



UNITED NATIONS  
Office for Outer Space Affairs



**ENGAGING SPACE TOOLS FOR DEVELOPMENT ON EARTH:  
CONTRIBUTION OF SPACE TECHNOLOGY AND APPLICATIONS  
TO THE POST-2015 DEVELOPMENT AGENDA**

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# UN and Outer Space: Early Years

- ▶ 1958: Resolution by the UN General Assembly 1348(XIII):
  - ▶ Outer space to be used for peaceful purposes only and to be exploited to the benefit of mankind
  - ▶ Established an ad-hoc Committee on the Peaceful Uses of Outer Space (COPUOS) as an appropriate body for international cooperation
  
- ▶ 1959: UN General Assembly resolution 1472 (XIV) reaffirmed the role of COPUOS and mandated the Committee to:
  - ▶ Review international co-operation
  - ▶ Study space-related activities that could be undertaken under United Nations auspices
  - ▶ Encourage and assist with national space research programmes
  - ▶ Study legal problems which may arise from the exploration of outer space



# Committee on the Peaceful Uses of Outer Space

- ▶ 1961: Establishment of two Subcommittees of COPUOS
  - ▶ Scientific and Technical Subcommittee (STSC)
  - ▶ Legal Subcommittee (LSC)
- ▶ Reports to the Fourth Committee of the General Assembly
- ▶ Adopts an annual resolution on “International cooperation in the peaceful uses of outer space”
- ▶ The only Committee of the General Assembly that deals with international cooperation in the peaceful uses of outer space
- ▶ COPUOS and UNOOSA organized three major United Nations conferences on the exploration and peaceful uses of outer space, all held in Vienna in 1968, 1982 and 1999 (UNISPACE)
- ▶ The third conference (UNISPACE III) outlined a wide variety of actions to:
  - ▶ Protect the global environment and manage natural resources;
  - ▶ Increase the use of space applications for human security, development and welfare;
  - ▶ Protect the space environment;
  - ▶ Increase developing countries’ access to space science and its benefits.

# International Day of Human Space Flight: 12 April

- ▶ Resolution by the General Assembly of 7 April 2011
- ▶ Celebrates at the international level the beginning of the space era for humankind





# Messages from Space Explorers



Messages from  
**Space Explorers**  
to future generations

start

# UN Programme on Space Applications

- ▶ Established in response to recommendations of the first UNISPACE conference in 1968
- ▶ Operational since 1971
- ▶ Implemented by UNOOSA
- ▶ United Nations Expert on Space Applications



# Capacity Building in Space Technology

- ▶ Under its Programme on Space Applications the United Nations is supporting capacity building in space technology development and rendering assistance to countries wishing to establish relevant programmes, in compliance with the relevant regulatory and legal framework

HSTI
<ul style="list-style-type: none"><li>• <b>Human Space Technology Initiative</b></li></ul>

BSTI
<ul style="list-style-type: none"><li>• <b>Basic Space Technology Initiative</b></li></ul>

BSSI
<ul style="list-style-type: none"><li>• <b>Basic Space Science Initiative</b></li></ul>

# Human Space Technology Initiative (HSTI)

- ▶ Launched in 2010
- ▶ **International cooperation:** in human space flight and activities related to space exploration;
- ▶ **Outreach:** Promote increased awareness among Member States of the benefits of utilizing human space technology and its applications;
- ▶ **Capacity-building** in microgravity science education and research.





# Basic Space Technology Initiative (BSTI)

- ▶ To enhance access to space application tools for sustainable development through building capacity in basic space technology
- ▶ Mission:
  - ▶ Respond to the growing interest in many countries to establish indigenous capacities in basic space technology
- ▶ Objectives:
  - ▶ Address the growing role of small (nano-) satellites for education, basic space science and for operational applications
  - ▶ Assist countries to assure adherence to the relevant regulatory frameworks and promote the use of standards
  - ▶ Promote international cooperation and information exchange in capacity building in basic space technology

# Regional Centres for Space Science and Technology Education, affiliated to the United Nations



# Space Law: UN Treaties and Principles on Outer Space

## ▶ Treaties:

- ▶ Outer Space Treaty, 1967 (103 States parties / 25 additional signatures)
- ▶ Rescue Agreement, 1968 (94/24)
- ▶ Liability Convention, 1972 (91/22)
- ▶ Registration Convention, 1975 (60/4)
- ▶ Moon Agreement, 1979 (15/4)

