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ON SCIENCE AND TECHNOLOGY FOR DEVELOPMENT (CSTD)**

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Contribution by UNOOSA

to the CSTD 2023-2024 priority theme on “Global cooperation in science,  
technology and innovation for development”

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## UNOOSA Inputs for CSTD 2023-2024 Priority Themes

Priority Theme 2: Global cooperation in science, technology and innovation for development

### **1. What STI cooperative mechanism(s) at global or regional levels has your organization initiated or joined in?**

The following is a list of relevant STI cooperative mechanisms and initiatives that UNOOSA is involved in:

- **Programme on Space Applications**

The Programme celebrated its 50<sup>th</sup> anniversary in 2021 and as such is a permanent agenda item of the UN Committee on the Peaceful Uses of Outer Space (COPUOS) and its Scientific and Technical Sub-committee (STSC). The agenda item is a catalogue of activities, projects and partnerships led by Member States of the committee, often becoming an engine for international cooperation in the peaceful uses of outer space.

[UNOOSA Programme on Space Applications \(unoosa.org\)](https://www.unoosa.org/Programme-on-Space-Applications)

- **International Committee on Global Navigation Satellite Systems (ICG)**

The ICG promotes voluntary cooperation on matters of mutual interest related to civil global navigation satellite systems (GNSS) and UNOOSA serves as the ICG Executive Secretariat. The core objectives of the ICG are to encourage coordination among the GNSS community to ensure greater compatibility, interoperability and transparency, and to promote the further introduction and utilization of these services, including in developing countries.

[International Committee on Global Navigation Satellite Systems \(ICG\) \(unoosa.org\)](https://www.unoosa.org/International-Committee-on-Global-Navigation-Satellite-Systems-ICG)

- **UN-Space**

UN-Space is an inter-agency mechanism for coordination on space-related technologies. It, among other things, convenes annual sessions of the Inter-Agency Meeting on Outer Space Activities to discuss current and future activities, emergent technologies of interest and other related matters among UN system entities. For broader stakeholders' consultations, UN-Space organizes informal sessions open to Member States, private sector, non-governmental institutions and academia to provide an overview of the activities on space technologies carried out by UN entities.

[UN-Space \(un-space.org\)](https://www.un-space.org)

- **Space and Global Health Network**

On 12 December 2022, the United Nations General Assembly, in its resolution A/RES/77/121 on international cooperation in the peaceful uses of outer space, took note of the report of the Working Group on the work conducted under its multi-year workplan. It noted with satisfaction the establishment of the Space and Global Health

Platform, based in Geneva, to promote effective collaboration on space and global health issues among Member States and United Nations system entities and welcomed the establishment of the Space and Global Health Network.

[Benefits of space: Global Health \(unoosa.org\)](https://www.unoosa.org/)

- **Planetary Defence: International Asteroid Warning Network and Space Mission Advisory Group**

Building resilient societies is one of the key challenges of the 21<sup>st</sup> century. Given the global significance of potential natural hazards from space, such as asteroid impacts, COPUOS in 2013 recommended the establishment of the International Asteroid Warning Network (IAWN) and the Space Mission Planning Advisory Group (SMPAG) that was adopted by Member States in General Assembly Resolution A/RES/68/75. The objectives of IAWN and SMPAG are to coordinate and focus the efforts of relevant institutions, such as observatories and space agencies, of countries with the aim to guard against this cosmic hazard and strengthen international response to a potential near-Earth objects (NEO) impact hazard. UNOOSA acts as the secretariat to SMPAG and works with IAWN, and in the event of an asteroid impact hazard, would facilitate the dissemination of information related to near-Earth objects to Member States.

[Near-Earth Objects \(unoosa.org\)](https://www.unoosa.org/)

- **Access to Space for All**

Access to Space for All provides research and orbital research opportunities for Member States to access space and to ensure that the benefits of space, in particular for sustainable development, are truly accessible to everyone. Access to Space for All is recognized by COPUOS as a mechanism for collaboration between entities of space-faring nations and of space-emerging nations that fosters sustainable development.

