Open informal session of the United Nations Inter-Agency Meeting on Outer Space Activities

"Space and disaster risk reduction:
Planning for resilient human settlements"

Towards the fourth session of the Global Platform for Disaster Risk Reduction

Tuesday 12 March 2013 from 10.00 to 17.30

Centre de Conférences de Varembé (CCV), 9-11 rue de Varembé,
CH 1202 Genève, Switzerland

10.00-10.30 Welcome addresses:
Ms. Elizabeth Longworth, Director, UNISDR
Mr. Niklas Hedman, Chief of Section, UNOOSA

10.30-12.30 PANEL A: Towards resilient cities: A wider use of geospatial data in urban planning

Discussion panel A will cover inter alia aspects of city planning and underground infrastructures; lessons learned from the Making Cities Resilient campaign; integrated urban planning processes for disaster risk reduction and adaptation; and experiences on resilience, urban planning and technical considerations

Moderator: Ms. Helena Molin-Valdes, Coordinator of "Making Cities Resilient Campaign", UNISDR

- "*From outer space to underground space – helping cities become more resilient*" by Mr. Han Admiraal, Chairman, and Ms. Antonia Cornaro, Secretary-General, ITA Committee on Underground Space of the International Tunnelling and Underground Space Association (ITA-AITES);
- "*Space-based, terrestrial technologies and resilience towards a sustainable city : an academic point of view*" by Dr. Youssef Diab, Université Marne-la-Vallee, Paris Est, France;
- Remarks by Mr. Esteban Leon, Chief, Shelter Rehabilitation Unit, Risk Reduction and Rehabilitation Branch, UN-HABITAT;
- Remarks by Ms. Helena Molin-Valdes, UNISDR

15.00-17.00 PANEL B: Mainstreaming space technology in land use planning and rural development strategies for effective disaster management

Discussion panel B will cover inter alia topics related to reducing vulnerability to natural hazards; the use of satellite data for hazard analysis in rural development, including on landslides, drought and flooding; cross sector strategies for the use of space-derived geospatial data; and case studies

Moderator: Mr. Luc St-Pierre, Coordinator UN-SPIDER, UNOOSA

- "*Mainstreaming space technology for effective disaster management*" by Ms. Keiko Saito, Global Facility for Disaster Reduction and Recovery, World Bank/GFDRR;
- Remarks by Mr. Einar Bjorgo, Officer in Charge, UNITAR/UNOSAT;
- Remarks by Mr. Juan-Carlos Villagran, Head of UN-SPIDER Bonn Office, UNOOSA;
- Remarks by Mr. Frédéric Bastide, EC/COPERNICUS

17.00-17.30 Summary of discussions with an eye towards the Fourth Session of the Global Platform for Disaster Risk Reduction

Concept Note

This event is an interactive forum for Governments, national authorities, United Nations system entities, private sector and civil society to examine how space-based-technology applications and geo-spatial data derived from space-based platforms and terrestrial sources can help nations and communities become better prepared to handle disasters triggered by natural and technological hazards.

In 2005, the ten-year *Hyogo Framework for Action* was laid down by Member States containing strategic goals and actions for building the resilience of nations and communities to disaster. Among other things, the *Hyogo Framework* calls for disaster risk reduction to be integrated into sustainable development plans of both rich and poor nations in order to stem economic losses due to disaster. This is done, inter alia, by strengthening risk assessment and investing in disaster prevention and early warning. The *Hyogo Framework* also calls on nations and communities to improve the resilience of vulnerable populations as an additional way of containing the social and economic impact of disasters on society as a whole.

The open informal session on "Space and disaster risk reduction: Planning for resilient human settlements" comprises two panel discussions aimed at stimulating an interactive dialogue on the role of space-based tools and spatial data infrastructure in enhancing policies for urban planning, land-use planning, and rural development – areas of relevance to the *Hyogo Framework*. This open informal session is expected to be helpful to countries as they engage in substantive preparation of the upcoming Global Platform for Disaster Risk Reduction (Geneva, 19-23 May 2013), where participants will consult on the post-2015 disaster risk reduction framework to continue efforts that began under the *Hyogo Framework*.

The session will focus on three concepts related to the resilience of human settlements, namely urban planning, land use planning and rural development. It will also examine the latest thinking on ways to meet society's information and communication needs. Integrated and coordinated use of space-based and terrestrial technologies and their applications can play a useful role in supporting disaster risk management by providing accurate and timely information and communication support through improved risk assessment, early warning and monitoring of disasters. Improving access to geographical information and geospatial data, and building capacities to use this data in areas such as climate monitoring, land use planning, water management, disaster risk reduction, health and food security, will allow for more accurate environmental and social impact assessments that could lead to better informed decision-making.

Space-derived and in-situ geographic information and geospatial data is also of benefit during times of emergency response and reconstruction, particularly in large urban areas with a high population density and especially after the occurrence of major events such as earthquakes or floods. Using geographic data and information collected before the occurrence of major disasters in combination with post-disaster data could yield important ideas for improved urban planning, especially in disaster-prone areas and highly-populated regions.

Availability of structured and easily-accessible, shared geographic information is also essential for disaster management activities, such as identifying access corridors or establishing the optimal location for essential public institutions such as hospitals or emergency shelters. Such geographic data and related resources and capacities are part of what is known as "spatial data infrastructure" (SDI).

SDIs are slowly being developed at the local (city), national, regional and global scales, but a lot more investment of effort is needed to optimize their use in the future for disaster risk reduction and disaster management, and to make them sustainable, well-resourced, and capable of easily offering accurate and updated information at any point and as needed. Furthermore, multi-stakeholder coordination is essential to ensure a systematic, timely and adapted integration of the space-based technology applications of remote sensing, meteorological satellites, satellite telecommunication and global navigation satellite systems to multi-source geospatial datasets. Key objectives include establishing sustainable spatial data infrastructure, and enhancing autonomous national capabilities in the area of space-derived geospatial data, including the development of associated infrastructure and institutional arrangements.

More information about the open informal session will be made available in due course on the website of the United Nations coordination of outer space activities (www.uncosa.unvienna.org).