

Conclusions « on-the-fly »

- 1. Consensus : things that we agree on.**
- 2. Questions : aspects that still require discussion**
- 3. How to proceed ?**

Ocean kernel

- no strong case for moving toward unstructured grid yet
- AGRIF is an essential tool for NEMO, but resources are needed.
- The question of scalability should be addressed, concept of separating Natural. Science from Computer Science

Ocean physics

- toward a more physically based mixing (ALE, time stepping, parameterizations, overflows)
- wave/circulation coupling : preparing the model for coupling with external wave models
- need to improve the coordination of physical developments (projects, decision process)
- circulation under ice-shelves, interface with land ice models

System environment

- improve users experience, facilitate the first steps with NEMO (tutorial, configuration tools)
- enabling external users to make available their configurations ?
- The general approach for Data Assimilation as defined by NEMO-Assim is good ;
the tools need more users

A need for **simplifying** the code for both maintenance and futur evolutions (fewer options)

Aspects on which we have not reached a consensus yet / that we have not addressed :

- NEMO : a community model or a consortium model ?
- contours of NEMO (seamless to what extent ? generic interface for ice models?)
- non-hydrostatic, non-Bousinesq have not been discussed
- diagnostic tools have not been discussed much
- do we need a short term strategy for HPC ?
- what rationale/process for simplifying the code ? This is related to quality testing.
- what approach for separating Computer Science from Natural Science ?
- since AGRIF is essential, who is/will be involved in maintaining it within the system ?
- how can we keep an eye on the evolution of unstructured discretization methods?
- shall we develop together tools for ensemble runs? (multi-NEMO, metrics)

Preparing the document :

- a document both for us and for the Steering Committee (should be updated on a regular basis)
- the DevCom should be in charge of updating the document
- the document should clarify the implication in terms of man power
- the Extended DevCom should review the document.
- a writing group should be set
- a task team to be set for simplification (fewer options in NEMO)
- a working group to be set on HPC separation : gateway report to DevCom (+invitation GungHo

two important questions should be addressed by december :

- contours of NEMO, seamless or not
- strategy with respect to GungHo.

Action

a small group will shortly provide a plan on how to proceed until december.