

Global Geodetic Observing System (GGOS)

Fifth Meeting of the Steering Committee

Wednesday, April 5, 2006

08:30 AM - 10:30 AM

Minutes (Version 0.4)

Written by

Hans-Peter Plag

(Version of 2006- 4-10 11:14).



Participants:

Zuheir Altamimi, IGN (*Invited Participant*)
Graham Appleby, NERC Space Geodetic Facility (*Substitute, ILRS*)
Christopher Barth
Dirk Berend, GSFC (*Delegate, IVS*)
Srinivas Bettadpur, University of Texas (*Chair, GGOS WG on Missions*)
Gerhard Beutler, UNIBE (*IAG President*)
Anny Cazenave, CNES (*Science Panel*)
Veronique Dehant, ROB (*Invited Participant*)
Hermann Drewes, DGFI (*Delegate, Commission 1, Chair WG on Conventions*)
Bjorn Engen, NMA (*Invited Participant*)
Jean Piere Garnier
Richard Gross, JPL (*Science Panel*)
Werner Gurtner, AIUB, Bern (*Invited Participant*)
Jacques Hinderer, University Strasbourg (*Delegate, GGP*)
Julie Horwarth
Gary Johnston (*Member at Large*)
John LaBrecque, GSFC (*Invited Participant*)
Bente Lilja Bye, NMA (*Chair, GGOS WG User Linkage and Outreach*)
Chopo Ma, GSFC (*Delegate, IERS*)
Carey Noll, GSFC (*GEO Committee Representative*)
Ruth Neilan, JPL (*Vice-Chair, GGOS Steering Committee*)
Erricos Pavlis, JCET/UMBC (*Delegate, ILRS*)
Michael Pearlman, Smithsonian (*Chair, GGOS WG Network and Communications*)
Hans-Peter Plag, NBMG (*Vice-chair, GGOS Steering Committee*)
Markku Poutanen, Finish Geodetic Institute (*Delegate, Commission 2*)
Bernd Richter, BKG (*Chair, GGOS WG Data and Infrastructure*)
Markus Rothacher, GFZ (*Chair, GGOS Steering Committee*)
Fernando Sanso (*Delegate, IGeS*)
Harald Schuh, University Vienna (*Invited Participant*)
C.K. Shum, Ohio State University (*GEO Committee representative*)
Gilles Tavernier, CNES (*Delegate, IDS*)
Frank Webb, JPL
Susanna Zerbini, University of Bologna (*GEO Committee representative*)

Agenda:

- 1 **Welcome, Agenda**
- 2 **Minutes of SC4**
- 3 **Action Item Status**
- 4 **Report from the Chair**

The Chair will briefly report on the main activities since the Retreat. The report will include a summary of the reports from the GGOS WGs and the GEO representatives.

5 Members at Large of the Steering Committee

The EC will compile a list of candidates from nominations solicited from the Steering Committee members. The Members at Large will be elected from this list.

6 Additional Members of the Science Panel

The EC will provide a list of new members of the Science Panel identified according to the guidelines discussed at the Retreat for confirmation by the Steering Committee.

7 EC Members from the Steering Committee

A list of candidates will be compiled by a Nomination Committee, based on nomination solicited from the Steering Committee. During the SC meeting, the list will be open for additional nominations of Members at Large elected during the SC meeting. The three new EC members will be elected from the list of candidates.

8 ToR for GGOS

A brief report will be given of the status concerning the intermediate ToR and the initial ideas concerning the new ToR to be proposed to the IAG Executive Committee at the IUGG meeting in 2007 will be outlined.

9 Mission for the Science Panel

The draft mission of the Science Panel will be presented for discussion.

10 Structure and mission of the GGOS WGs

The EC suggests to eliminate the WG on Publishing and Legal Matters and instead to search for an expert advisor in these matters. In addition, only urgent issues related to the structure and mission of the WGs will be addressed. In particular, this concerns the mission of the WG on Conventions.

11 The GGOS Workshop

A brief report on the status of the preparation will be given, and the sessions and topics will be reviewed.

