



A Synergy Framework for the integration of Earth Observation technologies into Disaster Risk Reduction

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Earth observations and space-based applications have seen a considerable advance in the last decade, and such advances should find their way in applications related to DRR, climate change and sustainable development, including in the indicators to monitor advances in these areas.

The post-2015 framework for disaster risk reduction, as adopted by the 3rd WCDRR is a action-oriented framework for disaster risk reduction that builds on modalities of cooperation linking local, national, regional and global efforts. Earth observations from ground and space platforms and related applications will play a key role in facilitating the implementation of the HFA2 and represent a unique platform to observe and assess how risks have changed in recent years, as well as to track the reduction in the level of exposure of communities.

The proposed white paper focuses mainly on Earth Observation from space but it also addresses the use of other sources of data (airborne, marine, in-situ, socio-economic and model outputs) in combination to remote sensing data.

Earth observations (EO) and Space-based technologies can play a crucial role in contributing to the generation of relevant information to support informed decision-making regarding risk and vulnerability reduction and to address the underlying factors of disaster risk. For example, long series of Earth observation data collected over more than 30 years already contribute to track changes in the environment and in particular, environmental degradation around the world. Earth observation data is key to the work of the scientific community. Whether due to inadequate land-use policies, lack of awareness or understanding regarding such degradation, or inadequate use of natural resources including water and the oceans; Earth observation technologies are now routinely employed by many Ministries of Environment and Natural Resources worldwide to monitor the extent of degradation and a basis to design and enact new environmental management policies.

This White Paper is the premise of a global partnership as a way to enhance the use of Earth observation and Space-based technologies worldwide in the context of the post-2015 disaster risk reduction framework. This document outlines several issues pertaining to such a global partnership including efforts conducted by international stakeholders, recent advances in the use of Earth observation and Space-based technologies, challenges that need to be addressed, policies, and potential aims.