



## Options for marine data management in Wales

by James Dargie (CCW)

In 2007 Just Ecology completed a scoping study for the Countryside Council for Wales (CCW) that examined the options for marine data management in Wales. The options of using MEDIN Data Archive Centres (DACs), existing Local Record Centres (LRCs) or a dedicated Wales Marine Record Centre (MRC) were examined. The study identified roles and responsibilities, strengths and weaknesses, gaps in provision for data archival. The intention being that planned marine data management activities complement each other; ensuring delivery of effective and efficient marine data management for Wales.

A key part of the study was a consultation with Government, agencies, LRCs, academics, existing archives and portals.

The balance of opinion among respondents was in favour of adopting the approach advocated by MEDIN - a DAC centric approach. This success will require positive support in Wales to ensure that data is mobilised from a wide range of sources to DACs.

This approach requires positive support in Wales from CCW and others, to ensure data is mobilised to DACs, and to ensure that adequate development of a MEDIN portal and mobilisation of biodiversity data from DACs onto the NBN Gateway takes place.

Several respondents pointed out the desirability of establishing a "one-stop shop" for access to all Welsh marine environmental data.

There is a clear demand that MEDIN DACs must be capable of delivering data disaggregated to any reasonable spatial unit, for example at a Wales only or regional scale.

CCW believe that the established network of Local Record Centres in Wales could have a crucial role in facilitating the mobilisation of volunteer derived marine biodiversity data to DACs.

James Dargie, CCW's Marine & Freshwater Data Manager reports that "CCW subsequently endorsed the MEDIN - DAC approach, and have become a MEDIN Sponsor; this piece of work provided part of the platform on which this fundamental decision was based".

The findings of the report are published as a CCW Science Report: Moss, D., Kirby, J., Frith, R. (2007). Scoping Study for Marine Data Management

in Wales. CCW Science Report No: 806, 139pp, Countryside Council for Wales, Bangor.

## International Data Initiatives

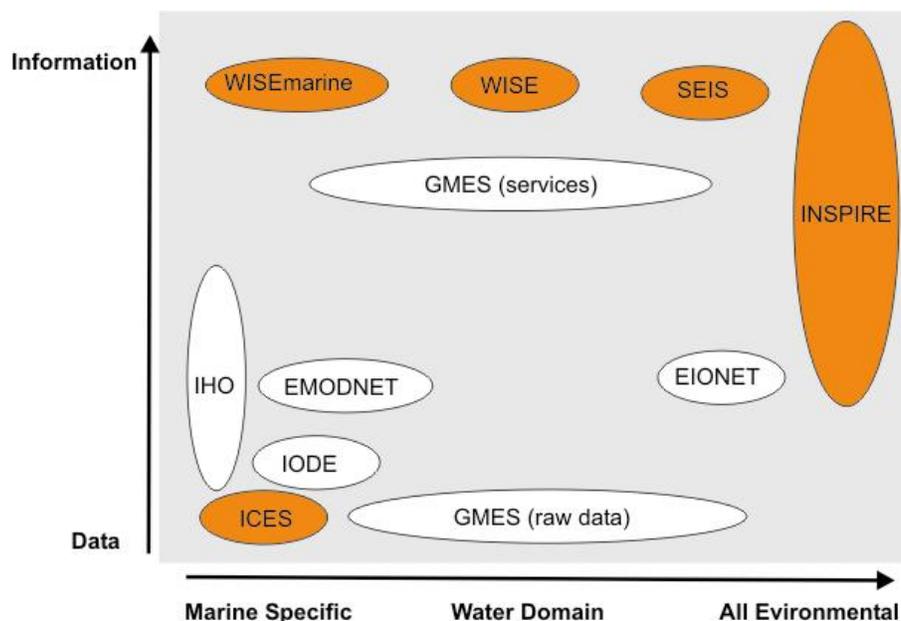
by Mark Charlesworth (MEDIN)

There are many European data and information initiatives particularly in the marine domain which are in the process of being developed. It is often difficult to identify the aims of these initiatives and how they relate to each other. The [linked table](#) gives a summary of the initiatives and describes the interaction with those initiatives by individuals and organisations in the UK. Specifically the initiatives considered are:

- Water Information System for Europe (WISE) and WISEmarine
- Shared Environmental Information Service (SEIS)
- Infrastructure for Spatial information in Europe (INSPIRE)
- European Marine Observation and Data Network (EMODNET)
- European Environment Information and Observation Network (EIONET)
- International Council for the Exploration of the Sea (ICES)
- Global Monitoring for Environment and Security (GMES) (Kopernikus)
- International Hydrographic Organisation (IHO)
- International Oceanographic Commission (IOC)

[Click here to download the summary table.](#)

Furthermore the figure below gives a quick overview on what type of data those initiatives consider. Shading denotes initiatives that currently are, or are anticipated to, manage data and information taken to satisfy EC Legislation or Conventions.



