

United Nations
Committee of Experts on Global Geospatial Information Management
Subcommittee on Geodesy

Terms of Reference

Background and Purpose

Recognizing:

1. The vital importance of a sustainable and accessible Global Geodetic Reference Frame (GGRF) for integrating geospatial information and quantifying Earth System changes;
2. The importance of the GGRF as a foundation for measurement systems that will assist with the monitoring of the Sustainable Development Goals indicators;
3. The success of the UN-GGIM Working Group on the Global Geodetic Reference Frame (GGRF) for Sustainable Development;
4. The importance of the UN General Assembly adoption of resolution 69/266 in February 2015, entitled 'A Global Geodetic Reference Frame for Sustainable Development';
5. ECOSOC resolution 2016/27 which enhanced the mandate of UN GGIM; and
6. The critical importance of an appropriate intergovernmental governance mechanism for global geodesy in order to effectively implement the GGRF Road Map and provide the required stability and longer-term planning for the global geodetic reference frame;

The United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM), at its sixth session in August 2016 in New York, resolved to create a permanent Subcommittee on Geodesy.

Objectives

The principal objectives of the Subcommittee on Geodesy are to:

1. Provide an intergovernmental forum, with equitable regional representation, for cooperation and exchange of dialogue on issues relating to the maintenance, sustainability and enhancement of the GGRF;
2. Develop an implementation plan for the GGRF Road Map;
3. Develop, as part of the implementation plan, a concept for an appropriate governance mechanism in order to effectively implement the road map for the global geodetic reference frame, particularly with respect to the governance mechanism being owned and driven by Member States, with the aim of eventually implementing the proposed mechanism;
4. Encourage open sharing of geodetic data and information that contribute to the implementation of global, regional and national reference frames, and their inter-relationship;
5. Advocate for guidelines and standards to advance the interoperability of geodetic systems and data;

6. Address various technical, institutional and policy issues related to the implementation of a GGRF;
7. Maintain a dialogue between UN-GGIM Member States and the Non-government international geodetic community;
8. Pursue the implementation of a GGRF Roadmap in coordination with the International Association of Geodesy (IAG) and the International Federation of Surveyors (FIG);
9. Encourage and provide mechanisms for capacity development and knowledge transfer in the field of geodesy among Member States;
10. Provide, through outreach, advocacy for the GGRF as the basis upon which all spatial data and positioning activities should be founded; and
11. Continue outreach and communication, particularly with appropriate regional initiatives and activities.

The Subcommittee on Geodesy will build on initiatives being undertaken within the global geodetic community in developing its approach to achieving these objectives.

Membership and Governance

The Subcommittee on Geodesy shall be comprised of:

1) Members:

Delegates from national governments who are appointed by the UN Member States to the regional UN-GGIM entities, and subsequently nominated by the executive of the regional entities on a pro-rata basis to serve on the Subcommittee and to be reviewed every two years. The review will be based on actual participation and contribution from the members, i.e. if no action they can be replaced. Asia Pacific Region (10 members); America's (7 members); Arab States (5 members); Europe (9 members); and Africa (9 members); Total (40 members). In making the nominations the regional entities should ensure appropriate inclusion of both developing and developed Member States.

In appointing their national representatives, Member States should seek to designate representatives with specific knowledge of and responsibility for global, regional, continental or national geodetic reference frames for positioning, navigation or timing applications. The Subcommittee will also seek to utilize Member State skills on management, administration and communications in delivering key elements of its work program. Consideration should also be given to how the national representatives coordinate inputs from all interested parties within the national system including, but not limited to, national mapping agencies, national and international space agencies, and government research institutes.

2) Associate Members:

- a. Experts from national governments who are appointed by Member States, in addition to those nominated by the regional entities as per 1) above; and
- b. Representatives from the International Association of Geodesy (IAG), and the International Federation of Surveyors (FIG).

3) Observers:

- a. Other international organizations may be invited to participate in the Subcommittee as observers.
- b. Other geodetic experts not directly representing Member States may be invited to participate as observers.

The Subcommittee will elect 2 co-Chairs to serve for 2-year periods, with chair elections occurring annually, such that one new co-Chair is elected each year in order to secure continuity. The co-Chairs will be selected from the members as defined in 1) above, such consideration of the equity between developed and developing countries occurs.

The Subcommittee on Geodesy will report to the UN Committee of Experts on Global Geospatial Information Management (UN-GGIM).

Liaison

The Subcommittee on Geodesy will liaise with other international organizations that have an interest in the GGRF, including:

- The Office for Outer Space Affairs as the executive secretariat of the International Committee on Global Navigation Satellite Systems (ICG).
- The Global Geodetic Observing System (GGOS), and the IAG services (IERS, IGS, ILRS, IVS, IDS, etc.) and associated entities (e.g. BIPM).
- The European Space Agency (ESA).
- The Group on Earth Observations (GEO) and the Global Earth Observing System of Systems (GEOSS).
- The Committee on Earth Observation Satellites (CEOS).

Meetings and Secretariat

The Subcommittee on Geodesy will convene annually for a dedicated meeting, generally hosted by a Member State, or occurring at a UN Regional commission premises. This annual meeting will be technical in nature and will be several (2-3) days in duration, allowing ample time for business related items including the formal election of chairs, and technical discussions of relevance to the Subcommittee and members.

The Subcommittee will otherwise utilize telecommunication options wherever possible to advance its work program. They will also meet in conjunction with appropriate UN or other meetings where topic matter experts may be present.

The UN-GGIM Secretariat will support the Subcommittee co-Chairs to coordinate, monitor and report on the activities of the Subcommittee.

(June 2017)