

US Inputs into GEO Framework Draft for the Earth Observation System (s) (EOS)

Architecture, Data Utilization and User Requirements:

- **EOS should be a System of Systems** – EOS should allow existing and future individual observing systems to remain within their mandates and accommodate new components. EOS members and participating organizations should agree on interoperability specifications among components.

- **EOS should provide for Data Accessibility.** – Data observations or information produced by EOS should be accessible to users (open and unrestricted exchange) and access policy should respect existing national laws and interagency and international agreements.

- **EOS should be sustainable, interoperable and adaptable.**
 - EOS should address long-term support of relevant capabilities in addition to short-term solutions to pressing issues, through a process of prioritization.
 - EOS should use common protocols, and standards, and interoperability specifications for observing, processing, and dissemination capabilities.
 - EOS should adapt to evolving needs, and incorporate new technologies and research outcomes.

- **EOS should be efficient and effective.**
 - EOS should promote greater coordination of planning data acquisitions and operations, leveraging standards, policies, programs, and existing observing systems worldwide.
 - EOS should identify gaps and promote continuity of observations as well as the exchange, dissemination, and archiving of data.

- **EOS should require an Inventory** – An inventory of member and participating organizations and the components they support should be maintained under the auspices of EOS, and should be publicly accessible, network distributed, and interoperable with other major Earth observation catalogs.

- **EOS should be User-Driven and Benefit-Focused.**
 - EOS should meet the requirements of a wide variety of decision makers, researchers, service providers, the public, and other stakeholders worldwide.
 - EOS should support informed analyses, forecasts and related decisions that result in societal benefits, especially benefits related to human health and well-being, hazard warning and disaster reduction, sustainable development and biological diversity.

- **Radio Frequencies** – EOS should seek to protect the allocation of frequencies to Earth observations systems.

Capacity Building:

- Capacity building should strengthen human, institutional and technical capabilities to contribute to, and make use of Earth observations by addressing core capacity needs, and facilitating effective feedback among all components of EOS.
- Education, training, communication and outreach are fundamental to capacity building efforts within the continuum of activities and services of EOS, and essential to the success of EOS.
- The capacity building efforts of EOS should build on existing local, national, regional and global capacity building initiatives currently planned or ongoing, and support the priorities of EOS as a whole.
- EOS will require capacity building in all countries, though specific capacity building needs are likely to differ among countries.

Proposed Mechanisms for International Cooperation:

- The international cooperation mechanism(s)' objectives, and their authority and responsibility to fulfil those objectives should be clearly articulated.
- The international cooperation mechanism(s) selected should:
 - Involve officials at the policy level with the authority to commit resources.
 - Be responsive and maintain a strong executive function.
 - Promote the full and appropriate involvement of all countries and relevant international organizations interested in and able to participate.
 - Have minimal establishment and operating costs.
 - Have flexibility to enable the mechanism(s) to adapt as the system develops and coordination needs change. Adopt benchmarks to permit evaluation of effectiveness of the mechanism(s) as they develop.
 - Allow for participation of the broad range of Earth observation communities (e.g., satellite, in situ, research, operational, atmosphere, ocean, land, climate, disaster, agriculture, aviation safety, environment, sustainable development).
 - Become operational in a timeframe appropriate to the goals of the initiative.