

Marine Environmental Data and Information Network (MEDIN) - Work Programme for 2011-2012

1 Progress in 2010-11

Important progress has been achieved by MEDIN in 2010-11.

- The MEDIN DAC network is now operational, with advanced preparations for further expansion to include fisheries and marine meteorology. Through a series of pilot projects, data upload processes are being established between MEDIN partners and the DAC network.
- The discovery metadata standard is now well established across the marine community and has been updated to retain consistency with other key standards. Data guidelines have been tested and new guidelines developed. Again these standards are being widely adopted.
- The MEDIN marine Discovery Portal came online in June 2010 and now has a population of over 1000 metadata records.
- Further progress has been made in identifying common requirements for reference information and a reference layer action plan to meet these requirements has been developed.
- MEDIN continues to provide important links to European and International Initiatives
- Reports on Marine Data Policy, and Recommendations for Sustainable Funding of Marine DACS were completed and published

2 Summary of plans for 2011-12

The 2011-2012 MEDIN Work plan represents a move of MEDIN to an operational phase from a developmental phase, with a 30% reduced level of funding. The Work Plan will address the priorities identified in the MEDIN Business Plan for 2011-12:

- Increase the content and usage of the Portal
- Consolidate the DAC network and the transfer and flow of data.
- Maintain good communication and linkage across relevant UK initiatives
- Ensure a good fit of MEDIN with key international and European data initiatives (INSPIRE, Marine Strategy Framework Directive)
- Establish widespread adoption of standards for metadata and data
- Coordinate and provide access to reference data
- Assess MEDIN performance against user expectations and needs

More details are provided for each work stream in section 4

3 Funds Available to MEDIN for 2011-12

Provisionally £620,787 will be available to fund MEDIN activities in 2011-12, as follows:

MEDIN Sponsorship income (Table 1):	£530,000
Carried forward (provisionally) from 2010-11:	£90,787
Funds available:	£620,787

Based on the anticipated Sponsorship income and carry over, the following allocation across work streams was made:

WS1 (DACs):	£171,978
WS2 (Standards):	£86,915
WS3 (Web Portal and Services):	£137,071
WS4 (International Coordination):	£24,413
WS5 (Resources and Applications):	£74,127
WS6 (Communications):	£16,138
WS7 (Management):	£111,421
Total	£622,064

More details are provided for each work stream in the following pages.

Sponsor Name	Funding
DEFRA: Department of Environment Food and Rural Affairs	£175,000
NERC: Natural Environment Research Council	£131,000
Scottish Government	£100,000
DECC: Department of Energy and Climate Change	£30,000
Met. Office	£14,000
Countryside Council for Wales	£14,000
The Environment Agency	£14,000
Marine Management Organisation	£14,000
Maritime and Coastguard Agency	£7,000
The Crown Estate	£7,000
HR Wallingford / Seazone	£7,000
UK Hydrographic Office	£7,000
The Joint Nature Conservation Committee	£5,000
Northern Ireland Environment Agency / Agri-Food Biosciences Institute	£5,000
TOTAL	£530,000

Table 1 – Table of MEDIN Sponsors for 2011-12

4 Work Plan for 2011-12

4.1 WS1 Comprehensive network of Data Archive Centres

Funding

£171,978 is provisionally allocated to this Work Stream, as follows:

Core Team Staff costs (30 days):	£21,978
DAC staff costs (5 x 20days);	£60,000
Additional funds for contracted work:	£90,000
Total	£171,978

The Work Programme for 2011-12 fits under the overall Work Plan for 2011-14. Key to the work plan is to facilitate the DAC Work Group and the Accredited DACs to operate proactively under the MEDIN banner.

The following Key Targets have been identified for WS1:

- KT1.1 Consolidation of the DAC network, reports delivered on internal data gaps. DAC meeting reports.
- KT1.2 DACS produce evidence of INSPIRE compliant view and download services in place
- KT 1.3 New data accessible through DACs and associated discovery metadata records in MEDIN Portal through data archiving pilot projects

The Work Plan has identified three key areas and these are discussed below together with milestones are provided:

A: Operational DAC network

DAC WG meetings – 2 meetings in the year.

It is proposed to make the DAC WG meetings more operational about meeting the MEDIN community needs. It is proposed to have 2 half day meetings with an optional mini workshop in the afternoon. MEDIN has specifically been asked to look at socio economic data, and a workshop has been provisionally planned to take place after the study described in section B.

