



UNITED NATIONS  
Office for Outer Space Affairs

**IAWN Steering Committee meeting,  
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## **UNOOSA - IAWN Interface**

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# Background

- Building resilient societies through better coordination and forging of global partnerships is one of the key challenges in the 21st century
- NEOs represent one of the 3 pillars in the cross-cutting area of “**Space for Resiliency**”, with the other two pillars being disaster risk reduction and space weather, where the **Committee on the Peaceful Uses of Outer Space (COPUOS)** and the **Office for Outer Space Affairs** already play a role in the overall coordination of international response to mitigating such threats.
- Given the global consequences of a NEO impact and the enormous resources required to prevent a collision, the UN has been seen as the forum to coordinate such efforts:
  - **1995:** UN International Conference on NEOs at the UN Headquarters in New York, organized by UNOOSA to sensitise Member States to the potential threat of NEOs and proposed an expansion of existing observation campaigns to detect and track NEOs



## Background (cont.)

- 1999: **UNISPACE III** (Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space) results in one of the recommendations **to improve international coordination of activities related to near-Earth objects**
- 2001: As a result of UNISPACE III, **COPUOS Action Team on NEOs** is established
- 2013: **UN General Assembly** in its resolution A/RES/68/75 (para.8) welcomes **Recommendations of the Action Team on Near-Earth Objects for an international response to the near-Earth object impact threat** (documents A/AC.105/C.1/L.329 ), which lead to the establishment of **IAWN and SMPAG**
- 2014: **IAWN and SMPAG** hold their first meetings
- 2015: Action Team is formally dissolved since it fulfilled its mandate (finalization of Recommendations; facilitation in establishment of IAWN and SMPAG)



# NEO Recommendations and follow-up

- **The Recommendations (A/AC.105/C.1/L.329) stipulate that IAWN and SMPAG have their work facilitated by the United Nations on behalf of the international community**
  - Facilitation of work of these two entities and implementation of Recommendations should be at **no cost to the United Nations**.
  - At the request of COPUOS Member States, IAWN and SMPAG **provide annual progress reports to the Scientific and Technical Subcommittee** on the preparation of an international response to the near-Earth object impact threat.
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- **2016:** the Subcommittee agrees to invite IAWN and SMPAG **to participate as observers** in the sessions of the Subcommittee (A/AC.105/1109, para. 182)
  - **2016:** UNOOSA to serve as the **Permanent Secretariat to SMPAG** (Draft GA Resolution, document A/C.4/71/L.2, para. 9)
  - **International Asteroid Day** to be proclaimed by the UN General Assembly, on 30 June (see Draft GA resolution , A/C.4/71/L.2, para. 10) to raise public awareness about the asteroid impact hazard, the role of IAWN and SMPAG, UNOOSA and COPUOS member States in this area



# UNOOSA-IAWN Interface

While UNOOSA serves as an observer and as a permanent secretariat to SMPAG, there is a scope to define a more concrete cooperation with IAWN in areas of:

- 1) **Communication** (General public)
- 2) **Dissemination of NEO-related information** (early warning) to Member States
- 3) **Capacity-building activities** (through UN-SPIDER network)



# Communication

## General public

- Educating and sensitizing general public on the NEO issues: IAWN could bring the existing information under one roof (following WMO Space Weather Portal) with UNOOSA linking the information
- UNOOSA could develop some content on its website and link to the portal. The portal would need to have massive redundancy in case of any overloading due to high traffic numbers in the scenario of a hazard or general panic.
- UNOOSA and IAWN could also work together on initiatives such as a conference or workshop on NEO hazards, and/or an annual educational campaign centred around International Asteroid Day. Such a campaign could include social media initiatives, media engagement/interviews, and public engagements (speech, panel discussion etc).



# Dissemination of information

## Member States

- Dissemination of information on close approaches through UNOOSA
- This would require a mandate from the Committee (Scientific and Technical Subcommittee)
- Proposal could be submitted to STSC 2017 by IAWN with a template/sample of information and request for nomination of focal points by member States to receive such information



# Capacity-Building

Sensitising Member States through UNOOSA (UN-SPIDER network) about the existing processes by IAWN and SMPAG with a focus on:

- **Information-sharing** in discovering, monitoring and physically characterizing potentially hazardous NEOs with a view that all countries, in particular developing countries with limited capacity in predicting and mitigating a NEO impact, are aware of potential threats
- **Emphasizing the need for an effective emergency response and disaster management** in the event of a NEO impact threat



Through, e.g. IAWN-UNOOSA/UN-SPIDER collaboration - including a module on NEOs in disaster risk preparedness trainings/workshops of UN-SPIDER in developing countries





# Capacity-Building

- With a network of currently twenty Regional Support Offices (RSO), which represent **regional or national centres of expertise, hosted by a space agency, a research centre, a university, or a disaster management institution**, UN-SPIDER already offers a platform and basis for communication and coordination to covering the realms of Outreach and Capacity building as well as Technical Advisory Support.
- While the RSO network could be seen as a first layer of regional efforts to strengthen NEOs related knowledge and responses, **the UN-SPIDER network of National Focal Points (NFPs)** represents countries' disaster management and space community to build national capacities and knowledge.



