

# **Call for Proposals for the GGOS Bureau for Standards and Conventions**

(Version: July 7, 2008)

## **INTRODUCTION**

The Global Geodetic Observing System (GGOS) was established by the International Association of Geodesy (IAG) in July 2003 as a project of the IAG. In April 2004 the IAG, represented by GGOS, became a participating organization of the Group on Earth Observations (GEO), in May 2006 GGOS was accepted as a member of the Integrated Global Observation Strategy Partnership (IGOS-P) and in July 2007 at the IUGG General Assembly GGOS became an official component of the IAG, i.e., the Global Geodetic Observing System of the IAG.

GGOS is the contribution of geodesy to a global Earth monitoring system. In particular, it provides the metrological basis and the reference systems and frames, which are crucial nowadays for all Earth observing systems. GGOS is built on the IAG Services (IGS, IVS, ILRS, IDS, IERS, IGFS, etc.) and the products they derive on an operational basis for Earth monitoring making use of a large variety of space- and ground-based geodetic techniques such as Very Long Baseline Interferometry (VLBI), Satellite and Lunar Laser Ranging (SLR/LLR), Global Navigation Satellite Systems (GNSS), Doppler Orbitography and Radiopositioning Integrated by Satellite (DORIS), altimetry, InSAR (Interferometric Synthetic Aperture Radar) and gravity satellite missions, gravimetry, etc. All of these observation techniques are considered integral parts of GGOS, allowing the monitoring of the Earth's shape and deformation (including water surface), the Earth's orientation and rotation and the Earth's gravity field and its temporal variations with an unprecedented accuracy. The observed quantities give direct evidence of many global processes that have a crucial impact on human society such as earthquakes, volcanism, floods, sea level change, climate change, water redistribution, mass balance of the polar ice sheets, etc.

GGOS relies on the observing systems and analysis capabilities already in place in the IAG Services and envisions the continued development of innovative technologies, methods and models to improve our understanding of global change processes. GGOS provides a framework that ranges from the acquisition, transfer and processing of a tremendous amount of observational data to its consistent integration.

With specific Calls for Proposals (CfP), GGOS intends to complement its present structure (see [www.ggos.org](http://www.ggos.org)) with the addition of the following four components (see Figure 1 below):

- Coordination Office and GGOS Portal
- Bureau for Standards and Conventions
- Bureau for Satellite Missions
- Bureau for Networks and Communication

This document contains the details on the Call for Proposals for the GGOS Bureau for Standards and Conventions.

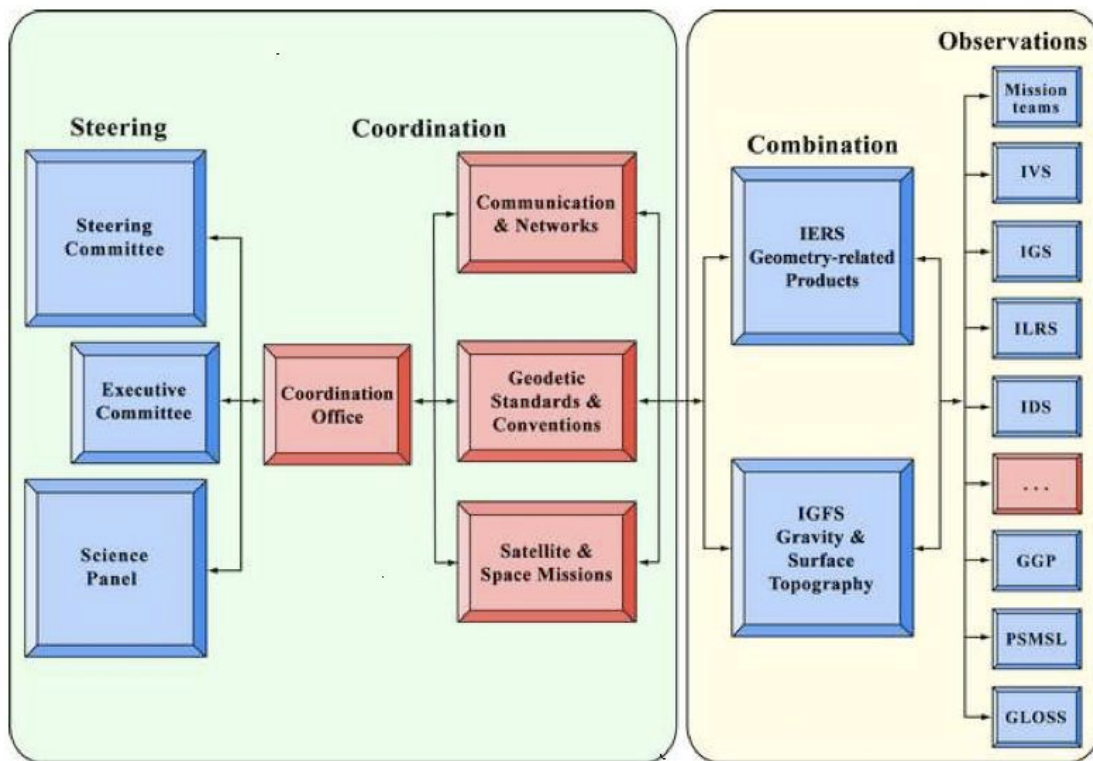


Figure 1: Structure of the GGOS with the four new components, for which a Call for Proposals is issued, in red.

