EMODnet - Ingestion and safe-keeping of marine data

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The EMODnet context

- Thanks to EMODNET, marine data have now their "one-stop-shop". They are easy to find, freely available, interoperable and reliable. Quality controlled and accurate data of the maritime environment are critical to underpin the sustainable growth of the blue economy.

- Many data however, collected by public authorities, researchers and private operators of coastal or offshore facilities still do not arrive to the national or regional repositories and are thus unavailable to scientists, engineers and other potential users.

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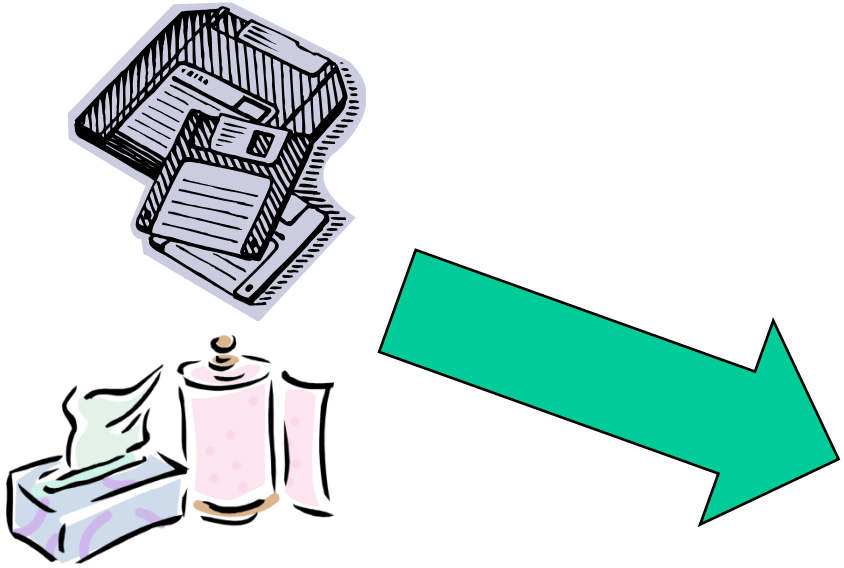
Data Ingestion Portal: General objective and means

- "To facilitate and streamline the process whereby marine data from whatever source is delivered on a voluntary basis for safekeeping to data repositories from where it can be freely disseminated."



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Data Ingestion Portal: General objective and means

- How? A dedicated portal from which specific data set handling processes are initiated.
- Relying on data managing organizations in EMODnet such as NODCs, Hydrographic Offices, Geological institutes, Biological institutes, *etc*.
- Targeting data providers and their data sets that are not yet handled and part of the mainstream processes of these data repositories

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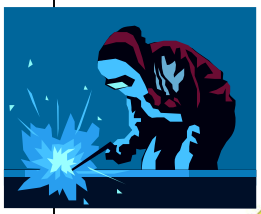
Principle of the Ingestion data flow

- The EMODnet Ingestion services will serve all EMODnet thematic portals for streamlining incoming data sets



