



The GEO User Requirements Approach to Achieving Societal Benefits

*The 8th UIC Meeting
September 22-24, 2008*

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Terms of Reference - GEO User Interface Committee

Goal

- **To engage users** in the development and implementation of a sustained GEOSS that **provides the data and information** required within and among the nine societal benefit areas **as specified by user groups** on national, regional and global scales

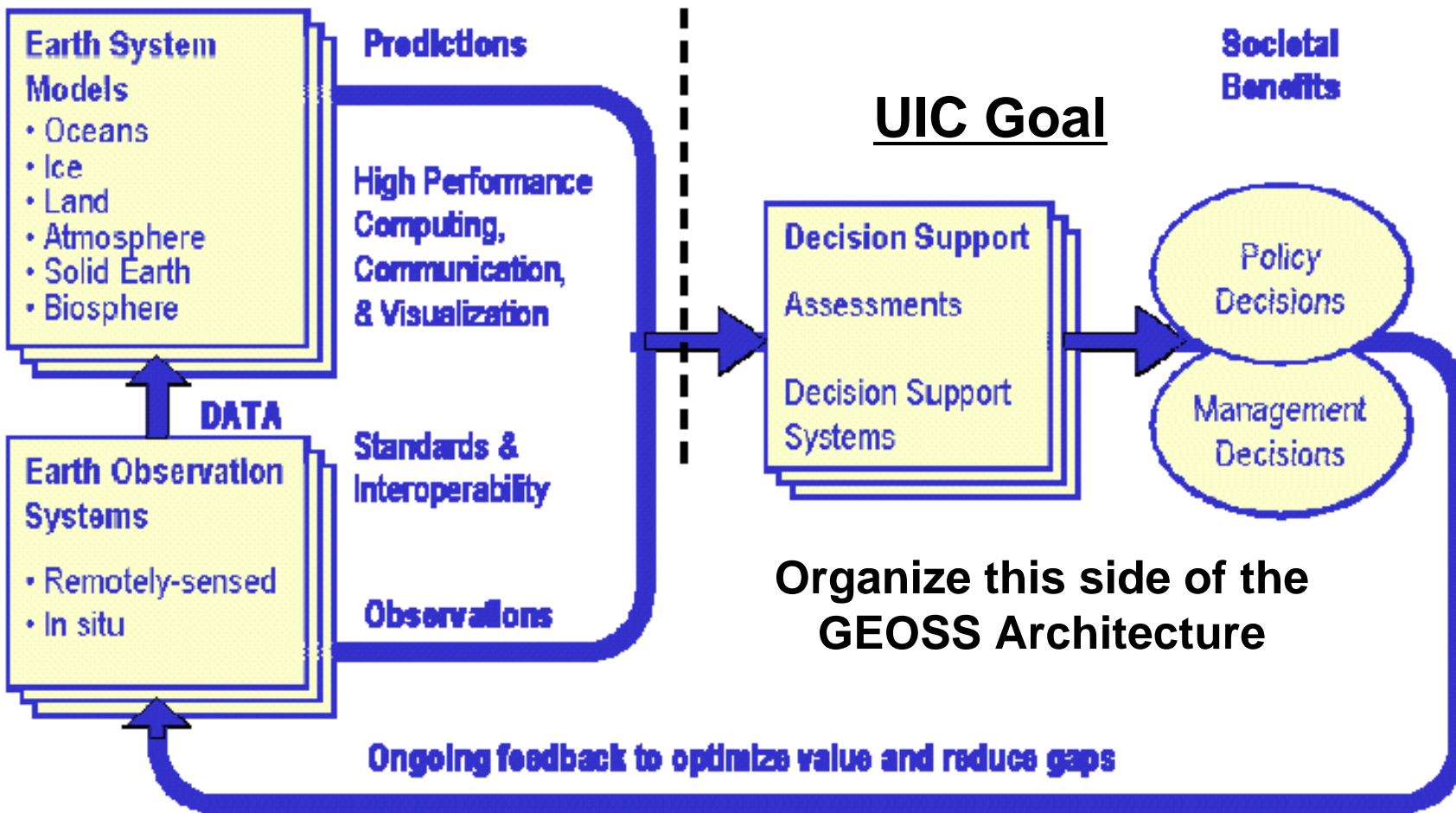
*Also a specific goal to address cross-cutting issues and oversee the **Communities of Practice (CPs)**, ensuring continuity & avoiding duplication.*