## Near-real time data to GTS

by Adam Leadbetter (BODC) and Gaynor Evans (MEDIN)

As part of its role within both the Marine Environmental Data and Information Network (MEDIN) and the Natural Environment Research Council's Oceans 2025 programme (NERC), the British Oceanographic Data Centre (BODC) operates a service sending profile data to the Global Telecommunications System (GTS) in near-real time. The British Antarctic Survey, Fisheries Research Service (FRS) and Sea Mammal Research Unit currently make use of this service.

In order to send data to the GTS, BODC must first acquire the data from the originating organisation. In the case of FRS, the profile data are e-mailed to BODC, for the other organisations the data are harvested from FTP sites by a script run nightly. Once the data have been acquired by BODC, they are reformatted, a set of first order quality controls are applied to the data and e-mail messages are produced with the appropriate GTS codes applied to the data. The quality controls applied ensure that: the latitude and longitude of the data lie within the bounds 90°N to 90°S and 180°W to 180°E; salinity data lie within the range 0 to 40; temperature data lie within the range -2 to 40°C; and that profiles get deeper with each cycle.

Profile data sent to the GTS can be accessed via the US National Oceanographic Data Centre's Global Temperature-Salinity Profile Program ([GTSP](#)). From the GTSP homepage, click 'Access GTSP Data', then '[GTSP web interface](#)' and search for the specific data type 'GTS TESAC Message Data: Real-Time CTD, Floats, Buoys'.

The biggest task so far in deploying this system has been the assignment of the GTS codes to the data, as the documentation for the GTS system is not user-friendly and there was a large discussion amongst the community about the assignment of call signs to the seal data (it was decided to assign them call signs from the list set aside for the Argo float network). We would recommend that anyone attempting a similar exercise allows sufficient time to navigate through this documentation and makes use of the test system available at the UK Met Office before going into fully operational mode.

## News

### Update on INSPIRE and The UK Location Strategy

The last quarter of 2008 was a busy period for INSPIRE and the implementation of the directive in UK. The INSPIRE directive came into force on 15<sup>th</sup> May 2007 and aims to deliver improvements in the sharing of and access to public sector spatial information leading to better environmental policies and outcomes. The European wide framework (or Spatial Data Infrastructure (SDI)) within which spatial data will be managed and made available will be based upon the SDIs of each country. Defra are the lead organization in the UK responsible for implementation of INSPIRE and the department took a significant step forward in outlining how the UK SDI could be developed by publishing The Location Strategy for the United Kingdom which details how to 'maximise the value to the public, government, UK business and industry of geographic information'. The term 'location' was used as it was felt that the term 'geographic information' was not widely understood however the same is meant by both terms.

The Location Strategy will provide the basis for delivering the UK's obligations under INSPIRE, but will also go beyond INSPIRE obligations to satisfy all national needs. Its aim is to provide a consistent framework to assist national, regional and local initiatives and service delivery. To coordinate and implement the strategy and the INSPIRE directive a new group has been formed 'The Location Council' who will provide a timescale for the implementation of the strategy in March 2009. It is expected that existing Spatial Data Infrastructures such as SPIRE and MEDIN will be an important component of the UK's contribution to INSPIRE and the Location Strategy.

Further developments on a European wide basis for the implementation of INSPIRE include the following.

To allow data to be searched more easily INSPIRE has drafted a discovery metadata format which was approved by the 'College' in December and will come into force in the immediate future following its publication in the Official Journal of the European Union.

'Data specifications' are detailed instructions on how data should be made available to make it easier for discovery, exchange and download. The data specifications are being provided on a thematic basis and the first group which include the themes 'hydrography' and 'protected areas' were made available in November and are available for comment to registered organisations. MEDIN would welcome anybody who would like to get

further involved in the evaluation of the data specifications and provide comments back to the drafting teams by 20<sup>th</sup> February.

November also saw the publication of the **Network Services Draft Implementing Rules and Guidance Documents** which sets out the technical architecture to allow searching and viewing of data. In December the draft implementing rule on Data and Service Sharing was produced which sets out rules that cover the access and rights for the use of spatial data sets and services or put another way outlines the intentions for license and costing regimes. If you wish to know more or provide comments on these documents please contact the MEDIN team.

The dates for the next INSPIRE conference have been announced which it to be held in The Netherlands from the 15-19<sup>th</sup> June.

Links:

Place matters: the Location Strategy for the United Kingdom

<http://www.communities.gov.uk/publications/communities/locationstrategy>

Further information on INSPIRE is available from the MEDIN

(<http://www.oceannet.org/medag/projects/INSPIRE.html>)

, Defra (<http://www.defra.gov.uk/corporate/gi/uk-eu-global/inspire.htm>)

and INSPIRE (<http://inspire.jrc.ec.europa.eu/>) websites.

