

May 2017

Measure once,  
use many times

MEDIN

marine environmental  
data & information network

# Sharing UK Marine Data

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Is poor data  
management putting  
your operations at risk?



# 1. We don't know what data we've got



**“I am not disorganized — I know exactly where everything is!  
The newer stuff is on top and the older stuff is on the bottom.”**



2. We can't use our own data

Station	Bottle	Press	Temp	Theta	Sal	Oxygen	$\delta^{18}\text{O}$	Sig $\delta^{18}\text{O}$
2	1	133.7	10.439	10.4232	34.401	198.3	0.3652	0.0009
2	2	119.5	15.285	15.2668	34.414	192.4	0.3285	0.0168
2	5	69.4	16.321	16.31	34.341	202.2	0.3348	0.0046
2	7	33.9	18.196	18.1902	34.265	216.9	0.3286	0.0329
2	9	4.1	20.816	20.8152	33.85	229.4	0.5739*	0.3773
6	1	100.5	18.539	18.5215	34.478	207.3	0.4521	0.0192
6								0.0906
6								0.0025
6	16	4.2	21.816	21.8152	34.154	224.4	0.2173	0.0438
14	1	256.2	0.52	0.5095	34.075	223.1	0.8459*	0.8933
14	3	187.4	1.184	1.1754	34.076	225.9	0.1195	0.0207
14	5	106.6	14.931	14.915	34.455	200.1	0.5263	0.2828
18	10	1159.3	0.203	0.1495	34.067	218.9	0.1276	0.0373

3. Nobody can use our data

# What is MEDIN?

# MEDIN

Open partnership

Funded by 16 sponsors

marine environmental  
data & information network

Report to Marine Science Coordination Committee





## ***Objective:***

***“improve access to, and management of, UK marine data and information”***

**Marine Data  
Catalogue**

**Hub for UK  
Marine Data**

**Expertise**

***Easier data sharing***

# Data Catalogue

## Marine Metadata Standard



The screenshot shows the MEDIN Discovery metadata editor interface. At the top, the MEDIN logo is displayed with the text "Discovery metadata editor" and "marine environmental data & information network". Below the logo is a navigation menu with buttons for "Home", "Create", "Update", "Export", "Import", "My account", and "My records". The main content area is titled "Dashboard" and contains two columns: "Create" and "Update". The "Create" column has a text input field labeled "Enter the title" and a dropdown menu labeled "What type of resource do you want to describe" with "dataset" selected. The "Update" column has a text input field labeled "Choose a record to update" and an "Edit" button.

### Online Tool



### Stand alone Tool

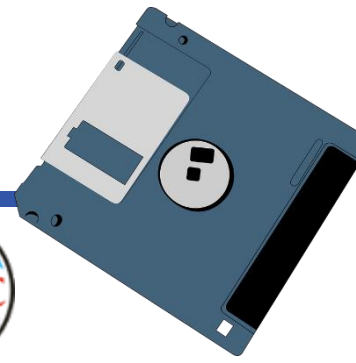
What fields?

Puts metadata into computer readable format (xml)

