

NORDISKA KOMMISSIONEN FÖR GEODESI

Ordförande BJÖRN ENGEN Statens Kartverk Kartverksvn 21 N-3500 Hønefoss NORGE Sekreterare BO JONSSON Lantmäteriverket LF-Geodesi SE-801 82 Gävle SVERIGE

THE PRESIDIUM OF THE NORDIC GEODETIC COMMISSION (NKG)

MINUTES OF THE 33RD MEETING

MASALA, FINLAND

NOVEMBER 11-12, 2004

PRESENT

Denmark: Sigvard Stampe Villadsen

Finland: Risto Kuittinen

Martin Vermeer

Iceland Thorarinn Sigurdsson

Markus Rennen

Norway: Bjørn Engen (Chairman)

Sweden: Bo Jonsson (Secretary)

Anders Olsson

New York

NORDISKA KOMMISSIONEN FÖR GEODESI

2005-04-28 Extract

ITEM 6. THE EUROPEAN COMBINED GEODETIC NETWORK (ECGN) – THE ANSWER ON THE RESPONSE FROM THE ECGN WORKING GROUP.

The chair of the ECGN Working Group has distributed a short status report on the activity in the ECGN project and a call for a report covering on-going national related ECGN-activities and ECGN Meta Data Forms, see minutes of the meeting of the NKG Presidium on 3-5 May, 2004. At that meeting it was agreed that each country should prepare and submit an individual response on the call from the ECGN Working Group. A copy of the response should be sent to the chair of the NGOS Task Force for the co-ordination of the Nordic efforts

Markku P., the chair of the NGOS Task Force, has not received any copies yet.

Agreed action: The Presidium emphasises the intention of a co-ordination of the Nordic contribution to the ECGN network

ITEM 7. THE NORDIC GEODETIC OBSERVING SYSTEM (NGOS) - A STATUS REPORT FROM THE NGOS TASK FORCE.

Markku Poutanen presented a preliminary report from the Nordic Geodetic Commission Task Force for a Nordic Geodetic Observing System (NGOS), see annex ??. Tide gauges in Table 1 and acronyms in Figure 3 were discussed. The intention of the NGOS Task Force is to complete the report during this year. Torbjörn Nörbeck will replace Hans-Peter Plag as the Norwegian representative in the NGOS Task Force. Markku raises the question "How far can we reach?". VLBI, SLR, Absolute Gravity and GPS are already in place. How shall the data be stored for future analyses, in common data banks. A possible approach is that the NGOS Task Force work out a proposal for a Meta data base and hands over this to the Geodynamics Working Group for the final development of dataflow, databases etc. for the observations of the NGOS system.

Agreed action: A final version of the report "NGOS – Nordic Geodetic Observing System" is expected to the next meeting of the NKG Presidium in April 2005. Comments on the present version should be submitted to Markku latest on December 15. 2004.

Agreed action: NGOS is encouraged to propose a Meta data base and a data bank structure for the storage of observation data from the proposed NGOS network

N. K

NORDISKA KOMMISSIONEN FÖR GEODESI

Today agreements between the Nordic Mapping Authorities exist for levelling data, gravity data and GPS observation data. It should perhaps be an advantage to have an umbrella agreement on a more general level for exchange of geodetic observation data between the Nordic countries

Agreed action: On the next meeting of the Presidium an Agenda item should deal with a more general agreement on exchange of data between the National Mapping Authorities. Anders Olsson agrees to develop basis for this discussion

ITEM 8. FUTURE HEIGHT SYSTEMS IN THE NORDIC COUNTRIES – ADJUSTMENT OF THE NORDIC BLOCK AND ACTIVITIES IN THE WORKING GROUP FOR HEIGHT DETERMINATION.

Mikko Takalo, the chair of Height Determination Working Group, reported on the ongoing activities of the Working Group, see annex ??.

The working Group

Agreed action: The Presidium expresses their full support for the Height Determination working Group in computation of the Baltic Sea Levelling Loop and the Nordic levelling block. A new status report is expected to the next meeting of the Presidium in November 2004.

ITEM 9. A UNIFIED ETRS 89 REFERENCE FRAME ON THE CM LEVEL FOR THE NORDIC AREA - A STATUS REPORT ON CARRIED OUT AND PLANNED ACTIVITIES.

Per Knudsen had submitted a status report on the establishment of a unified reference frame for the Nordic area. The work of the WG is progressing so there are now three solutions with Bernese, GIPSY and GAMIT. The Working Group will meet in Hønefoss at Statens Kartverk Tuesday 30/11(lunch) - Wednesday 1/12 (15:00) to compare and to discuss the (preliminary) results. At the meeting the transformations between the national realisations of EUREF/ETRS89 and the new common Nordic ITRF2000 reference frame shall be derived.

Agreed action: The Presidium recognizes the work done so far in the establishment of a unified reference frame by the Working Group on Positioning and Reference Frame and expects a preliminary result from the Nordic GPS campaign in October last year to the next meeting of the Presidium in April, 2005.

New York

NORDISKA KOMMISSIONEN FÖR GEODESI

ITEM 10. STATUS REPORTS FROM THE WORKING GROUPS, GEODYNAMICS AND GEOID DETERMINATION,

The Working Group for Geodynamics

Hans-George Scherneck had submitted a short report on phasing out relative gravity, see annex ??.

The measurement campaigns on the Nordic Gravity Lines using relative gravimeters have been completed in 2003 after a history of almost 40 years. The NKG Working group for Geodynamics, within which this work has been coordinated, strongly recommends preserving the markers and their documentation on all four relative gravity profiles. The reason being that small absolute gravimeters may soon become available with which the profiles can be remeasured at the original markers.

The Working Group for Geodynamics gratefully acknowledges the offer of the Finnish Geodetic Institute to publish a compilation of results in their Technical Report Series. A publication subgroup is to be appointed. Readying the publication during 2005 appears realistic. From that point on the data would be open to the public for scientific investigation. The Working Group encourages that a technical publication be followed up with a scientific paper in an international journal.

The filing of the gravity observation data (absolute and relative data) was discussed.

Agreed action: The Presidium supports the proposal from the Working Group for Geodynamics concerning the phasing out of relative gravity.

Agreed action: The Presidium asks the Working Group for Geodynamics to develop a proposal for the filing of all gravity observations on the gravity lines and the absolute gravity stations for future analyses to the next meeting of the Presidium in the autumn 2005.

The Working Group for Geoid Determination

The Working Group for Geoid Determination will have their next meeting on 11-12 November at KMS in Copenhagen, the agenda can be found in annex ??.

Jonas Ågren, who has completed his PhD-studies at KTH in Stockholm, started to work at Lantmäteriverket on 1 November. Jonas is a specialist in Geoid determination and will participate in the Working Group for Geoid Determination

Agreed action: The Presidium encourage the Working Group for Geoid Determination to carry on with the theory for Geoid Determination and the computation of a new Nordic Geoid