NSHC 34
VTC
Item D2
Tidal Working Group Report

NSHC 34 - Tidal Working Group Report

Meeting

Reykjavik , 5-6 February 2020 (participants from NL, UK, DE, IS, BE SE, DK, NO)

Numerous contacts by correspondence mainly on a bilateral basis.

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Tide gauge operations

- Heterogeneous ownership/operation of tide gauges (HO, ports, public works administration, meteorological institute …)
- Requirements for maintenance show variation depending on intended principal purpose of the tide gauge (Benchmarks, levelling , determining MSL trends …)

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Online tidal data

- Water level observations
- Tide tables
- Forecasts
- API for internal and third party applications

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Current issues

- Challenges in creating a seamless land and sea reference surface. (NO example)
- Extreme water level calculations and surge warnings (IS example)
- Developments in GNSS Based surveys (All)
- Investigating and reducing differences between reference surfaces at international borders (BE-NL / DE-NL / DK-SE-NO) – the maximum 1% of water depth as the acceptable difference between different LAT reference surfaces is hard to achieve in very shallow areas.

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Future outlook

- Introduction of S-100 series (S-104 Water level information for surface navigation and S-111 Surface currents)
- Investigating and further reducing differences between reference surfaces at international borders
- IHO TWLCWG project on Data archeology

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Progress since the last meeting :

- New finalized LAT reference surfaces : DE and NL
- Upcoming tender for establishing an updated LAT reference surface for BE

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- NSHC 34 is asked to
  - Take note of the report
  - Further charge the working group with:
    - Monitoring developments in GNSS Based surveys
    - Prepare introduction of S-100 series (S-104 Water level information for surface navigation and S-111 Surface currrents)
    - Investigating and further reducing differences between reference surfaces at international borders