



NORDISKA KOMMISSIONEN FÖR GEODESI

Ordförande
ANDERS OLSSON
Lantmäteriverket
I-Geodesi
SE-801 82 Gävle
SVERIGE

Sekreterare
BO JONSSON
Lantmäteriverket
I-Geodesi
SE-801 82 Gävle
SVERIGE

Preliminary version 2007-03-07

The NKG Steering Committee on the on-going sub projects for "NORDIC POSITIONING SERVICE"

**Minutes of the 25th meeting
Gävle, January 24-25, 2007**

PRESENT

Denmark:	Casper Jepsen Lolita Bahl
Finland:	No representative
Norway:	Bjørn Engen (chair) Rune Hanssen Per Erik Opseth
Sweden:	Bo Jonsson Andreas Engfeldt (secretary)



NORDISKA KOMMISSIONEN FÖR GEODESI

ITEM 1: OPENING OF THE MEETING

Bjørn Engen welcomed everybody to the 25th meeting of the NKG Steering Committee on the on-going sub projects for “Nordic Positioning Service”.

The Steering Committee agreed to the following agenda for the meeting

1. Opening
2. Minutes from the 24th Steering Committee meeting on 6 October in København and review of action lists from that meeting (see below) (Andreas / All)
3. Ongoing activities
 - Ongoing activities (All)
 - Nordnet – the computer network (Rune, Casper, Bo)
 - Nordic Web portal (Rune, Casper)
 - NorDPOS (Bo, Rune, Casper)
 - NordRTK (Casper)
 - The national GPS-services in each country (Bo, Rune, Casper)
4. Future activities (All)
5. The Automated Computation Service (Bo)
6. Spidernet tests (Casper)
7. Report from the meeting of the Presidium on 30 October 2006 (Bjørn, Lolita) and preparation for the next Presidium Meeting (All)
8. Preparation for the next Directors General Meeting (All)
9. EGNOS (Rune)
10. Other items (All)
11. Summary of action list (Andreas)
12. Next meeting and closing (All)

ITEM 2: MINUTES FROM PREVIOUS MEETING

Minutes from the 24th Steering Committee meeting on October 6, 2006, was approved.



REVIEW OF THE ACTION LIST FROM THE MEETING OF THE STEERING COMMITTEE ON OCTOBER 6, 2006

Action list from the meeting in København and the status today:

	Action	Responsible	Action carried out
1	The new computer network will soon be up. When a date for that is decided, we will cancel the old agreement with Tele Danmark.	Casper/Rune/Bo	The old contract is cancelled to 31 March.
2	There will be a Web site meeting between Rune, Per Erik and Anders before January.	Rune/Bo	A meeting was held on December 19, 2006, in Gävle
3	There will be a Web site meeting between Casper, Rune, Per Erik, Anders and Frands in January 2007.	Casper/Rune/Bo	This will take place on January 30, 2007, in København
4	Trimble will be contacted about the error message "SPP is wrong".	Rune	Per Erik has contacted them. The problem is now solved
5	Javad will be contacted about the problem that the different message types give different position	Rune	Per Erik has contacted them, but the problem still remains
6	There will be DAB-tests in Denmark in January - February.	Casper	It is delayed
7	A NordRTK-meeting will maybe take place in Sweden on December 5, 2006. Otherwise it will take place in January. A decision will be taken in November.	Per Erik	The meeting took place on January 23, 2007, in Arlanda
8	Three minor changes must be done in the classification document. Andreas will make them in week 41 and then distribute the document to the Steering Committee for approval.	Andreas	Carried out
9	The classification document shall be approved (or not approved) latest on October 31, 2006.	Andreas	The document is approved and published on the NKG web page since January 9, 2007



NORDISKA KOMMISSIONEN FÖR GEODESI

10	Rough coordinates of the GPSNet.fi stations are needed for the next Directors General meeting.	Bo	Seppo Tötterström has been contacted.
11	Rough coordinates of the GPSNet.dk stations and the Spidernet stations in Denmark are needed for the next Directors General meeting.	Casper	Carried out
12	Next meeting will take place on January 24-25, 2007, lunch-lunch, in Gävle	All	

