The Global Geodetic Reference Frame

Goal/Challenge: determine locations & deformations with an improved precision, Everywhere & Anytime on Earth, to satisfy societal and science requirements
UN resolution - Global Geodetic Reference frame

- UN-GGIM recognises the growing demand for more precise positioning services, the economic importance of a global geodetic reference frame and the need to improve the global cooperation within geodesy.

- The UN-GGIM decided at its 3rd session in July 2013 to formulate and facilitate a resolution for a global geodetic reference frame (GGRF).

- The Working Group on the GGRF was created in January 2014.

- Draft Terms of Reference, Resolution and Concept note have been developed and submitted at WG report.

- UN-GGIM now has the opportunity to progress the resolution to the next level.
Global Geodetic Reference Frame

Earth System Science  Location Information  Societal Applications
Why is it important?

• Enables a better understanding of the world we live in
• Facilitates better decision making
• Enables much more sustainable management and development of earth resources
• Allows for safer air, land and sea navigation
• Enables spatial data interoperability
• Creates efficiencies in many industries and societal endeavours
Questionnaire (100+ responses)

• 88% of responses indicated that the data, products and services of the international global geodetic community (e.g. ITRF, IGS orbits,…) were either critical or had high importance in their country

• Only 61% of responding countries are willing/able to freely share GNSS data to the global community
Resolution: Global cooperation

• 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
Recommendations

• Note the efforts of the working group and endorse the Terms Of Reference
• Endorse the intent of the draft resolution and concept note
• Encourage the working group, with assistance from the secretariat, to progress the resolution to ECOSOC and the GA
• Encourage members to seek mission support for the progression through ECOSOC to the GA