12 GGOS Meeting Schedule

13 Any other business

14 Summary of Action Items

Welcome, Agenda

Markus Rothacher welcomed the participants.

Minutes of SC4

The minutes of the Fourth Steering Committee meeting were accepted without changes.

Action Item Status

Markus Rothacher informed the participants that the action items are available with their status on <http://geodesy.unr.edu/ggos/sc/meetings/> (for the latest version, see [../ailist.html](#)). There, the report

on the action items will be frequently updated. Reports on the status of the action items should be sent to Hans-Peter Plag for inclusion in the web report.

Report from the Chair

Markus Rothacher reported briefly on the status of the work since the retreat (see [GGOS_status.pdf](#)). Most action items were carried out, and the Executive Committee has been very active with telecons nearly every second week. Markus Rothacher also stated that not all WGs and GEO representatives had responded to the request to send in reports on recent activities. This resulted in the Action item:

Action Item GGOS-SC-5-1: All WG chairs and GEO representatives who have not yet done so to sent reports to the EC. ***Responsible:*** All WG Chairs and GEO representatives who have not sent reports, ***Deadline:*** 2006-04-15.

The response to a call for Nomination of Steering Committee Members at Large did not result in very much input from the SC. Therefore, the EC conducted an own search (see TOP 5 below).

Concerning external activities, Markus Rothacher gave a brief report on the activities related to GEO and IGOS-P (see [GGOS_international.pdf](#)).

A poster on GGOS was presented at the Third Early Warning Conference, which took place on 27-29 March in Bonn, Germany. This resulted in the following AI:

Action Item GGOS-SC-5-2: Markus Rothacher to make available the GGOS Poster presented at the EWC-III on the GGOS web page. ***Responsible:*** Markus Rothacher, ***Deadline:*** 2006-04-15.

Members at Large of the Steering Committee

Markus Rothacher reviewed briefly the structure of GGOS and the composition of the Steering Committee. He emphasized the importance of the members at large (see [GGOS_members_at_large.pdf](#)).

As discussed during the SC4, the GGP replaced the ICET, and the representatives for the GGP are Jacques Hinderer and Corinna Kroner.

Markus Rothacher presented the list of persons asked to be candidates for Members at Large:

- Gary Johnston (Australia),
- E.C. Malaimani (India),
- James Park (Korea),
- Weijun Gan (China),
- Kosuke Heki (Japan),
- Matt Higgins (Australia) (would need travel funds, corresponding member?),
- Ben Chao (Taiwan) (declined).

The CVs of these persons are made available on the GGOS web page. Ruth Neilan gave a brief overview of the candidates.

Markus Rothacher outlined two different options, one being to accept the five candidates, the other being to vote for three out of them. Bernd Richter suggested that Matt Higgins is included as corresponding member. Zuheir Altamimi asked whether there could be a candidate from Africa and South America. For Africa, Salah Mahmoud (Egypt) was suggested. John LaBrecque proposed Luiz Fortes from Brazil. Several contributions opted for the inclusive approach to include the five candidates and to have Matt Higgins as corresponding member, and also an extension of the list of corresponding members.

It was concluded to accept the five members at large, to have a list of corresponding members, and to ask the two new nominees for their readiness to be on the SC.

Markus Rothacher asked for a vote from the SC members for the list. The list was accepted unanimously.

Action Item GGOS-SC-5-3: Markus Rothacher to inform the new SC Members at Large of the outcome of the vote. ***Responsible: Markus Rothacher, Deadline: 2006-04-15.***

Action Item GGOS-SC-5-4: Markus Rothacher to contact Salah Mahmoud and Luiz Fortes whether they are ready to be Members at Large of the SC or, if that is not possible, to be Corresponding members. ***Responsible: Markus Rothacher, Deadline: 2006-04-15.***

Additional Members of the Science Panel

Markus Rothacher reported that the EC took several actions in order to get the Science Panel completed (see [GGOS_Science_Panel.pdf](#)).