ACTION LIST FROM THIS MEETING

	Action	Responsible
1	One responsible person per sub project was decided	
1 a	Nordnet. Responsible: Frode Koppang Contacts: Casper, Anders Frisk Deadline: March 1 st	Frode Koppang
1 b	NorDPOS. Responsible: Casper Contacts: Gro Grinde, Anders Frisk Deadline: Not decided	Casper
1 c	Exchange of data. Responsible: Andreas Contacts: Rune, Örjan Zackrisson Deadline: Urgent, telephone meeting every second week	Andreas
1 d	Website. Responsible: Casper Contacts: Tom Halvorssen, Anders Frisk, Flemming Nissen, Frands Steffenssen Deadline: April 2007, telephone meeting every second week	Casper
2	The responsible of each sub project shall make a report for every meeting (live or telephone), including how many meetings has taken place, plans, what's performed.	Frode K/ Casper/ Andreas
3	Each country investigate if they are interested in a common ITRF in GPSNet. Deadline: Next telephone meeting.	Bo / Casper / Per Erik
4	The DAB status in Sweden will be investigated.	Bo
5	Status of different distribution channels in Germany will be investigated.	Casper



6	Rough coordinates of the GPSNet.fi stations are needed for the next Director Generals meeting.	Bo
7	The map for the Director Generals meeting must be drawn	Casper
8	KMS wants some advice regarding monitor stations	Lolita/Bo
9	Next telephone meeting will take place on March 12, at 9.00.	Andreas will order it
10	Next meeting will take place on May 2-3, lunch-lunch, in Hønefoss	All

ITEM 3: ONGOING ACTIVITIES

Ongoing activities

During our meeting we found that we want to speed things up a bit concerning the four parts in the headline above. So we decided to have one sub-project leader for each of those sub-projects.

- **Nordnet**: Sub-project leader: Frode Koppang. Point of contacts: Casper Jepsen, Anders Frisk.

- **NorDPOS**: Sub-project leader: Casper Jepsen. Point of contacts: Gro Grinde, Anders Frisk.

- **Exchange of data**: Sub-project leader: Andreas Engfeldt. Point of contacts: Rune Hanssen, Örjan Zackrisson.

- **Nordic Web portal**: Sub-project leader: Casper Jepsen. Point of contacts: Tom Halvorsen, Anders Frisk, Frands Steffensen.

It was decided that the sub-project leader shall follow up the activities between the telephone and the "physical" meetings of the Steering Committee with necessary contacts (telephone or mail) and make a status report (oral or written) to each meeting of the Steering Committee. The report shall include how many meetings which have taken place, plans, what's performed, etc.

One way to speed things up is also to have a closer contact between the persons in the sub-project. A proposal is to have a telephone meeting about every second week in each of the sub-projects.

Nordnet

The VPN line:

Since last meeting we have signed a Telenor offer for a computer network between the control centres. We have also cancelled the old agreement with Tele Danmark and the last day we can use the old computer network is the 31st of March, 2007. This means that the



NORDISKA KOMMISSIONEN FÖR GEODESI

new computer network MUST be up in good time before that date. The cost for the new lines will be splitted into three equal parts.

Nordic Web Portal

On December 19, 2006, there was a meeting in Gävle between Casper, Rune, Tom Halvorsen and Anders Frisk. One more possible problem has been identified, the programming language. On January 31, 2007, there will be another meeting in this sub group, this time also containing Frands Steffensen and Flemming Nissen. The whole portal shall be finished in April.

NorDPOS

In Denmark some problems with Trimble and RTCM 3.0 has been found. The problems seems to be less using GSM than using DAB. Anyway, now it is possible to test DAB in a small area with a predefined virtual reference station.

NordRTK

The was a meeting in NordRTK on January 23 in Arlanda (See Appendix A). Participants were Casper, Gro Grinde and Peter Wiklund. The next meeting will take place in København, probably on June 12. There will be a NordRTK meeting twice a year and now when Per Erik has left this sub group, Casper was appointed chair.

The national GPS services in each country

Denmark

Still KMS is checking/controlling the coordinates of the permanent GNSS stations owned by the private companies. In order to do that KMS is interested in the Swedish monitor station approach to check the private networks through, which means that KMS wants some advice from Lantmäteriet.

Norway

Within two months the three new CPOS-stations and the new DPOS-station in coastal Trøndelag will be up. This year there will be 12-16 new stations between Tromsø and Alta. There are also plans to build a few stations around Bodø and Lofoten, but those will first be built after the stations mentioned before.

Sweden

On January 1 the one-year establishment Network RTK project "Position Mitt" was finished.

There is a plan for 25 new Network RTK stations in the area of Jämtlands län and Västernorrlands län to tie together the northern network to the network in the southern



NORDISKA KOMMISSIONEN FÖR GEODESI

half of Sweden. The start of that project will hopefully be in August 2007. There are also an interest from a number of users to increase the area of the northern network with at least four stations.

