

**WGCV 35 Plenary  
September 2012**

# **CEOS /GEO TASK Plan**

**Greg Stensaas (USGS)**





- **CEOS Work Plan**

- 2.8 Continued CEOS leadership of, and support to, the GEO initiative on Quality Assurance for Earth Observations**

The CEOS WG on Calibration and Validation (WGCV) is actively involved in GEO-sponsored efforts to implement a framework on Quality Assurance for Earth Observations (QA4EO). In October 2011, a QA4EO workshop was conducted which identified numerous areas of further consultation and coordination among CEOS and its user community. The data reviewed Quality Assurance (QA) examples across a wide variety of GEO SBAs and their relationship to the QA4EO framework. Meeting participants agreed to promote QA activities across their user communities. GEO agreed and identified GEO 2012-2015 Task IN-02, which will serve as QA4EO Implementation Pilots (QIPs). And CEOS agreed to implement a QA4EO focus within CEOS Working Groups. For 2012, WGCV will continue to consult internally with other CEOS entities and externally with GEO to better define and support the next steps in QA4EO implementation, including support to CEOS FCT/GFOI activities.

- **GEO Work Plan**
- **WGCV Work Plan**

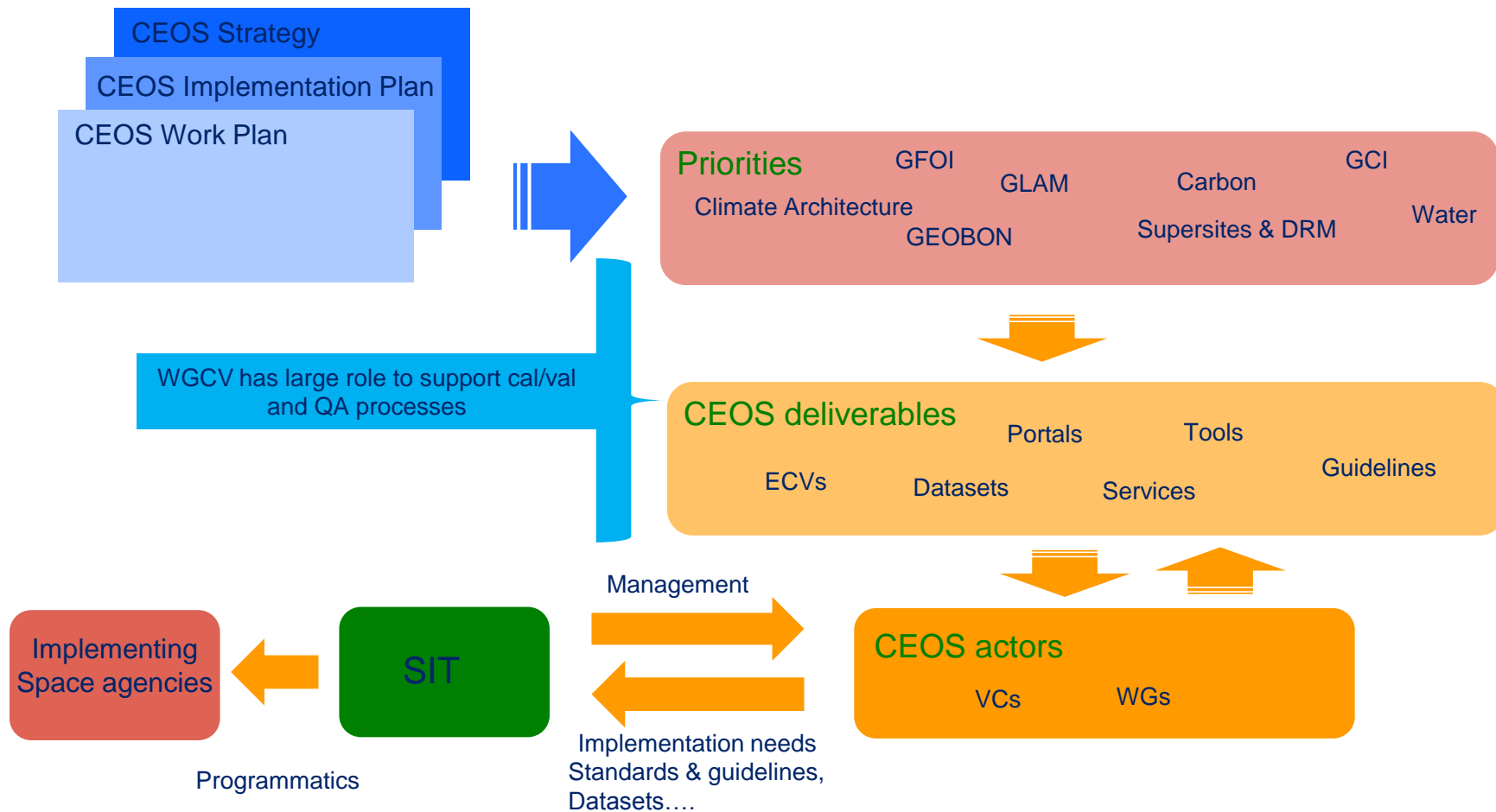


- **Geo Work Plan 2012-2015 Tasks**

- **IN-02 Earth Data Sets (currently involved)**
  - **C1: Advances in Life-cycle Data Management (WGCV support) (Task lead: Satoko Miura)**
  - **C2: Development of Regional/Global Information and Cross-cutting Datasets (WGCV/TMSG – Global DEM) (Task lead – Koki Iwao – Japan AIST)**
- **IN-05 GEOSS Architecture, Design and Interoperability (need discussion and review)**
  - **C1: GEOSS Design and Interoperability**
- **SB-03 Global Forest Observation (need discussion and review)**
  - **C1: Forest Carbon Tracking Activities for Observational and Methodological Guidelines**
  - **C2: Definition, Implementation and Operations of the Global Forest Observation Initiative (GFOI)**
- **CL-01 Climate Information for Adaptation (need discussion and review)**
  - **C1: Extension and Improvement of the Climate Record**
- **CL-02 Global Carbon Observation and Analysis (need discussion and review)**
  - **C1: Integrated Global Carbon Observation and Analysis System**

- **Potential cal/val involvement in other efforts**

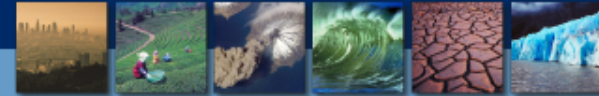
# CEOS Implementation Process





## Efforts required for CEOS QA4EO

- Enhance QA4EO CEOS Team and Establish QA4EO Implementation Board
- Data quality parameter definitions, System quality parameters and definition. - - - WGCV sub groups and WGISS (NASA ESDWG), GSCB
- fit for purpose documentation related to system/data/and product capability and accuracy WGCV sub groups (maybe support from WGC and WGCBDD), GSCB
- Quality parameter measurement and process guidelines for each quality definition - - - WGCV sub groups and WGISS
