



UN-GGIM: Global Geodetic Reference Frame (GGRF) for Sustainable Development



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SIRGAS 2015 Symposium: Universidad Nacional Pedro Henríquez Ureña, Santo Domingo, November 18, 2015



UN-GGIM

United Nations Initiative on
Global Geospatial Information Management

"Positioning geospatial information to address global challenges"

ggim.un.org

UN Resolution Survey on GGRF Development of a Roadmap

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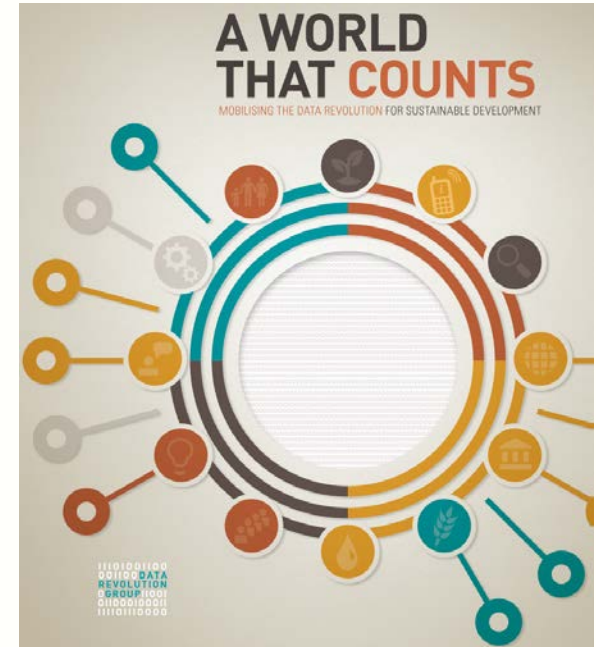
"Positioning geospatial information to address global challenges"

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To benefit People and Planet



Sustainable Development Goals



The First UN geospatial Resolution (1)



Photo: Kyoung-Soo Eom

General Assembly, 26 February 2015 (A/RES/69/266)



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The First UN geospatial Resolution (2)

United Nations A/RES/69/266



General Assembly

Distr.: General
11 March 2015

Sixty-ninth session
Agenda item 9

Resolution adopted by the General Assembly on 26 February 2015

[without reference to a Main Committee (A/69/L.53 and Add.1)]

69/266. A global geodetic reference frame for sustainable development

The General Assembly,

Reaffirming the purposes and principles of the Charter of the United Nations,

Reaffirming also its resolution 54/68 of 6 December 1999, in which it endorsed the resolution entitled “The Space Millennium: Vienna Declaration on Space and Human Development”,¹ which included, inter alia, key actions to improve the efficiency and security of transport, search and rescue, geodesy and other activities by promoting the enhancement of, universal access to and compatibility of space-based navigation and positioning systems, including Global Navigation Satellite systems,

tion the **establishment of a working group** by the Global Geospatial Information Management to develop a framework that addresses key elements relating to the development of a global geodetic reference frame;

invites Member States and relevant international organizations to provide technical assistance, especially for capacity building in developing countries, with the aim of ensuring the advancement of the global geodetic reference frame;

invites Member States to **implement open sharing of geodetic data, on a voluntary basis**, to contribute to the global geodetic reference frame through relevant national mechanisms and in coordination with the International Geodetic Reference Frame;

invites Member States to **commit to improving and maintaining geodetic infrastructure** as an essential means to enhance the accuracy and reliability of geospatial information;

invites Member States to **engage in multilateral cooperation that avoids duplications** towards the development of a more robust global geodetic reference frame;

6. *Further invites* Member States to **develop outreach programmes** that make the global geodetic reference frame more visible and understandable to society.

*80th plenary meeting
26 February 2015*



GGRF UN Resolution: Key objectives

- Develop a global geodetic roadmap for the GGRF
- Global cooperation in providing technical assistance in geodesy for those countries in need to ensure the development, sustainability and advancement of a GGRF
- Implement open geodetic data sharing
- Improve and maintain national geodetic infrastructure
- Enhanced multilateral cooperation that addresses infrastructure gaps and duplications globally
- Improved Outreach to make the GGRF more visible and understandable to society



A significant response rate to GGRF survey

Regional distribution:

North America: 2 (50%)

South America: 7 (54%)

Caribbean: 8 (36%)

Europe: 32 (67%)

Middle East: 3 (14%)

Asia: 11 (35%)

Pacific: 4 (20%)

Africa: 17 (27%)

92 responses from 84 countries



Photo: Anne Jorgensen



Survey conclusion: Global cooperation is key

- Key elements to achieving a sustainable GGRF
- Governmental and country commitment and funding
- Common standards
- International obligations

- Key elements for development of GGRF
- Maintain and build infrastructure
- Common standards
- Internationally coordinated policies



A roadmap for the enhancement of geodesy

- Governance
- Infrastructure
- Policy, standards and conventions
- Education, training and capacity building
- Communication and outreach



Photo: Andrick Lal, SPC, Fiji



Communicate GGRF



www.unggrf.org

UNGGRF
@UNGGRF

UN-GGIM Global Geodetic Reference Frame (GGRF) Working Group. Recognizes growing demand for positioning service, GGRF and global cooperation within geodesy.

unggrf.org

8 bilder og videoer

Tweets Tweets og svar Bilder og videoer

UNGGRF @UNGGRF · 1 t

"Looking forward to seeing this #GGRF roadmap", says Peni Suveinakama, Fiji UN mission @UNGGIM #ggim5 Side event.