# Notification procedures in case of a credible threat

1. Establishment of a Protocol on notification procedures in case of a credible NEO threat - consultation should be held with the newly established SMPAG Working Group on Legal Matters
2. Issues to be looked at: IAWN does not have a juridical capacity and thus it is challenging to establish any treaty framework with IAWN.
3. This creates issues with defining who is responsible on their behalf/within IAWN
4. Possible way to proceed would be to seek the conclusion of an agreement with a government representing IAWN and hosting one of IAWN's key members.
5. A potential agreement should include: (a) Responsibilities and liabilities (including quality of information), taking into account the privileges and immunities of the United Nations; (b) Protocol to be followed on issuing a notification (who is to be informed, in which form, etc.). The Protocol could be approved by the Committee and annexed to the agreement



# IAWN and SMPAG in the context of



- IAWN and SMPAG result from the recommendations of the Third UN Conference on Exploration and Peaceful Uses of Outer Space (**UNISPACE III**, 1999, Vienna )
- **UNISPACE+50 in 2018:**  
**COPUOS in 2018 (20-29 June 2018)** will mark 50<sup>th</sup> anniversary of the First UNISPACE conference, held in 1968





## 2018 UNISPACE+50 will consider

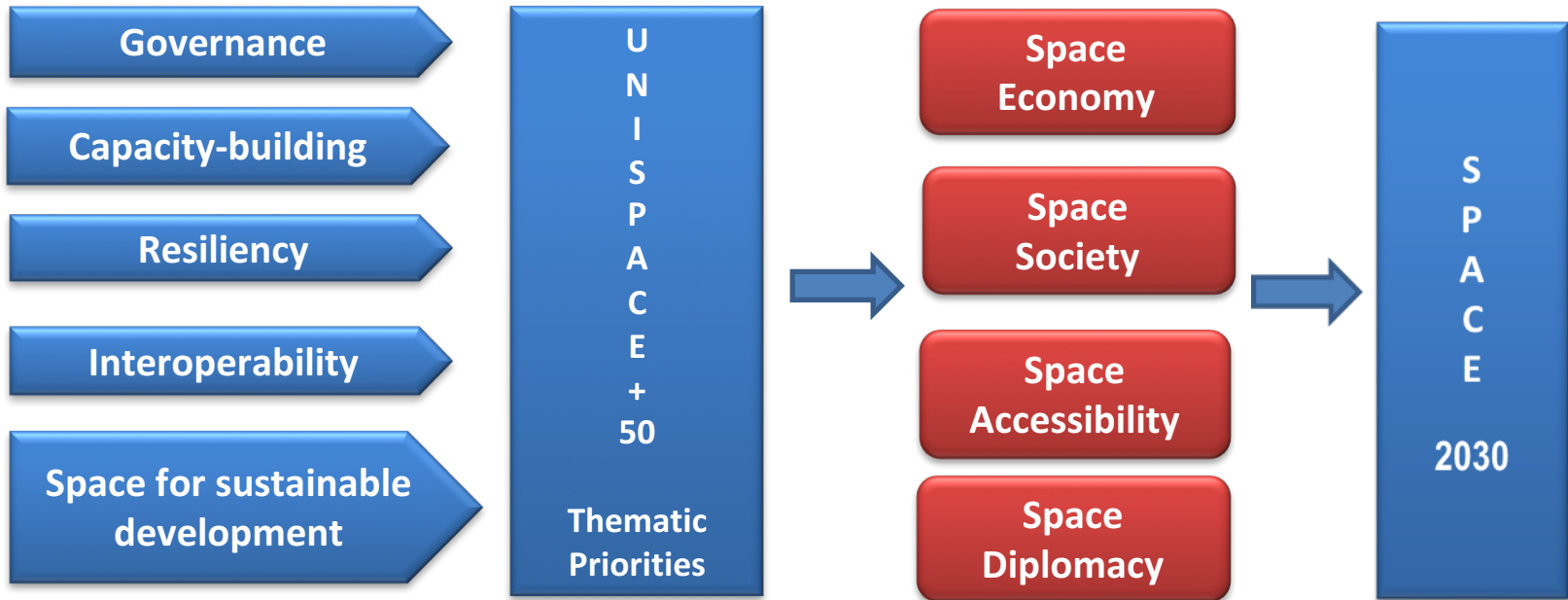
**IAWN and SMPAG as already  
existing coordination  
mechanisms**

- Development of **stronger space governance**, taking into account the **2030 Agenda for Sustainable Development** and the **sustainable development goals**
- **International mechanisms and frameworks**
- **Mechanisms and processes for resiliency and interoperability** ⇒
- **Mechanisms and platforms for space cooperation and coordination** towards stronger space governance and global partnerships.

