



NORDISKA KOMMISSIONEN FÖR GEODESI

Ordförande
BJÖRN ENGEN
Statens Kartverk
Kartverksvn 21
N-3500 Hønefoss
NORGE

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

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

**Minutes of the 24th meeting
København, October 6, 2006**

PRESENT

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



ITEM 1: OPENING OF THE MEETING

Lolita Bahl welcomed everybody to the 24th 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 (Lolita)
2. Minutes from the 23rd Steering Committee meeting on 16 May in Hønefoss and review of action lists from that meeting (see below) (Andreas / All)
3. Ongoing activities
 - Nordnet – the computer network (Rune, Casper, Bo)
 - Website (Rune, Casper)
 - NorDPOS (Bo, Rune, Casper)
 - NordRTK (Per Erik, Casper)
 - The national GPS-services in each country (Bo, Rune, Casper)
 - Approval of the performed classification of the reference stations (Andreas)
4. Future activities (All)
5. The Automated Computation Service (Bo)
6. Spidernet tests (Casper)
7. Preparation for the next Presidium Meeting (All)
8. Preparation for the next Directors General Meeting (All)
9. Global Star (Bo)
10. EGNOS (Rune)
11. Other items
12. Summary of action list (Andreas)
13. Next meeting and closing (All)

ITEM 2: MINUTES FROM PREVIOUS MEETING

Minutes from the 23rd Steering Committee meeting on May 16 was approved.



REVIEW OF THE ACTION LIST FROM THE MEETING OF THE STEERING COMMITTEE ON MAY 16

The agreed action list from the meeting in Hønefoss on May 16, 2006 was reviewed:

	Action	Responsible	Action carried out
1	Factum will be contacted because we want to go on with Network DGPS in Denmark with DAB as distribution channel.	Casper	Done, see ITEM 3, NorDPOS
2	There will be a meeting in Copenhagen between Casper, Rune and Anders. Frands will attend after a while when the Web site is the subject.	Casper	Done, see ITEM 3, Nordic Web portal
3	The Topcon-converter shall be installed in Sweden. Per Erik, Rune, Örjan and Anders will take part. This will be performed in June.	Per Erik	Done, see ITEM 3, Nordnet
4	NordRTK-meeting in Gardermoen on the 21th of June.	Per Erik	Done, see Appendix A
5	Casper checks about the term of notice for the computer lines between the Nordic control centres	Casper	Done, see ITEM 3, Nordnet
6	Rune sends the Telenor offer to everybody in the Steering Committee	Rune	Done
7	There will be a telephone meeting about this on the 9th of June. Andreas will not participate.	Rune will order it	Done
8	Next meeting will be the 7-8 of September, lunch-lunch, in Copenhagen	All	Changed to the 6 th of October

ACTION LIST FROM THIS MEETING

	Action	Responsible
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
2	There will be a Web site meeting between Rune, Per Erik and Anders before January.	Rune/Bo
3	- There will be a Web site meeting between Casper, Rune, Per Erik, Anders and Frands in January.	Casper/Rune /Bo
4	Trimble will be contacted about the error message "SPP is wrong".	Rune



5	Javad will be contacted about the problem that the different message types give different position	Rune
6	There will be DAB-tests in Denmark in January - February.	Casper
7	A NordRTK-meeting will maybe take place in Sweden on the 5th of December. Otherwise it will take place in January. A decision will be taken in November.	Per Erik
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
9	The classification document shall be approved (or not approved) latest on October 31.	Andreas?
10	Rough coordinates of the GPSNet.fi stations are needed for the next Director Generals meeting.	Bo
11	Rough coordinates of the GPSNet.dk stations and the Spidernet stations in Denmark are needed for the next Director Generals meeting.	Casper
12	Next telephone meeting will take place on December 6, at 13.00.	Andreas will order it
13	Next meeting will take place on January 24-25, lunch-lunch, in Gävle	All

ITEM 3: ONGOING ACTIVITIES

Nordnet

The VPN line:

We decided on the latest telephone meeting to accept the Telenor offer for a computer network between the control centres of the .Danish, Norwegian and Swedish networks of permanent reference stations. The confirmation from Telenor reached us the week before this meeting. As soon as we get a date for the installation of the lines, we will cancel the old agreement with Tele Danmark. The cost for the new lines will be splitted into three equal parts.

DEC/DES (Data Exchange Client/Data Exchange Server):

Last week Rune was in Gävle installing the Topcon-converter and trying to solve the DEC/DES problems with Örjan Zackrisson and Anders Frisk. During that time the converter didn't become stable. The DES worked fine, but the DEC didn't. Now Örjan has to make a few minor things to make the DEC work. There are some small problems with GPSNet, because of dll-files from Norway. This is something that Rune will contact



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Trimble about. It was also found that the Javad receivers give different position information depending on which message type is used. This is something Rune will contact Javad about.

Nordic Web Portal

There was a meeting in København the day before this meeting, including Rune, Casper and Anders Frisk. Since the specification document was written quite long ago, it needed to be read through and somehow changed. There is still a lot effort to do before Frands Steffensen can take over and make the programming. Next meeting will take place in January. The whole portal shall be finished in April (Norway's wish).

NorDPOS

Casper had a meeting with Factum and there will soon be a modified solution from Factum. KMS has bought DAB receivers and within 14 days there could be a DAB test. Next week the VPN line will be tested between KMS and Danmarks Radio. In January and February there will be real DAB tests. People from Statens Kartverk and Lantmäteriet are welcome to join and check the tests.

