will be welcomed to exchange their views on:

- 1) Future perspective and direction of the space activities in the Asia-Pacific region
- 2) Expectation for APRSAF activities (Common issues to be addressed in the future, suggestions to improve operations of APRSAF activities) Major ideas and suggestions shared among the space leaders will be incorporated into the Joint Statement to be adopted at the end of the APRSAF-24.

## *Space Policy Workshop*

*(Workshop, November 13)*

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This workshop, jointly organized by the University of Tokyo Graduate School of Public Policy, Japan, and the National Institute of Advanced Studies (NIAS), India, aims to provide an overview of space policy perspectives in the Asia-Pacific region and to explore further possibilities for international cooperation in the region.

The workshop program consists of two sessions: Perspectives of National Space Policy and Latest Space Programs [Part I]; and Panel Discussion on “Space Exploration: Emerging Issues of Space Policy and Possibility for Collaboration.” These sessions will share a vision toward future exploration as well as identifying pressing issues such as space debris mitigation [Part II].

Distinguished speakers are invited from various countries in the region to share their views on desirable approaches to space exploration.

The next day, November 14th, an additional workshop for space policy studies under academic cooperation between the University of Tokyo and the NIAS is to be held at the NIAS. For technical aspects of programme and confirming attendance/participation for the event of 14th, please inform:

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## *Space for Future Society*

### *(Evening Session, November 15)*

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Aerospace technology is playing a major role in our daily life.

Today, seven satellites of Indian Regional Navigation Satellite System (IRNSS) are on orbit and operational. Moreover, Japanese navigation satellite, QZS-4 (Michibiki4) was launched in October 2017 and four QZS satellites are on orbit now. These navigation satellites will be used in many application areas. Thinking about remote sensing, many Earth observation satellites and UAVs are operated and they are indispensable in our daily life

Another important area where aerospace technology can contribute to our daily life is “Renewable Energy” such as Solar Power.

This session aims to collect ideas and discuss how aerospace technology, such as Solar Power, GNSS and Remote Sensing, can contribute to future society. Themes of the session are smart system of energy management, transportation, healthcare, disaster reduction, agriculture, industry, environment monitoring and so on.