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## **Earth Observations and the Importance of Broad, Open Data Sharing Policies**

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Broad, open data sharing policies and practices have, since its inception, been a key tenant of the Group on Earth Observations (GEO). While substantial strides have been made in the last decade, there is still much room for improvement both globally and in selected domains, including the geological sciences.

As a global partnership of governments and organizations, created following the first World Summit on Sustainable Development (Johannesburg, 2002), GEO's vision is to create a world wherein decisions are informed by sustained, comprehensive and coordinated Earth observations. Today, in 2016, GEO is comprised of 103 governments and 103 Participating Organizations with a mandate for, and/or interest in the use of Earth observations. Together this GEO community is building a Global Earth Observation System of System (GEOSS) (see Figure 1) that links Earth observation resources worldwide across a number of Societal Benefit Areas (SBAs). These SBAs include Biodiversity and Ecosystem Sustainability, Disaster Resilience, Energy and Mineral Resources Management, Food Security, Infrastructure and Transportation Management, Public Health Surveillance, Sustainable Urban Development and Water Resources Management.

While broad, open data policies and practices have always been a key objective of GEO, efforts have redoubled in what is now GEO's second decade. Each of the SBAs identified above rely on a myriad of Earth observations collected by organizations and entities too numerous to count. Unless these organizations and entities adopt more broad, open data policies, the information collected by each is sub-optimized.

In partnership with the International Council for Science (ICSU) Committee on Data for Science and Technology (CODATA), GEO recently (2015) developed a paper titled, *The Value of Open Data Sharing* which identifies the benefits and challenges associated with broader sharing of Earth observations. Topics discussed within the paper include: Economic growth, social welfare, research and innovation, education, and effective governance and policy-making. The presentation at 35IGC will explore each of these topics in more detail.



Figure 1: Schematic of the Global Earth Observation System of Systems (GEOSS).

