Ninth GGOS Steering Committee EGU Vienna, Austria Tuesday, April 17, 2007, 12:30 - 15:30

Minutes (Version 0.1)

Written by

Hans-Peter Plag

(Version of 2007- 5- 4 10:25).



Participants:

Susanna Zerbini, University of Bologna (*Executive Committee*)

Chopo Ma, GSFC (Executive Committee; Delegate, IERS)

John LaBrecque, GSFC (Invited Participant)

Michael Pearlman, Smithonian (Executive Committee; Chair, GGOS WG Network and Communications)

Markku Poutanen, Finish Geodetic Institute (*Delegate, Commission 2*)

Martin Vermeer (Commission 2 Representative)

Carey Noll, GSFC (GEO Committee Representative)

Harald Schuh, University Vienna (*Invited Participant*)

Bernd Richter, BKG (Chair, GGOS WG Data and Infrastructure)

Hermann Drewes, DGFI (Delegate, Commission 1, Chair WG on Convensions)

Michael Sideris (*Invited Participant*)

Gerhard Beutler, UNIBE (IAG President)

Zuheir Altamimi, IGN (Invited Participant)

Erricos Pavlis, JCET/UMBC (Delegate, ILRS)

Gary Johnston (*Member at Large*)

Richard Gross, JPL (Science Panel)

Ruth Neilan, JPL (Vice-Chair, GGOS Steering Committee)

Markus Rothacher, GFZ (Chair, GGOS Steering Committee)

Hans-Peter Plag, NBMG (Vice-chair, GGOS Steering Committee)

Veronique Dehant, ROB (Invited Participant)

Srinivas Bettadpur, University of Texas (Chair, GGOS WG on Missions)

Agenda:

1 Welcome and Discussion of Agenda

2 Minutes of SC8

The draft minutes of SC8 are available as <u>../scm8/minutes_sc8.html</u> and <u>../scm8/minutes_sc8.pdf</u>. The minutes will not be discussed in any detail. The participants are asked to identify necessary changes and/or corrections.

3 Action Item Status

The list of action items from SC8 is available as <u>ailist.html</u> and <u>ailist.pdf</u>. Open Action Items from previous meetings (SC7 - SC3) are listed ailist_previous.html and ailist.pdf

- 4 Brief report from the Chairs
- 5 GEO Task AR-07-03 Status, including GGOS 2020 and the GEO/GGOS 2007 Workshop
- **6 Does GGOS need Standards?**
- 7 GGOS at IUGG
- 8 GGOS Common Research Projects and the Unified Analysis and Data Workshop
- 9 Call for Proposals for the GGOS Portal

- 10 GGOS ToR
- 11 GGOS 2008 Retreat
- 12 GGOS Meeting Schedule
- 13 Any other business
- 14 Summary of Action Items

Welcome and Discussion of Agenda

Markus Rothacher opened the Steering Committee meeting and welcomed all participants. He mentioned that during the IAG Executive Committee meeting on Monday, April 16, 2007, the future of GGOS was discussed. As a result, IAG is intending to implement GGOS as IAG's Observing System, which will require changes in both the GGOS ToR and the IAG By-Laws.

Minutes of SC8

The draft minutes of SC8 were made available as <u>../scm8/minutes_sc8.html</u> and <u>../scm8/minutes_sc8.pdf</u>. The minutes were not discussed in any detail. The participants were asked to identify necessary changes and/or corrections. No points were raised and the minutes were accepted as they are.

Action Item Status

The list of action items from the SC-8 telecon was available as $\underline{ailist.html}$ and $\underline{ailist.pdf}$. A list of all open action items from previous meetings was available as $\underline{ailist.previous.html}$ and $\underline{ailist.previous.pdf}$

Markus Rothacher pointed to the list of Action Items and did not consider these in detail. He mentioned that IAS has been informed about the decision to include a representative on the GGOS Steering Committee and an invitation to IAS has been extended to nominate a representative.

Brief report from the Chairs

Markus Rothacher delivered the report of the GGOS Chair (see his presentation available as Presentations/GGOS_Report_170407.pdf). The main events were the GGOS Retreat in Oxnard and two telecons of the GGOS Executive Committee. For the latter, the main topics including the preparation of the next GEO/GGOS Workshop, for which the First Circular is now available, the GGOS 2020 strategy document, and the Unified Analysis Workshop.

Concerning the IUGG Assembly 2007 in Perugia, he pointed out that key steps will be resolutions on GGOS by IAG and IUGG, and the new ToR for GGOS. GGOS will be a component and not a project of IAG, which also will require changes in the IAG By-Laws.

