



# **GEO Work Plan: *User Engagement and GEO Tasks***

**Analysis of User Engagement in Work Plan Task Sheets**

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**GROUP ON  
EARTH OBSERVATIONS**



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## *Task Sheet Analysis – User Engagement*

### **Task Sheet Analysis**

UIC has a responsibility within GEO to address the user element in all of the tasks in the Work Plan. Some tasks have a significant, inherent user-engagement dimension to them, and some tasks do not (though eventually all might).

At 10<sup>th</sup> & 11<sup>th</sup> UIC Meetings, the UIC committee discussed the need to understand the “user” dimension in all of the Work Plan tasks.

Analysis focused on assessing the quality of the user-engagement component in the task sheets.

Analysis also focused on identifying opportunities for UIC involvement in tasks, especially those that have an inherent need for user engagement and a high probability of success in engaging users. Also, analysis to identify key needs/ways to improve Task Leads’ understanding of user engagement.



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## Task Sheet Analysis – User Engagement

2009-2011 GEO Work Plan Tasks, by Transverse and SBAs			Range of Sub-tasks per OAT	
Transverse Area and SBAs	Overarching Tasks (OAT)	Sub-tasks	High	Low
Architecture	5	15	4	1
Data Management	4	11	4	1
Capacity Building	5	19	7	1
User Engagement	3	9	4	2
Science & Technology	2	2	1	1
Agriculture	2	4	3	1
Biodiversity	1	3	3	3
Climate	3	8	3	2
Disasters	4	7	2	1
Ecosystems	2	8	4	4
Energy	3	3	1	1
Health	3	8	4	1
Water	3	14	7	3
Weather	2	3	2	1
<b>Totals</b>	42	114		

Table 1. Work Plan Tasks and Sub-Tasks, by Transverse Area and SBAs

Note: Analysis used the task sheets submitted in December 2008 & March 2009



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## *Task Sheet Analysis – User Engagement*

### **Approach/Methodology: Rating Factors**

#### I. UIC Roles in the Activity

- I.A Current UIC Involvement (*Yes, No*)
- I.B Current UIC Involvement (*Lead, Actively Support, Track, None*)
- I.C Potential UIC Involvement (*Lead, Actively Support, Track, None*)

#### II. User Engagement Aspects of Task Sheets

- II.A Presence of Text in the User Engagement section (*Yes, No*)
- II.B Level of Thought & Detail in the UE section  
(*Very Good, Some, Minimal, and Indeterminate*)
- II.C Understanding of User  
(*Strong, Requires Support, Unclear*)
- II.D Opportunity for Broad User Engagement (*High, Low*)
- II.E Overall Interest of the task to the UIC (*Absolutely, Maybe, Not Really*)



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## *Task Sheet Analysis – User Engagement*

### **Results of Analysis**



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## Task Sheet Analysis – User Engagement

### UIC Roles in the Task

<b>I.A</b>	<b>Current UIC Role in Task:</b>	<b>Yes</b>	<b>18</b>	<b>(16%)</b>
		<b>No</b>	<b>96</b>	<b>(84%)</b>
<b>I.B</b>	<b>Current Level of UIC Involvement:</b>	<b>Lead</b>	<b>7</b>	<b>(6%)</b>
		<b>Actively Support</b>	<b>4</b>	<b>(4%)</b>
		<b>Track</b>	<b>7</b>	<b>(6%)</b>
		<b>None</b>	<b>96</b>	<b>(84%)</b>
<b>I.C</b>	<b>Potential Level of UIC Involvement:</b>	<b>Lead</b>	<b>7</b>	<b>(6%)</b>
		<b>Actively Support</b>	<b>32</b>	<b>(28%)</b>
		<b>Track</b>	<b>65</b>	<b>(57%)</b>
		<b>None</b>	<b>10</b>	<b>(9%)</b>



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## Task Sheet Analysis – User Engagement

### User Engagement Aspects of Task Sheets

<b>II.A Text in User Engagement Section:</b>	<b>Yes</b>	<b>51</b>	<b>(45%)</b>
	<b>No</b>	<b>63</b>	<b>(55%)</b>
<b>II.B Level of Thought and Detail in User Engagement Section:</b>	<b>Very Good</b>	<b>15</b>	<b>(13%)</b>
	<b>Some</b>	<b>25</b>	<b>(22%)</b>
	<b>Minimal</b>	<b>11</b>	<b>(10%)</b>
	<b>Indeterminate</b>	<b>63</b>	<b>(55%)</b>
<b>II.C Understanding of Users and User Engagement in Task Sheet:</b>	<b>Strong</b>	<b>15</b>	<b>(13%)</b>
	<b>Requires Support</b>	<b>43</b>	<b>(38%)</b>
	<b>Unclear</b>	<b>56</b>	<b>(49%)</b>
<b>II.D Opportunity for Broad User Engagement:</b>	<b>High</b>	<b>51</b>	<b>(45%)</b>
	<b>Low</b>	<b>63</b>	<b>(55%)</b>
<b>II.E Interest of Task to UIC:</b>	<b>Absolutely</b>	<b>35</b>	<b>(31%)</b>
	<b>Maybe</b>	<b>66</b>	<b>(58%)</b>
	<b>Not Really</b>	<b>13</b>	<b>(11%)</b>