For atmospheric sciences, at SC4 Gilles Sommeria was suggested, but he declined. Hubert Savenije is a hydrologist, who is interested to join the Science Panel, and he will be asked to submit a CV.

The chair of the Ocean Observing Science Panel, John Field, South Africa, was asked for nominations of candidates representing the ocean sciences. He suggested Detlef Stammer, Pascal LeGrand, and Ejo Schramma. Philip Woodworth was also contacted, and he nominated Simon Williams, Victor Zlotnicki, Pascal LeGrand. Hans-Peter Plag pointed out that Simon Williams is member of the Steering Committee and therefore should not be on the Science Panel.

After some discussion, the following AI was agreed:

Action Item GGOS-SC-5-5: In order to complement the Science Panel with one expert in oceanography, Markus Rothacher to ask in this sequence Victor Zlotnicki, Detlef Stammer, and Pascal LeGrand for their readiness to serve on the Science Panel. ***Responsible: Markus Rothacher, Deadline: 2006-04-20.***

Subsequently, names for an atmospheric scientist were discussed. Erricos Pavlis suggested Paul Poli, Veronique Dehant David Salstein, and C.K. Shum Rick Anthes. This led to the AI:

Action Item GGOS-SC-5-6: In order to complement the Science Panel with one expert in atmospheric science, Markus Rothacher to ask in this sequence Rick Anthes, Paul Poli, and David Salstein for their readiness to serve on the ***Responsible: Markus Rothacher, Deadline: 2006-04-20.***

It was also suggested to have someone from the ICCT on the Science Panel. The ICCT will be asked to nominate a name:

Action Item GGOS-SC-5-7: Markus Rothacher to ask the Chair of the ICCT to provide a nomination of a person from the ICCT for the Science Panel. ***Responsible: Markus Rothacher, Deadline: 2006-04-20.***

EC Members from the Steering Committee

Markus Rothacher briefly summarized the situation concerning the Executive Committee membership (see [GGOS_EC.pdf](#)). He pointed out that Gerhard Beutler was not a member of the EC in order to avoid conflicts of interested due to him being the President of the IAG.

Werner Gurtner gave a report on the election of additional three voting Steering Committee to serve on the Executive Committee (see [GGOS_EC_Elections.pdf](#)). In the end there were four nominees who agreed to candidate, and the result of the election was Bente Lilja Bye 8 votes, Chopo Ma 12 votes, Michael Pearlman 10 votes, and Susanna Zerbini 9 votes. Markus Rothacher congratulated Chopo Ma, Michael Pearlman, and Susanna Zerbini, and he welcomed them to the Executive Committee.

ToR for GGOS

Markus Rothacher reported on the process to draft the modified ToR (see [GGOS_ToR.pdf](#)), which were mainly drafted by Ruth Neilan with input from the other EC members. The draft ToR as distributed prior to the SC meeting are available as [GGOS_ToR_4.06v3.pdf](#).

He reported that the draft was discussed at the IAG EC meeting, with two main concerns discussed during that meeting. One concern was with respect to the size of the Steering Committee, which is considered to be very large. Moreover, there were concerns with respect to compliance with the IAG By-Laws. Gerhard Beutler stated that he will write to the Cassini Committee in order to clarify the issue concerning the By-laws by 2007. He indicated that there are two ways to go, one to change the By-Laws for the IAG Projects, and the other to reduce the Steering Committee. He concluded by saying that the main message from the IAG Executive Committee is that IAG wants GGOS to go ahead with the current structure and not to absorb too much energy in changes of the ToR.

There was some discussion about the role of the IAG services as represented in the ToR. Minor changes were agreed to emphasize this role. After that, the ToR will be circulated once more, and then sent to the IAG Secretary with the statement that they are approved by the SC. After approval from the IAG EC, this would bring a legally accepted situation. The corresponding Action Items are

Action Item GGOS-SC-5-8: The EC to prepare a new draft with minor changes and to distribute to the Steering Committee for approval. ***Responsible: Markus Rothacher, Deadline: 2006-04-20.***

Action Item GGOS-SC-5-9: Markus Rothacher to send the ToR after acceptance by the SC to the IAG Secretary for acceptance by the IAG EC. ***Responsible: Markus Rothacher, Deadline: 2006-05-31.***

Mission for the Science Panel

Markus Rothacher reported that not much had been done concerning a statement for the Science Panel. Markus Rothacher made the case for a principal document that would give answer to questions such as what do we expect from SLR, what missions do we need, etc.

