

NEMO SEA ICE WORKING GROUP

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Progress against *transition plan*

Transition in a good shape

- Merge of CICE, LIM3 and GELATO by 2019 (nearly ok)
- Coupling implementation for Met Office systems (done)
- Incorporation of new developments by 2020 (started)
- Prepare strategy (half-way)

Later than planned (but underway)

- Developments (ponds, drags, rheologies, advection)
- Documentation

Successes

- Transition phase nearly over
- Community Developments start
 - aEVP rheology in there, EAP & VP on the way ([NOCS](#), [CNRS & Mercator](#))
 - Radiative transfer ([CNRS & UKMO](#))
 - Infrastructure work => SI3 in Met Office coupler ([UKMO & CNRS](#))
 - Evaluation package ([Louvain](#))
- New developers start to work with NEMO/SI3
- SI3 receiving good levels of EU funding (~10 PYs)
- Established in the community
 - Community workshop Iceland 2019
 - Review / perspective papers in BAMS (Blockley et al., 2020) and Climate Change Reports (Hunke et al., 2020)

Issues

- **COVID**
 - working difficulties for many of us; communication harder
- **SIWG has lots to do & a wide scope**
 - Multiple components: dynamics, thermodynamics, coupling, snow,...
 - Model developments
 - Long-term strategy
 - SI3 documentation
- **Transition is a slow process** (development practises, developments)
- **Some developers do not yet contribute as expected**
 - Recruitment/staffing issues
 - How best to get pull-through from external/university groups?
- **Limited resources** (3 projects, 1yr per partner, 5+2 partners)
 - Top-heavy management vs. development
- **Project-based development: cost higher than benefit ?**
 - Large admin overhead
 - Extra demands/pressures from funders

Future plans

- SI3 documentation
 - Funding: IS-ENES3 & CMEMS
 - Combined with GMD model description paper
- SI3 strategy:
 - Updating existing NDS Chapter 8
 - Building upon Iceland workshop and associated papers
- Finalising developments in current projects:
 - Rheology: VP, EAP [IMMERSE]
 - Melt-ponds & form-drag [CMEMS/IS-ENES]
- Bringing new developers fully into NEMO dev. cycle
 - CNRM/CPOM/UCL/ECMWF
 - IS-ENES: training & test configs