[Access to Space for All \(unoosa.org\)](https://www.unoosa.org/)

- **UN Platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER)**

UN-SPIDER empowers developing countries to utilise Earth Observation assets, building institutional resilience through training and mentorship in all phases of the disaster management cycle. Participating countries learn how to invoke International Emergency Response Mechanisms (such as the International Charter Space & Major Disasters and Copernicus Emergency Management Services), bringing global space assets and resources to their aid. UN-SPIDER also receives voluntary expert support from a network of Regional Support Offices and maintains a Knowledge Portal with best practices, projects, and resources.

[UN-SPIDER \(unoosa.org\)](https://www.unoosa.org/)

- **Space for Water**

Water is a permanent agenda item of COPUOS where national, regional and global initiatives are built and where their outputs are shared. Since 2008, UNOOSA, together with the Prince Sultan bin Abdulaziz International Prize for Water, organizes conferences on the use of space technology for water management and the Space4Water web Portal is one of the results of this cooperation.

[Space for Water \(unoosa.org\)](https://www.unoosa.org/SitePages/Space4Water.aspx)

- **Space for Women**

Only 1 in 5 space industry workers are women, and only 11% of astronauts. The Space4Women project promotes access to space as well as Science, Technology, Engineering and Mathematics (STEM) education and careers for women and girls around the world. The Space4Women Portal is a platform for women to share diverse experiences about working in the space sector. As a Space4Women Network member, participants are part of a global professional and educational network focused on advocacy, awareness-raising, and action in supporting gender equity. The Space4Women Mentorship Programme brings together female space leaders and women and girls to provide personalized guidance and create lasting relationships.

[Space4Women | \(unoosa.org\)](https://www.unoosa.org/SitePages/Space4Women.aspx)

- **Space for Climate Action**

Under Space for Climate Action, UNOOSA facilitates international coordination and cooperation around the use of space technologies for climate action. Space for Climate Action provides a platform for information-sharing and coordination at the intersection of space and climate action and aims to raise awareness, strengthen capacity-building and facilitate multistakeholder collaboration around this. The initiative performs a key role in promoting the applications of space technologies for climate change monitoring, mitigation, adaptation, and resilience strategies.

[Space4ClimateAction \(unoosa.org\)](https://www.unoosa.org/SitePages/Space4ClimateAction.aspx)

## ***2. To what extent the existing cooperation programmes are aligned with the development priorities of participating developing countries?***

- **Programme on Space Applications**

The Space Applications Section of UNOOSA is implementing an annual programme of workshops, symposiums, conferences and training events in the full range of space applications of remote sensing, global navigation satellite systems and satellite communication. Public servants, researchers and graduate students are sponsored to benefit from these unique events where state-of-the-art technologies or research subjects are shared. This provides those from developing countries with opportunities to articulate development priorities and be exposed to and cooperate on cutting-edge applications of space technologies that can contribute to implementing a variety of the Sustainable Development Goals (SDGs).

- **International Committee on Global Navigation Satellite Systems (ICG)**

As an important multilateral vehicle, ICG contributes to sustainable development and serves to assist GNSS users with their development plans and applications by encouraging coordination and serving as a focal point for information exchange. The members of ICG are driving this process and the priorities. GNSS are critical space-based tools for priority development areas, including border security, aviation, maritime, rail, road and mass transit. The ICG and GNSS therefore directly contribute to the implementation of SDGs 3: Good Health and Well-being, 7: Affordable and Clean Energy, 9: Industry, Innovation and Infrastructure, and 11: Sustainable Cities and Communities. The work of the ICG with regards to information-exchange and coordination also contributes to achieving SDGs 4: Quality Education and 17: Partnerships for the Goals.

