

NKG Resolutions 2026

No 1 Reference Frames

No 2 Height and Geoid

No 3 Geodynamics and Earth Observations

No 4 GNSS positioning

No 5 Presidium

No 6 Thanks

Resolution no 1. Reference frames

The Nordic Geodetic Commission (NKG),

recognising the need for reliable, high-quality, and up-to-date GNSS-related reference frame and transformation products and services for the basis of geodata,

recognising the importance of GNSS processing and other software for producing the reference frame products, and the potential risks due to strong dependency on the used software,

recognising the need to study dynamic reference frames and its implementation as a “two-frame approach” along conventional reference frames,

noting the work of the Reference Frames Working Group on re-processing of permanent GNSS observations in the NKG countries, and on standardization of the reference frame products,

noting the ongoing study on development of ETRS89, and the potential of the artificial intelligence (AI) for reference frame products,

asks the Reference Frames Working Group to finalize NKG repro2 and to continue producing and improving continuous and up-to-date coordinate and velocity solutions and derived reference frame products, and to make them as official NKG products,

recommends to explore alternative GNSS processing software and possibilities to integrate AI for reference frame products, and

encourages its member countries to continue the standardization and unification of processes for reference frame and transformation products.

Resolution no 2. Height and Geoid

The Nordic Geodetic Commission (NKG),

recognising the emergence of quantum gravimetry technology and its potential for improving the accuracy and traceability of absolute gravity measurements,

recognising its responsibility to provide geodetic data products that support climate change studies, including regional gravity data and derived products, including invention of common standards, procedures and tools,

noting the efforts of the working groups in collecting, analysing, quality-controlling, and harmonising geodetic data,

noting the importance of reliable transformations between the International Height Reference Frame (IHRF) and regional and national vertical reference frames,

noting the continued efforts required to maintain and develop the NKG gravity database,

asks the Height and Geoid Working Group to complete the next generation of NKG quasigeoid models, including associated uncertainty information, and

recommends the development of gravity anomaly products to support climate and Earth system studies.

Resolution no 3. Geodynamic models for the NKG area

The Nordic Geodetic Commission (NKG),

recognising the importance of an accurate determination of the glacial isostatic adjustment (GIA) signal to, among others, provide stable geodetic reference systems and identify net variations in mean sea level,

recognising the need for highest quality deformation models as correction for the GIA signal in geodetic practice and beyond,

noting the successful reprocessing of GNSS observations in the European GIA-affected area during the last NKG period,

noting the commenced meticulous preparations for a new generation of NKG deformation models,

asks its working groups to finalize new NKG deformation and GIA models.

Resolution no 4. GNSS positioning

The Nordic Geodetic Commission (NKG),

recognising the value of cross-country collaboration and knowledge exchange to achieve resilient GNSS services,

recognising the increase in cases of GNSS interference and the need to secure the GNSS infrastructure,

noting that GNSS infrastructure monitoring and resilience includes both physical and software components,

noting the importance of quality assurance of real-time positioning services available in the NKG region,

noting the development of alternative technologies for positioning, navigation, and/or timing,

also **noting** the importance of outreach activities to secure the geodetic reference frame to be included in standardized, real-time data streams from both positioning services and sources of geospatial information,

recommends to strengthen collaboration on monitoring and mitigation of GNSS disturbances arising from natural phenomena and human interference.

Resolution no 5. Presidium

The Nordic Geodetic Commission (NKG),

recognising the successful inclusion of the Baltic countries with the 2022 by-law revision,

recognising scientific excellence conducted by the working groups as well as individuals supporting the NKG mission

recognising that awareness of geodetic contributions to the society must be raised to secure future engagement and funding,

recognising that the geopolitical situation calls for strengthening European collaboration,

noting that the NKG Awards are being given,

requests a need for two Task Forces on “Education & Outreach” and “NGOS (Nordic Geodetic Observing System)”,

requests the NKG Presidium to create clear and concise descriptions of the products of NKG and their relationships,

requests the NKG Presidium to assess potential to strengthen geodetic capabilities in Europe, e.g. in cooperation with the UN-GGCE office in Bonn, Germany,

encourages all stakeholders and working groups that publication and dissemination of NKG products is done as official NKG products and in accordance with the FAIR principles for research data.

encourages celebrating the NKG’s 75 years anniversary in 2028 and utilizing this in outreach activities

Resolution no 6. Thanks!

The Nordic Geodetic Commission and its members

present at the 20th General Assembly of the Commission in Vilnius, Lithuania, express their sincere thanks to the ***Ministry of Environment of the Republic of Lithuania*** and the ***local organizing committee*** for hosting and organizing an excellent GA beyond expectations and to the ***scientific committee*** for offering a program of highest standard – all together concluding the GA as a NKG highest achievement