John LaBrecque asked what the relation between GGOS and the services is, and whether this could be considered a Federation. Markus Rothacher responded that this will be defined by the new ToR, which have not yet been written. Michael Pearlman pointed out that the IAG Services have been very inportant for the formation of GGOS, and cautioned that the description of the relation has to be carefully worded. Ruth Neilan asked when the draft ToR have to be ready for Perugia.

Chopo Ma asked about the representation of GGOS on the IAG Executive Committee. Gerhard Beutler explained that the GGOS chair is appointed by the IAG Executive Committee and a non-voting member of the IAG Executive Committee.

Markus Rothacher continued in his presentation and described three GGOS phases, namely (1) 2003-2005: design phase; (2) 2005-2007: implementation phase, and (3) from 2007: permanent phase.

He then summarized the GGOS Retreat, which provided comprehensive feedback on GGOS from the IAG Services and Commissions, throughly discussed the GGOS 2020 document, and resulted in the need for a Call for Proposals for the GGOS Portal and, at a later stage, a GGOS Bureau, which is now called the GGOS Coordinating Office.

In his overview over the next events, he mentioned the IUGG meeting with a collocated GGOS Steering Committee meeting, the GEO/GGOS Workshop, a Steering Committee in conjunction with this Workshop, and the Unified Analysis Workshop, and a GGOS Retreat in March 2008.

In his summary of activities, he emphasized the need to finalize the GGOS 2020 Reference and Strategy Documents, to draft the new GGOS ToR, to issue the CfP for the GEO Portal, and to prepare several workshops and sessions.

As a result of the discussions, the following action items could be identified:

<u>Action Item GGOS-SC-9-1:</u> The EC will prepare draft ToR for the future GGOS according to the guidelines given by the IAG Executive Committee. **Responsible:** All EC members, Deadline: 2007-05-31.

<u>Action Item GGOS-SC-9-2:</u> The EC will decide on a date for the Steering Committee meeting in Perugia during the IUGG meeting. *Responsible: All EC members, Deadline: 2007-05-15.*

GEO Task AR-07-03 Status, including GGOS 2020 and the GEO/GGOS 2007 Workshop

Hans-Peter Plag presented the status of Task AR-07-03 (see his presentation available as Presentations/plag_geo_taskar0703.pdf). He pointed out that the GGOS 2020 documents and the organization of the GEO/GGOS Workshop are deliverables of this task for 2007. The ADC has recognized the GGOS 2020 documents as GEO documents, which will have to be endorsed by the GEO Plenary. Concerning IGOS-P and the IGOS-P-14 meeting, which will take place on May 30, 2007, in Paris, he reported that the theme proposal will have to be submitted on April 25.

After the presentation, considerable discussion ensued concerning the finalization of the reference document. In particular, Gerhard Beutler requested that all lead authors make their contribution to the Executive Summary and the Chapter 11 (Recommendations). Hans-Peter Plag emphasized the need to have the document available as final draft for the IUGG meeting in July and as final documents for the GEO Plenary meeting in November 2007. The following action item resulted:

<u>Action Item GGOS-SC-9-3:</u> Hans-Peter Plag will make an dedicated effort to get input from all lead authors for the Executive Summary and the Chapter 11 of the GGOS 2020 Reference document. **Responsible: Hans-Peter Plag, Deadline: 2007-04-30.**

Does GGOS need Standards?

Hans-Peter Plag explained that the diagram illustrating the future organization of GGOS in Chapter 10 of the GGOS 2020 document includes a *Bureau for Standards and Conventions*. This raises the question whether GGOS actually needs standards in the sense of e.g. ISO standards. John LaBrecque reported that there was considerable push back from NASA concerning standards.

Gerhard Beutler explained that he wished to see some kind of authority that could say these are the constants to be used. Hermann Drewes elaborated that the term 'standards' has been used for constants. Conventions would be a more appropriate name. Therefore, he recommended to consistently use the term 'conventions'.

GGOS at IUGG

Markus Rothacher presented one slide summarizing the GGOS-related activities during the IUGG meeting (see Presentations/IUGG_Meeting_170407.pdf).

With respect to a special GGOS 2020 event at IUGG, no decision was made.

John LaBrecque used the opportunity to thank Markus Rothacher and GGOS for the letter concerning retroreflectors, which turned out to be very useful. In the following week respective recommendations would be made for GSP-III. He recommended that GGOS requests a certain minimum cross section at the GNSS to optimize SLR to these satellites. Michael Pearlman reported that ILRS endorsed a minimum requirement, and he requested a similar endorsement from GGOS. Bernd Richter pointed out that IERS will join the resolution on retroreflectors. John LaBrecque commented that it would be good to recommend coordination of signal structures for interoperability.

