NATIONAL REPORT OF FINLAND

P. Häkli, M. Bilker-Koivula, H. Koivula, J. Näränen, M. Ollikainen, M. Poutanen,
P. Rouhiainen, V. Saaranen, T. Saari, M. Turunen and many others.

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FINNISH GEOSPATIAL
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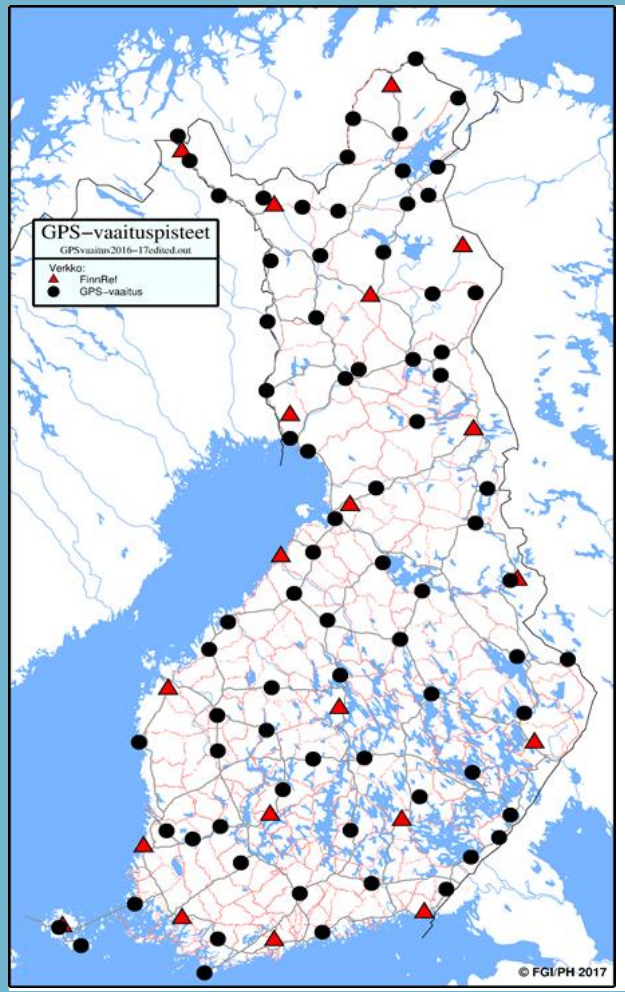
FGI

EUREF Symposium 2018
Amsterdam, Netherlands, May 30 – June 1, 2018

FINNREF

- NLS has initiated a project for 2017-2019 to densify FinnRef CORS network with 20-30 stations
- FinnRef, with about 50 high-quality stations, will be the basis for all reference systems (3D, heights, gravity) in Finland. All FinnRef stations will be connected to the precise levelling network. Part of them are/will be also absolute gravity points.
- The NRTK service will be improved so that it fulfills the internal surveying needs of the NLS. Starting 2019 the FinnRef reference stations will be used as base stations for aerial survey work and the NRTK service by 400 NLS surveyors for RTK.
- Densification ready by the end of 2018



NEW GNSS-LEVELLING DATABASE

- 78 points measured in 2016 & 2017
- 1st order levelling points with heights in N2000 (~10 points 2nd order)
- Where possible EUVN and EUVN_DA points used
- GPS observations 1.5 to 2 days
- Processing of GNSS data in 2018

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Metsähovi SLR – status of renewal

- The telescope system is still being worked on by the manufacturer. No show stoppers, but a lot of minor issues still to be fixed.
- In February, the Coudé path of the telescope was finalized.
- First light in 2018 is the goal.
- After telescope is finalized, the integration of the complete system will take place.
- Rest of the components and subsystems are in place, but have not been tested with telescope.
- Complete SLR system operational in 2019, pending on the progress on the telescope

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Metsähovi VGOS – status

- In 2017 most of the infrastructure work (e.g. making the foundation) was done for the new VGOS telescope.
- Factory acceptance test of the telescope mechanical parts passed in December 2017, servo system FAT 13.3.
- Installation work of the telescope is scheduled to start 11.6.2018.
- Telescope is completed according to contract end of November.
- Signal chain (detection system) components are being procured.
- Expected complete system tests early 2019.