## ▶ Principles:

- ▶ Declaration of Legal Principles Governing the Activities of States in the Exploration and Uses of Outer Space (1963)
- ▶ Principles Governing the Use by States of Artificial Earth Satellites for International Direct Television Broadcasting (1982)
- ▶ Principles Relating to Remote Sensing of the Earth from Outer Space (1986)
- ▶ Principles Relevant to the Use of Nuclear Power Sources in Outer Space (1992)
- ▶ Declaration on International Cooperation in the Exploration and Use of Outer Space for the Benefit and in the Interests of All States, Taking into Particular Account the Needs of Developing Countries (1996)

# UN Register on Objects Launched into Outer Space

- ▶ Established in 1962, the Register is the central repository of official information provided by States on space objects in accordance with the Registration Convention or, on a voluntary basis, under General Assembly resolution 1721 B of 1961
- ▶ The Register contains information and registration data on nearly 14.000 space objects received from Member States and Intergovernmental Organizations in their capacity of launching States
- ▶ Web-database containing information received and also complementary information collected from external sources on all functional objects launched into outer space since 1957
- ▶ Search could be performed using different parameters (name, international designator, launching State, date of launch, orbital status, etc.)
- ▶ Provides links between space objects and their relevant documents of registration. This way, every user can download and print any registration document
- ▶ All information contained in the Register is publicly available via the UNOOSA website: [www.unoosa.org](http://www.unoosa.org)

## Space Law Capacity-building programme

- ▶ Series of Space Law Workshops held: 2002 in The Netherlands; 2003 in the Republic of Korea; 2004 in Brazil; 2005 in Nigeria; 2006 in Ukraine; 2009 in Iran; 2010 in Thailand; 2012 in Argentina. Space Law Workshop to be held 2014 in China

Dedicated space law seminar organized within African Leadership Conference in 2011 (Kenya) and 2013 (Ghana)

Space Law Website:

Treaty status database and national space legislation database

Bilateral and multilateral agreements database

Directory on education opportunities in space law

Technical legal assistance, including on UN Register

Curriculum on education in space law for Regional Centres published in March 2014



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

- ▶ “Ensure that all countries and international and regional organizations have access to and develop the capacity to use all types of space-based information to support the full disaster management cycle.”
  - ▶ Especially by being **a gateway** to space information for disaster management support;
  - ▶ serving as **a bridge** to connect the disaster management and space communities; and
  - ▶ being **a facilitator** of capacity-building and institutional strengthening (A/RES/61/110).

# UN-SPIDER activities



## Knowledge Portal

- The UN-SPIDER Knowledge Portal is a web-based tool for information, communication and process support



## Fostering Cooperation

- UN-SPIDER fosters alliances and creates forums where both space and disaster management communities can meet



## Capacity Building

- UN-SPIDER facilitates capacity building and institutional strengthening, including the development of curricula and an e-learning platform (e-SPIDER)



## Technical Advisory Support

- UN-SPIDER provides support to countries in assessing national capacity and in evaluating disaster and risk reduction activities, policies and plans



and many more...