- MA1 First DAC WG meeting and discussion on Fisheries data Q3
- MA2 Workshop on Heritage data Q3
- MA2 Workshop on Socio-Economic data Q4
- MA4 Second DAC WG and workshop on Oceanographic data Q4

B: Expansion of data within the DAC Network

1. Gap analysis of required data currently outside archive system

This includes internal (data not collated but of interest to accredited DACS) and external where no DAC provision has been made.

Internal: Time will be spent with each DAC and targeted users/contributors to survey what major holdings remain outside of the archive system. The review should include reference to all previous data collation exercises and discussions with DAC

leaders. The report can be undertaken from within the DAC network with core staff contribution.

External: There are several reports already on data types and data sources outside of the MEDIN DAC network. A budget of £60K has been allowed for Data Archiving Pilot Projects, to establish data archiving arrangements between MEDIN partners and DACs. A Report on Data Management Arrangements for Socio-Economic data is planned in cooperation with the UKMMAS Productive Seas Evidence Group.

Milestones:

MB1.1 Report on internal DACS and data collation gaps	Q2
MB1.2 Data Archiving projects (budget £60k)	Start Q3
MB1.3 Report on socio economic data (funded by the MMO)	Q4

2. Best options for archive of additional data – existing DACS or repositories
Based on the reports above and recommendations MEDIN needs to prioritise and archive the data. It is proposed to carry out that work in Q3 and Q4 with projects running into the 2012-13 workplan.

MB2.1 Additional data ingestion projects (budget £10k)	Q4
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3. Applying best practice and common standards

The first DAC meeting will consider current best practice and the use of common standards including those produced to date. The DAC WG will drive the need/ability to publish further information through the MEDIN web site.

MB3 Best practice and common standards Web site update	Q3
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4. Expanding existing DAC holdings – enforcing the data clause

The data clause is in place but its take up patchy. MEDIN core staff will be asked to discuss the data clause with MEDIN partners and report to the DAC WG on take up and any problems. DACs will be asked to state how they would see the data clause used.

MB4.1 MEDIN cores staff to discuss data clause with all MEDIN partners	Q2
MB4.2 Core staff to report to DAC WG	Q3
MB4.3 DAC WG to report implementation plan to MEDIN Exec	Q4

C. Development and future planning

The DAC network needs to plan ahead for effective archive, and for effective publication/delivery of data and metadata. In particular:

- **INSPIRE / UKLP**
The WS will consider how best to meet data publication requirements from INSPIRE / UK Location Programme. Those organisations falling under INSPIRE will be required to provide view services for Annex I (bathymetry) data in May 2011, and for Annex III (other oceanographic /environmental) data in December 2013. Download services should be provided by June 2012 (Annex I) and December 2013 (Annex III). Full data publishing services are due later (between 2015 and 2019). MEDIN aims to meet the Discovery Metadata service requirements by Autumn 2011
- Linking metadata search results to data download

Early portal users have proposed that direct links should be provided between metadata records identified through the MEDIN portal, and the capability to download data from the appropriate DAC. Ways to implement this capability will be investigated, in coordination with the Portal Work Stream.

A budget of £20,000 has been allocated in 2011-12 to meet the requirements under this activity.

MC1 Meeting INSPIRE / UKLP: Review and discussion by DAC WG Q3
 MC2 Meeting data needs of portal. Review and discussion by DAC WG Q3
 MC3 DAC WG statement on future delivery to be published on Web site Q4

Initial DACs Deliverables Table

Deliverable	Status	Commentary
Q1 Met DAC accreditation to be complete FishDAC accreditation underway		
Q2 First DAC WG meeting and workshop on Heritage data. WG to review INSPIRE/UKLP Report on internal DACs and data collation gaps MEDIN core staff to discuss data clause with all MEDIN partners		
Q3 Second DAC WG and workshop on Socio Economic Data. DAC portal requirements assessed Core staff to report to DAC WG on data clause Data Archiving projects launched Best practice and common standards Web site update		
Q4 Third DAC WG and workshop on Oceanographic data Report on socio economic data DAC WG to report implementation plan to MEDIN Exec on data clause ingestion DAC WG statement on future delivery to be published on Web site		