GGOS Common Research Projects and the Unified Analysis and Data Workshop

Markus Rothacher gave an overview of the status concerning the Unified Workshop, the submitted proposals for common research projects, and the GGOS-D Proposal (see his presentation Presentations/Unified_Analysis_Workshop_GGOS_SC9.pdf).

Ruth Neilan asked how many participants are expected for this workshop, and Markus Rothacher replied that he wants to have about 40, since more would be a more like a symposium. Michael Pearlman asked how the participants should be selected, and Harald Schuh proposed that the services should decide on this. Markus Rothacher reviewed the list of proposed projects, and emphasized the need to decided on what to select. Susanna Zerbini point out that InSAR would be important, particularly the combination of techniques, and various loading effects.

As next steps, Markus Rothacher listed (1) inform the services, (2) select the research projects, (3) develop ideas on sessions, (4) iterate these ideas with ACs and session chairs, (5) prepare a second circular. The organizing of the workshop was assigned to GGOS plus representatives from the IAG Commissions.

Call for Proposals for the GGOS Portal

Markus Rothacher explained the main features of the GGOS Data Portal (see his presentation Presentations/GGOS_Portal_170407.pdf) and raised the question whether the call should be for the development alone or also cover the operational part.

Bernd Richter pointed out that technical constraints at the operating institution might necessitate to combine the two aspects. Hans-Peter Plag emphasized that it would make sense to separate between the hosting of the web pages and the responsibility for the contents. For the later, a group of editors (e.g. Science Panel members) could take responsibility.

John LaBrecque remarked that a good explanation of the reference frame for the non expert would answer aburning question that came up frequently.

Markus Rothacher underlined the importance of a discussion of how to connect the Portal to the Services. No decision was made of how to proceed with the call.

GGOS ToR

Markus Rothacher reviewed the status of the current ToR and identified a few questions and issues to be addressed in the new ToR (see his presentation Presentations/GGOS_ToR_170407.pdf).

Bernd Richter asked whether the current ToR will stay as GGOS ToR, and Gerhard Beutler eplained that the procedure for GGOS will be the same as for the Services. Michael Sideris remarked that the write-up for the By-Laws to account for the transition of GGOS from a project to an observing systems is more important than the new ToR.

GGOS 2008 Retreat

Susanna Zerbini presented the potential place for the GGOS 2008 Retreat (see the presentation at Presentations/Bertinoro_GGOS_SC.pdf). The place was generally accepted as an attractive location for the Retreat. Considering potentially conflicting meetings, the time window of March 25-28, 2008 was chosen.

<u>Action Item GGOS-SC-9-5:</u> Susanna Zerbini will ensure that the proposed venue for the GGOS Retreat 2008 in Bertinoro is available for the Retreat in the time window of March 25-28, 2008. **Responsible: Susanna Zerbini, Deadline: 2007-05-31.**

GGOS Meeting Schedule

The GGOS Meeting Schedule is available on the web page at http://geodesy.unr.edu/ggos/ and there under the link 'Relevant Meetings', while the overview over the Steering Committee meetings is provided at http://geodesy.unr.edu/ggos/sc/.

Any other business

There was no other business.

Summary of Action Items

<u>Action Item GGOS-SC-9-1:</u> The EC will prepare draft ToR for the future GGOS according to the guidelines given by the IAG Executive Committee. **Responsible:** All EC members, Deadline: 2007-05-31.

<u>Action Item GGOS-SC-9-2:</u> The EC will decide on a date for the Steering Committee meeting in Perugia during the IUGG meeting. *Responsible: All EC members, Deadline: 2007-05-15.*

<u>Action Item GGOS-SC-9-3:</u> Hans-Peter Plag will make an dedicated effort to get input from all lead authors for the Executive Summary and the Chapter 11 of the GGOS 2020 Reference document. **Responsible: Hans-Peter Plag, Deadline: 2007-04-30.**

<u>Action Item GGOS-SC-9-4:</u> Markus Rothacher together with the EC to continue the preparation of the Unified Workshop. *Responsible: Markus Rothacher, Deadline: 2007-05-31.*

<u>Action Item GGOS-SC-9-5:</u> Susanna Zerbini will ensure that the proposed venue for the GGOS Retreat 2008 in Bertinoro is available for the Retreat in the time window of March 25-28, 2008. **Responsible: Susanna Zerbini, Deadline: 2007-05-31.**