EMODnet
Atlantic checkpoint status

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http://www.emodnet.eu/checkpoints

General framework and methods

- Design by DG/MARE of "Challenge areas" meant to fully cover the broad scope of marine knowledge

- Based on ISO standards for geographic information

- Use of SeaDataNet parameter discovery vocabulary

- Assessment of data quality in two steps

    - the HOW - Availability: DAR1 end of 2016

    - the WHAT - Appropriateness: underway

- Production of a set of key adequacy indicators (DAR2)

Data adequacy report 1

Steering Committee – Roma – 12 to 14 Sept. 2017

Atlantic DAR1 key findings

	Ease to find	Data Delivery Mechanisms	Responsiveness	Data Policy	Visibility of Data Policy	Readiness
Administrative units						
Bathymetry and Elevation						
Bird, mammals, reptiles						
Chemicals						
Currents						
Fish abundance, reproduction						
Fisheries						
Geology, Geomorphology						
Habitat						
Human activity						
Invasive Species						
Phytoplankton						
Pigments						
River flow and discharge						
Salinity						
Sea level						
Suspended particulate material						
Temperature						
Wave						
Wind						

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Atlantic DAR1 key findings

- ◉ **Bathymetry: Key recommendations**
  - ■ **Data acquisition programmes** should be undertaken in priority areas to be defined by needs (Coastal/SOLAS/Blue Growth/MPAs)
  - ■ **An effort should be made** by some data originators **to make available for free survey datasets funded by public money**
  - ■ Time stamping of soundings **MUST** be delivered

- ◉ **Geology: Key recommendations**
  - ■ **Data acquisition should be undertaken in** areas to be defined by needs (Coastal/SOLAS/Blue Growth/MPAs)

- ◉ **Habitats: Key recommendations**
  - ■ **More data acquisition should be carried out across carbon sink (seagrass, mangrove, kelps, coral reef spatial) and deepwater habitats**
  - ■ **Spatial distribution modeling may be** an alternative to **costly** extensive **survey**

- ◉ **Chemistry: Key recommendations**
  - ■ **Metadata standards should be defined for contaminants so that they can be integrated in EMODnet Chemistry**

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Atlantic DAR1 key findings

- ◉ **Physics: Key recommendations**
  - ■ **HF radar presence to be increased** to improve sea surface currents real-time observation,
  - ■ **500m 3D modeled data to be produced** everywhere for wave, currents, temperature and salinity
  - ■ **A broad programme of GPS correction at each tide gauge** to be undertaken to provide information on vertical land motion

- ◉ **Biology: Key recommendations**
  - ■ Alien Species: **urgent need for** data **standardisation** and **protocols** for data collection
  - ■ Species mobility/behaviour (migratory corridors, staging, feeding, nesting, breeding areas, larval dispersal) : **standardisation** and **coordination** of monitoring Tags/Genetics datasets

- ◉ **Human activities: Key recommendations**
  - ■ To develop services to deliver **free (or at least at much lower cost) access of AIS data** , key input for Oil leak (impact of spill on traffic), Windfarm siting or MPAs (competition for space, traffic statistics), fisheries impact or Invasive species
  - ■ Fishing: A service that interrogates the VMS raw data and outputs aggregated datasets across the basin would be beneficial
  - ■ For some variables (eg Aquaculture sites) a **working group to define and standardise what information should be captured** in datasets and provide guidance to data originators

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Products

- 50 products across 11 challenges
- Mostly spatial layers (polygons, points) but also tables where required

| Challenge 1 : Offshore windfarm | 4 |
Challenge 2 : MPA	6
Challenge 3 : Oil leak	2
Challenge 4 : Climate	8
Challenge 5 : Coasts	9
Challenge 6 : Fisheries management	3
Challenge 7 : Fisheries impact	3
Challenge 8 : Eutrophication	7
Challenge 9 : River inputs	9
Challenge 10 : Bathymetry	3
Challenge 11 : Alien species	2

Example of products

- Fisheries impact
  - CH07_Product_1: Area where bottom habitat has been disturbed by trawling (number of disturbances per month)
  - CH07_Product_2: Change in the level of disturbance over the past ten years
  - CH07_Product_3: Damage to seafloor to both living and non-living components
- Bathymetry
  - CH10_Product_1: Sample areas of digital bathymetry covering representative areas of the North Atlantic
  - CH10_Product_2: Digital bathymetry uncertainty covering the North Atlantic, and a representative sample area within the North Atlantic.
  - CH10_Product_3: North Atlantic area divided into regions showing priority areas for surveying.

