

**Statement by the
Group on Earth Observations (GEO)
at the Regional Platforms for Disaster Risk Reduction in the
Americas
27 - 29 May 2014**

Mr Chair, Your Excellencies, Delegates, Colleagues,

Earth observations (EOs) and information - derived both from space and surface networks - play an increasingly important role in helping to increase the resilience to natural hazards of societies around the world by providing decision makers with critical and objective data needed to drive investments to reduce underlying disasters risk factors and make society more adaptive to the effects of climate change. However, despite significant progress in recent years, there remain substantial gaps in ongoing national, regional, and global efforts to address Disaster Risk Reduction and Mitigation challenges.

Urban population growth is posing new challenges to governments, decision makers and stakeholders. New settlements, and the dramatic expansion of urban areas, require feasible, affordable and sustainable solutions for housing, energy and infrastructure in order to mitigate urban poverty, expansion of slums and a general deterioration of the urban environment, which play a key role in magnifying the loss of life and property in extreme or severe disasters events.

Earth observations and information are vital elements in this process as they provide a uniquely valuable vantage point to monitor many kinds of large-scale dynamics. *In situ* and remotely sensed data include raw data, maps, optical images or radar images that accurately measure and track critical parameters, including land use and classification, meteorological variables, heat islands phenomena, and trace gas emissions.

Satellite and in situ Earth observations, and related information and services, are essential to informing disaster preparedness and prevention policies, decisions and actions.

Integration of space-based, *in situ* data, and models can result in improved national response to natural and man-made disasters by enabling better coordination and streamlined operations of international response mechanisms and national civil protection agencies.

More timely dissemination and use of geospatial information from globally-coordinated systems for monitoring, predicting, risk assessment, early

warning, mitigating and responding to hazards will help to reduce loss of life and property at the local, national and regional level.

The Group on Earth Observations (GEO) is a voluntary partnership of governments and organizations that envisions “a future wherein decisions and actions for the benefit of humankind are informed by coordinated, comprehensive and sustained Earth observations and information.” GEO Member governments include 89 nations and the European Commission, and 77 Participating Organizations comprised of international bodies with a mandate in Earth observations. Together, the GEO community is creating a Global Earth Observation System of Systems (GEOSS) that will link Earth observation resources world-wide across multiple Societal Benefit Areas, including agriculture, biodiversity, climate, disasters, ecosystems, energy, health, water and weather, and make those resources available for informed decision-making.

GEO is working to expand the use of satellite imagery and surface data for reducing disasters risk posed by natural and man-made hazards. The GEO community is developing decision-support tools and applications for the full cycle of disaster management, particularly for developing countries, working in close collaboration with national space agencies - through the Committee on Earth Observation Satellites (CEOS), the space coordination arm of GEO -- to help improve all phases of disaster risk management (DRM) on a global basis.

The Disaster Risk Reduction and Management challenges facing the global community increasingly demand broad and timely access to high-quality, integrated and sustained Earth observation data and related information. Moreover, EOs are owned by many entities around the world, and no single country is able to acquire the comprehensive data and tools it needs to inform policy in these critical domains. Specifically, crisis management faced by governments due to high-frequency natural and human-induced extreme events requires EOs capacities that generally cannot be provided by one country alone; effective response requires regional/international collaboration and coordination so that, when such events occur, the flow of data from various countries, as well as the international organizations in which they are represented, works smoothly.

The Global Earth Observation System of Systems (GEOSS) is a unique data resource that provides users access to more than 65 million pieces of Earth observation data, information, tools and models that are essential to government leaders, civil defense and disaster experts, and ordinary citizens seeking to make well-informed decisions about disaster risk, reduction and mitigation at the local to international levels.

The GEOSS Common Infrastructure (GCI) allows EO users to access search and use the data, information, tools and services available through GEOSS. The GEOSS Portal is a single Internet gateway to the comprehensive and near-real-time data

produced by GEOSS. The GEOSS Portal integrates diverse data sets, identifying relevant data and portals of contributing systems, and provides access to models and other decision-support tools. Through the Portal, GEOSS enables decision leaders to access information not previously available to them and thereby provide essential services to confront environmental and societal challenges which otherwise would not have been addressed. GEOSS makes the production of comprehensive Earth observations more sustainable by leveraging investments from a wide range of global partners, ensuring that Earth observations remain a global public good.

Disaster Risk Reduction and Mitigation frameworks and strategies must include access to and use of essential global Earth observation resources, such as the Global Earth Observation System of Systems (GEOSS), to provide decision leaders and citizens the data and information necessary to make informed decisions about preparing for, preventing and recovering from natural and man-made disasters.

Sharing data, information and knowledge, and making these resources readily accessible and usable by a large community of users is still a major challenge for large areas of the Americas and other regions around the world. Technological and economic barriers pose a real challenge as information technology is evolving at ever greater speeds, driven by the increasing computational power of personal computers and personal devices and the growing popularity of technology-based applications for geocoding and location information. It is of paramount importance to support national and regional efforts for the establishment of large, multi-sectoral and meshed data infrastructures. These cyber-infrastructures are critical to implement an integrated use of data and for the development of new data products, and to integrate observations through novel ICT solutions. GEO has demonstrated it can play an essential role in addressing these gaps in an effective and long-term manner through coordination and networking among its major stakeholders, and by working together with other key international environmental mechanisms.

Objective and reliable information on hazard, vulnerability and exposure, presented through an analysis of expected impacts for given Risk Scenarios, is instrumental to trigger and, more importantly, sustain the political will and economic strength necessary to achieve adaptation and mitigation to the effects of climate change on global society.

Mr/Mme Chair, I look forward to the continued fruitful interaction between UNISDR and GEO and to discussing with other participants here how Earth observations and information can support your work.

Thank you.