

**First Forum
Seoul, Republic of Korea, 24-26 October 2011**

Capacity Building Experiences in Global Mapping *

Submitted by: Mr. Yoshikazu Fukushima, Secretary General, International Steering Committee for Global Mapping



Capacity Building Experiences in Global Mapping

1st High Level Forum on Global Geospatial
Information Management

24-26 October, 2011

Seoul, Republic of Korea

Yoshikazu FUKUSHIMA

Secretary General of

International Steering Committee for Global Mapping

What is Global Map ?

- ❖ Digital Geographic Dataset
 - ❑ Covering the global land area
 - ❑ Spatial Resolution: 1:1,000,000 or 1km
 - ❑ Unified specifications
 - ❑ Easily accessible with marginal costs
- ❖ Objectives
 - ❑ Sustainable development .. Rio Summit
 - ❑ Disaster response
 - ❑ Climate Change



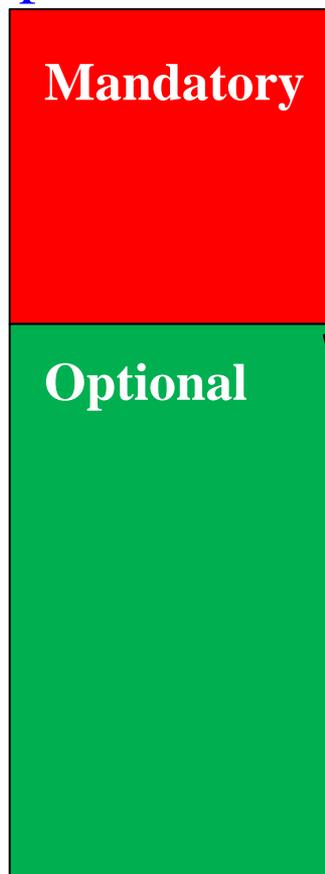
Global Mapping project(1)

- Who make Global Map? -

- ✿ **Each National Mapping Organization (NMO)** is responsible for developing Global Maps for each country.
 - ❏ Supported by NMOs, AID organizations and companies.
 - ❏ Vector : 79 countries/regions NMOs developed
 - Boundary, Drainage, Transportation & Population Center
 - ❏ Raster : 47 NMOs developed one or more layers
 - Elevation, Land Cover, Land Use & Vegetation
- ✿ **Global Datasets**
 - ❏ Elevation (USGS), Land Cover & Vegetation(GSI)

Global Mapping project(2)

Specifications



- Decision process on Specifications -
Adopted ISCGM in 2009

Mandatory

= each NMO shall develop

Optional

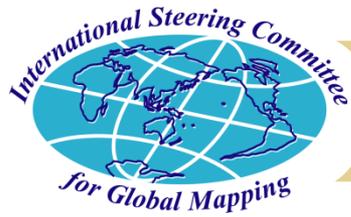
= decided by each NMO

1. Principles on adopted items.
 - ⊕ Users' needs survey
 - ⊕ Average Needs raised by NMOs > 50%
and
 - ⊕ Average Capacity of NMOs > 50%
2. Reducing duplication with other project.
New features and/or attributes can be an **option**. They will be reviewed in future.
ex. UN-SALB code, (UN Map Specifications)



Capacity Building Programs

- ⊕ **Group Training** Course on Global Mapping
Conducted by JICA*, implemented by GSI of Japan
- ⊕ Global Mapping **Partnership Program**
Coordinated by MLIT**, cooperated by JICA
- ⊕ Equipment **Grant** Program
By ESRI & Intergraph
- ⊕ **Tools** on Global Mapping for Quality Improvement
by GSI



JICA Global Map Training Course

- Implemented by GSI, Japan -

1994 – 2011 held annually

60 countries, 106 participants from NMOs

Duration: 2 and half months

Output is **simple**: Global Map of 43 countries
has been developed by NMOs
participated the training course



Technology to be transferred – **clearly focused**

Developing Method (GIS, RS, SDI, standards, etc.)

Planning of Global Mapping of the country

Outcome of Training – **easily understandable for society**

because Global Map can be used by everyone



JICA Group Training Course

- Lessons Learnt -

- Capacity on Global Mapping is steadily strengthened
Ex. of 2011 JICA course
Global Map version 2 of two countries were released during the training (Serbia and Senegal)
- Mapping tools based on standards are useful for training
ISO/OGC standards help quick achievement of training.
Common terminology, common technology, ... on SDI
- Some training participants prefer more ICT training
Web page management, WMS ...
- Output may depend on existing capacity
Support to Africa is important