Products – Rivers challenge
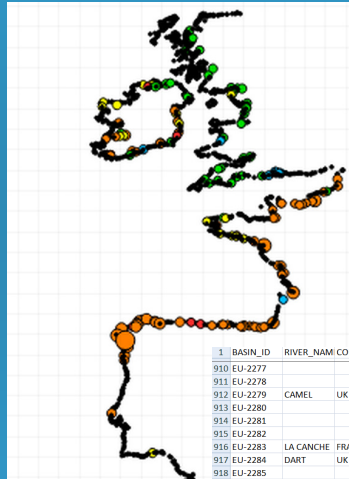
1	BASIN_ID	RIVER_NAM	COUNTRY	EXUT_LAT	EXUT_LON	COLOR_CO	SIZE_	DATA_AVAIL	LTA	2005_VALUE	2005_ERROF	2006_VALUE
910	EU-2277			50,614583	-2,4520833	#000000	0,4992851	0				
911	EU-2278			50,610417	-1,95625	#000000	0,4992851	0				
912	EU-2279	CAMEL	UK	50,530935	-4,852252	#01df01	2,5281251	8		187114136	153734253	1	147389081
913	EU-2280			50,577083	-3,4645833	#000000	0,4992851	0				
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915	EU-2282			50,45625	-4,15625	#000000	0,4992851	0				
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922	EU-2289			50,46875	-5,03125	#000000	0,4992851	0				
923	EU-2290			50,43125	-4,1854167	#000000	0,4992851	0				

Products – Bathymetry challenge
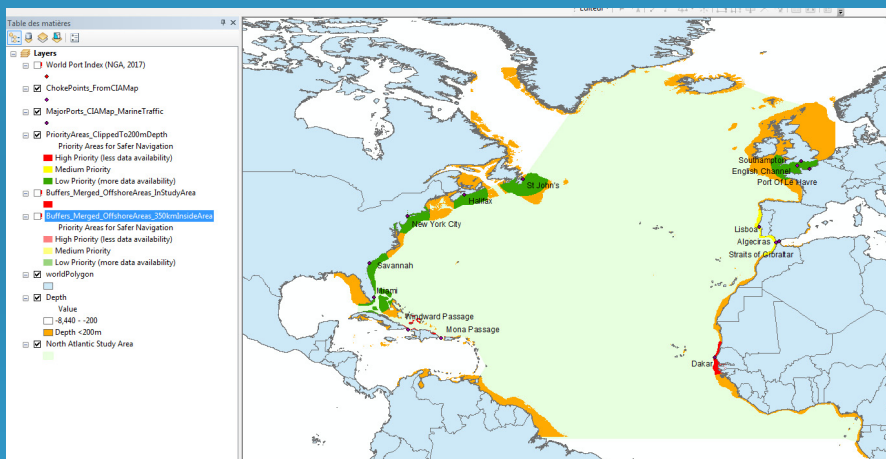
Key final deliverables

- Final Data adequacy report
  - Consolidated view of availability based on all input data sets identified and assessed
  - Appropriateness based on input data sets actually used to produce 58 products; discrepancy between specifications (DPS) and achieved products (TDP) by way of statistical assessment of indicators

- Web services for producers to access data adequacy assessment of their productions
  - Web browser of input data sets and related products
  - Web dashboard

Workplan to project end

Deliverables	Deadline
Appropriateness metadata in Sextant (draft)	Mid-Dec. 2017
Products in webGIS	End Jan. 2017
Challenge reports	End Jan. 2018
Appropriateness metadata in Sextant	End Jan. 2018
Second Adequacy report	End May 2018
Second panel meeting and final meeting	Mid-Jun. 2018
Final report	End Aug. 2018