Validate Metadata



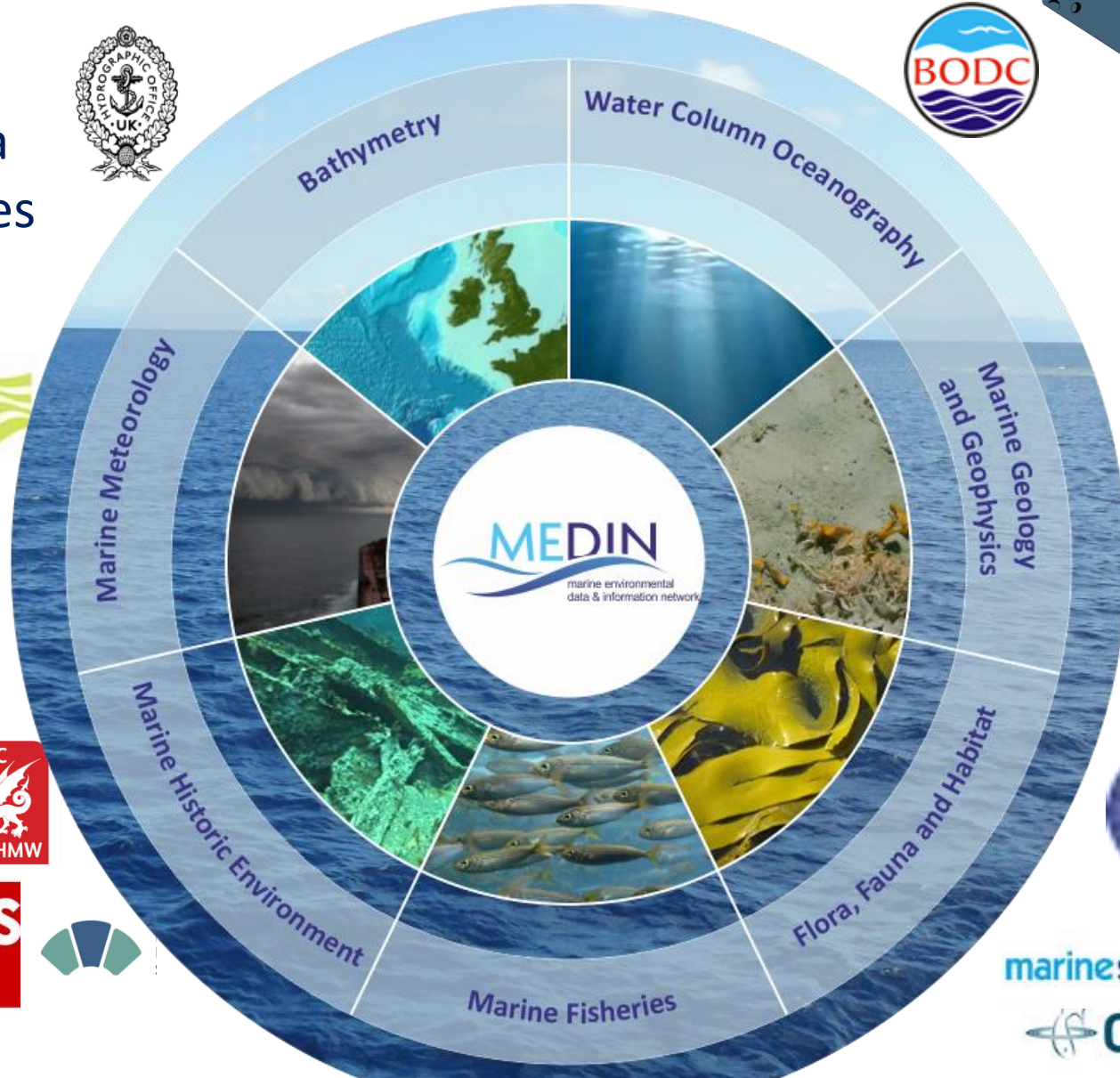
# Hub for UK Marine Data



Specialist Data  
Archive Centres



Data  
Portal



# Data Guidelines

Station	Bottle	Press	Temp
2	1	133.7	10.439
2	2	119.5	15.285
2	5	69.4	16.321
2	7	33.9	18.196
2	9	4.1	20.816

	B	C
10	<b>surveyName</b>	<b>surveyAbstract</b>
11	<b>M</b>	<b>M</b>
	Title of the survey	Brief description of the purpose of the survey and other types of measurements that were made for the survey.
12	Free text;	Free text;
13	e.g. 2004 CCW Menai Strait benthic monitoring survey	

What fields?