Cartesia are no longer the operator of the EPOS service (DGPS) since January 1 2007. Teracom is at moment negotiating with another operator to keep the service in operation. The users will still be able to use the service until April 1, 2007, if no new operator has been found.

Approval of the performed classification of the reference stations

The document was approved and is up on the NKG-website since January 9, 2007.

ITEM 4: FUTURE ACTIVITIES

GLOBALSTAR:

No new modem has been developed. Bo will contact them about it one more time.

ITEM 5: THE AUTOMATED COMPUTATION SERVICE

The special version of the automated computation service for road construction (and especially for the "Road 45" project) is now in operation. A file of 30 minutes now gives a standard deviation of 10 mm. The next step is to make this work on national basis. Hopefully this will happen during the spring.

Lotti Jivall visited Statens Kartverk last autumn to inform about Swedish experiences on the set-up the Bernese software.

There were thoughts about creating a Nordic Bernese group, but we decided that such a proposal or decision shall not come from this group.

ITEM 6: SPIDERNET TESTS

Maybe there won't be a comparison with GPSNet in Denmark.

Probably there will be a Spidernet installation in Göteborg (Göteborg Positionerings System).



ITEM 7: REPORT FROM THE LATEST PRESIDIUM MEETING AND PREPARATION FOR THE NEXT PRESIDIUM MEETING

The latest meeting of the Presidium took place on 30-31 October, 2006, in Akranes, Iceland. Because Bjørn will retire in 2007, the Presidium appointed Bo to be the new chair of Nordic Positioning Service.

The next meeting of the Presidium will take place on March 8-9 in Helsinki. One of the members of the Steering Committee who also is a member of the Presidium will inform the Presidium about our ongoing activities.

ITEM 8: PREPARATION FOR THE NEXT DIRECTORS GENERAL MEETING

The next Directors General meeting will take place this spring. On that meeting the total coverage of permanent reference stations for GNSS will be shown. Since NKG General Assembly we have an updated map of the permanent reference stations which belongs to the governmental agencies in the Nordic countries. But on this meeting also the permanent reference stations owned by private companies should be included, so we need to find out the rough coordinates of these. Casper has got the ones in Denmark and Bo has tried to get the ones in Finland. Bo will continue to try to get them by calling Seppo Tötterström. Casper is responsible for drawing the map, which means that all coordinates should be sent to him.

ITEM 9: EGNOS

Three satellites (120, 124 and 126) are sending out the signal. Since the ionosphere grid is densified, the accuracy has increased in the northern parts.

ITEM 10: OTHER ITEMS

No other items were brought up to the agenda.

ITEM 11: SUMMARY OF ACTION LIST

- We decided to have one main responsible person on every sub project.
- Nordnet: Sub-project leader: Frode Koppang. Point of contacts: Casper Jepsen, Anders Frisk.
- NorDPOS: Sub-project leader: Casper Jepsen. Point of contacts: Gro Grinde, Anders Frisk.



NORDISKA KOMMISSIONEN FÖR GEODESI

- Exchange of data: Sub-project leader: Andreas Engfeldt. Point of contacts: Rune Hanssen, Örjan Zackrisson.
- Website: Sub-project leader: Casper Jepsen. Point of contacts: Tom Halvorsen, Anders Frisk, Frands Steffensen.
- The sub-project leader shall make a report for every meeting (live or by telephone), including how many meetings has taken place, plans, what's performed, etc.
- Each country shall investigate if they are interested in a common ITRF in GPSNet. Deadline: Next telephone meeting.
- The DAB status in Sweden shall be investigated. Bo Jonsson is responsible.
- The status of different distribution channels in Germany will be investigated. Casper Jepsen is responsible.
- Rough coordinates of the GPSNet.fi stations are needed for the next Director Generals meeting. Bo Jonsson is responsible.
- The map for the Director Generals meeting must be drawn. Casper Jepsen is responsible.
- KMS wants some advice from Lantmäteriet concerning monitor stations.
- Next telephone meeting will take place on the 12th of March (2007), at 09.00.
- Next meeting will take place on the 2-3 of May (2007), lunch-lunch, in Hønefoss.

ITEM 12: NEXT MEETINGS AND CLOSING

The time of the next telephone meeting of the Steering Committee will take place on Monday March 12, 2007, at 09.00.

The next "real" meeting will take place in Hønefoss on May 2-3, 2007, lunch-lunch.

Bjørn was thanked for his time as chair for this project. Bo took over the chair and thanked us all for a fruitful meeting.