

*Presentation to:
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Development of the Global Map - *National and Cross- National Coordination*

*Presented by:
R. O'Neil
Canada Centre for Remote Sensing
oneil@ccrs.nrcan.gc.ca
On behalf of:
International Steering Committee for Global Mapping*

The Global Map

- geospatial framework data of the Earth's land areas.
- in which to place environmental, economic and social information in its geographic context.
- a way for individual countries to choose how they will be represented in a global data base.

History

- Early attempt in early 1900's failed.
- promoted by Japan in early 1990's.
- first meeting in 1996.

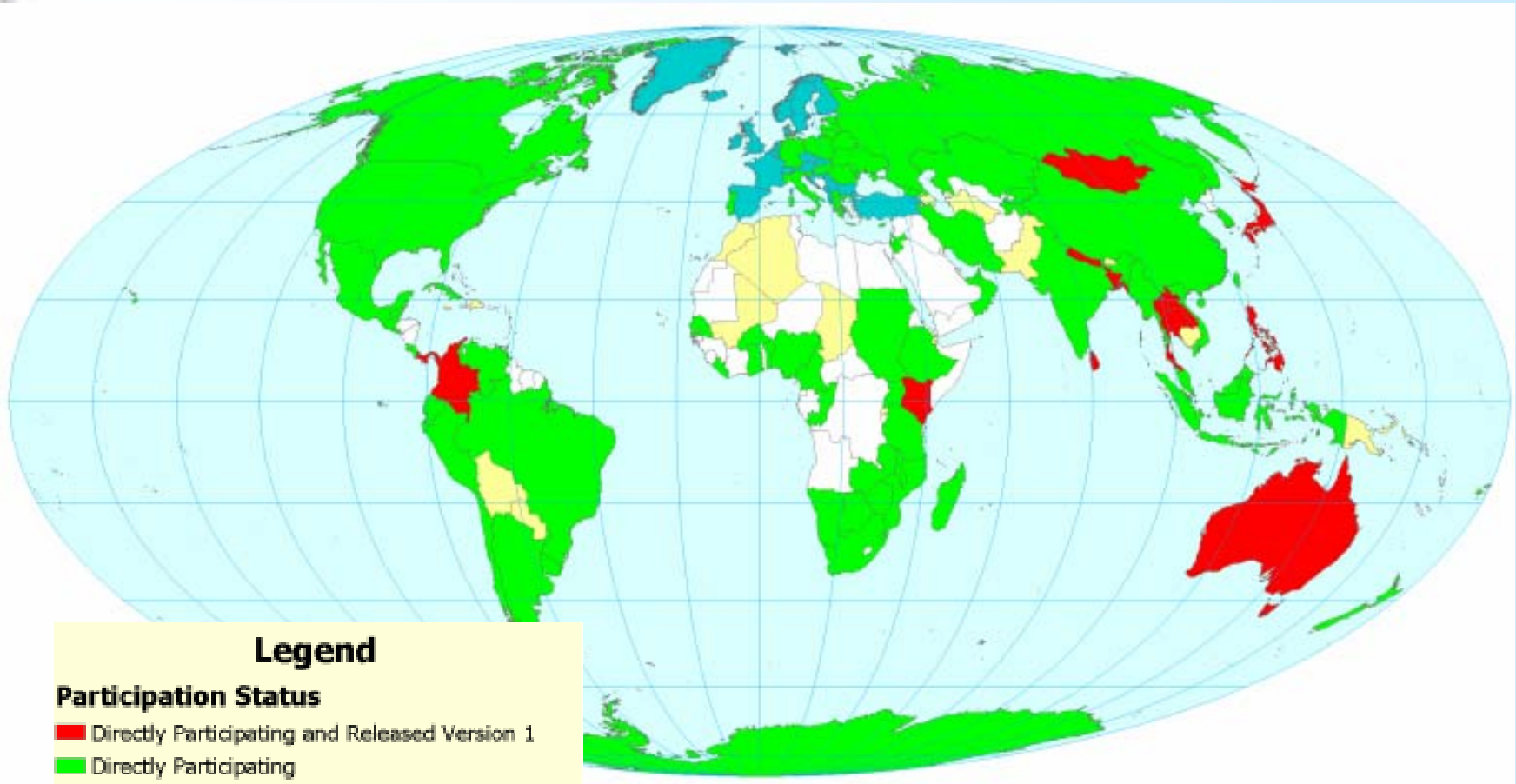
International Steering Committee for Global Mapping (ISCGM)
~ 17 countries + observers

National participation in Global Map

Status	Number of countries
Participating	126
(Participating directly)*	(102)
Considering	18
Global Map released	12

*due to organizations building regional contributions to Global Map (e.g. EuroGeographics)

Participation in Global Map (Sept. 2002)



Legend

Participation Status

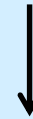
- Directly Participating and Released Version 1
- Directly Participating
- Indirectly Participating through EuroGeographics
- Considering
- Not Participating
- Ocean

International Steering Committee for Global Mapping

8 layers in data base

- administrative boundaries.
- drainage.
- transportation.
- population centres.
- elevation.
- land cover.
- land use.
- vegetation cover.

Initial data sets



Vector data sets – VMap
Level 0 – 1:1M scale
(NIMA)

Raster data set –
GTOPO30 30 arc sec
(USGS)

Raster data sets – Global
land cover data base
(USGS)

Next steps

- correct errors in data sets:
 - geographical.
 - technical.
- validate land cover data sets.
- fit raster data and vector data sets together.
- submit to ICGM Secretariat for quality assurance and publication on web:
 - licence for commercial applications.

