Blue Cloud Initiative – SeaDataNet contributions so far

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Blue Cloud Initiative by EU

- EU wants to develop the European Open Science Cloud (EOSC)
- Number of projects underway for exploring the EOSC contours such as EOSC Pilot project (lead by e-infrastructure parties), EOSC Hub, and others
- At the 2016 G7 S&T Ministerial, Commissioner Moedas proposed development of a Pilot Blue Cloud (PBC) as an initiative of the EOSC, and as contribution to the G7 Future of the Seas and Oceans initiative
- DG-RTD has held two workshops with DG–GROW, DG–CNECT, DG–MARE and community stakeholders to explore a common vision for developing the PBC.
- Workshop participation by leading marine data infrastructures such as SeaDataNet, EMODnet, EuroGOOS, Copernicus (CMEMS INSTAC), Euro-Argo, PANGAEA, EBI - EMBL, and EurOBIS, e-infrastructures such as EUDAT and EGI, and projects such as ODIP, AtlantOS, BlueBridge, ENVRI+ and EVER-EST.
Providing harmonised discovery and access to data output from multiple sources

- Operational oceanography networks, cooperating with EuroGOOS, CMEMS In-situ TAC, JERICONext, FixO3, ..
- European research fleet, via national science arrangements and Eurofleets
- Environmental monitoring agencies for chemistry and biology
- Hydrographic services for bathymetry
- Geological services for geology and geophysics
- Multiple national research projects
- Multiple EU research projects
- Interoperability with EurOBIS, ICES, PANGAEA, ..
Intensifying collaboration with EU research projects

- Developing **BlueCloud ingestion services**, facilitating more easy data management by EU marine research projects with data collection
- Developing an EU marine data management protocol
- **However ensure that existing arrangements with European data infrastructures are not hindered**
- Effect must be even more capture and availability of well documented data from marine research projects
Planning a Blue Cloud programme in FP9

- Specifying and deploying a cloud and HPC platform with major capacity as virtual space for many groups
- Including common services for data preprocessing, visualizations, publishing, DOIs...
- Interfacing with harmonized metadata and data services as provided by SeaDataNet, PANGAEA, ..
- International interoperability with USA, Australia, .. (ODIP)
- Calls for developing a growing number of VREs and applications, using the platform and data streams
- Concerted actions to tune the VRE developments and maintain interoperability
- Bringing together in-situ and satellite communities
Blue Cloud Initiative – further actions

• Further workshops are planned to initiate development of a blueprint for the PBC.
• As short term action the European Commission urged the Blue research community to engage with the EOSCpilot to explore collaboration and integration opportunities that could benefit PBC and the wider marine community:
  – Pilot proposal submitted by SeaDatanet, ODIP and EuroArgo for data alert service on SeaDatanet and EuroArgo
  – Pilot proposal submitted by EBI-EMBL for sequencing data
  – Pilot by ....??
  – Conclusions expected in December 2018
• Moreover SeaDatanet participated in several Workshops, Conferences and Surveys of EOSC pilot in order to emphasise the need for collaboration between data infrastructures and e-infrastructures for EOSC
• Lobbying at EU for going for large Blue Cloud programme in FP9 with interaction between DG RTD, DG MARE, DG CNECT and DG GROW