The GEOSS Architecture



Users and Scientific Communities Served By
GEOSS Common Approaches Systems within their Mandates





UIC Objectives

- Enable GEO to address in a systematic, targeted, focused and comprehensive way the needs and concerns of a **broad range of user communities** in developing and developed countries, across issues and trans-disciplinary needs, with a particular focus on fostering new or less organized communities.
- Enable GEO, in the implementation of GEOSS, to engage a **continuum of users**, from producers to the final beneficiaries of the data and information
- Facilitate linkages and partnerships between established **CPs** and **new user groups or organizations** interested in collaborating.
- Incorporate the IGOS themes (Integrated Global Observing Strategy)



THE SPECTRUM OF USERS



From observations

Earth observations & earth system models

Data-to-Information archiving & services

Decision support tool development

Decision making

Assessment of benefits

To societal benefits

Requirements well known

Earth system scientists and modelers

Earth system service providers

Environmental process modelers & researchers

Policy Makers & Environmental managers

Public officials, advocacy groups and the Public

Not aware that observational Requirements are even needed



GEO TASK US-06-01

Establish a GEO process for identifying critical Earth observation priorities common to many GEOSS societal benefit areas, involving scientific and technical experts, taking account of socio-economic factors, and building on the results of existing systems' requirements development processes.



The US-06-01

The User Requirements Gathering Processes

- **Presentation by Dr. Lawrence Friedl**

User Needs and System Performance Utility (UNSPU) Proposed Functional Specifications

- **Presentation by Dr. Hans-Peter Plag**



The User Requirements Gathering Processes



- **A 2-year (+) timeline of US-06-01 activities .**
- **How an “Advisory Group” and an “Analyst” will work together to develop the priorities within each SBA. The analyst will be the primary coordinator and organizer of the activity to meet the schedules, and will interact with and utilize the Advisory Group for each SBA.**
- **UIC’s Refined Process in nine steps.**
- **The process “harvests” observation needs expressed in *existing* documents.**
- **Role of US-06-01 in new Work Plan.**



DA – 06 - 04

- Facilitate the development, availability and harmonization of data, metadata, and products commonly required across diverse societal benefit areas, including base maps, land-cover data sets, and common socio-economic data.
- ADC and UIC



Communities of Practice

A user-led community of stakeholders, from providers to the final beneficiaries of Earth observation data and information, with a common interest in specific aspects of societal benefits to be realized by GEOSS implementation.