Zuheir Altamimi requested a link between Science Panel and Services in order to make sure the Science Panel knows the limitations of what is currently available. Hans-Peter Plag emphasized the necessity of the Science Panel to be free from the current limitations and to work on the basis of the problems and the scientific solution required, to define what is necessary in terms of observation system, not so much in terms of what is currently possible.

Gerhard Beutler suggested that the EC should take the initiative and work with the Science Panel to write a strategy and implementation document for GGOS.

Action Item GGOS-SC-5-10: The EC together with the Science Panel to draft a GGOS strategy implementation document. **Responsible: Markus Rothacher, Deadline: 2006-09-30.**

Structure and mission of the GGOS WGs

Markus Rothacher informed participants that the submitted missions statements were available on the GGOS web page, but that the statements were not up-to-date for all WGs. He urged the WG chairs of these WGS the mission statements.

Action Item GGOS-SC-5-11: Hermann Drewes to submit updated mission statements for the WG on Conventions. **Responsible: Hermann Drewes, Deadline: 2006-04-30.**

The WG on Publishing and Legal Matters was not discussed.

The GGOS Workshop

Markus Rothacher gave a brief report on the status of the Workshop preparations (see GGOS_Workshop_Prep.pdf). He reviewed the sessions and pointed out that for each of the four sessions, one or more position papers will be requested. The next action is to identify the session chairs, key speakers, and the authors of the position papers.

Action Item GGOS-SC-5-12: The EC to prepare the GGOS Workshop in a Telecon with respect to session chairs and position paper topics. **Responsible: Markus Rothacher, Deadline: 2006-04-30.**

GGOS Meeting Schedule

Markus Rothacher pointed to the GGOS meeting schedule at the GGOS.unr web page and urged everybody to send information on meetings to Hans-Peter Plag for inclusion in that page.

Any other business

Endorsement for retroreflectors on GNSS satellites.

Michael Pearlman briefly reported on activities to get retroreflectors on GNSS satellites. ILRS is working on a statement supporting this step, and he asked for the endorsement of this statement by GGOS. There is a meeting next week, where this endorsement would be very helpful. Bernd Richter suggested that such an endorsement is also sent to Galileo Joint Undertaking.

John LaBrecque pointed out that such an endorsement would bring considerable resources to the table in terms of laser ranging capacity, and emphasized the importance of the cross-calibration.

The Steering Committee unanimously endorsed the activities to get retroreflectors on GNSS satellites.

Action Item GGOS-SC-5-13: Markus Rothacher to sent a letter of endorsement of activities to include laser retroreflectors on GNSS satellites to Michael Pearlman and the three GNSS. **Responsible: Markus Rothacher, Deadline: 2006-04-15.**

Publication issue: ILRS is planning to put together a Science issue.

Michael Pearlman informed that the ILRS is putting together a special issue on Laser Ranging and asked the question where to publish this, mentioning that IVS and IDS already plan a special issue each in *Journal of Geodesy* . Gerhard Beutler and Veronique Dehant supported to have this in the *Journal of Geodesy* . Hans-Peter Plag suggested also Physics and Chemistry of the Earth and Susanna Zerbini Global and Planetary Changes. After some discussion, there was consensus that the special issues of the services should be published in the *Journal of Geodesy* . The following AI was agreed:

Action Item GGOS-SC-5-14: Gerhard Beutler to write a letter to the Journal of the Geodesy concerning the special issues of the individual services. **Responsible: Gerhard Beutler, Deadline: 2006-04-15.**

Bente Lilja Bye suggested that the Outreach group would scan the journals to see where the 'external' publications could be strengthened. This led to

Action Item GGOS-SC-5-15: Bente Lilja Bye together with the outreach committee to scan the relevant journals to identify those that would be appropriate for publications on GGOS. **Responsible: Bente Lilja Bye, Deadline: 2006-04-30.**

GGOS contribution to the international Year of Planet Earth.