In this context, the work of IAWN and SMPAG is considered as on-going – representing **important coordination mechanisms** aimed at strengthening the information-sharing in discovering, **monitoring and physically characterizing potentially hazardous NEOs with a view that all countries, in particular developing countries with limited capacity in predicting and** mitigating a NEO impact, are aware of potential threats, and emphasize the need for an effective emergency response and disaster management in the event of a NEO impact threat.



# UNISPACE+50 Process





## **7 UNISPACE+50 thematic priorities with mechanisms agreed by COPUOS in 2016:**

- 1. Global partnership in space exploration and innovation - Action Team with MS***
- 2. Legal regime of outer space and global space governance: current and future perspectives - LSC WG on Treaties in coordination with WG on LTS***
- 3. Enhanced information exchange on space objects and events – WG TBD at STSC 2017***
- 4. International framework for space weather services - STSC EG on Space Weather***
- 5. Strengthened space cooperation for global health - STSC EG on Space and Global Health***
- 6. International cooperation towards low-emission and resilient societies - UNOOSA***
- 7. Capacity-building for the 21<sup>st</sup> Century - UNOOSA***



# UNOOSA works towards UNISPACE+50 deliverables under 4 pillars: **SPACE ECONOMY / SPACE SOCIETY / SPACE ACCESSIBILITY / SPACE DIPLOMACY**

These pillars will guide our preparations towards  
**UNISPACE +50** and beyond – “Space2030”

- The **High-level Fora “Space as a Driver for Socioeconomic Sustainable Development”** will address deliverables of UNISPACE+50 under these four pillars.
- UNISPACE+50 will produce a **path for the future (“Space2030”)** under the framework of the four pillars.
- **States and space community** at large are invited to actively engage in this process.



## Why the four pillars?

- The space arena is currently in a three-dimensional phase:
  1. The number of government space actors is increasing
  2. Private companies are becoming a major driver in the space sector
  3. Thanks to increased space spin-offs and space accessibility, the socioeconomic impact of space is greater than ever before.
- These three dimensions make it even more relevant to discuss the interlinkages and interdependencies under the framework of *space economy*, *space diplomacy*, *space society* and *space accessibility* as part of a holistic picture towards UNISPACE+50 and beyond: “Space2030”.
- The four pillars will be the framework into which the thematic priorities (targets and activities) will feed.
- The four pillars will also prove an essential tool in the definition of a common language to promote the goals of the UNISPACE+50 process: “To address the Future of Space”





## Four Pillars

**UNISPACE+50 will produce recommendations under the same four pillars:**

**Space Economy**

1. Development of space-derived economic benefits.

**Space Society**

2. Evolution of society and societal benefits stemming from space-related activities.

**Space Accessibility**

3. All communities using and benefitting from space technologies.

**Space Diplomacy**

4. Building partnerships and strengthening international cooperation in space activities.



# HLF 2016

- 1<sup>st</sup> High Level Forum on “Space as a driver for socio-economic sustainable development”.
- Dates: **20 – 24 November 2016**
- Venue: **Dubai, United Arab Emirates**
- Organizers: **United Nations Office for Outer Space Affairs, United Arab Emirates**
- Co-organizers and sponsors: **Secure World Foundation, Sierra Nevada Corporation’s Space Systems and International Committee on Global Navigation Satellite Systems**



**OUTCOME and RECOMMENDATIONS:  
DUBAI DECLARATION**



# Other HLF 2016 Highlights

- **High-Level Panel**

Organized with participation of top-level representatives of space agencies and other relevant national/regional/international institutions and organizations from both space-faring and non-space faring countries, establishing a direct debate with the HLF participants on the role of space science and technology in fostering global development.

- **Women in Space Breakfast and Networking**

Open to all participants, this event is designed to foster the interests of women working in space science and technology, and to advance women through initiatives and leadership development, as well as networking. This event is sponsored by Deutsches Zentrum für Luft- und Raumfahrt.V. (DLR).

- **Panel with private sector**

This panel will be a unique opportunity for the inclusion of, and dialogue with, the growing number of private actors in the space arena.

- **Roundtable Discussion Session: UNISPACE+50 – The way ahead**

The primary purpose is to address future global space governance leading up to the fiftieth anniversary of the First United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE+50) in 2018.



# HLF Website

## **HLF WEBSITE:**

<http://www.unoosa.org/oosa/en/ourwork/hlf/fIRST-hlf-meeting.html>

# Contact points

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