- An overall quality survey to determine state of quality analysis completed for dataset and product - QA4EO flag
- Incorporation of information from the process and definitions above into CEOS electronic database for all CEOS data and information QA flags and data/metadata fields - - - WGISS and NASA ESDWG / GSCB
- Develop QIPs for key priority CEOS efforts as example
- LTDP and Data Management (KA #1 and #3 have QA4EO related actions)



IN-02-C1_3	
GEO Task Reference	IN-02-C1
Action Status	OPEN
Action Description	Develop a CEOS Quality Assurance Framework for Earth Observation (QA4EO) and implement processes and structure for CEOS data and information.



CEOS-GEO Action Number	IN-02-C1_5
GEO Task Reference	IN-02-C1
Action Status	OPEN
Action Description	Enabling Data and Information Interoperability and Harmonization in CEOS and GEO. Develop an architecture and constituent elements needed for implementation of an operational system to insure the long term interoperability of EO data to meet the SBA needs, particularly climate; e.g. Methodologies, test sites, database infrastructure for quality, ?.



## Potential LTDA Process for CEOS and QA4EO

CEOS-GEO Action Number	IN-02-C1_1
GEO Task Reference	IN-02-C1
Action Status	OPEN
Action Description	<p>1. Sharing data management life cycle models and recommendations aligning to the first Priority Action. Improve and coordinate data management approaches that encompass a broad perspective of the observation data life-cycle from processing to modeling and visualization. Identify and implement recommendations for best practices.</p> <p>2. Provide data management guidance related to Priority Action No. 3 Develop a GEO strategy for the long-term preservation of Earth observation data, building upon existing long-term data preservation guidelines.</p>

CEOS-GEO Action Number	IN-02-C1_2
GEO Task Reference	IN-02-C1
Action Status	OPEN
Action Description	<p>DOMÉ-C Multi-Sensor Experiment</p> <p>Use Dome-C as prototype and developing continued and on-going methodology to tie into the Cal/Val portal enhancement as a reference for Landnet sites.</p>

CEOS-GEO Action Number	IN-02-C1_4
GEO Task Reference	IN-02-C1
Action Status	OPEN
Action Description	Develop Cal/Val Portal and post-launch test sites to assist implementation of QA4EO for GEOSS.





CEOS-GEO Action Number	IN-02-C2_1
GEO Task Reference	IN-02-C2
Action Status	OPEN
Action Description	Development of regional/global information and cross-cutting datasets, including socio-economic information, geographic information, and Earth-system reanalysis (e.g. promote research and development for models, data assimilation modules, and new or improved algorithms for global and regional services and products).
Due Date (DD-MMM-YYYY)	01-OCT-2013
Primary POC	Jan-Peter Muller ( <a href="mailto:jpm@mssl.ucl.ac.uk">jpm@mssl.ucl.ac.uk</a> )