Field title

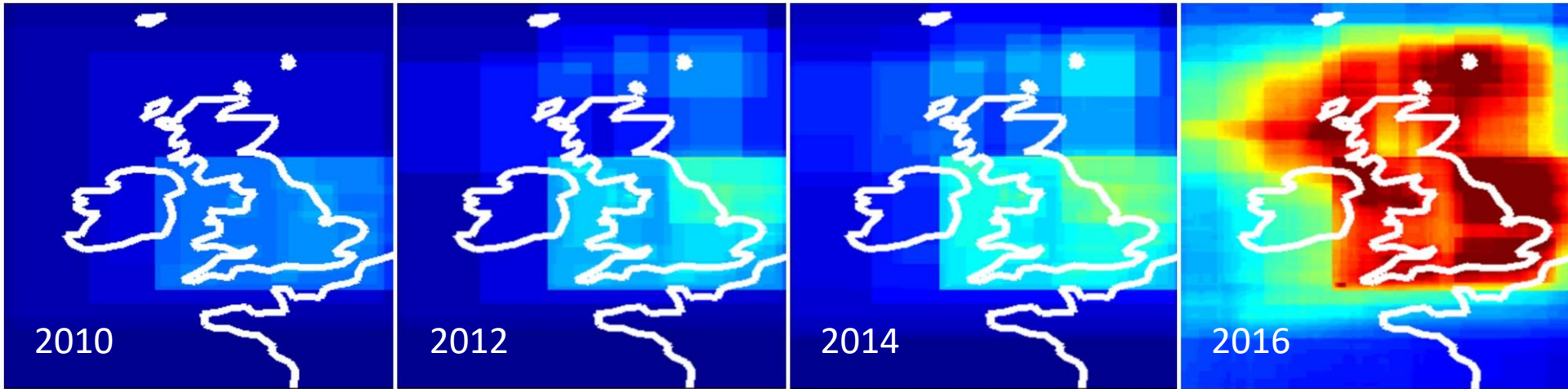
Field format: Free text, Decimal, Controlled Vocabulary



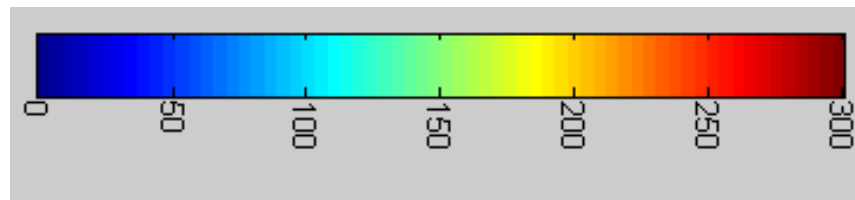




# Where is the data?



- MEDIN has greatly increased access to Marine Data since its inception
- Marine data is available across all regions of the UK







## *Training industry partners*

Last year, MEDIN provided bespoke training workshops for industry partners:

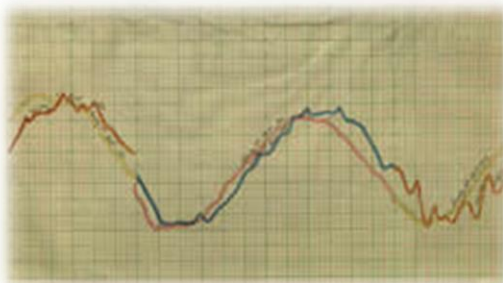




# Rescuing Industry Data



Ensuring valuable datasets created through collaborative work between scientists and the fishing industry since 2003 are available for re-use by industry, academia and government.



*“By including MEDIN as a requirement for those supplying us with data, we have seen vast improvements in the quality and consistency of management of data that has cost up to £350million to collect. Ensuring the discoverability and re-use of data has enabled a huge amount of research that would otherwise have not been possible, including feeding into work on regional monitoring for marine aggregates and cumulative impact assessments for offshore wind farms. In addition, The Crown Estate has been able to build and enhance relationships with regulators and customers alike, adding value to our own business as well as the marine community as a whole.”*