Veronique Dehant reported that 2008 will be the International Year for Planet Earth under UNESCO umbrella. She asked that GGOS is taking action to do something as GGOS. This led to

Action Item GGOS-SC-5-16: The Executive Committee to consider a GGOS contribution to the IYPE for discussion by the Steering Committee. **Responsible: Executive Committee, Deadline: 2006-05-31.**

Other issues

It was also mentioned that Bernd Richter with other has prepared a draft for the GGOS Portal (see http://geodesy.unr.edu/sci/GGOS_Data_Portal_Specification_v02.pdf), and Markus Rothacher emphasized the importance of this work. Bernd Richter reported that the currently available draft is under revision, and it was agreed that a new draft should be distributed to the SC for comments:

Action Item GGOS-SC-5-17: To make available draft GGOS portal description for discussion in the SC. **Responsible: Bernd Richter, Deadline: 2006-04-30.**

Finally, Markus Rothacher pointed out that since the SC Members at Large and the Science Panel members all had submitted brief CVs, it would be good to also have some information available on the other SC members. This resulted in:

Action Item GGOS-SC-5-18: Ask all Steering Committee members to sent linksto home pages or brief CV to Hans-Peter Plag for inclusion on the Steering Committee Membership page. **Responsible: Hans-Peter Plag, Deadline: 2006-04-15.**

Summary of Action Items

Action Item GGOS-SC-5-1: All WG chairs and GEO representatives who have not yet done so to sent reports to the EC. **Responsible: All WG Chairs and GEO representatives who have not sent reports, Deadline: 2006-04-15.**

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for their readiness to serve on the Science Panel. **Responsible: Markus Rothacher, Deadline: 2006-04-20.**

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Action Item GGOS-SC-5-9: Markus Rothacher to send the ToR after acceptance by the SC to the IAG Secretary for acceptance by the IAG EC. **Responsible: Markus Rothacher, Deadline: 2006-05-31.**

Action Item GGOS-SC-5-10: The EC together with the Science Panel to draft a GGOS strategy implementation document. **Responsible: Markus Rothacher, Deadline: 2006-09-30.**

Action Item GGOS-SC-5-11: Hermann Drewes to submit updated mission statements for the WG on Conventions. **Responsible: Hermann Drewes, Deadline: 2006-04-30.**

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Action Item GGOS-SC-5-13: Markus Rothacher to send a letter of endorsement of activities to include laser retroreflectors on GNSS satellites to Michael Pearlman and the three GNSS. **Responsible: Markus Rothacher, Deadline: 2006-04-15.**

Action Item GGOS-SC-5-14: Gerhard Beutler to write a letter to the Journal of the Geodesy concerning the special issues of the individual services. **Responsible: Gerhard Beutler, Deadline: 2006-04-15.**

Action Item GGOS-SC-5-15: Bente Lilja Bye together with the outreach committee to scan the relevant journals to identify those that would be appropriate for publications on GGOS. **Responsible: Bente Lilja Bye, Deadline: 2006-04-30.**

Action Item GGOS-SC-5-16: The Executive Committee to consider a GGOS contribution to the IYPE for discussion by the Steering Committee. **Responsible: Executive Committee, Deadline: 2006-05-31.**

Action Item GGOS-SC-5-17: To make available draft GGOS portal description for discussion in the SC. **Responsible: Bernd Richter, Deadline: 2006-04-30.**

Action Item GGOS-SC-5-18: Ask all Steering Committee members to send links to home pages or brief CV to Hans-Peter Plag for inclusion on the Steering Committee Membership page. **Responsible: Hans-Peter Plag, Deadline: 2006-04-15.**