National report - Norway

Positioning services

- Number of stations:

  309 stations pr 03.03.2025

  302 stations pr 14.02.2023

  210 stations pr 01.01.2018

- Replacing legacy Trimble NetR9 receivers with Leica GR50

- Paying subscribers: 5300

- Free-of-charge subscriptions (R&D, innovation, schools etc): 300

- Private companies estimated 18 000 unique users, based on the GNSS-stations from NMA.

Other activities

- Renewing the real-time data collection architecture
  - Moving from a self-developed Linux-based system, to commercially available solutions
  - Decision based on lacking software developer resources

  - Tested Alberding NTRIP caster and Rinex generator, but found it lacking especially on Nav files and SBAS (b)-files

  - Current concept being tested:
    - RTCM MSM5 streams from all receiver types through Trimble Pivot Platform router modules. Redundant setup (2x servers)
    - Download Rinex-files from receivers
      - GR50 OK, NetR9 missing doppler and slow conversion
      - Need to correct Rinex headers from stationDB

Kartverket

Status of GNSMART:

- Still using GNSMART from Geo++ but only for R&D projects
  - HYPOS and MODI projects
  - Soon upcoming data collection in these projects, where we will utilize SSRZ from GNSMART
  - Carl will talk more about this in a later presentation