United Nations/Germany International Conference International Cooperation Towards Low-Emission and Resilient Societies

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Role of Space Technologies to Contribute to the Monitoring of Goals and Targets

(Sendai Framework for Disaster Risk Reduction 2015-2030)



Institutionalisation of the Monitoring mechanism of Sendai Framework

- In Mar 2015, the Open-ended Intergovernmental Expert Working Group (OIEWG) was proposed at the World Conference on DRR to undertake the following:
 - Develop INDICATORS to measure global progress in the implementation of the Sendai Framework
 - Update of TERMINOLOGY on disaster risk reduction
- ☐ In Dec 2016, OIEWG submitted its report, which the UN General Assembly endorsed in Feb 2017
- In March 2017, UN Statistical Commission, 48th Session, endorsed the recommended indicators of the OIEWG, and identified UNISDR as custodian agency for the same under SDGs related to the following:
 - SDG1: Poverty Reduction
 - SDG 11: Cities and human settlements
 - SDG 13: Climate Action



OIEWG called upon UNISDR to **provide technical guidance** - together with the *international statistical community* - to operationalize the global monitoring frameworks of the Sendai Framework and relevant SDGs, through initiatives including:

- 1. Undertaking a review of data readiness with respect to the indicators
- Exploring minimum standards and metadata for disaster-related data and statistics
- 3. Reviewing methodologies for measurement and processing of statistical data
- 4. Developing technical guidance material for the testing and roll -out of the indicators and the web-based monitoring system

This is the core work that UNISDR's Bonn office has been mandated to undertake



Sendai Framework for Disaster Risk Reduction 2015-2030

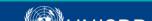
One Expected Outcome

One Goal

Four Priorities

Seven Targets

Thirty-eight Global Indicators



The Seven Targets of Sendai

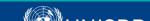
No.	Global Target	Туре
A	Substantially reduce global disaster mortality by 2030, aiming to lower the average per 100,000 global mortality rate in the decade 2020–2030 compared to the period 2005– 2015;	Output
В	Substantially reduce the number of affected people globally by 2030, aiming to lower the average global figure per 100,000 in the decade 2020–2030 compared to the period 2005–2015;	Output
С	Reduce direct disaster economic loss in relation to global gross domestic product (GDP) by 2030;	Output
D	Substantially reduce disaster damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including through developing their resilience by 2030;	Output
E	Substantially increase the number of countries with national and local disaster risk reduction strategies by 2020;	Input
F	Substantially enhance international cooperation to developing countries through adequate and sustainable support to complement their national actions for implementation of the present Framework by 2030;	Input
G	Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to people by 2030.	Input

So where could **Space Technologies** come in?

Some examples where they doTarget B

No.	Global Target
В	Substantially reduce the number of affected people globally by 2030, aiming to lower the average global figure per 100,000 in the decade 2020–2030 compared to the period 2005–2015;

- B-1 (compound) Number of directly affected people attributed to disasters, per 100,000 population.
- B-3 Number of people whose damaged dwellings were attributed to disasters.
- B-4 Number of people whose destroyed dwellings were attributed to disasters. B-5 Number of people whose livelihoods were disrupted or destroyed, attributed to disasters



.....and Target C

No.	Target
С	Reduce direct disaster economic loss in relation to global gross domestic product (GDP) by 2030;

- C-1 (compound) Direct economic loss attributed to disasters in relation to global gross domestic product.
- C-2 Direct agricultural loss attributed to disasters.
- C-3 Direct economic loss to all other damaged or destroyed productive assets attributed to disasters.
- C-4 Direct economic loss in the housing sector attributed to disasters.
- C-5 Direct economic loss resulting from damaged or destroyed critical infrastructure attributed to disasters.
- C-6 Direct economic loss to cultural heritage damaged or destroyed attributed to disasters.

.....and Target D

No.	Global Target
D	Substantially reduce disaster damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including through developing their resilience by 2030;

- D-1 (compound) Damage to critical infrastructure attributed to disasters.
- D-2 Number of destroyed or damaged health facilities attributed to disasters.
- D-3 Number of destroyed or damaged educational facilities attributed to disasters. A/71/644 16-21184 7/41
- D-4 Number of other destroyed or damaged critical infrastructure units and facilities attributed to disasters.



.....and a special mention for Target G

No.	Global Target
G	Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to the people by 2030.

- G-1 (compound G2-G5) Number of countries that have multi-hazard early warning systems.
- G-2 Number of countries that have multi-hazard monitoring and forecasting systems.
- G-3 Number of people per 100,000 that are covered by early warning information through local governments or through national dissemination mechanisms.
- G-5 Number of countries that have accessible, understandable, usable and relevant disaster risk information and assessment available to the people at the national and local levels.
- G-6 Percentage of population exposed to or at risk from disasters protected

Few Issues related to Space Technologies in Sendai Framework Monitoring

- Decision on methodologies rests with the Member States
- Public-Private partnership is of utmost importance
- Not only post but very importantly in pre-disaster situations
- Satellite vs the neighbourhood drone
- Launch of Sendai Monitoring process 6-8 Dec in Bonn- Special session on Frontiers of Data

A Drone's eye view of Kathmandu earthquake

Thank you.

Rahul Sengupta sengupta@un.org

Sendai Framework Monitoring Unit, Bonn Office, United Nations Office for Disaster Risk Reduction (UNISDR)