4.2 WS2 Standards for data and metadata

£86,915 is allocated this Work Stream:

Core Team Staff costs (78 days):	£44,915
Travel and workshop costs:	£2,000
Funds for contracted work:	£40,000
Total	£86,915

The £40,000 for contracted work will be allocated to develop and review new standards

The following Key Targets have been identified for WS2:

KT 2.1 Hold at least 3 workshops to disseminate MEDIN standards to the wider community

KT 2.2 Develop a UK front end to the World Register of Marine Species

KT 2.3 Ensure coordination of standards with national and international initiatives

KT 2.4 Monitor number of downloads and registrations for MEDIN tools

The following work programme for 2011-12 was agreed by the Standards WG:

- Review of INSPIRE Data Specifications for Sea Regions and Oceanographic Features (and other themes as indicated by MEDIN DACs) and understanding impact on Data Guidelines
- Review of outputs from different MEDIN Discovery tools and testing against GEMINI, ISO and INSPIRE requirements
- Continue WoRMs integration and produce UK front end view on WoRMs database
- Produce seabed and subseabed Data Guidelines; Identify other guidelines missing; tools for data guidelines
- Dissemination of Standards, workshops, meetings etc

Initial STDs WG Deliverables table

Deliverable	Status	Commentary
Q1 Hold MEDIN Standards Meeting Negotiate and test new desktop discovery metadata creation tool Agree contract specification for new data guidelines Propose changes to Data Guidelines following reviews Progress the adoption of WoRMs		
Q2 Present standards and portal at INSPIRE workshop Release the desktop tool metadata maestro Let contract for testing discovery metadata tools Advertise contract for derivation of MEDIN Data Guidelines for seabed surveys Progress the adoption of WoRMs and derivation of new UK front end. Revise Data Guidelines and republish on website		
Q3 Hold MEDIN standards meeting Complete review of INSPIRE Data Specifications 'Marine Species of the British Isles and Adjacent Seas' website to go live Consider review of Discovery metadata tools Let seabed survey Data Guideline development		
Q4 STDs Work Plan for 2012-2013 STDs Report for 2011-12 Hold MEDIN standards meeting		

4.3 WS3 Web Portal Products and Services

£137,071 has been provisionally allocated to this Work Stream, as follows:

Core Team Staff costs (203 days):	£84,071
Travel and workshop costs:	£1,000
Funds for portal development:	
Funds for contracted IT work on portal	£22,000
Operational costs of portal	£10,000
Funds for population of the portal:	
Metadata support	£20,000
Total:	£137,071

The following Key Targets have been identified for WS3:

- KT 3.1 Increase the number of records in the portal to 4500 by the end of March 2012
- KT 3.2 Upgrade MEDIN portal to provide improved search functionality
- KT 3.3 Establish transfer of metadata records to data.gov.

The main objective for this work-stream in 2011-12 is to progress the MEDIN Marine Discovery Portal through increased record population and enhanced functionality. Additional web catalogues and services will also be supported. Specific activities for 2011-12 are:

- Review the portal user search interface against user requirements and compare against other portals including data.gov.uk. Specify (via the portal steering group) and improve the portal user search interface. The portal has been online since June 2010 and comments have been received by users on how it could be improved. As an online tool, its function and format has to compete with other environmental data portals.
- Increase the number of records in the portal to circa 4500 by the end of March 2012. For information, the previous year's target was >2000 records.
- Continue to update, expand and maintain the existing web-based marine catalogues and databases and consider how these catalogues could be better integrated:
 - UK Directory of Marine Observing Systems*
 - UK Tide and sea level catalogue*
 - UK Wave data catalogue*
 - UK part of European Directory of Marine Environmental Datasets*
 - Cruise Summary Database*
 - Foreign Cruises in UK Waters*
- Plan and implement further portal and web-service developments as necessary to meet INSPIRE and UK Location Programme Discovery service requirements including view services.

