

Sub-task Number: US-09-03a

Sub-task Title: Development of Global Map for GEOSS Societal Benefit Areas

Overarching Task: Cross-Cutting Products and Services

Area: USER ENGAGEMENT

Relevant Committee: UIC

Related Targets: (to be included in 2009)

Sub-task Definition (as given in the 2009-2011 Work Plan):

Foster the use of Global Map in societal benefit areas such as Disasters, Health, Agriculture, Biodiversity and Water. Align the specification of Global Map with the requirements from the GEOSS societal benefit areas. Global Map datasets provide a full and consistent coverage of land on the Earth – at 1 km resolution. They are composed of the following thematic layers: elevation, vegetation, land-cover, land-use, transportation drainage systems, boundaries and population centers.

Leads (GEO Member or PO, Entity carrying out the work, Contact: e-mail):

Japan (GSI), Point of Contact: Yoshikazu Fukushima, ISCGM, fukushima@gsi.go.jp

Motivation/Background

Global Map version 1 was developed in 2008 and will be updated as version 2 by the end of 2012. Version 2 specifications will be discussed in the context of the GEOSS Societal Benefit Areas (SBA) with the aim of improving Global Maps usefulness for society. Decisions will be taken in October 2009. Currently, Global Map is not provided as Web services. Technology development and standardized provision of Global Map via web services is necessary to enable web applications aligned with GEO SBAs.

Outputs (e.g. products and services which result from the activities of the Task/sub-task; outlined in the form of deliverables with timelines)

Planned:

2009 Sep: Draft version 2 Specifications of Global Map will be developed and adopted in Oct. 2009.

2010 Mar: Development manuals for national mapping organizations will be prepared with specifications.

2010 Sep: Draft standard of test web service will be decided.

2011 Mar: Testing web service of Global Map version 2 will begin.

2011 Sep: Evaluations of the test web with collecting opinions from SBAs and users.

Produced (current status):

2009 Jul: 1st Draft version 2 Specifications was prepared.

Activities (operations or work processes through which resources are mobilized to produce specific outputs; outlined in the form of milestones including timelines)

Planned:

2009 Mar: Define Scope and Plan of the Sub-task.

2009 Sep: A workshop will be held in Tsukuba, Japan to discuss version 2 specifications.

2009 Oct: Draft Specifications and possibility of web map service will be discussed in ISCGM-16 in Bangkok.

2009 Dec: Questionnaire to SBAs on specifications will be sent.

Progress (current status): ...

- 2008 Dec: Questionnaire to National Mapping Organizations on specifications and web map service was sent.
- 2009 Feb 9: Outline of the US-09-03a sub-task and result of former DA-06-05 task were presented at GEO Architecture and Data Committee meeting in Kyoto. Opinions on format and process toward version 2 Specifications were raised.
- 2009 Mar-Jun: Opinions on current specifications from National Mapping Organizations (NMOs) were collected. Reports were circulated twice.
- 2009 May: Report of former DA-06-05 task was printed and sent to GEO related organizations.
- 2009 Jun 18: "Data Standards for Global Map" at the GSDI11 conference in Rotterdam was held for those interested in the meeting of INSPIRE (Infrastructure for Spatial Information in Europe) and the Global Map community, organised under the umbrella of the EuroGeographics led ESDIN (ESDI Network) project.
- 2009 Jun 19: Informal ISCGM meeting was held in Rotterdam. The schedule of drafting and possibility of adopting GML were discussed.
- 2009 Jul: 15: Draft Specifications was sent to NMOs to collect opinions.

Resources (indication of resources – e.g. financial, human – contributed by GEO Members or Participating Organizations to produce outputs)

ISCGM core organizations(GSI, Geoscience Australia, USGS, Eurogeographics etc.): Personnel to discuss version 2 specifications

National Mapping Organizations(NMOs): Personnel and financing of developing Global Map of their countries

Architecture and Data Component

1) Please briefly describe any task-related Earth observation resources (data set, system, website/portal) and any related Web Service interfaces that are contributed to GEOSS. State whether these items are or will be registered with the GEOSS Component and Service Registry for access via the GEO Web Portals, and whether any associated standards or other interoperability arrangements will be registered in the Standards and Interoperability Registry.

Global Map was registered with GEOSS Component and Service Registry in July 2008.

2) Please also describe what data and information your activity/system needs that you would request to be accessible through the GEOSS Common Infrastructure.

Capacity Building Component

(capacity building is defined to include the development of capacity related to: (i) Infrastructure and technology transfer (Hardware, Software and other technology required to develop, access and use EO); (ii) Individuals (education and training of individuals to be aware of, access, use and develop EO) and (iii) Institutions – building policies, programs & organizational structures to enhance the value of EO data and products).

1) In accordance with the above definition does this Task have a capacity-building component? If so, please provide a short description of this component including a description of end users.

Capacity-building components for NMOs. Development manuals for national mapping organizations will be prepared with detailed specifications. Capacity-building components for end users. Collection of good examples of SBAs in developing countries could be capacity-building components. However, method of making summary for these examples would need more considerations and experiences. Therefore, it would be difficult to achieve the capacity-building components by 2011.

2) Have any additional CB needs for this Task been identified? Please provide a short description.

User Engagement Component

(please briefly describe to what extent end users are engaged in this Task and influence the nature of the outputs produced)

Opinions of users of Global Map will reflect to new Global Map specifications. New attributes of geographic features, methods of use of data such as standardized web mapping component.

In June 2009, ISCGM and WHO agreed to pay efforts to try making Global Map and SALB specifications as close as possible. WHO is an important components of user engagement.

Science and Technology (S&T) Component

1) Please briefly describe the elements of scientific research or technological development contained in this Task.

2) In relation to the S&T component(s) of this task, please describe gaps, priorities, continuity needs, barriers, scientific expertise and additional resource needs (this information will be used for developing a gaps and needs assessment in Task ST-09-01)

Members and POs' Contributions to Outputs and Activities above:

(Input is optional. This section gives the chance to Members and POs to provide more details (3-5 lines) on their individual activities, making a clear connection with the Outputs and Activities outlined above).

Germany

Bundesamt für Kartographie und Geodäsie (BKG): Data specifications for global reference data.

Japan

GSI: To collect the further demands for enhancing the current Global Map availability and improve the Specifications. Develop a new Global Map based on the new specifications in cooperation with the task contributors.

Participation (Table to be filled in 2009):

Type	Member or PO	Representing	Contact Name	EmailAddress
Lead(PoC)	Japan	ISCGM, GSI	Yoshikazu Fukushima	fukushima@gsi.go.jp
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