Global Mapping Partnership Program

Held 6 times during 2002 – 2008
by MILT, Japan and JICA



25 countries, 86 participants from NMOs in Africa

Duration: a few days

Location: Kenya & Senegal

Output is **simple**: Participation to Global Map

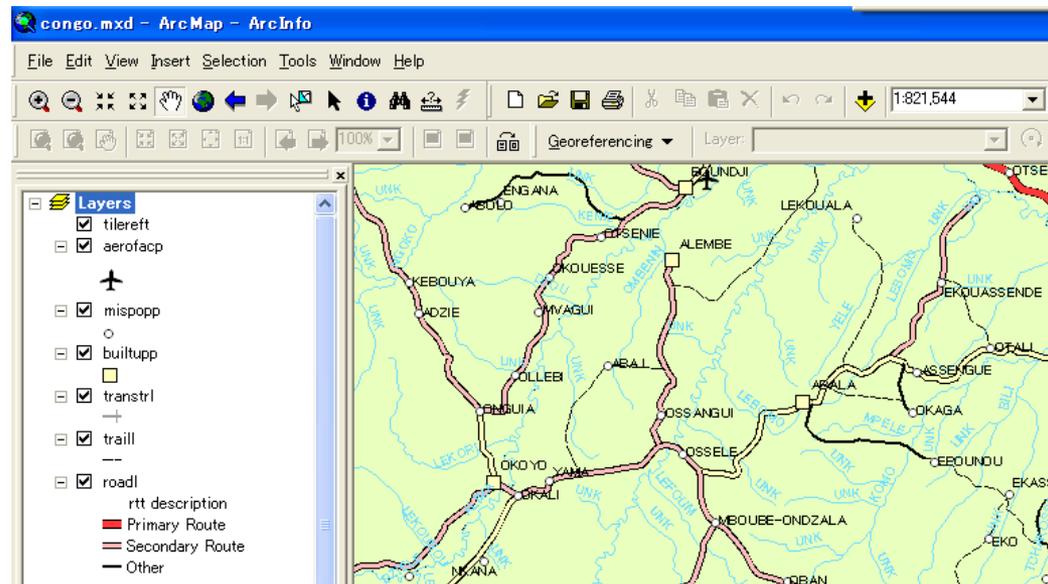
=> 23 countries participated Global Map

=> 12 countries developed Global Map

Grant Program

- ESRI grant
- Intergraph grant

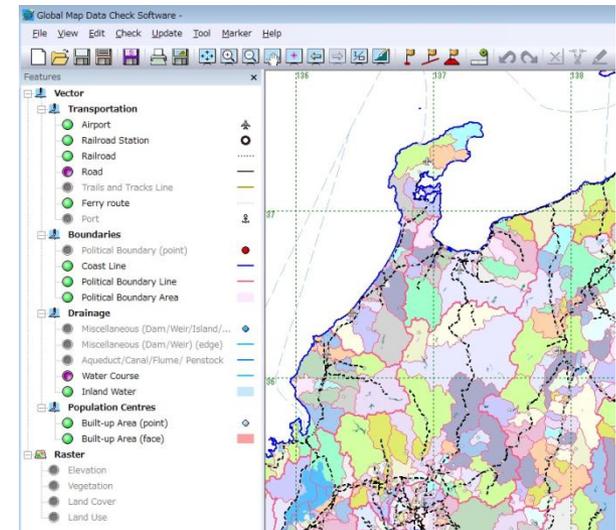
Grant program helped NMOs to develop Global Map of some countries.



Tools developed for Global Mapping

- *Based on Resolution of UN-RCC Americas (2009)*
Further recognizing the efforts of the *Global Mapping* project in encouraging ... *providing spatial data of high quality,*

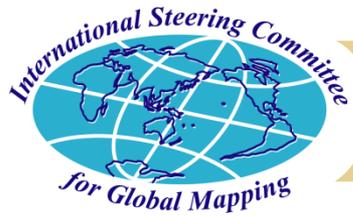
- **Tools** have been developed by GSI, Japan and being distributed to NMOs for internal use since 2010
 - > **Global Map Data Check Software**
... functions will be added in March 2012
 - > **Global Map Metadata Editor**
(including Spanish & French manual)





Capacity building is a method and is not purpose of Global Map.

- ❑ Users' benefit will begin when Global Map is available.
If the NMO cannot develop Global Map =>
Need of development by other country
- ❑ Capacity building is enough for Global Mapping?
(ex. GSI developed 22 countries with close cooperation to respective NMO.
Now, **capacity building on updating technology** is important.)



Conclusion and Future Plan

❏ Long term capacity building is important.

1. Tools for 1:250,000 Global Map

- > Updating and Quality improvement using satellite imagery
- > Capacity building using the tool

2. To introduce capacity building on ICT

More advanced technology to develop Global Map
Web page management & WMS



Thank you

<http://www.iscgm.org>

sec-iscgm@gsi.go.jp