Portal and Web Services Deliverables table 2011 - 2012

Deliverable	Status	Commentary
Q1 Installation of portal discovery service onto MEDIN virtual server at BODC. Batch tool to generate MEDIN format metadata Provide CSW (or WAF) service link to UK Geoportal (and hence INSPIRE). Attainment of KPI 1 (2000, representative, metadata records searchable through portal) Convene portal steering group to produce specification Produce specification for improvement to portal interface Generate web stats for portal		
Q2 Contract GeoData to implement portal improvements Generate web stats for portal		
Q3 Advertise the Discovery Portal Generate web stats for portal		
Q4 Generate web stats for portal Portal and Web Services Work Plan for 2012-2013 Portal and Web Services Report for 2011-12		

4.4 WS4 International Awareness, co-ordination and delivery to global databases

£24,413 has been provisionally allocated to this Work Stream, as follows:

Core Team Staff costs (35 days):	£20,413
Travel and workshop costs:	£4,000
Funds for contracted work:	£0
Total	£24,413

The following Key Targets have been identified for WS4:

KT 4.1 Provision of feedback (via short reports) from international working groups (e.g. WG DIKE, MODEG, etc) illustrating how key European and international data initiatives impact on MEDIN.

KT 4.2 All near-real-time temperature and salinity data received by MEDIN passed on to the Global Telecommunications System. Increase in number of data suppliers.

KT 4.3 Deliver 50% of backlog of historical CTD data to international repositories (e.g. World Data Center for Oceanography (Silver Spring), ICES Data Centre and CLIVAR and Carbon Hydrographic Data Office (CCHDO))

KT 4.4 Produce a report which clearly articulates the role of MEDIN within the broader range of UK and European data sharing initiatives

The main objectives for the International work-stream in 2011-12 are to

Provide a UK view on European and International initiatives/drivers relevant to MEDIN.

- Continue to review anticipated requirements from the European Marine Strategy Framework Directive as it becomes transposed into national legislation, and develop recommendations as to how MEDIN can support the UK community in its implementation.
- Continue to track new guidelines and implementation rules as they emerge from INSPIRE and ensure the MEDIN work streams develop appropriate standards and web services (WS2 and WS3).
- Inform UK Community of relevant international initiatives, including producing three to five year forward look for International Coordination, including updating the international initiatives table and compiling a document on getting ready for reporting data and information for the MSFD.
- Identify what the priorities for engagement are and/or how the UK is covering this (e.g. could be through others engaging in INSPIRE – not necessarily core MEDIN). This should in part be driven by managing risks.

Support representation on international working/expert groups (e.g. ICES Working Group on Data and Information Management, IOC/IODE Committee, EC Marine Observation and Data Expert Group, EU Working Group on Data, Information and Knowledge Sharing (WG-DIKE for WISE Marine)).

Continue submission of real-time data to global databases and centres

Begin submission of delayed-mode data to World Data Center for Oceanography (Silver Spring), ICES Data Centre and CLIVAR and Carbon Hydrographic Data Office (CCHDO)

WS4 Deliverables 2011-12

Deliverable	Status	Commentary
Q1		
Feedback from relevant European/ International Expert/Working Groups Delivery of temperature and salinity data to the Global Telecommunication System Quarterly Progress report		
Q2		
Feedback from relevant European/ International Expert/Working Groups Plan delivery of water bottle and CTD data to global data centres Delivery of temperature and salinity data to the Global Telecommunication System Quarterly Progress report		
Q3		
Feedback from relevant European/ International Expert/Working Groups Update the international initiatives table and compile a document on getting ready for reporting data and information for the MSFD Delivery of temperature and salinity data to the Global Telecommunication System Delivery of water bottle and CTD data to global data centres (part 2) Quarterly Progress report		
Q4		
Feedback from relevant European/ International Expert/Working Groups Delivery of water bottle and CTD data to global data centres (part 2) Delivery of temperature and salinity data to the Global Telecommunication System Quarterly Progress report		

4.5 WS5 Resources and applications development

£74,128 has been allocated this Work Stream, as follows:

Core Team Staff costs (21 days):	£10,128
Travel and workshop costs:	£4,000
Funds for contracted work:	£60,000
Total	£74,128

The following Key Targets have been identified for WS5:

- KT 5.1 Coordinate and provide access to reference and other core datasets
- KT 5.2 Assess MEDIN performance against user expectations and needs
- KT 5.3 Identify and help deliver cross cutting data products, tools and other resources required by MEDIN sponsors and partners.