# *Further Information*

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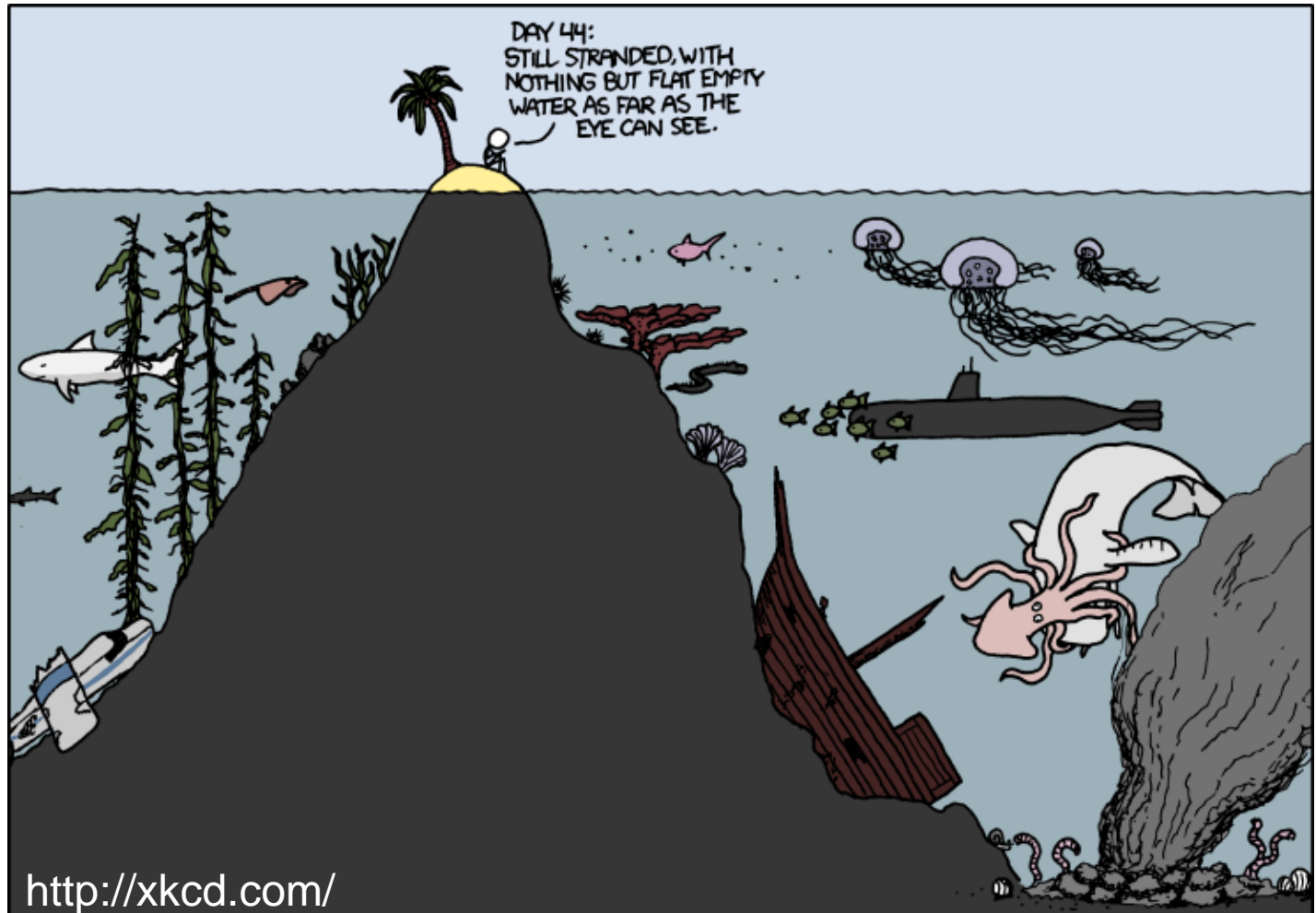
- [oceannet.org](http://oceannet.org)
- Free MEDIN workshops :

London	25, 26 May 2017
Plymouth	22, 23 August 2017
Edinburgh	15, 16 November 2017
Plymouth	24 January 2018
London	15 March 2018

*" highlights importance of data management and organisation, whilst being full of enjoyable practical exercises "*