Folk å følge · Oppdater · Vis alle

- Maria Cabello @mjcabello · Følg
- Bill Oates @wpoates1 · Følg
- simon wheeler @simonwha... · Følg

Finn venner

Trender · Endre



Communication Strategy

GOAL

A roadmap for enhancement of the Global Geodetic Reference Frame and multilateral cooperation on geodesy

Communication challenge

Make the UN-GGIM delegates, decision makers and geodetic opinion leaders to understand how important it is to communicate the GGRF roadmap in own regions and countries in order to achieve a sustainable multilateral collaboration.

Communication objectives

Reach UN-GGIM delegates, decision makers, geodetic opinion leaders to communicate the importance of the GGRF roadmap and why sustainable global cooperation on geodesy is key to meet the objectives of the GGRF resolution.

Ambitions

- Support and enthusiasm for GGRF roadmap and sustainable global cooperation on geodesy.
- UN-GGIM 6th Session endorses the GGRF Roadmap in August 2016.

Communication platform

Basis

- Geodesy is a global science. Through geodesy we measure and define the Earth's shape, motion, rotation, gravitational field and changes to these.
- Geodesy is fundamental for monitoring changes to the Earth including the continents, ice caps, oceans and the atmosphere. Geodesy is also fundamental for mapping, navigation and universal timing.

GGRF

- Geodesy provides a very accurate and stable coordinate reference frame for the whole Earth. This coordinate system allows you to relate measurements taken anywhere on the Earth with similar measurements taken at a different time or location.
- Global Geodesy is dependent on contributions from nations all around the globe. We aim to change from the current system where contributions to the development of a global geodetic reference frame are undertaken on a "best efforts" basis to one where they are made through multilateral cooperation under a UN mandate.

Strategy

- Capture experiences and best practices for the global geodetic reference frame, particularly in developing countries, through newsletter distribution and social media.
- Develop new tools - and use the communication tools including newsletters, unnggrf.org, @unnggrf-twitter account and GGRF-video for enhancement of global cooperation on geodesy.
- Communicate the importance of the UN resolution and the importance of their contribution to the GGRF roadmap among the UN-GGIM nations and regions and ask them to spread the message in their country through communications tools including the newsletters, www.unnggrf.org, social media and GGRF-video.
- Make use of international science networks and geodetic opinion leaders to communicate the importance of geodesy to their respective science domain.

UN-GGIM delegates

Develop good GGIM ambassadors who will provide advocacy for the UN resolution and the implementation of the GGRF roadmap in their countries and regions.



Decision makers/ politicians

Increase the knowledge about the UN resolution and the ongoing work with the GGRF roadmap. Explain that joint international effort is needed in order to meet the objectives of the GGRF resolution.



Opinion leaders in international research/science networks

Influence the opinion leaders to share the message about the importance of the UN resolution and the GGRF roadmap.



Target groups

Messages

Tools

UN resolution, survey and roadmap

- UN General Assembly adopted its first resolution - "A global geodetic reference frame for sustainable development" - recognizing the importance of a globally-coordinated approach to geodesy. The discipline focuses on accurately measuring changes in the shape, rotation and gravitational field of planet Earth.
- A global survey identified that a joint international governance effort is needed in order to meet the objectives of the GGRF resolution.
- A Working Group on the Global Geodetic Reference Frame has begun working on the roadmap to build a framework to implement the Global Geodetic Reference Frame.

Timeline 2015 - 2016

2015

Sept-October

- Working Group GoTo/telecon-meetings 15 September 15 October
- UN-GGIM regional meetings and involvement: Europe incl EUREF and Asia Pacific
- Revised standard presentation on UN GGRF
- Revised communication strategy
- Revised timeline

Nov-December

- Working Group GoTo/telecon-meetings: 23 November + 14 Dec. (San Fran)
- UN-GGIM regional meetings and involvement: Americas incl SIRGAS and Africa incl AFREF
- Consultations IAG, FIG, GEO, CEO before meeting in San Francisco
- Lead authors and groups writing
- Newsletter
- 1. draft of roadmap in progress at San Francisco meeting

2016

January

- Working Group GoTo/Telecon-meeting
- Send out 1. draft roadmap mid/ end January (after the discussions in San Francisco and the regional input and consultations)

February

- Working Group GoTo/Telecon-meeting + WG-meeting for those present at IGS, Sydney?
- Deadline for feedback from regions and others on 1. draft

March-April

- Working Group GoTo/Telecon-meetings
- Working Group to combine feedback and build cohesive roadmap document

May

- Report and GGRF Roadmap to UN-GGIM 6th session
- Prepare A3 Roadmap-glossy version for UN-GGIM 6th session (key elements)

June

- Newsletter for UN-GGIM 6th session
- GGIM-secretariat posts the report on ggim-web

August

- UN-GGIM 6th session endorses the GGRF Roadmap in August, New York



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Way forward

- Final roadmap endorsed at the UN-GGIM 6th session in early August 2016
- Outcomes described by UN General Assembly resolution are included
- Involvement of UN-GGIM regions and consultation with IAG, FIG, GEO, CEOS in progress
- Draft will be sent out for comments
- Working Group to combine feedback and build cohesive document
- Roadmap deadline in May 2016





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INFORMATION MANAGEMENT

Thank you, very much.



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