

NSHC Tidal Working Group Work Plan and List of Actions

**Approved by NSHC38, 8-9 April 2025
As proposed by TWG27, 4-5 February 2025**

Work Plan

Item Number (TWG/Item)	Objective (Why/Priority)	Task Description (What/How)	HO Involved	Status
WP 16/04	Enable GNSS-based tidal reduction and the connection with the vertical datum on land	Follow developments on geoid, MSL and LAT computations for the North Sea area	All	Permanent
WP 18/01	Improve North Sea wide realization of reference surfaces	Explain and reduce differences in reference surfaces at the international boundaries	All	Permanent
WP 18/02	Improve methodologies for ERS	Exchange between HO's on operational methodologies for ellipsoidal referenced surveying for GNSS based surveys	All	Permanent
WP 22/01	Ensure common European LAT surface adoption	Follow the developments of European initiatives on new LAT surfaces	All	Permanent
WP 24/01	Regional cooperation and coordination of the implementation of S-104 Water Level and S-111 Surface Currents	Coordinate the implementation of S-104 Water Level and S-111 Surface Currents and report on the progress to NSICCWG. Make available S-104 and/or S-111 test datasets which could be compared at national boundaries in the North Sea region, investigate and collaborate on resolving any differences.	All	Permanent
WP 24/02	Data Rescue and Data Archaeology	Exchange between HO's on details and methods used in the rescue of national / international archive tidal & water level datasets, for the purposes of climate change studies, tsunami research and any such activity requiring access to these important assets	All	Permanent

List of Actions

Item Number (TWG/Item)	Objective (Why/Priority)	Task Description (What/How)	HO Involved	Status	Corresponding Work Plan Item
AP 18/01	Explain differences in realizations of LAT	Exchange on bilateral basis between involved HO's to investigate further the origin of observed differences at the boundaries between national reference surfaces	All	Permanent	WP 18/01
AP 22/02	Investigate the differences in national LAT reference surfaces at all borders	Each member state should supply all LAT updates to NL who will update the LAT differences matrix accordingly	NL, All	closed, merged into new 27/03	WP 18/01
AP 22/03	Investigate the differences in national LAT reference surfaces at all borders	Make error estimates in LAT surfaces	All	closed, merged into new 27/03	WP 18/01
AP 22/05	Ensure common European LAT surface adoption	Follow the developments of European initiatives e.g. EMODnet on new LAT	All	Permanent	WP 22/01
AP 23/02	Investigate all LAT differences at the borders and overlapping parts of surfaces using the redefined Norm	Investigate the differences at all MS borders (and overlapping parts of surfaces) between national LAT reference surfaces	All	closed, merged into new 27/03	WP 22/01
AP 24/01	UK and FR to supply 'CD to Ellipsoid' separation values along their common boundary to NL to investigate if this improves the result in any way	Charted depths in this region are reduced to 'CD', which is approximately LAT. Therefore it is important to ensure the correct surfaces are being compared with each other, then used in the 1% norm calculation (or other suitable method as decided by TWG)	FR, UK, NL	done	WP 18/01

AP 25/01	Investigate LAT differences at overlapping parts of surfaces	Each member state should supply LAT surfaces for an as large as possible area of the North Sea to NL who will compare the surfaces	All	closed, merged into new 27/03	WP 18/01
AP 26/01	Provide links to S-104 and S-111 test datasets	Link to existing IHO website, which already coordinates this. https://iho-ohi.github.io/S100Resources	All	Permanent	WP 24/01
AP 27/01	Exchange information on LAT / CD calculation and implementation	Collect information on how LAT /CD surfaces are calculated by the HO's and make it available to the group	Chair	Permanent	WP 18/01