



Memo on Nordic Geodetic Commission

Division
Geospatial References

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Short status on the NKG and the Working Group projects the past years.

General information on NKG:

NKG (The Nordic Geodetic Commission, founded in 1953) is an association of geodesists and individuals working in the field of geodesy from Denmark, Finland, Iceland, Norway, and Sweden.

The vision of the NKG is to advance geodetic cooperation, education and research.

The NKG is recognized and supported by several Nordic organizations, such as the Director Generals of the Nordic Mapping Authorities (see [bylaws](#)). To forward its vision, NKG arranges a general assembly every 4 years, and well themed summer schools also every 4 years, in one of the Nordic countries as the host.

NKG is managed by a Presidium and the actual work is done in Working groups and dedicated projects. **NKG** is currently very active and has a strong project-oriented focus. NKG presidium has in the past 4 years mainly worked on updating its bylaws in order to integrate the Baltic nations (Estonia, Latvia, Lithuania) as full members of NKG.

The NKG has during the years coordinated many tasks related to improved and joint geodetic infrastructure in the Nordic area, which has always successfully proven that the cooperation is needed. Current examples of very important NKG projects are an improved Nordic geoid model, a new empirical land uplift model, a joint GNSS analysis centre, the joint gravity database and a common transformation method.

NKG has also been visible in international organizations and projects, e.g., in the work of EUREF, the International Association of Geodesy Reference Frame Sub-Commission for Europe. NKG's local analysis centre contributes since many years to the EUREF Permanent Network (EPN), a European wide network of permanent GNSS reference stations. Another example is the EUREF working group of deformation models where the Nordic geodetic challenges of adequate



treatment of the post-glacial rebound signal have been successfully accentuated on pan-European level.

NKG has the following working groups (WG):

WG of Geodynamics and Earth Observation

Chairperson: Holger Steffen, Sweden

Gathering all information available (both satellite and terrestrial data such as from GNSS and gravimeters) on the movements of the land and sea the group is among others computing models of the land movements of northern Europe and helps identifying geodynamic processes and climate related changes. Another important recent task has been the initiation of collaboration of geodesists and geophysicists within the InSAR community

WG of Future Height System and Geoid

Chairperson: Ove Christian Dahl Omang, Norway

This group has been working mainly to coordinate the work on gravity observations and processing them into a common Nordic geoid, which is used to determine accurate heights using GNSS by any survey in the Nordic region. Further the group investigates how to define future heights systems due to land uplift and sea level changes.

WG of Future Positioning Services and Applications

Chairperson: NN

Currently the WG is sharing information on GNSS applications and services such like Galileo and its High Accuracy Service (HAS) and issues like geodetic infrastructure, as the group have not had a chairman in the past years.

WG of Reference Frames

Chairperson: Pasi Häkli, Finland.

The group is coordinating all the GNSS data processing of the Continuous Operating Reference Stations (CORS) in the Nordic countries. The results, both coordinates and time series are feeding into the WG of Geodynamics as well as the work on coordinate transformations between the various geodetic reference frames to be used by all of the geodetic community.