- **UN-Space**

Through annual resolutions, all United Nations Member States urge UN-Space to continue to examine how space science and technology and their applications could contribute to their priorities and the 2030 Agenda for Sustainable Development, and encourage entities of the United Nations system to participate, as appropriate, in UN-Space coordination efforts (see, inter alia, UN General Assembly Res 77/121). Reports and publications of UN-Space have addressed such relevant topics as climate action, agriculture development and food security, space and global health and capacity-building for an inclusive future. Whereas UN-Space meetings have, for example, focused on the identification of needs of Member States and United Nations entities for capacity building in the use of space-based observations and space-based technologies for disaster risk reduction (see also the answer to question 3 below).

- **Space and Global Health Network**

The mechanism has been recently established as the result of Member States' recommendations and upon the request of the General Assembly A/RES/77/121, aligning with the priorities of United Nations Member States. In particular, this initiative supports Member States in the achievement of Sustainable Development Goal 3: Good Health and Well-being.

- **Planetary Defence: International Asteroid Warning Network and Space Mission Advisory Group**

Both mechanisms, IAWN and SMPAG, have been established as the result of Member States' recommendations and General Assembly Resolution A/RES/68/75. They serve to ensure that all countries, in particular developing countries with limited capacity for predicting and mitigating a near-Earth object impact, are aware of potential threats and to emphasise the need for capacity-building for effective emergency response and disaster management in the event of a near-Earth object impact.

- **Access to Space for All**

Access to Space for All is key in raising awareness about what space technology can do for the development priorities of participating countries. Through their projects,

participants are able to articulate and drive development priorities. For example, in reference to the SDGs:

- SDG 4 Quality Education: provides educational resources supporting hands-on opportunities. The initiative seeks participants who understand the needs of developing countries and how space technology can contribute to reaching their SDGs.
  - SDG 8 Decent Work and Economic Growth: builds capacity for individuals to access jobs in the space industry. The initiative provides a unique opportunity to develop important skills and know-how that open up new perspectives on the job market.
  - SDG 9 Industry, Innovation and Infrastructure: institutions create facilities that remain available once the opportunity has been completed. The initiative also supports testing innovative new technologies.
- **UN Platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER)**

UN-SPIDER is part of the steering committee of the International Network for Multi-Hazard Early Warning Systems (IN-MHEWS). It is in the interest of member states, and especially developing countries, to improve their early warning systems. This is supported by the call of the UN Secretary-General for "early warning for all" and is included as target G in the Sendai Framework for Disaster Risk Reduction. Space-based technologies play an important role in the set-up and operation of early-warning systems and UN-SPIDER, with its partners, assists member states in this regard.

UN-SPIDER provides technical advisory support to developing countries, supporting their efforts in the utilization of space-based technologies for disaster management. During technical advisory support activities, UN-SPIDER always includes the development priorities of participating developing countries. To do this, UN-SPIDER works directly with member states and their ministries and agencies and adjusts activities to their needs and demands. The starting point for UN-SPIDER is a Technical Advisory Mission (TAM), which serves as a fact-finding mission to understand priorities and the current state of technologies and their usage, which may be followed by additional capacity building or institutional strengthening activities. All activities carried out require a request by the member state in order for UN-SPIDER to become actively involved. See other relevant activities below:

- UN-SPIDER together with international and national partners created the Partnership Using Space-based Technology Applications for Disaster Risk Reduction (GP-STAR). The GP-STAR partnership supports member states in the context of the Sendai Framework for Disaster Risk Reduction.
- UN-SPIDER is part of the International Working Group on Satellite-based Emergency Mapping (IWG-SEM), a voluntary group of organizations involved in satellite-based emergency mapping. It was founded in order to improve cooperation, communication and professional standards among the global network of satellite-based emergency mapping providers.
- UN-SPIDER works together with a rich network of partners (especially the UN-SPIDER Regional Support Office network), which may accompany UN-SPIDER



on missions, depending on their expertise and regional focus. The Regional Support Offices and UN-SPIDER meet regularly to discuss cooperations, and how activities conducted by the network could support member states including developing countries.

- UN-SPIDER actively promotes the usage of space-based collaborations and their established mechanisms, such as the International Charter Space & Major Disasters and the Copernicus Emergency Management Services. Using these services, member states can directly benefit from space-based information in the case of disasters.