The objectives of WS5 in 2011-12 are to:

- Identify, design and develop resource requirements of MEDIN sponsors, providing advice and research, as appropriate, to help them design and develop specifications for resources to meet these needs.
- Consider the resources that MEDIN is well placed to deliver which are of direct relevance to the data needs of the UK's Marine Science and Monitoring and Assessment Strategies (UKMMAS).
- Assist in the delivery and monitor the performance of existing and new data resources that may be operated by other MEDIN work streams or an external body (e.g. the MMO) through the continuation of use cases.
- Continue to strengthen reference datasets through the identification of data holders and provide advice, support and tools to these organisations to meet their obligations (under the INSPIRE regulations or elsewhere).
- £60,000 of sponsor funds has been allocated for contracted work, primarily to address the fourth objective, the strengthening of reference datasets.

Resources and Applications Deliverables 2011 – 2012

Deliverable	Status	Commentary
Q1		
<p>Action Plan for Reference Data accepted by ET</p> <p>Marine Gazetteer (V1.0) completed and published on MEDIN web site</p> <p>Identify potential work packages to support strengthening and publication of Reference Datasets</p>		<p>Contract with Geodata Institute carried over from 2010/11</p> <p>Measurement of MEDIN's performance against its objectives and current user needs</p>
Q2		
<p>Marine Gazetteer (V1.0) accepted by SeaVox and published internationally</p> <p>Engage with data holders to establish roles in publishing Reference Datasets</p> <p>Establish Reference Data page on MEDIN website</p>		<p>Solicit user comment for next version. Liaise with data holders e.g. UKHO and OS wrt land-sea interoperability</p> <p>Ensure MEDIN is aligned with sponsors for the creation and publication of reference data</p> <p>Provide View/Download Service or link to data holder site (preferred)</p>
Q3		
<p>Identify, design and develop resource requirements of MEDIN sponsors and partners by:</p> <ul style="list-style-type: none"> - Participation in Partner Conference - Repeat of Questionnaire in Nov 2011 <p>Collate results of Partner Conference and 2011 questionnaire and report</p> <p>Liaise with other WSs and provide input to 2012/13 work programme</p>		<p>Activities will help make users aware of MEDIN's capabilities and resources</p> <p>Questionnaire to be developed and published in conjunction with partner questionnaire (WS6)</p> <p>Specifications and data strengthening roadmap to be developed in collaboration with data holders / users</p>
Q4		
<p>Document data management requirements of UKMMAS, especially wrt MSFD, gap analysis and prepare Action Plan to address shortfalls</p> <p>Minimum of SIX Reference Datasets added directly or as links to MEDIN website</p> <p>Update Action Plan for the strengthening and publication of reference and other core data</p>		<p>To be agreed at Spring ET meeting.</p>

4.6 WS6 Communications: Outreach, forums, publicity

£16,138 has been allocated to this Work Stream:

Core Team Staff costs (15 days):	£6,138
Travel and workshop costs:	£5,000
Materials :	£2,500
Newsletter subscription fees	£2,500
Total	£16,138

The following Key Targets have been identified for WS6:

- KT 6.1 Publish 4 issues of MEDIN Newsletter
- KT 6.2 Hold Partners' Meeting
- KT 6.3 Web site. >12,500 Web visits per year

Activities within this work stream have been reduced to a bare minimum. There will be minimal expenditure on materials, and apart from supporting 1 partners meeting per year, all other communications activity will be web based – primarily through the electronic newsletter *Marine Data News* which will be published quarterly.

Where possible members of the MEDIN core team will attend meetings, but no meeting sponsorships (e.g. Coastal Futures, AGI) will be supported. Thus MEDIN will be relying more heavily on its partners to publicise MEDIN resources and new developments.

The main objectives for the communications work stream in 2011-12 are to continue to build on publicity activities undertaken in 2010, to hold a themed forum and a partner's meeting, and to publish articles in magazines to promote good data management practices as established by MEDIN. The website will also continue to be maintained and developed as required. It is expected that MEDIN partners will also contribute to promoting awareness of MEDIN.

Specific requirements for publicity resources have been identified in WS1 (informational material on using the DAC network).