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SWEDISH MARITIME ADMINISTRATION

Liikennevirasto

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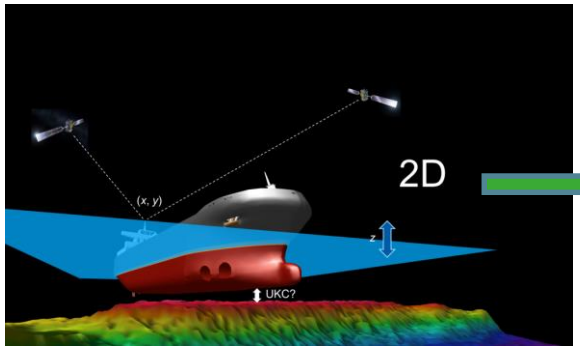
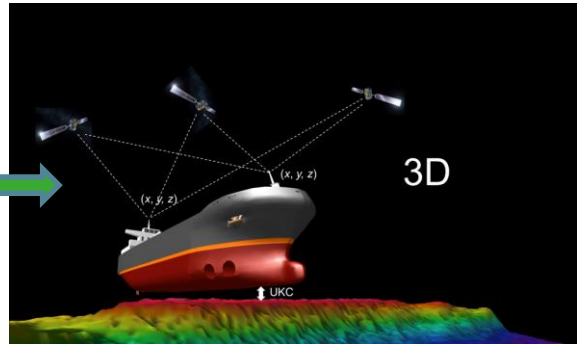
Co-financed by the European Union
Connecting Europe Facility

FAMOS

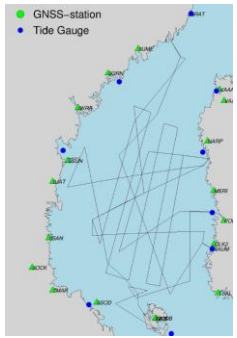
FAMOS

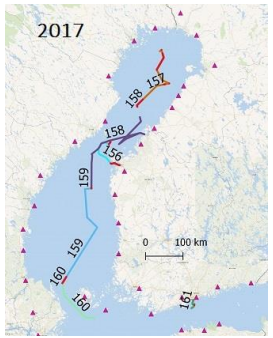
(Finalising Surveys of the Baltic Motorways of the sea)



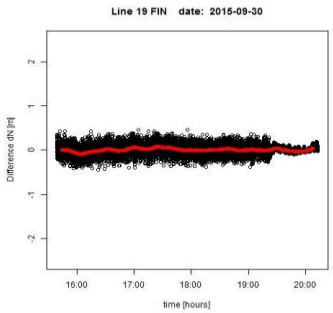


- The goal is to improve safety, efficiency and accuracy of navigation on the Baltic Sea
- FGI has studied:
  - Geoid validation using marine GNSS & sea level data
  - Tests of different GNSS instruments and positioning techniques

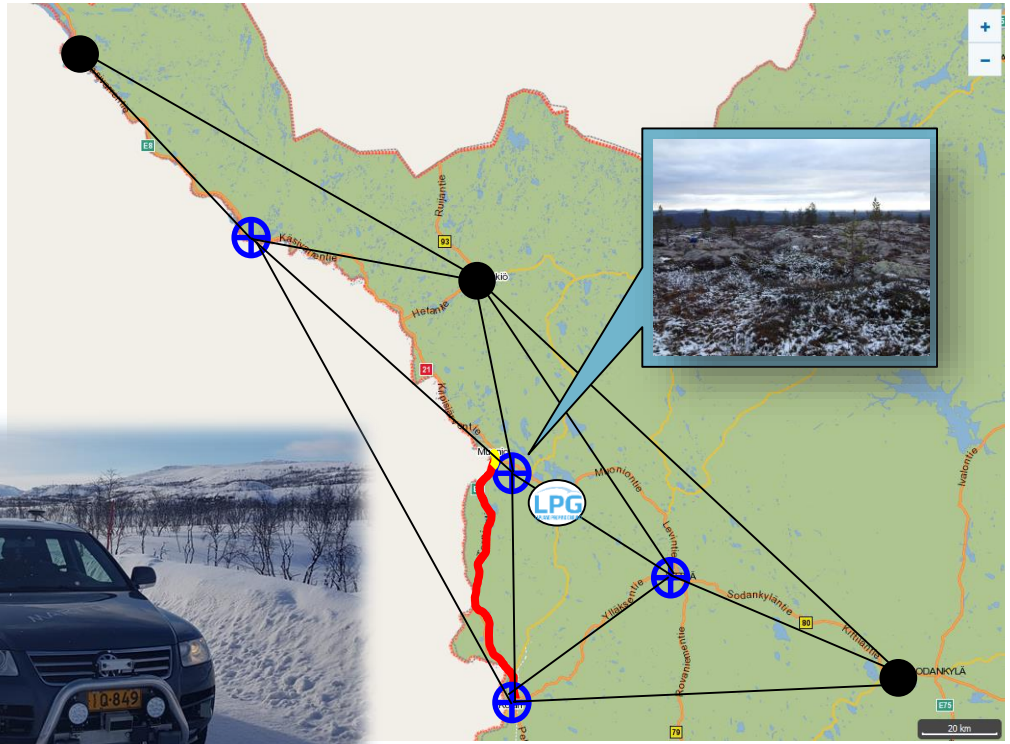




Survey vessel Airisto.
(LOA 30.5 m / B 8.9 m / Draft 2.8 m)



SNOWBOX Aurora



aurora
snowbox.fi

Liikennevirasto
Finnish Transport Agency

Arctic PNT: Aurora-Borealis, March 2018

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More information:
pasi.hakli@nls.fi
https://www.maanmittauslaitos.fi/en/research

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