Institutions and Development Implementation Board - Methodology for Assessing Progress against GEOSS Targets

The aim of the Institutions and Development Board is to monitor progress of institutional and development targets of all GEOSS targets, not only of those seemingly (and traditionally) most connected with institutions and developments, such as user engagement, science and technology, capacity building and data management. A parallel aim is to make monitoring progress towards targets more explicit, by using qualitative and quantitative indicators, where possible. This leads to the application of the following methodology:

- A list of all the strategic GEOSS targets of Document 12(Rev1) of GEO-VI as general framework;
- A list of (at the moment) 15 directions of fit or cross-cutting aspects that link Institutions and Development with the strategic targets, formulated in relation to the 'to be achieved by' and 'to be demonstrated by' sections of the same document;
- Quantitative and qualitative indicators to assess progress per cross-cutting aspect, each related to the respective contributing task.

The following cross-cutting aspects have been identified (presented in random order):

- 1. Establishment of LINKAGES across SBAs.
- 2. Establishment of PARTNERSHIPS within SBAs.
- 3. DEVELOPMENT of INFORMATION and DATA for socio-economic benefit and decision-making.
- 4. USE of earth observation products and services, integration of Earth observation systems in decision-making.
- 5. PROMOTION of research and development, and capacity building.
- 6. Research and development for MODELs, data assimilation and algorithms.
- 7. Promote development from RESEARCH TO OPERATIONS.
- 8. SENSOR validation and verification.
- 9. Science and technology to improve OBSERVATION.

- 10. Promote INTEROPERABILITY of observing systems.
- 11.SOCIETAL needs in new RESEARCH.
- 12.Increase SYNERGIES and effectiveness of CAPACITY building programs.
- 13.Involvement of RESOURCE providers for CAPACITY building.
- 14.Full and open exchange of data, metadata and products, available with minimum time delay and at minimal cost (SHARING)
- 15. Special attention to participation of, capacity building in Earth observation in, and development of Earth observation for decision-making in, DEVELOPING COUNTRIES.

The 15 cross-cutting aspects are linked to the strategic targets and the task components. The next step is to develop quantitative and qualitative indicators. Almost by necessity these will be indicators of input rather than impact. An activity of task ID-02 is taken as an example: "build the capacity of individuals, institutions and systems to benefit and contribute to GEOSS, particularly in developing countries". This activity supports both the USE (number 4) and the DEVELOPING COUNTRIES (number 15) cross-cutting aspects.

The User Requirement Registry is used to capture the interconnectivity of Task Components, cross-cutting aspects, and their relation to the Strategic Targets. The figure below shows the example of Component 1 of Task ID-03, which addresses two of the cross-cutting issues that are linked to the Strategic Target 4. The same approach will be used by the ID-Board for all ID Tasks and is also available to the other Boards.

Quantitative indicators could be: the number and type of initiatives, the number of hits and the intensity of use of the capacity building web part of the GEO Portal. In a qualitative way, impact can be demonstrated by compelling success stories. By counting activities for and participation of developing countries separately, both cross-cutting aspects can be measured. This also applies to the SBAs in general and those where this type of activity is specifically mentioned in relation to the target, such as for example in Agriculture, Biodiversity, Health and Weather.

The analysis of the GEOSS strategic targets and the cross-cutting aspects has been done. The indicators still need to be developed in detail. Assessing progress through the proposed methodology will also support measurement of GEOSS performance indicators 13 - 18 of Document 11 of the 22^{nd} Executive Committee meeting in 2011.

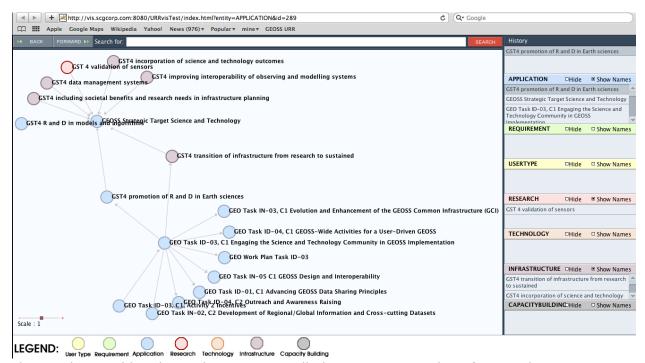


Figure: The graphics shows the current, preliminary representation of Strategic Target 4 (Science and Technology) and the cross-cutting applications and needs associated with this Target, as well as the links between ID-03 C1 and these cross-cutting aspects.