GOOS SC-13 Session 9:

Part of the GOOS SC-13 meeting running from Sunday to Wednesday.

Tuesday 16 April afternoon

GOOS Panel, OCG, etc. representatives will be onsite with SC members for discussions. Others welcome to join virtually. Aim to approach a strategy for GOOS digital infrastructure/ambition, i.e. have some agreed ideas and ambition in place to work on. Suggest we have short PPts to give the pieces and key ideas - and make some synthesis slides for discussion

System Integration Lead: Emma, Mathieu, Kevin, Ward, Karen, Gabrielle, Veronique (BGC Panel representative (Nico Lange) online)

13.30-15.00
9. Strengthening operational capacity, metadata and data flow

GOAL: Strategy for digital (metadata and data) ambition across GOOS and along the value chain for FAIR data delivery

- Presentations (all 4 slides/5 minutes on current status (realistic), gaps and envisioned action/how connect across GOOS towards a GOOS digital infrastructure/ecosystem)
- Part 1 - status now - what elements and ambition across GOOS
    - GOOS OceanOPS / OCG Data Implementation Strategy (implications of infrastructure creating and connections to IODE, WIS, Decade Data Strategy) (strengthen tracking/analysis, quality metadata, data delivery and interoperability) - Kevin and Mathieu
    - BioEco Panel (OBIS/BioEco Portal/connections across GOOS) - Karen
    - BGC Panel (?? products, GDAC, different challenges?) - Veronique
    - Global external view - Decade Data Strategy (Kevin, Patrick?)

- Part 2:
    - Initial cross-GOOS suggestions
        - from this background document
        - engage with GRAs on the data strategy to support the implementation of GDAC ERDDAPS in the key national/regional data hubs (network mapping can help)

- Discussion
    - Can we agree a strategic ambition across GOOS - characteristics of a GOOS digital ecosystem - connected to global systems
    - Define elements of work - e.g. OCG-BioEco-national systems (through ODIS/national nodes - data strategy) data on existing platforms, technical what possible/what efficient, schema/who does what, metadata and data flows, integrated and connected system

- What will we need to support future ambition - envision a supported infrastructure and to lead the cross vision ask for a high level loan 18 months to lead this - e.g. Kevin, CIOOS, IMOS, IOOS...????
- how do we label, map, support - EOV products, indicators, goos branding along the on data value chain such that it is visible in a 'data lake'

- Background docs
  - OCG Data Implementation Strategy
  - BioEcoPanel 2 Page Backgrounder

Some questions:

what do our users want from a GOOS digital (data /metadata) infrastructure

- what are the main first and what are the main barriers to a cross GOOS strategy? what are the opportunities?
- EOV vs platform focused data delivery systems - similar discussion as the networks - is there anything important here to note for a system?
- Can GOOS now mandate certain standards globally?

How could we better leverage national (GRA) systems?
Points raised across GOOS Components - opportunities
Use people skilled like Kevin, Pier Luigi who could lead this cross -GOOS effort
(discussed and to some extent happening already, need to formalise, add Pieter....)
GOOS should try to harmonize what sits in the OBPS
harmonizing metadata with GRAs and global systems would be a great first step
EOV products are different to different domains...

- should we be making metadata standards for sensor manufacturers
  That could be a very nice initiative
  Again, I think we should be encouraging sensor manufacturers to comply with existing and widely used standards.

First get all systems talking at the metadata level - we can already do a great deal with this.

- What about model data (ETOOFS)?What do have now already to work with & what is missing?

Comments from Components
Pieces
OCG Data Implementation Strategy - ERDAAP, data and metadata, federated system future
OceanOPS - tracking elements
BioEco Portal - tracking elements
OBIS - BioEco metadata and data
ODIS federated architecture: I think this is the architecture we should adopt across all GOOS components
Do we need more standards, a vision and governance - we have the pieces?

- Should we indicate 'GOOS data' though metadata markers for the digital lakes

how do we see products in this data strategy?

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- how do we track delayed mode data?
- what more can be automated?

- should we be making metadata standards for sensor manufacturers
- how do we make it easy for more data providers to enter the systemrole of cloud? Role of AI?

EH NOTES: If we want to get to a strategy then we perhaps need to perhaps agree on some basics, have a vision of what GOOS wants overall, see the pieces on the table that we already have, take advice and discuss the gaps and steps. How much we can get done in 1.5 hours depends on if we can make a little progress here first I think.

What might be the basics?
Principals and Features: FAIR/CARE, free, frictionless flow of data to data management system and access nodes in a federated system, agreed minimum and harmonized metadata standards, tracking, cross discipline access. Support strengthening and interoperability of the systems, improve data flow and FAIR data access, make integrated system more visible, break down silos between data from different disciplines…

What might be a vision: To have rivers of GOOS data entering the digital lakes, recognised for being the vital high quality backbone of information and services

Proposed action/decision