# *There's data out there, but we can't always see it*



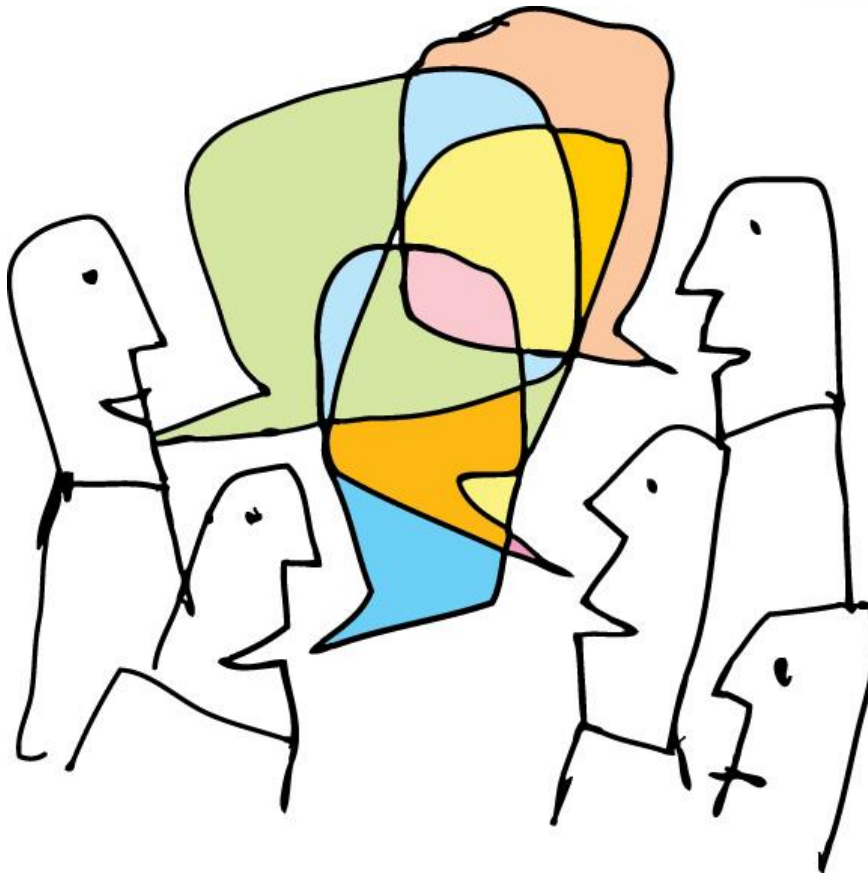




<http://xkcd.com/> + Clare P




*Thank you*



welcomes new  
partners and  
sponsors

Contact Clare  
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A vertical photograph on the left side of the slide showing a rocky coastline. The foreground is filled with large, dark and light-colored rocks. The water is a clear, light blue, and the sky is a pale, clear blue.

*“ABPmer regularly uses a range of MEDIN resources to undertake effective data management. The MEDIN data guidelines, discovery metadata standard and Metadata Maestro tool assist us with quality assurance of renewables industry survey data which is subsequently made available to the public, hence the MEDIN resources we use contribute to the efficient capture and re-use of industry data, as well as the availability of data to support transparency in decision-making. Using MEDIN’s consistent standards and requirements also enhances the discoverability of data, reducing the amount of resource spent locating, accessing and retrieving marine data.”*

# *Who collects marine data?*

- What data exists?
- Too many organisations
- Different formats
- Different methods
- Sparse data

**Research**

**Surveying**

**Defence**

**Security**

**Monitoring**

**Industry**

**EIAs**

**Education**



# Marine Metadata Standard

UK Marine Standard:



UK Standard:  
GEMINI2



European Standard:  
INSPIRE Directive



International Standard:  
ISO19115



# MEDIN Open Meeting February 2016



## The Industry *Marine Data* Revolution



- *“valuable information and issues which need to be addressed”*
- *“very thought provoking”*
- *“interesting/useful to understand potential future requirements we could get from our clients”*