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## Task Sheet Analysis – User Engagement

Task Sheet Analysis	II.D: Opportunity for Broad User Engagement			
II.A: Text in User Engagement Section		High	Low	Total
	Yes	32	19	51
	No	19	44	63
	Total	51	63	114

Table 3. Opportunity for Broad User Engagement in the Task vs. Presence of Text on Users

Analysis: 32 of 51 (61%) High User-Engagement Tasks completed the UE Section of the Task sheet



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## *Task Sheet Analysis – User Engagement*

### User Engagement Aspects of Task Sheets

51 task sheets had some text in the UE section (63 had nothing).

Of the 51 task sheets that had text:

- 15 task sheets (29%) had substantive, thoughtful statements
- 25 sheets (49%) had some level of thought
- 11 sheets (22%) had minimal response.

Thus, overall, only 13% of *all* task sheets (15 of 114) gave substantive attention to user engagement in the UE section.



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## Task Sheet Analysis – User Engagement

Task Sheet Analysis	II.C: Understanding of Users & User Engagement				
		Strong	Needs Support	Unclear	Total
II.E: Interest of Task to UIC	Absolutely	10	16	9	35
	Maybe	5	25	36	66
	Not Really	0	2	11	13
	<i>Total</i>	<i>15</i>	<i>43</i>	<i>56</i>	<i>114</i>
	Table 5. Interest of Task to UIC by Task's Understanding of Users				

Analysis: There are opportunities in most tasks to improve the approaches to user engagement. The UIC has a inherent interest in many.



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## Task Sheet Analysis – User Engagement

Task Sheet Analysis	I.C: Potential Level of UIC Involvement					
		Lead	Active Support	Track	None	Total
I.B: Current Level of UIC Involvement	Lead	7	0	0	0	7
	Active Support	0	4	0	0	4
	Track	0	4	3	0	7
	None	0	24	62	10	96
	Total	7	32	65	10	114

Table 9. Current and Potential Roles of UIC in Task

Analysis: UIC is engaged at appropriate level in most current tasks. There are many more tasks in which the UIC could/should be involved.



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## Task Sheet Analysis – User Engagement

Task Sheet Analysis	II.C: Task Understanding of User Engagement				
		Strong	Needs Support	Unclear	Total
I.C: Potential Level of UIC Involvement	Lead	5	1	1	7
	Active Support	5	12	15	32
	Track	5	28	32	65
	None	0	2	8	10
	<b>Total</b>	<b>15</b>	<b>43</b>	<b>56</b>	<b>114</b>

Table 10. Potential UIC Role in Task vs. Task's Understanding of Users

Analysis: For most of the tasks that UIC might become involved with, many task teams will need support/advice to develop their user engagement.



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## *Task Sheet Analysis – User Engagement*

### Major Findings

1. UIC is engaged at an appropriate level for most of the tasks it is currently engaged with.
2. The understanding of user engagement expressed in task sheets is generally lacking.
3. There are numerous opportunities for the UIC to become significantly engaged in tasks. *(see slide 14)*
4. UIC needs to support task teams to understand and develop the user engagement aspects.

#### ***Overall Finding:***

***Significant need within GEO regarding user engagement, and  
Significant opportunities for UIC to support GEO task teams***



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## Task Sheet Analysis – User Engagement

### Elaboration on Finding #3

There are 20 tasks the UIC is not currently involved with yet are of absolute interest to the UIC

Of these 20 tasks, 13 are ones the UIC should Actively Support and 7 are ones the UIC should Track.

These 20 tasks are shown to the right (listed alphabetically).