Communications Deliverables table 2011-12

Deliverable	Status	Commentary
Q1 Edition of Marine Data News Publish articles in on-line newsletters and magazines on MEDIN portal and standards Edit and maintain website		
Q2 Organise and hold MEDIN partners meeting Edition of Marine Data News		
Q3 Edition of Marine Data News Produce more publicity material as required Publish articles in on-line newsletters and magazines on MEDIN portal and standards		
Q4 Edition of Marine Data News Edit and maintain website		

4.7 **WS7 Management, planning and co-ordination**

£111,421 has been allocated to this Work Stream, as follows:

Core Team Staff costs (149 days):	£101,421
Travel and workshop costs:	£5,000
Chair Costs	£5,000
Total	£111,421

The main objectives for the management and planning work-stream in 2011-12 are

- To continue to widen active participation in MEDIN across the whole marine sector – engage new sponsors and partners. In particular work to engage the commercial sector.
- To continue to promote the use of the data clause by all partners. Monitor the effectiveness of the clause by establishing that data under these contracts has been delivered to a DAC prior to the contract being finished. Establish the use of the data clause in licence agreements (such as FEPA).
- To continue to support UKMMAS, through participation in Marine Assessment and Reporting Group meetings, and in the “Tier 3” Evidence Group meetings. Together these form a significant commitment in terms of time and travel by the MEDIN Core team
- To work with UKMMAS to define how MEDIN can contribute to improve the information available on pressures and activities in the UK marine environment. Lack of reliable information on pressures is a key issue identified in the preparation work for Charting Progress 2.
- To continue to represent the marine sector within the UK Location Programme, and to ensure developments are coordinated across UKLP and MEDIN.
- To hold four Executive Team meetings and at least one Sponsors’ Board.
- To report to and engage with the Marine Science Coordinating Committee as required.
- Produce Data Mining Guidance note for MSCC

Management and Planning Deliverables table 2011-12

Deliverable	Status	Commentary
Q1 (Apr-Jun 2011) Quarterly Progress Report Finalise MEDIN 2011-12 Work Plan		
Q2 (Jul – Sep 2011) Quarterly Progress Report		
Q3 (Oct – Dec 2011) Hold MEDIN Sponsors’ Board Users Review Quarterly Progress Report Report on the effectiveness of the Data Clause Pressures Workshop in coordination with UKMMAS		
Q4 (Jan-Mar 2012) Quarterly Progress Report Annual Report for 2011-12 Work Plan for 2012-2013		

5 Key Performance Indicators.

The following KPIs have been established for 2011-12

2011-12 Key Performance Indicator	Description	Link to WS Targets
1. Increase the content of the Portal	The portal should provide comprehensive coverage of all marine data in the UK. <ul style="list-style-type: none"> The target for 2011-2012 is 4500 data set metadata records available by March 2012. A secondary indicator to provide an indicator of currency has been proposed - the number of records for datasets collected in the last 5 years. A baseline measurement will be provided in March 2012. 	KT 3.1
2. Increase the usage of the portal	The objective is to establish the portal as the recognized central source of information for marine data. Google analytics will be put in place in 2011-12, so 2011-12 will provide the baseline (in terms of numbers of visits) against which future progress will be measured	KT 3.2
3. Consolidate the DAC network / increase the transfer and flow of data.	Relevant measures are to be provided through the DAC Annual Reports to MEDIN, and 2011-12 will provide a test of these measures, which are: <ul style="list-style-type: none"> number of new data sets archived within the MEDIN DACs within the year number of requests for data received by the DACs. number of MSCC members sending data to the DACs 	KT1.1, KT1.3
4. Maintain good communication & linkage across relevant initiatives.	Objectives are <ul style="list-style-type: none"> to hold a partners meeting and standards workshops, to publish 4 issues of Marine Data News and increase its circulation to increase the number of visits to the MEDIN website. to publish metadata and linked data view and download services to data.gov (and hence INSPIRE) 	KT1.2, KT2.1, KT 2.2, KT 2.3, KT3.3
5. To articulate the role of MEDIN within UK and European data initiatives	To produce a report which clearly articulates the role of MEDIN within the broader range of UK and European data sharing initiatives and identifies the more strategic issues that need to be tackled to established a joined-up system.	KT4.1, KT 4.2, KT 4.3, KT 4.4
6. Establish widespread adoption of standards for metadata and data.	There will be three measures: <ul style="list-style-type: none"> Number of new data sets arriving at DACs in MEDIN standard formats (reported by DACs) Number of MSCC members that are enforcing the use of MEDIN standards. Number of downloads / registrations for use of MEDIN tools 	KT 1.1, KT 1.3, KT2.4
7. Coordinate and provide access to reference data.	To be measured by the number of reference datasets that are available through the MEDIN portal. The target for March 2012 is 6 reference data sets.	KT 5.1
8. Assess MEDIN performance against user expectations and needs	A report will be provided by Work Stream 5 based on a questionnaire and feedback from the Partner Meeting	KT 5.3

