

US Adopts OGC Standards for Civil Earth Observations



The Open Geospatial Consortium's (OGC) standards are cited in the Obama Administration's National Science and Technology Council's (NSTC) recently released 'National Strategy for Civil Earth Observations'—a framework for increasing the efficiency and effectiveness of the nation's Earth-observation enterprise'. The OGC WaterML 2.0 Encoding Standard, recently approved by the OGC membership, has been endorsed as an official component of the civil Earth observation strategy of the federal government of the United States.

The National Strategy for Civil Earth Observations identifies 12 "Societal Benefit Areas" for collection of information, one of which is water. The report states, "WaterML: Water Markup Language (ML) is an informatics initiative of the CENRS Subcommittee on Water

Availability and Quality that provides a systematic way to access water information from point observation sites." CENRS is the NSTC's Committee on Environment, Natural Resources, and Sustainability.

OGC Web Services, including the OGC Web Map Service (WMS), Web Feature Service (WFS), and Web Coverage Service (WCS) interface standards are listed in another NSTC document, "Exchanging Data for Societal Benefit: An IEOS Web Services Architecture", which is referenced in the Data-Management Framework section in the National Strategy document. IEOS is the US National Oceanic and Atmospheric Administration's (NOAA) Integrated Earth Observing System. The Architecture and Data Management Working Group of the NSTC-led United States Group on Earth Observations (USGEO) prepared the document. It states on page 4: "An Internet-based service-oriented architecture is the ideal approach for developing interfaces to both new and legacy data and information systems contributing to IEOS. Standards-based service interfaces can then be designed to promote interoperability and allow users seamless access to USGEO data and services from multiple sources."

Through USGEO, the United States is a founding member and vital contributor to the intergovernmental Group on Earth Observations (GEO). GEO, a group of 88 nations and the European Commission, is developing the Global Earth Observation System of Systems (GEOSS). GEOSS is a set of agreements and technical arrangements being developed to link together existing and planned observing systems around the world. The OGC, a participating organisation in GEO, leads the GEOSS Architecture Implementation Pilot (AIP).