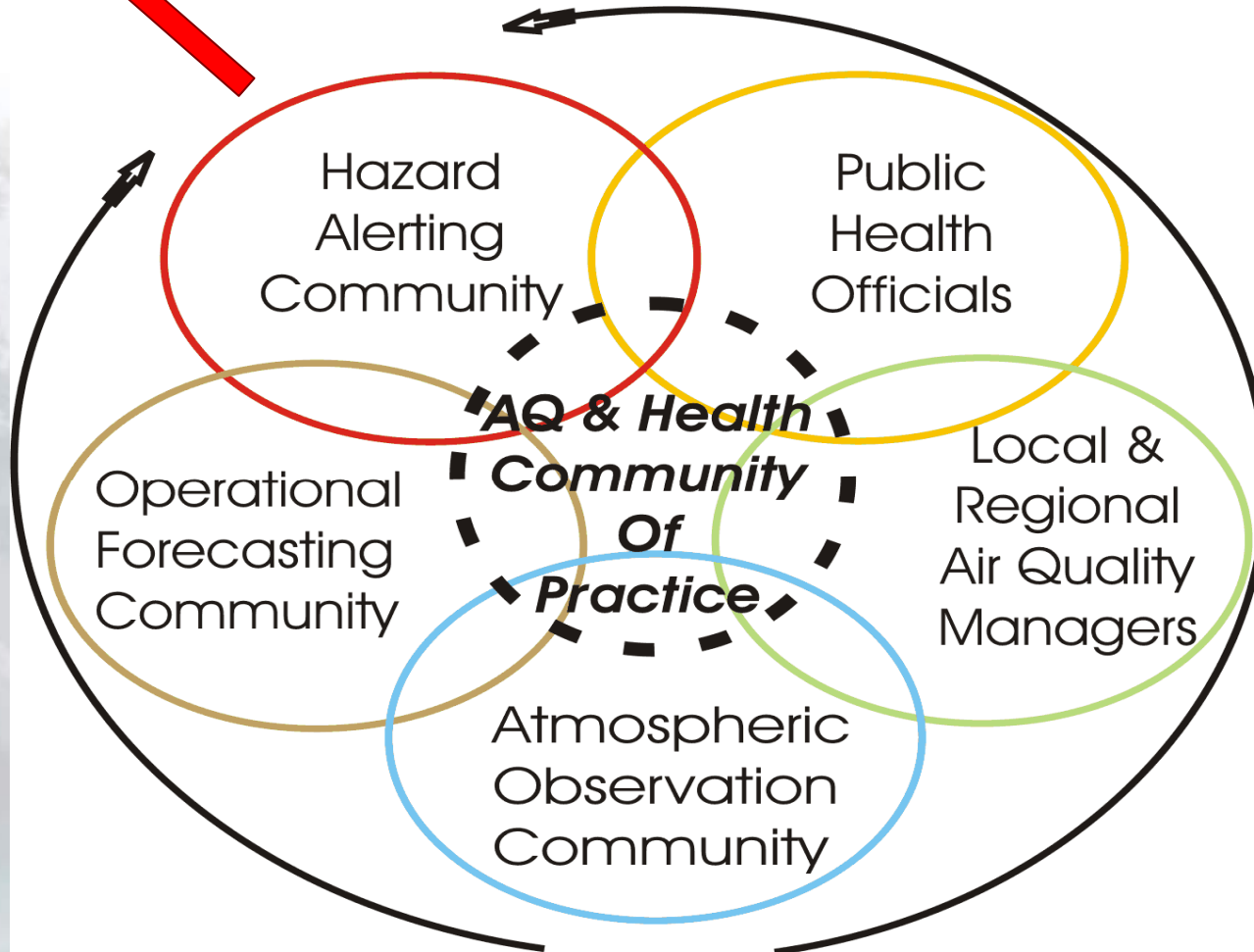
The Communities of Practice will be self organized and will include stakeholders required to achieve benefits.



An Example Community of Practice

Air Quality & Health

The Public





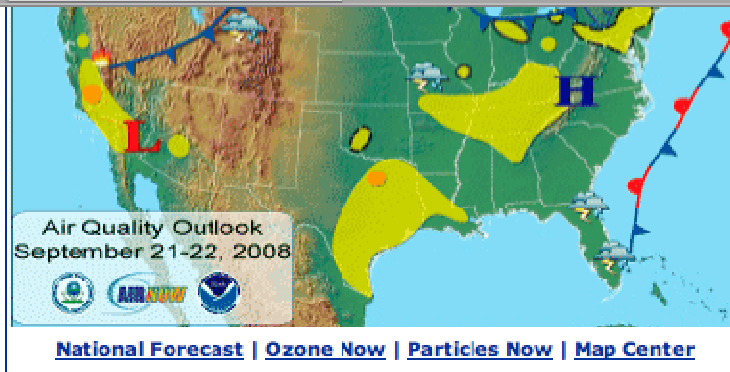
Canada Ce

AIRNow - Home

http://airnow.gov/

ANGEL Aeroplan Amazon US Amazon.ca Lee Valley Tools JSTARS EarthPortal YouSendIt Apple - Start Horde:secure

AIRNow - Home



Local Air Quality Conditions and Forecasts

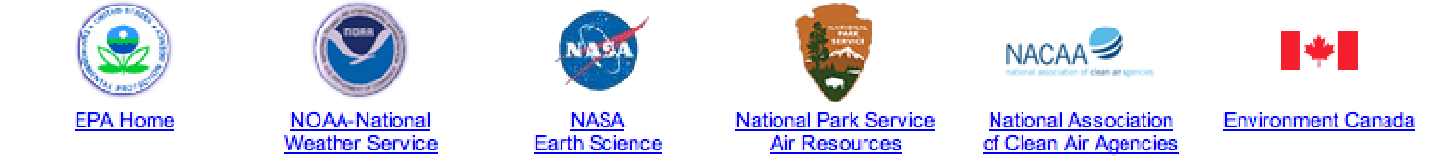
Alabama [Select by map](#)