# UN-SPIDER Network of Regional Support Offices

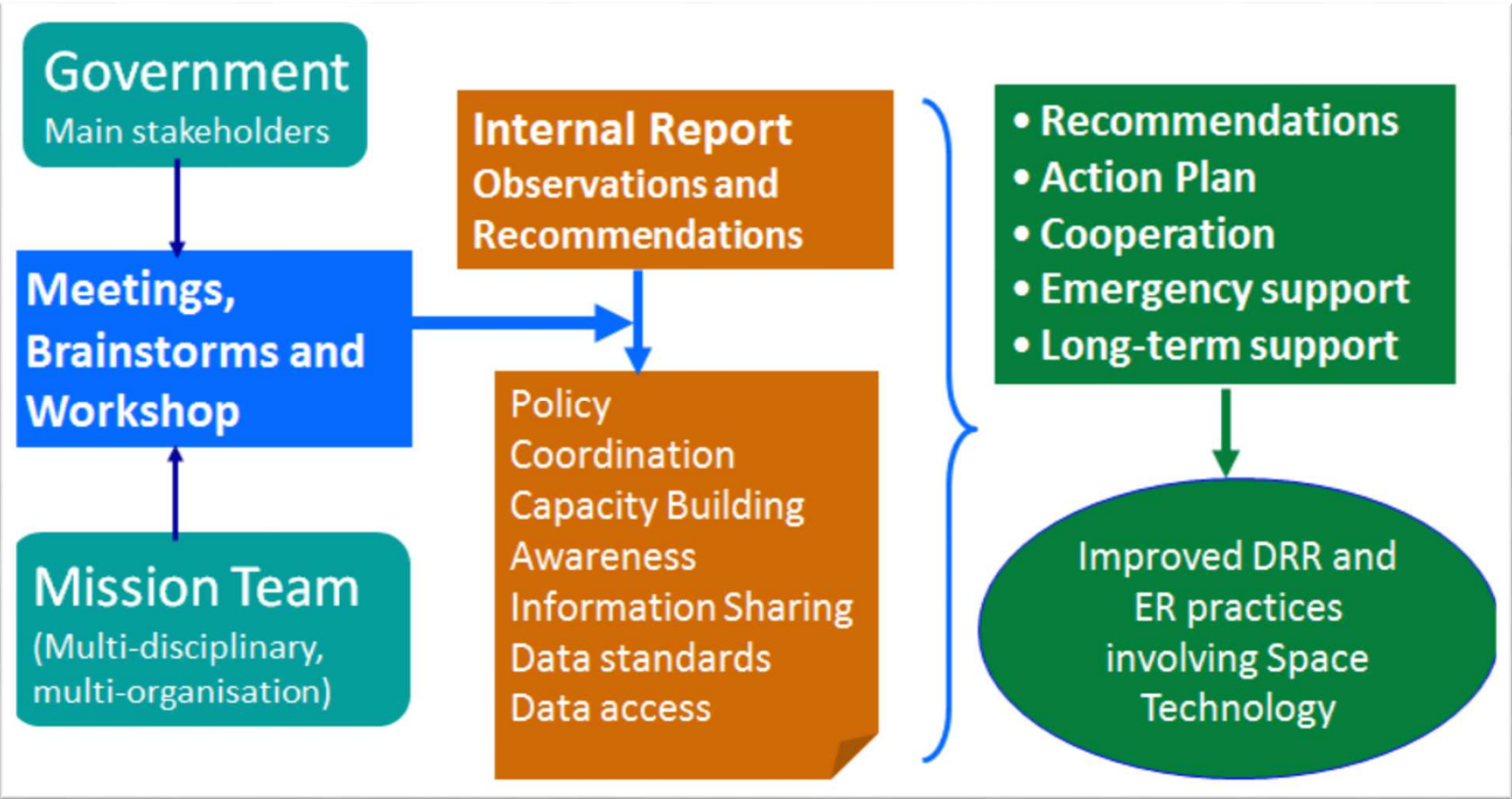


# UN-SPIDER Knowledge Portal

- ▶ A web portal for information, communication, and process support. A platform which supports knowledge management, capacity building, technical advisory support and support to emergency and humanitarian assistance
- ▶ <http://www.un-spider.org>

The screenshot displays the UN-SPIDER Knowledge Portal website. At the top, there is a blue header with the United Nations logo on the left, the text "UNITED NATIONS | UNOOSA | UN-SPIDER" in the center, and "English Español" on the right. Below the header is a search bar with the text "Search..." and a magnifying glass icon. A navigation menu consists of several blue buttons: "HOME", "SPACE APPLICATION", "ADVISORY SUPPORT", "LINKS & RESOURCES", "KNOWLEDGE BASE", "NETWORK", "PROJECTS", and "ABOUT US". Below the navigation menu is a green banner with the text "IN FOCUS". Underneath the banner, there are three main content areas. On the left, there are three small thumbnail images with text: "Call for Experts: UN-SPIDER Mission to Mongolia...", "UN-SPIDER pre-conference event at AMCDRR...", and "ASEAN Workshop in Indonesia concluded UN-SPIDER...". In the center, there is a large satellite image of a landscape with a river, overlaid with a semi-transparent box containing the text "Call for Experts: UN-SPIDER Technical Advisory Mission to Mongolia" and "UN-SPIDER invites applications from representatives of relevant institutions, organizations,..." with a "Read more" button. On the right, there is a green banner with the text "UN-SPIDER WORLD" and a screenshot of a world map with various colored markers. Below the map, there is the text "UN-SPIDER-World" and "See a geographical representation of news, events, contact points, etc."

# UN-SPIDER Technical Advisory Missions







**Thank you** for your attention

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