The principles behind these KPI's were to:

- establish "SMART" targets that provide a long-term indicator of development, and which can be updated and continued year on year
- address the priorities identified in the MEDIN Business Plan for 2011-14
- build on the individual Work Stream Key Targets

The Business Plan (2011-14) Priorities are listed below, it can be seen that there is a direct mapping across to the KPIs listed above, with the first Business Plan Priority being split across KPI1 and KPI2.

MEDIN Business Plan Priorities (BPP)

1. Increase the content and usage of the Portal
2. Consolidate the DAC network and the transfer and flow of data.
3. Maintain good communication and linkage across relevant UK initiatives
4. Ensure a good fit of MEDIN with key international and European data initiatives (INSPIRE, Marine Strategy Framework Directive)
5. Establish widespread adoption of standards for metadata and data
6. Coordinate and provide access to reference data
7. Assess MEDIN performance against user expectations and needs

Annex A: 2010-11 KPIs

The Key Performance Indicators for the previous year (2010-11) are listed below. Although there were specific targets for 2010-11, KPIs 1-3 are in fact long term measures and so have been carried forward in modified form into the KPIs for 2011-12

2010-11 Key Performance Indicator	Progress
1. To define and help develop the cross cutting data products, tools and other resources required to help partners meet their current and future policy and regulatory objectives.	Due to complete in 2012. The questionnaire exercise has helped to identify requirements, but to fully meet this KPI requires further development of the portal, and implementation of the reference layer action plan, which will take place in 2011-12
2. To ensure that at least 2000 separate data sets, providing coverage across data types and specialities to meet key UK policy needs, are discoverable through the MEDIN portal.	Due to complete Sept 2011. By April 2010 1,167 metadata records were available on the portal. There were unexpected technical complexities in converting existing metadata records to the new format.
3. To establish flow of data into the MEDIN network and adoption of standards across a representative section of the public and commercial sectors.	Ongoing long-term task. Being facilitated through Data Archiving Pilot Projects under WS1, and through standards workshops and seminars. Support has been asked for at top level through MSCC. Data Flow into the DACs will be monitored as a long term Key Performance Indicator
4. To develop a practical, scalable funding model for marine Data Archiving Centres which is agreed by the MEDIN sponsors.	Complete. Recommendations were presented to the MEDIN Sponsors in November 2010. Support for DASSH now agreed by Defra, and Marine Scotland. Discussions are ongoing with CCW/WAG. Process to monitor DAC funding and provide recommendations as appropriate is in place.
5. To publish a costed forward strategy for MEDIN which is agreed, and financially supported by, the MEDIN sponsors.	Complete. A Business Plan for 2011-14 was developed and accepted by the MEDIN Sponsors in November 2010. Commitments for all the requested funding have been received.
6. To help assess the need, scope and if required help deliver an information strategy to underpin the marine science strategy	Due to complete Summer 2011. A paper was presented to the MSCC in March 2011, which recommended that MEDIN provide the mechanism for defining and delivering the data and information strategy for the MSCC. This recommendation has since been adopted by the MSCC

Annex B: MSCC Action - Strengthened Data Coordination

Whilst MEDIN can set itself targets in terms of building resources and capacity, the full potential benefits will not be realized unless key marine organizations adopt the standards, generate and publish MEDIN standard discovery metadata and make use of the network of MEDIN accredited Data Archive Centres. To that end MSCC has identified a number of actions for its partner members under the theme “Strengthened Data Coordination”. All MEDIN sponsors and partners are asked to support these actions.

Action 5: Strengthened Data Coordination

- i. Ensuring that all relevant data collection work by MSCC bodies incorporates suitable archiving and links to the MEDIN portal.
- ii. Ensuring MSCC bodies use the MEDIN Discovery Portal as their first port of call when seeking UK marine environmental data and before considering commissioning new research/ data sets.
- iii. Considering funding the inclusion in MEDIN of some of the currently unavailable data held across the wider marine community (public and private sector).
- iv. Supporting the adoption of MEDIN standards for metadata and data.