



Kartverket

NATIONAL REPORT FROM NORWAY

EUREF 2018



Levelling benchmark in Bømlo, Norway. Photo: Per Chr. Bratheim

Fundamental station

Ny Ålesund in Spitsbergen



- Multi technique station: VLBI, SLR, DORIS and GNSS
- Official opening on June 6th 2018
- Some technical issues to be solved, planned operational late 2018

Implementation of the new geophysical height system NN2000/EVRS2007 is completed

- Includes more than 30 000 km of precise levelling acquired over a time period of 100 years
- The last municipalities converted to NN2000 in May 2018



Re-computation of control points in Euref89

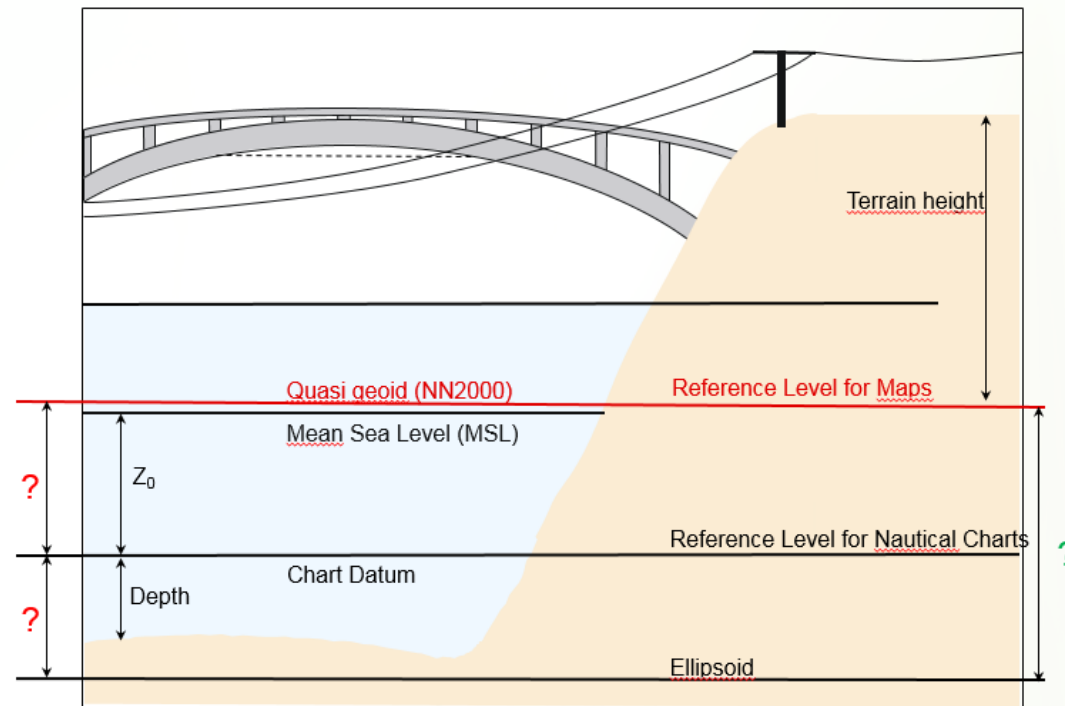
- The national control point network in Euref89 was established before the CORS network
- Extensive GNSS campaigns have been conducted since 2009
- All control points will be re-computed based on the CORS-network
 - Coordinate differences 0 – 3 cm
- Control points will be fully aligned with the positioning service CPOS after update

Future reference frame strategy

- We expect that future technology will require data in a global reference frame in near current epoch
- Proposed strategy:
 - Step 1: Change from Euref89 to ITRF/IGS epoch 2020 or later
 - Step 2: Data management in near current epoch (dynamic reference frame) ?

Connecting height datum and chart datum

- Pilot project to determine the relationship between chart datum, height datum and reference ellipsoid
- Separation models based on tide gauges, levelling data and GNSS
- Project phase II in 2018 will focus on fiord areas



Thank you for your attention!



Photo: Eivind Leren