Terms of Reference

**NOOS Model validation WG**

Background

* The NOOS web site is an important means of communicating with users of North West Shelf products and services.
* It provides observations, analysis, forecasts, and model-based products describing the marine conditions.
* A common strategy for determining the quality of existing products is needed, though individual NOOS contributors do conduct their own validation and verification assessments internally.
* Some common validation exercises have already been undertaken as part of NOOS on multi-model verification of temperature and salinity following the GODAE Class4 methodology (Class4: statistics estimated from common set of reference observations and matchup from the various models in observations space).
* Current activities will be extended to encompass further validation/verification exercises.

Vision:

* The results from the various verification activities will be disseminated through a web page linked to the NOOS web site
* The validation/verification of key parameters will be done against available quality controlled observations
* The verification activities intend to inform both the end users in the quality of the information provided by NOOS products, as well as the model development process by identifying areas for improvement.
* The verification activities will be coordinated as part of both NOOS and CMEMS product Quality Working group activities
* The principle is to start small and simple, one variable at a time, and add complexity and functionality once a framework has been established

Strategy:

* Each model provider will make its output available for inter-comparison, this will complement and be coordinated with the Multi-Model Ensemble activities in NOOS/CMEMS
* Reliable quality controlled observations will be identified
* A set of metrics, assessment techniques will be decided on
* Routine verification for the NWS (including sub regions of interest) will be provided on regular basis (daily, monthly…)
* Routine verification for the NOOS interface regions with both BOOS and IBI
* (including sub-regions of interest) will be provided on regular basis (daily, monthly…)

List of Participants:

1. Met Office: Christine Pequignet
2. BSH : Inga Golbeck, Xin Li
3. FCOO: Johan Soderkvist
4. Met Norway: Øyvind Sætra, Nils Kristensen,
5. RBINS: Sebastian Legrand
6. SMHI: Adam Nord
7. DMI: Jacob Woge Nielsen

Mode of operation:

* Met Office will lead the activities
* BSH will develop the web site
* By keeping the NOOS verification activities in line with the CMEMS product quality Working Group priorities, the activity plan will follow the CMEMS PQ plan.
* The community will contribute by making their model available and providing comments and suggestions
* Met office and BSH will engage the partners to define priorities, metrics and methodology
* Keep close collaboration with verification strategy of waves and surge

Plan for next years:

* Extend SST verification to SSS
* CMEMS class2 verification activity (Class2 = verification at fixed mooring locations)
* Develop the verification website interface, to display work already done
* Surface current verification using HF radar verification will be made operational