Managing Interoperability for GEOSS - A Report from the SIF

S.J. Khalsa (1), D. Actur (2), S. Nativi (3), S. Browdy (4), and P. Eglitis (5)

(1) Univ. Colorado, CIRES, Boulder, United States (sjsk@nsidc.org), (2) Open Geospatial Consortium
(darctur@opengeospatial.org), (3) Italian National Research Council/University of Florence (nativi@IMAA.CNR.IT), (4)
OMS Tech, Inc. (steveb@OMSTECH.COM), (5) Norwegian Meteorological Institute (paul.e.eglitis@MET.NO)

The Global Earth Observation System of Systems (GEOSS) is a coordinating and integrating framework for Earth observing and information systems, which are contributed on a voluntary basis by Members and Participating Organizations of the intergovernmental Group on Earth Observations (GEO). GEOSS exists to support informed decision making for the benefit of society, including the implementation of international environmental treaty obligations.

GEO Members and Participating organizations use the GEOSS Common Infrastructure (GCI) to register their Earth observation resources, thereby making them discoverable and consumable by both humans and client applications. Essential to meeting GEO user needs is a process for supporting interoperability of observing, processing, modeling and dissemination capabilities. The GEO Standards and Interoperability Forum (SIF) was created to develop, implement and oversee this process. The SIF supports GEO organizations contributing resources to the GEOSS by helping them understand and work with the GEOSS interoperability guidelines and encouraging them to register their "interoperability arrangements" (standards or other ad hoc arrangements for interoperability) in the GEOSS standards registry, which is part of the GCI. These registered interoperability arrangements support the actual services used to achieve interoperability of systems. By making information about these interoperability arrangements available to users of the GEOSS the SIF enhances the understanding and utility of contributed resources.

We describe the procedures that the SIF has enacted to carry out its work. To operate effectively the SIF uses a workflow system and is establishing a set of regional teams and domain experts. In the near term our work has focused on population and review of the GEOSS Standards Registry, but we are also developing approaches to achieving progressive convergence on, and uptake of, an optimal set of interoperability arrangements for all of GEOSS.