

Discussion Paper on Action on Disaster Risk Reduction

This Document is submitted to the GEO-XVI Plenary for information.

1 GEO PLENARY IS ASKED TO CONSIDER

This discussion paper is written with the theme of the GEO Ministerial “Earth observations: investments in the digital economy” in mind. It highlights the current state of GEO’s engagement and identifies some of the key challenges and opportunities for further progress. To stimulate discussion during Session 3: Action on Disaster Risk Reduction the following questions are posed:

- How should GEO support the recommendations within the UNDRR Global Assessment Report on Disaster Risk Reduction 2019 for nations to invest in Earth observations, and to leverage the move towards open data, collaborative science and cloud computing¹?
- How best to integrate GEO into Disaster Risk Management Processes building on, and respond to, the opportunities and benefits to use open and accessible Earth observations for the reduction of disaster risk?
- What can GEO do to make more of an impact in risk reduction – and how can we achieve it?

2 GEO’S ENGAGEMENT IN THIS AREA

The Sendai Framework for Disaster Risk Reduction 2015-2030 is one of GEO’s priority engagement areas. The Sendai Framework is an internationally agreed framework which, at its core, commits governments to substantially reduce the impact of disaster risk and losses in lives, livelihoods, and health and in the economic, physical, social, cultural, and environmental assets of individuals, businesses, communities and countries²

There is a recognized effort within GEO to explore opportunities in the use of Earth observations systems for the benefit of humankind. This aligns with the expected outcome of the Sendai Framework. With this in mind, decision-makers need credible data and derived products that correctly assess disaster risk and support their ability to make risk-informed decisions. Earth-observing systems have enormous potential to put risk into a systems context and assist the global community in making strong progress in

¹ UN Office for Disaster Risk Reduction, (2019), Global Assessment Report on Disaster Risk Reduction (p201) http://gar.unisdr.org/sites/default/files/reports/2019-05/full_gar_report.pdf

² <https://www.unisdr.org/we/coordinate/sendai-framework>

risk reduction. But there is still a lot that needs to be done to make a sustained and meaningful contribution to risk reduction activities.

As was stated by Mami Mizutori (the UN's Special Representative for Disaster Risk Reduction) during the opening keynote at GEO-XV Plenary, geospatial information and Earth observations are essential to disaster risk reduction. This concept is not new to practitioners within the EO Disaster Risk Reduction (DRR) community and there are many existing efforts both at national and regional scale to utilize Earth observations for risk reduction and disaster management. There is now a tangible opportunity to further progress this concept and for GEO to show leadership in the uptake and use of Earth observations for disaster risk reduction.

There have been two primary levels of engagement from GEO. The first is the relationship between GEO Secretariat and the UN Office for Disaster Risk Reduction (UNDRR), the second is developing tools and collaborations through the revised 2020-2022 GEO Work Programme which will help further progress towards achieving the Targets of the Sendai Framework. Progress in these two areas is summarized below.

2.1 GEO Secretariat and UNDRR

There is increasing awareness within the UN System – and with the UN Office for Disaster Risk Reduction in particular – of the role that GEO's Members and Participating Organizations have in the reduction of disaster risk. At a strategic level this is highlighted by the opportunities afforded to our community to participate in the development of the Global Assessment Report 2019, and the Global Risk Assessment Framework.

GEO Secretariat is a member of the Global Advisory Board of the Global Assessment Report on Disaster Risk Reduction (GAR) who works at the invitation of the Special Representative to the Secretary General of the United Nations for Disaster Risk Reduction to set the strategic direction of the GAR. GEO also authored a chapter on 'Changes in technology and data sharing' which included a focus on Earth observations and the challenges and opportunities that these afford users. It was also an opportunity to promote GEO and our Data Sharing Principles more widely.

The launch of the UNDRR Global Risk Assessment Framework (GRAF) during the Global Platform 2019 also gave GEO an opportunity to contribute to, and support, the development of an overarching framework to assemble the risk specialists, decision-makers, providers and clients of risk information in the interest of reducing risk. The GEO Secretariat are supporting the development of the GRAF by working in and promoting the GEO community in the GRAF Working Groups and providing support and advice to the GRAF Secretariat on the technical aspects of developing a complex data framework.

2.2 Developing a GEO Work Programme that supports the delivery of the Sendai Framework

The revision and adoption of the 2020-2022 GEO Work Programme has provided a timely opportunity to ensure the activities in the GEO Work Programme better support, national governments' data requirements. This was one of the challenges by Mami Mizutori to the GEO-XV Plenary and should help enable governments to use Earth

observations to measure progress against the Sendai Framework Targets and to reduce risks to their citizens.

This can be seen through ongoing and new activities in the GEO Work Programme, including those in regional GEOs, looking to address specific aspects of the Sendai Framework including monitoring and reporting. It can also be demonstrated in the activities of the GEO Programme Board Sendai Subgroup who have provided advice and guidance to inform Work Programme Implementation Plans.

2.3 Summary of Engagement

As a result of this engagement, we believe that there is an increased awareness within the UN System of the role that Earth observations, as delivered by GEOs Members, Participating Organizations, through GEO Work Programme activities can play in the reduction of risk.

This has been highlighted in the UNDRR Global Assessment Report on Disaster Risk Reduction 2019 (GAR2019) which contains recommendations for national governments to invest in Earth observations, and to leverage the movement towards open data. The GEO community has for many years supported and advanced open data policies and invested in new technologies that enable nations to support the needs of their citizens. GEO Members and Participating Organizations should consider how best promote these policies at the national level in order to advance the Sendai Framework.

3 THE KEY CHALLENGES AND OPPORTUNITIES FOR FURTHER PROGRESS

It is worth noting that challenges remain in the uptake and use of Earth observation for disaster risk management. This can be for many reasons including trust and reliability of data, lack of skills capabilities within disaster management agencies to access and use Earth observations, or that some data is not freely or openly available. It is for this reason that the GEO Work Programme remains an important step in moving from research to implementation.

In some Member States there is a disconnect between the national disaster response agencies and GEO Principals/GEO community/National Sendai Coordinators. This was in evidence during the “UNDRR 2018 Technical Forum: Leveraging the Sendai Framework Monitoring process in support of the implementation of the 2030 Agenda and the Paris Agreement”. One of the key themes that came out of the Forum, and which was limiting National Sendai Coordinators in reporting progress against the targets of the Sendai Framework, was the lack of authoritative data, or issues in access the relevant data.

In order to improve the use of Earth observations for disaster risk management we invite GEO Principals to identify and work with their national and local disaster management agencies to share experiences of using Earth observations to support risk reduction. One way to achieve this could be to invite National Sendai Coordinators to National and Regional GEO meetings, or to promote activities such as Earth Observation and Copernicus in Support of Sendai Monitoring within the GEO Work Programme 2020-2022.

The creation of the GEO Disaster Risk Reduction Working Group as part of the Engagement Priorities Coordination Foundational Task will provide an active forum to advance the use of Earth observations for disaster risk reduction. The Working Group will support disaster related activities between the GEO community and national, international, and intergovernmental bodies as well as identifying areas of concern or new opportunities for engagement. GEO Members and Participating Organizations are encouraged to nominate representatives to the Working Group.