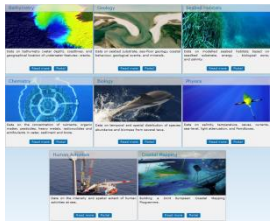
External Data Providers

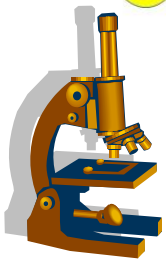
Central Ingestion Portal

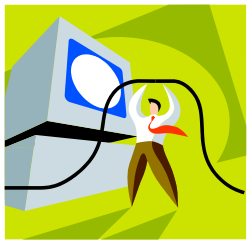
Data centres

EU infra structures

EMODnet portals







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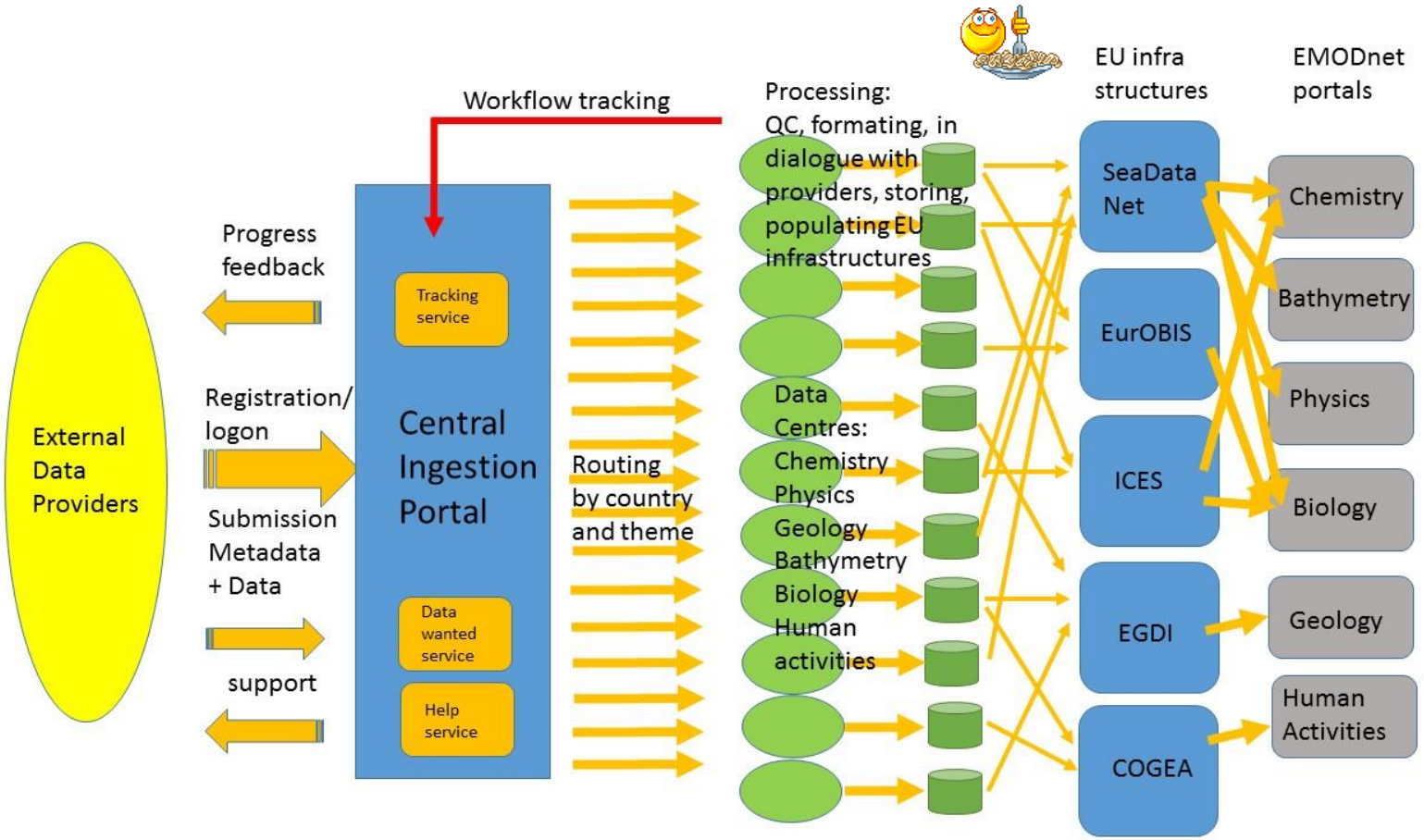
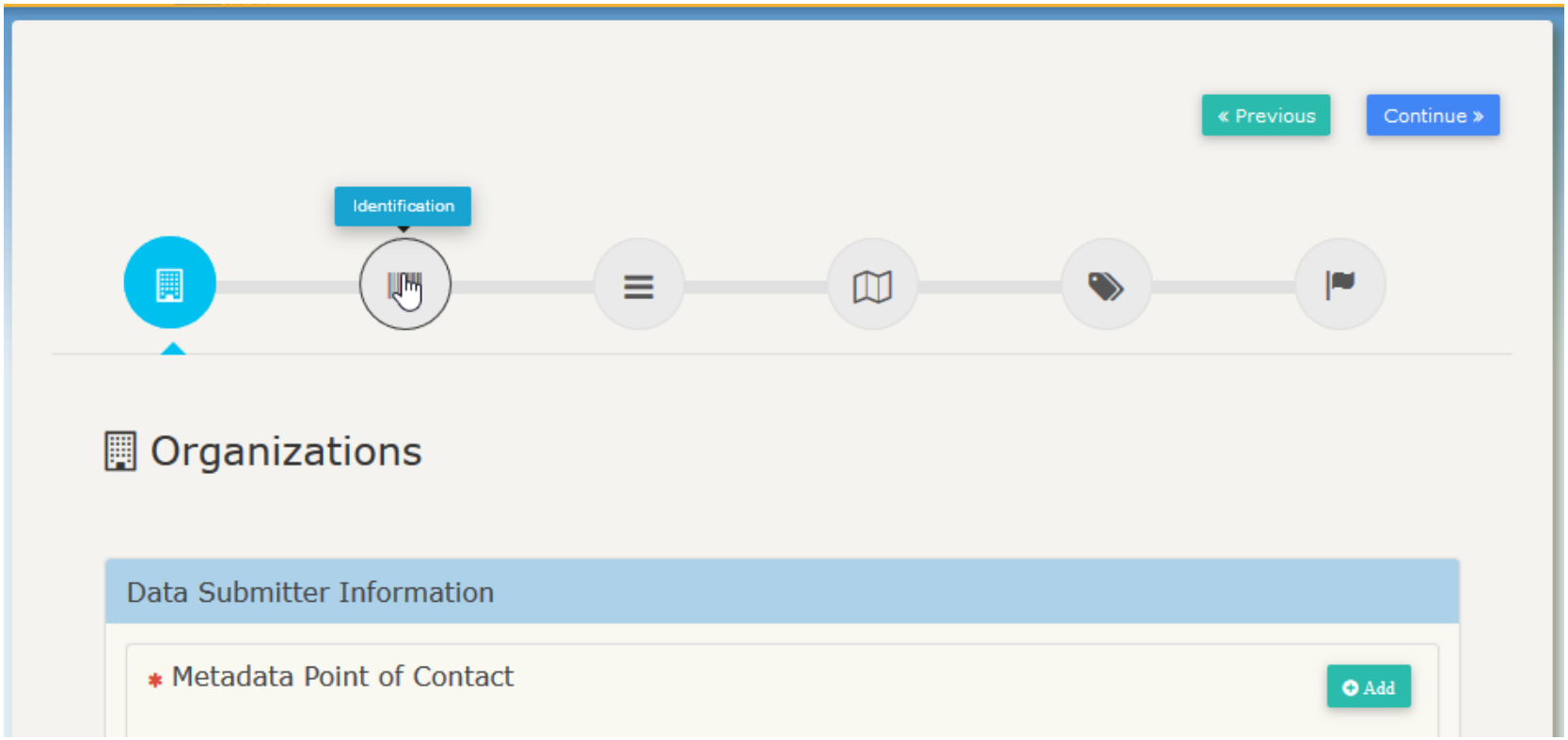
Data flow detailed as pathways (WP 2)