## THE BUREAU

### Charter

- Keep track of the strict observation of adopted geodetic standards, standardized units, fundamental physical constants, resolutions and conventions in all official products provided by the geodetic community. This includes the regular control of data sets released by the geodetic services and comparison of the consistency of heterogeneous products generated by different services (geometry and gravimetry oriented, respectively).
- Review, examine and evaluate all actual standards, constants, resolutions and conventions adopted by IAG or its components, and recommend its further use or propose the necessary updates; identify eventual gaps in standards and conventions and initiate steps to close them; propose necessary resolutions by the IUGG and/or IAG Councils. Examples for urgently needed resolutions refer to unified global vertical systems (world height system), standard atmosphere parameters, e.g., for geometric and gravimetric deformation, and standards for the hydrological system (groundwater, humidity, etc.).

## **High Level Tasks**

- Maintain regular contact with all international bodies involved in the adoption of standards, resolutions and conventions.
- Propose the adoption of new standards in need, necessary changes and revisions.
- Propagate all geodetic standards and conventions in the geodetic and general scientific community and accomplish their common use.
- Revise official products of IAG with respect to the correct use of standards and conventions.
- Propagate most important standards to society in general and promote their use.

## **Organization**

- Tasks of permanent nature shall reside within the Bureau. Tasks of temporary nature may be delegated to task forces or standing committees.
- The Bureau will be headed by a director and will include a secretariat to attend to administrative, communications, data base and web support.
- The Bureau will include such expertise as is necessary to conduct Bureau business and provide guidance and oversight to the supporting entities.
- The Bureau must have official representation from all relevant IAG Services, the IAG Commissions, and the Inter-commission Committee on Theory to act as liaisons.
- Associate members may be included from external bodies involved in standards and conventions (e.g., ISO, CODATA), and neighbouring disciplines, in particular from other IUGG Associations and the International Astronomical Union (IAU), in order to guarantee the interdisciplinary consistency of standards and conventions.
- Dedicated Working Groups may be set up for specific issues dealing with particular fields of geodesy (geometry, gravimetry, or combined products). Regional or national members may be included in such Working Groups.
- The Bureau Head will be a member of the GGOS Steering Committee (pending).
- The Bureau will report regularly to the GGOS Steering Committee and to the IAG Executive Committee, and – if necessary or appropriate – to the IUGG Executive Committee.

## **Interfaces with Internal and External Entities**

The BSC is essentially based on the IAG Services. They will provide the main input for the activities, and will benefit most from the BSC output. A permanent contact between BSC and Services is therefore indispensable. There must be a routine exchange of information and results, and regular meetings with the Services' Directing / Governing Boards or Coordinating Centres, respectively.

In addition there shall be a strong interface with the institutions in charge of standards:

- International Organization for Standardization (ISO)
- International Bureau of Weights and Measures (BIPM)
- Committee on Data for Science and Technology (CODATA)

## **CALL FOR PROPOSALS**

GGOS requests proposals for the operation of the GGOS Bureau for Standards and Conventions (BSC). Proposals may include more than one organization cooperating on the activities. One organization must be identified as the lead. An organizational structure to operate the Bureau and an operational plan must be provided in the proposal. The proposal should clearly address the capabilities being offered by the institution (or institutions), its financial ability to carry them out, and appropriate points of contact.

## **RESOURCES**

The funds required for the GGOS Bureau for Standards and Conventions have to be provided by the proposing institution(s). Proposers may also solicit support from external entities in terms of financial contributions and expertise. From the proposal it should become clear that the proposing institution(s) has/have the expertise, capabilities and financial background to perform the proposed tasks.

## **TERM**

The term of this appointment will be 4 years. It may be terminated by either party with a 6 months notice. The term will be automatically renewed, unless either party gives notice 6 months prior to the end of the term.

## **PROPOSAL STRUCTURE, DEADLINE AND SUBMISSION**

The proposal should contain the following parts: title, proposing institution(s) with its/their address(es), designated Head of the new component, abstract, goals, expertise, work and schedule, responsibilities (if more than one institution involved), and allocated resources. Proposals should be concise, 4 – 5 pages in length. Proposals should be submitted electronically and by mail not later than October 15, 2008, signed by the responsible head(s) of the proposing institution(s) with the authority for the commitment of human and financial resources, to the Chair of the GGOS Steering Committee

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**SCHEDULE:**

July 15, 2008:	Dissemination of the Call for Proposals
October 15, 2008:	Due date for proposals
November 30, 2008:	Report by the evaluation committee to the GGOS Steering Committee
December 14, 2008:	Decision by GGOS Steering Committee
December 16, 2008:	Notification of proposers on proposal acceptance
January 1, 2009	Start of the GGOS Bureau for Standards and Conventions activities

**PROPOSAL REVIEW**

The proposals will be evaluated and ranked by an independent evaluation committee and decided upon at a special meeting of the GGOS Steering Committee to be held in San Francisco on December 14, 2008. Successful proposers will be notified by December 16, 2008 with the goal to start the GGOS Bureau for Standards and Conventions activities and work by January 1, 2009.