An INSPIRE status for 2008 is available at

[http://inspire.jrc.ec.europa.eu/reports/newsletters/INSPIRE\\_status\\_20081118.pdf](http://inspire.jrc.ec.europa.eu/reports/newsletters/INSPIRE_status_20081118.pdf)

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## **New support links for EDINA multimedia services**

The JISC advisory service with close links to EDINA has changed its name and remit. Now known as JISC Digital Media, the service formerly known as TASI, offers support and advice for moving images and sound, as well as still images.

The activity of the new advisory service supports the three multimedia services EDINA runs - Education Image Gallery, Film & Sound Online and NewsFilm Online. Users of any of those services are encouraged to consult the new website, which is extensively linked from the EDINA website, for information and further links.

In addition both EDINA and JISC Digital Media will be exhibiting at the JISC conference and various RSC e-fairs over the coming months for anyone who'd like to any issues. The two organisations have co-presented at each

other's training workshops in the past and plan to continue collaborating in the future.

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## **Marine Scotland to Manage Sustainable Seas For All**

A new marine management body is being created to help Scotland make the most of its seas for future generations.

Marine Scotland, which will be up and running by April 1, will play a key role in managing Scotland's seas, with direct responsibility for marine science, planning, policy development, management and compliance monitoring measures.

It will work with other partners with marine interests to deliver economic prosperity - including in developing areas such as marine renewables - and environmental sustainability.

Marine Scotland offers better protection to Scotland's marine environment and will help streamline existing support services. It will deliver a simplified management and regulating system for all marine activities in Scotland.

The current functions of Fisheries Research Services (FRS), the Scottish Fisheries Protection Agency (SFPA) and the Scottish Government's Marine Directorate will be brought together in the new organisation, which will work with others to ensure sustainable economic growth from our marine and coastal environments.

It will build on the success of these organisations to deliver a strategic approach to managing Scotland's seas. A Marine Strategy Board, led by Marine Scotland and involving key partners with marine management interests, will be established to deliver a coherent and focused approach. Marine Scotland will become a Scottish Government Directorate.

Cabinet Secretary for Rural Affairs and the Environment Richard Lochhead said:

"We have been clear from day one that our underlying key purpose is that of sustainable economic growth.

"The creation of Marine Scotland will help deliver this vision, managing Scotland's seas for prosperity and environmental sustainability. Marine Scotland will be the champion for our marine environment.

"We have a unique coastal and marine environment which provides an important natural resource upon which so many communities depend. Our waters are vital to the Scottish economy and support many thousands of jobs, most notably through the oil and gas industry, aquaculture and fishing.

"Coastal tourism and internationally significant species attract wildlife enthusiasts from around the world. Marine Scotland will combine and co-ordinate the efforts of existing bodies, to ensure we manage Scotland's seas sustainably and benefit from the rich assets and resources they represent.

"The Scottish Government will shortly bring forward a Marine Bill that will provide a sustainable future for our waters, and build on existing arrangements to provide the foundations for Marine Scotland's work."

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## Events

### MEDIN Partners' meeting 30th June 2009

The MEDIN Partners' meeting will take place on Tuesday 30th June 2009 at the Foresight Centre in Liverpool (<http://www.foresightcentre.co.uk/>)

The Foresight Centre, University of Liverpool, 1 Brownlow Street, Liverpool, L69 3GL.

Directions: <http://www.foresightcentre.co.uk/location.html>

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### INSPIRE confernece 15-19th June 2009

The **Third INSPIRE Conference** will take place in Rotterdam, the Netherlands, 15-19 June 2009, in conjunction with the Eleventh International Conference of the GSDI Association and the national conference on Dutch SDI: Results and Challenges.

Please visit the [conference site](#) for additional information. The [joint call](#) for papers for all three conferences is now open. Specific presentation topics of interest may include, but are not limited to, the following:

- Design and development of depositories, portals, and registries for geographic data, metadata and services.
- Innovative methods for addressing technical, legal, economic or institutional challenges in implementing spatial data infrastructure concepts, components and systems.
- Experiences with current spatial data infrastructures at local, regional, national and multi-national levels and their evaluation.
- Emerging participatory, inclusive or collaborative approaches in developing content and building infrastructure (e.g. participatory GIS, geoweb tools, data commons, open source software, volunteered geographic information, global efforts).
- Challenges and approaches to standardization of data and interoperability of systems.
- Barriers to sharing data and methods for achieving success in sharing.
- Alternative methods and models for planning, financing and implementing spatial data infrastructure or related initiatives.
- Policies supporting creation and responsible management of spatial data infrastructure resources.

- Progress achieved by developing nations through information infrastructure development efforts.
- Facilitation of international support for the development of spatial data infrastructure.
- Analysis of practical cases to determine whether infrastructure initiatives are actually achieving goals such as (a) increasing efficiency and effectiveness in the management of information, (b) helping to advance health, education, social welfare, security, and safety, (c) better managing resources such as oceans, forests, roads, rivers, property, and housing and (d) similar social goals.
- Education and capacity building efforts.
- Basic and applied research in advancing spatial data infrastructure theory and concepts.