- Pathways will be implemented to forward submitted data to the appropriate data repository that will take care of processing, QC and formatting for local storage and publishing, followed by population in the European infrastructures that are driving the EMODnet thematic portals



Data ingestion portal

Work in progress



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Prioritising, promotion and marketing activities (WP 4)

- A big challenge is to identify relevant marine data providers that are not yet routinely submitting data sets to national data repositories and to convince and help them to submit their data.
- Priorities for exploring external data sets will be set by the EMODnet Thematic portals.
- All project partners will analyse the situation in their country and identify potential data sources and their providers for the different data themes, taking into account the priorities.
- Promotion and marketing is essential and will be a combination of central and networked activities, involving all partners and Thematic portals, and also promoting specific use cases.

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How to “attract” data sets?

1. The “data wanted” feature that allows users seeking certain types of information to specify their needs.

2. Success stories:
   a) Identify “sleeping” data sets
   b) Identify obstacles
   c) Design solutions
   d) Convince data holder
   e) Actually “ingest” the data set
   f) Valorize the success story

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Identify “sleeping” data sets

Some ideas…

- Industry: survey before field works
- Industry: monitoring of offshore activities
- Navy: non-classified data
- PhDs
- “Isolated” studies and monitoring programmes
- Harbour authorities: weather, traffic…
- … suggest your own !

➔ Prioritisation process, specific solutions to overcome obstacles

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Components and services over time

- **Data Ingestion** portal – **M6**
- **Data Submission** service with logon (User Management) for any data provider – **M6**
- **Guidance** for suggested formats for specific data types and general instructions – **M6**
- **Help desk** service – **M6**
- **Data Tracking** service for submitters – M12
- **Data Wanted** service for any user – M12
- **Submission Summary Records** service for any user – M12
- **Optimised pathways** – M18
- **Operation and maintenance of ingestion processes** – M7 – M36

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Machine-to-machine (WP 3)

Facilitating the connection of monitoring stations to the EMODnet Physics NRT data flow, based on Copernicus Marine Service for NRT data exchange.

- **List of EuroGOOS repositories** fit for receiving Near Real-Time (NRT) observation data published at Ingestion portal – M18
- **Guidance and procedures** for connecting NRT stations published at Ingestion portal – M18
- **Extra NRT stations from station operators** made available to EMODnet Physics portal – M18 – M36
- **Sensor Web Enablement (SWE) demonstrator** for Real-Time (RT) physical data launched – M18
- **SWE demonstrator** expanded with more RT stations – M18 – M36

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Contract details

- 44 partners, consisting of NODCs, Hydrographic Offices, Geological institutes, Biological institutes, Marine research institutes and few SME's
- Coordinators of all EMODnet thematic lots are partner
- MARIS as project coordinator and HCMR as scientific coordinator
- Three years duration; started 19th May 2016
- Budget 4 M€
- http://www.emodnet-ingestion.eu (under development)

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- Thank you for your attention!
- Questions? Comments?