- **Space for Water**

Water conservation and management are among the most critical issues facing humankind and is a key development priority for developing countries. SDG 6: Clean Water and Sanitation, ensuring access to water and sanitation for all, is one of the most interconnected SDGs. Space technology can help analyse global water cycles, map water courses, and monitor and mitigate the effects of floods and droughts. Indeed, a large number of remote sensing platforms and datasets are developed specifically to manage water resources.

Space for Water comprises activities in the following areas:

- The Space4Water Portal which enables all stakeholders involved in space and water communities to access data and knowledge
- A Community of Practice which gathers actors and experts in space technologies, water resource management, and other water-related topics
- A series of conferences on space technologies for water resource management

- **Space for Women**

Through a mentorship programme and annual expert meetings, UNOOSA Space4Women project aligns with development priorities related to SDGs 4: Quality Education and 5: Gender Equality by facilitating access to STEM (Science, Technology, Math and Engineering) and space education opportunities for women and girls. Space4Women expert meetings are co-hosted with Member States and focus on the priorities of the country hosting the event. Such meetings allow participants from developing countries to discuss challenges and identify interventions to make the space sector more inclusive and diverse at a global and national level.

- **Space for Climate Action**

Climate change is one of the most pressing interconnected challenges of our era and a significant development priority for developing countries, many of which are among those most vulnerable to the effects of climate change and simultaneously those most neglected by climate action. Space technologies can perform a critical role in informing climate action strategies. Indeed 26 of the 50 Essential Climate Variables can only be measured from space, and therefore only satellites can provide



the global coverage needed for climate action. Space for Climate Action is structured around SDG 13: Climate Action, but also directly contributes to SDGs 14: Life Below Water and 15: Life On Land. Due to the interconnected nature of climate change, the initiative further contributes to various priorities of developing countries and to implementing many other SDGs, most especially SDGs 2: Zero Hunger, 3: Good Health and Well-being, 6: Clean Water and Sanitation, 7: Affordable and Clean Energy, and 11: Sustainable Cities and Communities.

**3. What are the main outcomes of such mechanism(s)? And what are the impacts of the resultant cooperation on participating countries? Pls. include the gender dimension.**

▪ **Programme on Space Applications**

For more than 50 years, the programme was supported by a very large number of projects at the national, regional and global levels implemented by Member States of COPUOS, some in collaboration with UNOOSA. Those projects are reported to the committee and their outputs are often of the public domain or the starting elements of new collaborations. The capacity-building events co-organised by UNOOSA and host countries have been accessible to thousands of participants from developing countries and have provided a fertile environment for international cooperation in all areas of applications of space technologies.

▪ **International Committee on Global Navigation Satellite Systems (ICG)**

Significant progress continues to be made through ICG, and the outcomes of this work promote the capabilities of GNSS to support sustainable development and promote new partnerships among members of ICG and institutions of the broader user community. Developing countries particularly benefit from the fostering of new partnerships which enhance their efforts to develop their GNSS capabilities. The information and assistance provided to developing countries through ICG and other partnerships help those countries incorporate GNSS tools into their development plans and integrate these capabilities into their infrastructure. Throughout the events held by ICG in 2022, including workshops and training courses, 37.5% of the participants that attended were women.

▪ **UN-Space**

UN-Space has published five reports on different topics concerning Space-related activities within the United Nations System and nine Special Reports to the United Nations Committee on the Peaceful Uses of Outer Space: [UN-Space: Special reports and publications \(unoosa.org\)](https://www.unoosa.org/).

▪ **Space and Global Health Network**

The mechanism has been recently established as the result of Member States' recommendations and upon the request of the General Assembly A/RES/77/121, aligning with the priorities of United Nations Member States. UNOOSA has been conducting several conferences and activities related to Space and Global Health and



supporting Member States' discussions within the Expert Group on Space and Global Health.