NordRTK

There was a meeting in NordRTK on June 21, in Gardermoen (See Appendix A). The next meeting will take place in Sweden, perhaps on December 5 (decided in November).

The national GPS services in each country

Sweden

On July 1 the one-year establishment Network RTK project "Nord-RTK" started in Västerbotten and Norrbotten, with 16 new stations.

There is a plan for 25 new Network RTK stations in the area of Jämtlands län and Västernorrlands län to tie together the recent established northern network to the network in the southern half of Sweden. The start of that project will earliest be in July 2007.

The operator of the EPOS service (DGPS), Cartesia, will not any longer be the operator after January 1 2007. Teracom is at moment trying to find another operator. The users will still be able to use the service three months after that date if no new operator has been found.

Norway

There are plans to build three new CPOS-stations and to add one DPOS-station to the CPOS-network in coastal Trøndelag. In Sogn & Fjordane one station has been moved and two new stations have been established.

The Norwegian Spidernet (Leica) will probably start in October in Rogaland and will be run from Denmark. In the beginning it will only be a single station RTK service.



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Denmark

One of the missions for the Geodesy department at KMS is to control/check the permanent GNSS stations owned by the private companies. At this meeting appeared a proposal was put forward that KMS should build a few monitor stations to check the private networks through. What is needed is then a GNSS receiver, communication lines and a good antenna. This subject will be on the agenda of next NordRTK meeting.

Approval of the performed classification of the reference stations

Some opinions to change a few minor details were agreed. After the changings the Steering Committee shall approve (or not) the document latest on October 31.

ITEM 4: FUTURE ACTIVITIES

Galileo:

We had a discussion about Galileo, the delay, receivers and antennas. It seems as all Dorne Margolin antennas we have at present must be either switched to a new antenna or changed in the antenna elements. Anyway it will cost quite much to do that. The Zephyr antenna from Trimble is said to be compatible with Galileo.

ITEM 5: THE AUTOMATED COMPUTATION SERVICE

The new version of the SWEPOS computation service, using the Bernese software version 5.0, is in progress.

The special version of the automated computation service for road construction (and especially for the "Road 45" project) is almost in operation.

ITEM 6: SPIDERNET TESTS

As long as Spidernet is not up and running there is no use testing it. The service in Denmark will not use GLONASS, but the one which will start in October in Rogaland will use GLONASS too.

ITEM 7: PREPARATION FOR NEXT PRESIDIUM MEETING

The next meeting of the Presidium will take place on 30-31 October in Iceland. One of the members of the Steering Committee who also is a member of the Presidium will inform the Presidium about our plans.



ITEM 8: PREPARATION FOR THE NEXT DIRECTORS GENERAL MEETING

The next Directors General meeting will take place next 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 will take care of the ones in Denmark and Bo will take care of the ones in Finland.

ITEM 9: GLOBALSTAR

The development in using GlobalStar as distribution channel has gone one step back. At previous tests, performed in 2005 by Lantmäteriet, the modem was big but had a good antenna. For a test this summer, performed by Lantmäteriet, the modem was small and looked like a cellular phone, but the antenna was very bad. The tests this summer showed very poor results compared with the earlier tests, there were a lot of interruptions in the reception of the signal from the GlobalStar satellites.

Bo had a meeting with the Swedish GlobalStar provider, Netton, in August, where he told them about the test results and our desires (small modem and good antenna).

On the next meeting this item will be moved to Future activities.

ITEM 10: EGNOS

ESTB was finished on July 1. ESA has decided to get two new RIMS stations in Norway (Jan Mayen and Svalbard), which will make the coverage of EGNOS better in the north. At present it will only perform well up to 63-64 degrees north.

The last evaluation before EGNOS gets operational will take place in October and November.

ITEM 11: OTHER ITEMS

No other items were brought up to the agenda.

ITEM 12: SUMMARY OF ACTION LIST

- The new computer network will soon be up. When a date for that is decided, we will cancel the old agreement with Tele Danmark.



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- There will be a Web site meeting between Rune, Per Erik and Anders before January.
- There will be a Web site meeting between Casper, Rune, Per Erik, Anders and Frands in January.
- Rune will contact Trimble about the error message "SPP is wrong".
- Rune will contact Javad about the problem that the different message types give different position.
- There will be DAB-tests in Denmark in January - February. Anyone from the other countries who are interested in it, are welcome to participate.
- A NordRTK-meeting will maybe take place in Sweden on the 5th of December. Otherwise it will take place in January. A decision will be taken in November.
- 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.
- The classification document shall be approved (or not approved) latest on October 31.
- Bo will find out rough coordinates of the GPSNet.fi stations and Casper will find out rough coordinates of the GPSNet.dk stations and the Spidernet stations in Denmark. Those coordinates are needed for making a map for the next Director Generals meeting.
- Next telephone meeting will take place on the 6th of December, at 13.00.
- Next meeting will take place on the 24-25 of January, lunch-lunch, in Gävle.

ITEM 13: NEXT MEETINGS AND CLOSING

The time of the next telephone meeting of the Steering Committee will take place on Wednesday December 6, at 13.00.

The next "real" meeting will take place in Gävle on January 24-25, 2007.

We thanked each other for our contribution to a fruitful meeting.