#### *Active Support*

- AR-09-03d: Global Observing System (GOS)
- AR-09-04a: GEONETCast
- AR-09-04b: GEONET
- CB-09-04a: Identifying Best Practices, Gaps and Needs
- CB-09-05c: SERVIR Expansion
- DA-06-01: GEOSS Data Sharing Principles
- DA-09-01a: GEOSS Quality Assurance Strategy
- DA-09-01b: Data, Metadata and Products Harmonisation
- DA-09-03a: Global Land Cover
- EC-09-01d: Protected Areas Assessment and Monitoring
- HE-09-02b: Air Quality Observations, Forecasting and Public Information
- US-09-02b: Socio-economic and Demographic Global Data
- WA-06-07b: Capacity Building for Water Resource Management - Africa

#### *Track*

- AG-07-03a: Global Agricultural Monitoring System
- AG-07-03c: Expanding EO Applications in Agriculture and Promoting Capacity Building in Developing Countries
- CL-09-03a: Integrated Global Carbon Observation (IGCO)
- DI-09-01a: Vulnerability Mapping and Risk Assessment
- DI-09-02b: Regional End-to-End Disaster Management Applications
- ST-09-01: Catalyzing R&D Funding for GEOSS
- ST-09-02: Promoting Awareness and Benefits of GEO



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## *Task Sheet Analysis – User Engagement*

**Recommendation 1. The UIC should identify specific tasks in which it wants to engage.**

*There are approximately 100 tasks in which the UIC has a likely interest. Dozens of tasks need to refine their understanding of user engagement.*

### Sub-recommendations:

- UIC assess the opportunities and develop a phased approach to engage task teams, targeting a set of tasks in the near term and more in mid-term and long-term.
- UIC determine the immediate tasks in which it wants to engage.
- UIC assign members to the specific tasks it will engage. The UIC members can advise and support the task teams on user engagement techniques and approaches.
- UIC hold a specific meeting or internal workshop to discuss user engagement approaches (especially for UIC members).



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## *Task Sheet Analysis – User Engagement*

**Recommendation 2. The UIC should develop materials on user engagement.**

*63 tasks sheets had nothing written in the UE section;  
99 task sheets had lacking or unclear approach to user engagement.*

Sub-recommendations:

- UIC develop materials to support and educate the task teams on user engagement approaches.
- UIC document and publish a range of user-engagement techniques and examples as a resource for the GEO tasks teams and community.
- UIC provide a user-engagement consulting service for all task teams. For example, UIC could establish a team of UIC members to respond to requests from task teams for advice in engaging users.



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## *Task Sheet Analysis – User Engagement*

**Recommendation 3. The UIC should utilize its User Type Analysis to support task teams understand, design, and implement user engagement approaches.**

*The task teams can employ the user types in developing and assessing their user engagement activities (e.g., gap analysis to evaluate and refine their user engagement approaches and audiences)*

### Sub-recommendations:

- UIC pursue and complete the User Type Analysis and publish the user types for GEO's use.
- UIC encourage the task teams to employ the user types to identify potential user groups they can engage in their task, such as using the user types in a gap analysis to evaluate and refine their user engagement approach.



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## *Task Sheet Analysis – User Engagement*

**Recommendation 4. The UIC should conduct a membership analysis to assess skills and resources needed to support and enhance user engagement in the GEO tasks.**

*The UIC's ability to support the GEO tasks in improving user engagement will depend upon on the number of UIC members who are able to engage the task teams as well as the skills of the UIC members.*

### Sub-recommendations:

- UIC conduct an analysis of its membership to assess the current skills and competencies relative to user engagement.
- UIC also identify the required number of members with appropriate skills to achieve the desired level of user engagement.



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## *Task Sheet Analysis – User Engagement*

**Recommendation 5. The UIC should develop methods to track and report on progress in the tasks' user engagement.**

*There are numerous tasks that need to refine or develop their user engagement. The UIC can track the user engagement methods the task teams' employ to analyze and document successful techniques.*

Sub-recommendations:

- UIC develop methods for UIC members on tasks teams to report on the user engagement activities of the task.
- UIC establish a schedule for members to report on the tasks, with the amount of reporting depending on the level of involvement in the task.
- UIC appoint one of the Co-Chairs to provide leadership on UIC members' support to the task teams. This Co-chair can work with UIC members to track progress in user engagement and identify and document successful techniques.



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## *Task Sheet Analysis – User Engagement*

### **Tasks of Likely UIC Interest and Potential UIC Roles**

Appendix B of the report lists the tasks of likely interest to the UIC and the potential UIC role in those tasks.

Table B-1: Transverse Area Tasks

Table B-2: SBA Tasks



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## *Task Sheet Analysis – User Engagement*

### **Discussion of Analysis, Findings, and Recommendations**



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## *Task Sheet Analysis – User Engagement*

### **Back-up Materials**



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## *Task Sheet Analysis – User Engagement*

### Task Sheets

The sections of a task sheet include (as of April 2009):

- Task Definition
- Leads
- Motivation/Background
- Outputs (Planned, Produced)
- Activities (Planned, Produced)
- Resources
- Capacity Building Component
- User Engagement Component
- Science & Technology Component
- Participation (a table listing people involved with the task).

For July 2009 Task Sheets, GEO added an Architecture & Data Component.

There is an optional section in which GEO Members and Participating Organizations (PO) can provide information on their individual contributions.