- **Planetary Defence: International Asteroid Warning Network and Space Mission Advisory Group**

The main outcomes of these mechanisms are effective information-sharing in discovering, monitoring and physically characterizing potentially hazardous near-Earth objects to ensure that all countries, in particular developing countries with limited capacity in this area, are aware of potential threats. UNOOSA has published reports and organized conferences on this topic. Additionally, to raise awareness about the asteroid impact hazard, the United Nations General Assembly proclaimed in resolution A/RES/71/90 the International Asteroid Day, observed annually on 30 June.

- **Access to Space for All**

Research institutions of developing countries have the opportunity to access unique terrestrial and orbital research facilities that would otherwise be unaffordable or for which the educational support would not be available. Competitive selection processes attract young researchers and university students to develop innovative projects with concrete results in many fields of applications of space science and technologies. Many of the research proposals are in fact coming from sectors outside of space science, such as medicine, biology, agriculture, physics, manufacturing processes, and biotechnology among others, where the space environment is seen as an essential research parameter. The initiative often becomes a stepping-stone for researchers and institutions towards more complex research, career development paths, and incentives towards STEM studies. The initiative has prioritized gender balanced teams and has examples of a fully female team preparing a microgravity experiment.

- **UN Platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER)**

The IN-MHEWS network organises the Multi-Hazard Early Warning Conferences (MHEWC), as pre-events for the Global Platform for Disaster Risk reduction. This conference allows delegates of member states to discuss and exchange experiences about multi-hazard early warning systems and provides a platform for knowledge sharing and presentation. During the process of the selection of speakers, it was ensured to have an equal gender balance. UN-SPIDER co-chaired the conferences. The last one having been in 2022: <https://globalplatform.undrr.org/2022/multi-hazard-early-warning-conference-iii.html>.

During missions and other activities with a member state, UN-SPIDER collects information about the utilization of space-based and geospatial technologies for disaster management in ministries and agencies of the member state. After these activities, such as Technical Advisory Missions, UN-SPIDER provides recommendations on how the procedures and institutionalization could be improved.

This is captured in extensive reports and UN-SPIDER sustainably provides follow-up support to member states and their agencies by offering further capacity building. As mentioned previously (see question 2), UN-SPIDER also works together with a network, including the UN-SPIDER Regional Support Offices, on missions. By this, the member states establish a connection to a network of experts which may assist in future activities.

- **Space for Water**

The Space4Water Portal is a platform for interdisciplinary knowledge exchange on space solutions and technologies for water-related topics, making information discoverable and creating a multi-stakeholder platform. It supports capacity-building and serves expert communities sharing information on software, applications, publications, projects and initiatives. The portal is inclusive for actors from developing countries.

- **Space for Women**

Space4Women spearheads UNOOSA's gender mainstreaming efforts. The mentorship programme connects female space leaders and professionals with young women and girls to help them grow their skills, expand their network and flourish in the space sector. This programme thus supports developing countries building the workforce necessary in scientific and technical fields such as space, leading to greater innovation and socio-economic development. Through annual expert meetings, recommendations developed by participants provide guidance to developing countries on how to increase the participation of women in STEM and space sectors.

- **Space for Climate Action**

The principal outcome of this initiative is the Space4Climate Action website which currently functions as an informational tool for awareness raising, capacity-building and facilitation for actors at the intersection of space and climate action. The website aims to serve as a central focal point for the coordination of stakeholders utilizing space for climate action, which the mapping exercise 'International Efforts using Space for Climate Action' identified as a significant gap in the field. The impacts of this coordination are enhanced knowledge exchange around and increased awareness of the value of space for climate action, which provides stakeholders in developing countries with the awareness and incentive to meaningfully consider and integrate space technologies in climate action strategies.

#### ***4. What are the main difficulties your organization has encountered or is facing when implementing the cooperation mechanisms?***

- **Programme on Space Applications**

The events organised by UNOOSA (see question 2 above) are always co-organised with host governments of UN Member States, sometimes additionally with scientific federations, space agencies or research institutions. Negotiating and signing host country agreements of cooperation often causes delays or can be the cause of

cancellation if no agreement is reached (if this occurs, it is often related to the issue of privileges/immunities or security elements). In some instances, host countries may not have all the financial resources required for the activity, increasing the financial share of UNOOSA, which can result in a reduction of the potential number of participants or beneficiaries.