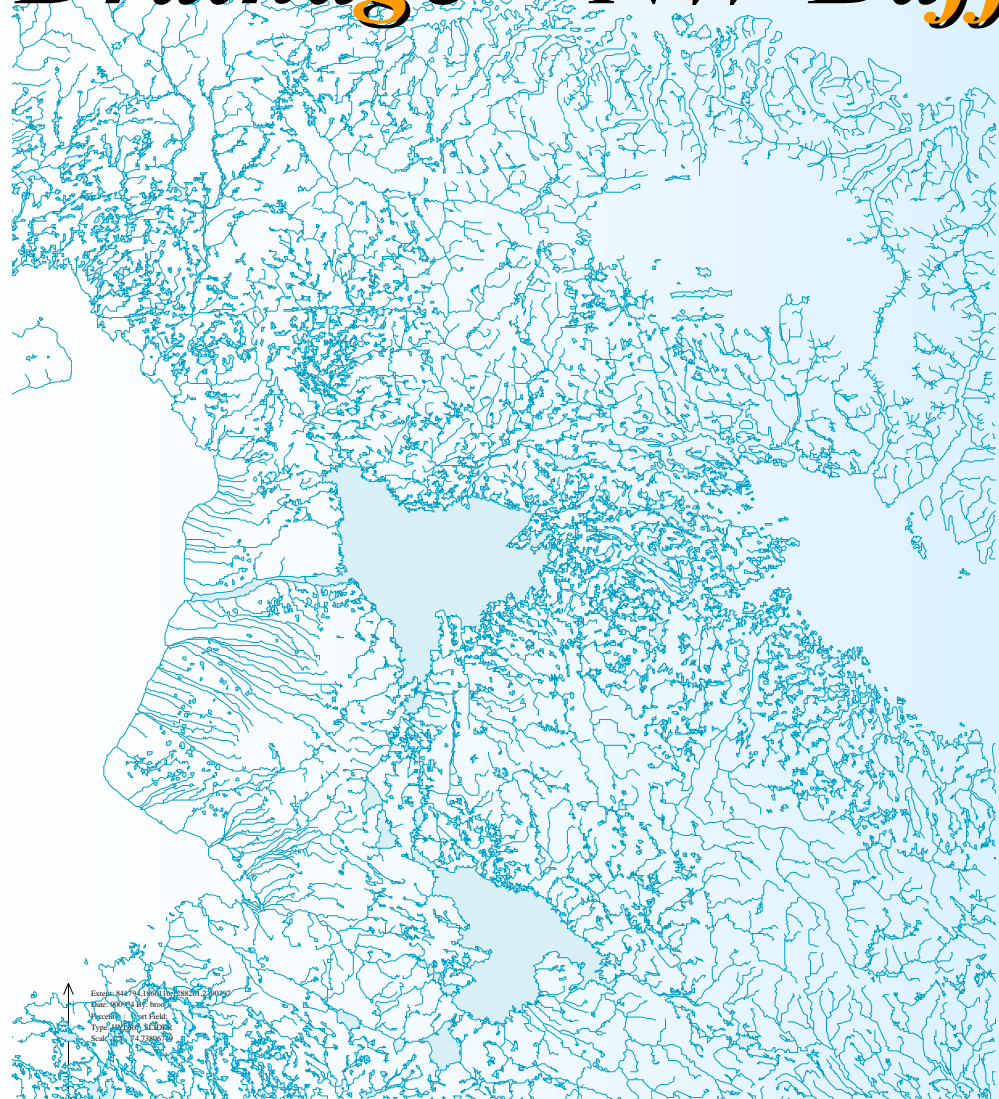
Drainage – NW Baffin Island (1)



Selection of
Hydrology on
Baffin Island

100%

Drainage – NW Baffin Island (2)



Selection of
Hydrology on
Baffin Island

75%

Drainage – NW Baffin Island (3)



Selection of
Hydrology on
Baffin Island

10%

Drainage – NW Baffin Island (4)



Selection of
Hydrology on
Baffin Island

2%

Issues to be overcome (1)

- “capacity” within National Mapping Agencies:
 - countries (Japan, Columbia) are willing to assist other countries in preparing Global Map contribution.
 - ESRI grant of software and training to prepare national map and put it into the Global Spatial Data Infrastructure.
 - similar program by Intergraph to provide software and training to exploit Open GIS Consortium protocols.
- 1:1M scale is too small for many island nations.
 - permit increased/variable data density (~ larger scale) within Global Map.

Issues to overcome (2)

- VMap level 0 deemed not robust enough for regional/local applications:
 - derive from new, developing national base (USA – National Map).
 - major correction effort, replace with new data (Canada).
 - consistent representation for Europe (EuroGeographics).
- Data distribution policy:
 - free, unrestricted for non-commercial use.
 - licence (nominal fee) by data provider for commercial use.
- national boundaries remain sensitive particularly in developing countries.

A major success at WSSD

- World Summit on Sustainable Development:
 - ISCGM promotes development and use of Global Map.
 - Global Map and applications mentioned in implementation plan.

Towards a second generation Global Map

- to enable greater participation and hasten completion while making it easier to assemble and use for global, regional, national and local applications.
- considerations:
 - permit variable data density (scale).
 - permit native data structures and formats used in common commercial GIS.
 - distributed (rather than centralized) access.
 - additional thematic layers.
 - include ocean bathymetry and thematic information.

ISCGM Secretariat

International Steering Committee for Global Mapping

c/o Geographical Survey Institute
Tsukuba, Japan

sec@iscgm.org

www.iscgm.org