Today's Highest AQI Forecasts

Youngstown, OH	!	PM2.5
Bakersfield, CA		OZONE
Cleveland-Akron-Lorain, OH		PM2.5
Dallas-Fort Worth, TX		OZONE
Asheville Valleys (below 1000 feet), NC		PM2.5
— More —	!	- city declared an Action Day

Note: EPA established a tighter fine particle [standard](#) in the fall of 2006 to better protect public health. [— More Information —](#)

AIRNow is a government-backed program. Through AIRNow, EPA, NOAA, NPS, news media, tribal, state, and local agencies work together to report conditions for ozone and particle pollution. [State, Local and Tribal Partners.](#)



Ozone
Particles
UV

The AQI for:
Health Providers
Older Adults
Weathercasters

Key Topics
Your Health
Smoke From Fires
International Air Quality

The Learning Center
Kids (K-10)
Students
Teachers

Resources
AQI in Google Earth
Publications
Publications (En Español)
FAQ
Movies
What You Can Do
NAQ Conferences
About the Data

Accessibility
Privacy and Security

Historical Information

Air Compare
Compare Air Quality of U.S. Cities

Announcements

System Maintenance 9/20/2008

Air Quality Health Advisories
National Parks
National Weather Service

Hurricane Recovery
Using generators safely
Health effects of smoke

Web Cams

[Visibility in Charlotte, NC](#)
[View Other Visibility Cams](#)



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- Reaffirm our goal to “•To engage users in the development and implementation of a sustained GEOSS that provides the data and information required within and among the nine societal benefit areas as specified by user groups on national, regional and global scales”.
- The Major UIC Work Plan task, US-06-01, is proceeding on two fronts under the leadership of Dr. Lawrence Friedl and Dr. Hans-Peter Plag.



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- The UIC web site must be developed and include definition of the concept of the ‘Community of Practice’, titles and contact persons for each approved ‘Community of Practice’, and specification of the process of submission and adoption of new ‘Community of Practices’.
- We will participate in the ‘Best Practices’ WIKI being developed by the ADC and solicit submissions by the User Community. We should also consider the legal liabilities of the Best Practices



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- The 'Data Sharing Principles' Document was reviewed.

– Issues identified include:

- Liability on data and services
- Liability on Wiki Best Practices
- Protection of metadata
- Restrictions: prior arrangements
- How do you encourage compliance with principles
- PPP: want to engage commercial sector, register their data and services even though it is not free, open, possibly to standard. Private company metadata in the system
- There is a need for special arrangements on sensitive data
- Clear standards on data use classes: free / unrestricted, restricted...
- Not just data and metadata



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- Air Quality Community of Practice
Scenario Workshop – UIC/ADC
collaboration on Call for Participation
- Feed into US-06-01





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- **UIC Management:**

- There was a thread of ongoing discussion throughout the meeting about workplan development, identification of milestones, how to measure success, and need to integrate activities with other GEO committees.
- ADC Sherpa Model: Milestones and record of achievement
- UIC CoP model with co-chair working with each CoP ‘owners’
 - Users different than software engineering
 - The users are a process driven group rather than an activity driven group.



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- **New Management Model adopted in Washington, 2007**
 - Breakout sessions for CoP
 - Plenary for discussion of common themes
 - Participatory vs highly structured

Our Assessment is that it is working and we need to allow evolution before dramatic adjustment



Are you new to GEO and GEOSS? Find out more [here!](#)

Highlights

The GEOSS Common Infrastructure (GCI)

Evaluating the GEO Portal prototypes

Evaluate the GEO Portals

The assessment phase for the GEO Portals runs until May 2009. The Portals are updated regularly so please make repeat visits and provide your feedback.

Components registration

Register your components

The GEO community is invited to register its data bases, catalogues, services and tools in the GEOSS Components and Services Registry

Standards registration

Register your standards here

The GEO community is encouraged to register standards, protocols and other specifications for ensuring an interoperable "system of systems" in the GEOSS Registry



Objectives of Boulder Meeting

- **Issue of US-06-01 – Determine role in new work plan and define new task for 2009**
- **Develop a Call for Participation**
- **Include IGOS members in UIC**
- **One new initiative with CBC**
- **Determine Activities of UIC in ISRSE, May 09**