- **International Committee on Global Navigation Satellite Systems (ICG)**

One main challenge in ICG's work is providing assistance and information for those countries seeking to integrate GNSS into their basic infrastructure, at governmental, scientific and commercial levels.

- **UN-Space**

Due to the size and complexity of the United Nations system, and the increasing recognition of the value of and opportunities presented by space-based technology and its applications, it can be challenging to maintain full oversight of the relevant entities, sections and people that could benefit from being linked. In order to best collaborate, avoiding duplication of efforts and building efficiencies is crucial, which is also why UN-Space is key in avoiding duplications.

- **Space and Global Health Network**

Not applicable.

- **Planetary Defence: International Asteroid Warning Network and Space Mission Advisory Group**

Among some of the challenges is engaging more member countries and their relevant institutions and observatories to participate in the IAWN and SMPAG. Despite the positive trend in membership growth, it is important to ensure broader geographical representation.

- **Access to Space for All**

After over 30 awardee teams under the initiative, most of the constraints faced in the development or execution of the research projects are of administrative/logistic nature: importation or exportation permits delays, travel visas or lost baggage or equipment. Some teams faced management problems in maintaining collaborations over a long period or leadership conflicts. Building on lessons learnt, UNOOSA is increasing its direct monitoring of awardees and adapting timelines to mitigate some of the risks.

- **UN Platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER)**

The implementation and long-term sustainability of the cooperation mechanism is often hindered or endangered by a lack of commitment, regular communication,

information exchange, and funding. It is therefore dependent on personal commitment, as contributions to the cooperation mechanism are usually considered to be “extra effort” on top of the fulfilment of regular responsibilities.

- **Space for Water**

The Space for Water project and the Portal benefit from a generous contribution from the Prince Sultan Bin Abdulaziz International Prize for Water (PSIPW). The Portal seeks to serve communities through a series of innovative and modern Internet tools and resources which require a range of IT and editorial capabilities that cannot all be sourced from within UNOOSA, these aspects of the project therefore rely on internships and volunteers. Although interns and volunteers deliver quality content and advance the development of these tools, they require extensive management and supervision efforts. The Portal, to remain a relevant and acknowledged resource, must continuously update its content and upgrade its technical resources. Keeping abreast of potential materials and resources for this can be demanding. Furthermore, expanding the number of collaborators and users of the Portal remains a key challenge.

- **Space for Women**

The difficulty of UNOOSA in relation to cooperation mechanisms in this area mainly relate to limited resources for the implementation of cooperative activities and limited capacity to be involved in mechanisms organized by other entities.

- **Space for Climate Action**

The main obstacle in the field of space for climate action is the ill-defined nature of the terminology, specifically “climate action” and “climate services” lack a widely agreed upon definition and are used in a variety of ways by different stakeholders. This creates ambiguity in what is considered to be climate action, which inhibits meaningful coordination of and cooperation among those operating at the intersection of space and climate action. Thus, despite the terabytes of climate data that is produced by those working in the space industry, it is a challenge to organise the data into meaningful outputs for climate action. The increasing diversification of the types of stakeholders involved in the space industry can further exacerbate this issue, even though this diversification also presents new opportunities for enhanced coordination in the field.

***5. In respect of achieving the objectives and goals, what are the factors contributing to the success or failure of the cooperation mechanism(s) in which your organization has joined?***

- **Programme on Space Applications**

The activities of UNOOSA under the programme benefit from a high recognition in the space sector for their ability to directly benefit public servants, researchers and graduate students of developing countries. They are perceived by space actors as

excellent platforms to develop collaborations and partnerships and to further develop the applications of space technologies.

- **International Committee on Global Navigation Satellite Systems (ICG)**

Contributing factors to the success of ICG's objectives include signal compatibility and interoperability among GNSS systems as well as transparency in the provision of open civil services. These will be key factors in ensuring that civil users around the world receive the maximum benefit from GNSS and its applications.

