EUREF National report for Denmark

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Denmark

The three permanent GPS stations that are in operation in Denmark (BUDP: Buddinge, SULD: Suldrup, and SMID: Smidstrup) have been accepted for the EPN. Furthermore, the SULD and SMID stations have been submitted to the ECGN.

The KMS DGPS services (SPOT-FM and NAV-DK) use at the moment the network of permanent GPS-stations. The private sector has in cooperation with KMS established two RTK services including local permanent GPS stations covering the entire Denmark. KMS act as a consulting part and calculate the positions of the local stations in relation to the national geodetic reference frame.

The introducing of a new reference system (EUREF89/ETRS89 and the new vertical reference DVR90) is in progress. The new 3D GPS reference network has a spacing of 10 km. The network is ready for use in Sjælland, Fyn and the southern part of Jylland. In total 275 stations will be established in the new network.

A Nordic computing centre (NCC) for Precise Levelling is set up in Denmark. The main idea is to use the existing facilities in KMS database administration and adjustment system for all levelling in the Nordic area. A test with all the Swedish data has been carried out successfully, and all Norwegian levelling data from 1927 to 2001 has been calculated with minor problems.

Greenland

Six geodetic permanent GPS station are in operation in Greenland. The Geodetic Department of the National Survey and Cadastre of Denmark operates and maintains the stations at the Thule Airbase, THU2 and THU3, the station SCOB in Scoresbysund, and the newly established station QAQ1 in Qaqortoq. NASA/JPL operates the stations KELY in Kelyville and KULU in Kulusuk. The stations THU3 that has replaced THU1, QAQ1, and KELY are included in the IGS global network. THU2 is equipped with a GPS/GLONASS receiver and has contributed to the IGEX and the IGLOS campaigns. Recently THU2 was accepted for the IGS LEO network. Furthermore, the stations THU3 and QAQ1 have been included in the EPN.