- **UN-Space**

Success criteria for the inter-agency work include not only the number of UN entities that engage with and contribute to UN-Space activities, but also the depth and breadth of such collaboration. UN-Space continues to actively reach out to entities across the UN system on new topics and methods of inter-agency cooperation.

- **Space and Global Health Network**

Some of the critical success factors of the Space and Global Health Network are the backing of the 102 Members of the United Nations Committee on the Peaceful Uses of Outer Space and the fact that the Space and Global Health Network has been welcomed by United Nations General Assembly Resolution A/RES/77/121. With this support, the Network is now expanding and will continue promoting effective collaboration on space and global health issues among Member States and United Nations system entities.

- **Planetary Defence: International Asteroid Warning Network and Space Mission Advisory Group**

Both IAWN and SMPAG report annually to the Committee on the Peaceful Uses of Outer Space (COPUOS), its Scientific and Technical Subcommittee, to ensure prompt information-sharing in discovering, monitoring and physically characterizing potentially hazardous near-Earth objects to all member States. IAWN and SMPAG have also established initial criteria for action and preparedness in case of a real asteroid impact threat. Linkages are also being built with disaster management community through UNOOSA's UN-SPIDER programme, in order to build capacity for effective emergency response and disaster management in the event of a near-Earth object impact.

- **Access to Space for All**

Access to unique research facilities is a major incentive for researchers and university students in developing countries to propose innovative and competitive research projects in space science and space applications. In various instances, the selected projects have generated much enthusiasm in their respective countries with media coverage, activities in primary and secondary schools, publications, etc. Some teams have also been successful after their projects in attracting new external funding and

international partnerships, due to their increased visibility and research outputs. The initiative is also very successful in attracting new partnerships from space agencies, educational or research institutions, and from the private sector, increasing the number of opportunities and the scope of applications.

- **UN Platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER)**

A key to success is active collaboration and communication: the cooperation mechanisms need to be in active use. To this end, common goals and a common understanding on how to realise this are crucial. Ensuring that partners possess an understanding of their and each other's roles and responsibilities is important as well. Furthermore, the cooperating partners need a strategy on how to transfer knowledge from the network (cooperation mechanism) to the user or consumer (member state/developing states).

- **Space for Water**

The series of conferences and stakeholders' meetings are becoming increasingly recognised by a range of providers and users of solutions in the water sector. This is in part due to the support these actors have received from the Space4Water Portal that now provides a range of services that are not only innovative or relevant, but non-existent on other specialised platforms. UNOOSA is working to secure a permanent source of funding for the Portal and conference series to ensure their operation beyond the current funding sources.

- **Space for Women**

Not applicable.

- **Space for Climate Action**

If the terminological barriers previously mentioned (see question 4 above) can be overcome, though these hamper coordination, increased coordination seems to be the way to secure agreement on terminology, then this will enable Space for Climate Action to capture a range of stakeholders working in the field to facilitate cooperation among. In this sense, successfully accounting for the diverse actors that operate in space for climate action will enrich the outcomes of the cooperation. It will also be crucial to ensure transparency and inclusivity in the coordination given the multi-stakeholder approach the initiative takes, and to prioritize keeping stakeholders well-informed.

## **6. What cooperation could your organization propose to CSTD in coordinating and imparting directionality to international STI collaboration and technology sharing?**

UNOOSA is receptive to offers of support in its role as the gateway to space in the UN system and is open to considering opportunities to cooperate on its initiatives and projects. As Member States in 2021 adopted the "Space2030" Agenda: space as a driver of sustainable development (A/RES/76/3), which was negotiated by COPUOS



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and has a strong focus on partnerships, UNOOSA is open to collaboration as it acts as a conduit for promoting and facilitating the use of space-based solutions for development. This includes capacity-building activities for Member States in the field of space science and technology, their applications, and in space law and policy, taking into account the “Space2030” Agenda and implementation plan.

Please contact [ooosa@un.org](mailto:ooosa@un.org) if you have any questions.