

Financial/Administrative co-ordinator

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Executive Summary

Main Achievements

- Continuation of WP6 component development
- Continuation of WP7 application development
- Two successful integration meetings
- Exploitation Plan initiated
- Presentation of Mermaid at Conference in Zurich, Switzerland

Progress in implementation of the 'Description of Work'

- Completion of core Broker components
- Continued development of all major Broker components (DAE, RDAE, Products Catalogue, Search Interface, E-commerce Engine)
- Continuation of applications development (WP7)
- IMGW-OM prototype application complete
- Successful integration of core components – initial tests successful
- Design of Graphical User Interface (look and feel) initiated

Problems encountered

- Budget re-assessment/allocation required due to changing situations at MO /BMT
- On-going contract Amendment issue – communications problems with the Israeli partner MCED.

Highlights for next reporting period

- 2nd Annual Review
- Completion of Broker integration
- Completion of Applications integration
- Testing phase
- Establishment of hosting service

Anticipated problems for next reporting period

- None

1 – Overview

1.1 Objectives

<i>Objectives</i>	<i>Progress towards achieving objectives</i>
<p>Workpackage 1:</p> <ul style="list-style-type: none"> ❑ Ensure the smooth running of the project ❑ Maximise exchange of data and information between project participants ❑ Ensure the optimal focusing of effort towards meeting the project objectives ❑ Ensure the timely delivery of high quality deliverables to the EU <p>Workpackage 6:</p> <ul style="list-style-type: none"> ❑ Integration of the software modules developed in WP3, WP4 and WP5 into the Data Broker prototype. ❑ Detailed design and specification of the Data Broker based on the enabling technologies developed in WP3, WP4, and WP6. ❑ Development of the Data Broker GUI with the Broker Interface Component and Broker Manager integration. ❑ Development of the Broker Manager and linking to the E-commerce Manager ❑ Configuration of the host web-site and establishment of the Data Broker ❑ Development of test plan and testing of Data Broker with sample datasets. 	<p>Regular correspondence by e-mail to assess the status of each partner.</p> <p>Project Status meeting at BMT Southampton in Dec. 2001</p> <p>Continued development and integration of components by e-mail.</p> <p>2 successful integration meetings (BMT and TXT), although final integration meeting still required.</p> <p>Successful tests of dataset search, request, purchase and transfer by ftp and e-mail.</p> <p>Continued detailed development of MO's GRIB RDAE.</p> <p>Refinement of component design, and documentation of these amendments</p> <p>Continued compilation of test datasets, and test plans.</p>

1.1 Objectives – cont.

<i>Objectives</i>	<i>Progress towards achieving objectives</i>
<p>Workpackage 7:</p> <ul style="list-style-type: none"> ❑ Integration of the Data Broker Applet within an existing marine emergency response simulator to create an example of links between a sophisticated end user application and the Data Broker ❑ Development of a simple data retrieval application to demonstrate the type of web-based application that a data provider or user could construct to utilise the Data Broker service. ❑ Linking the 3 project participant data providers to the Data Broker 	<p>Completion of IMGW-OM's prototype application, and initial integration tests with IF component</p> <p>Refinement and testing of this application</p> <p>Continued development of BMT's application.</p> <p>Completion of the Interface Component for interaction with the end applications.</p>

1.2 Milestones

<i>Milestone</i>	<i>Planned date</i>	<i>Actual date</i>	<i>Comments</i>
No milestones were scheduled for this quarter			
M06.1 Completion and Testing of code and Documentation	End of Sept. 2001	-	As was stated in the last report – this milestone was illogically scheduled, but will be completed during the testing phase in WP8 (March – June 2002).
M08.1 Completion of Data Broker Components	End of Feb. 2002	End of Jan. 2001	This milestone was scheduled for Feb. 2002, but the core components were almost completed by the end of Dec, and should be finished in January 2002. However, refinement of these components will continue through the integration and testing phases.
Milestones foreseen for the forthcoming quarter:			
M08.2 Integration of all components to create Data Broker Prototype	End of March. 2002	Expected by End of Jan. 2001	This milestone is scheduled for Feb. 2002, but most components are already successfully integrated, although some bugs remain, and refinements will continue throughout the testing phase.
M08.3 Establishment of web-based Data Broker Prototype and testing	End of March. 2002	Expected by End of March. 2002	This milestone is still on course, although the testing phase will not begin until the broker has been completed in early March 2002.
M09.1 Completion of Marine emergency response application	End of Feb. 2002	Expected by End of March. 2002	This milestone is expected to be slightly delayed, as it is illogically scheduled, but should be complete and ready for testing by end-March.
M09.2 Completion of IMGW-OM application	End of Feb. 2002	Expected by End Feb 2002	This milestone is expected to be on time.
M09.3 Activation of the Data Broker with sample datasets	End of Feb. 2002	Expected by End March 2002	This milestone is illogically scheduled, as it should occur after the completion of the broker, at the end of March. It is expected to be completed by end of March.
M09.4 Testing of fully operational Data Broker and linked Applications	End of Feb. 2002	Expected by mid-March 2002	This milestone will begin during March, once the broker is completed, but will not be completed until May/June, as the testing will obviously take some time to accomplish, and is part of WP8 (Mar – June 2002).

1.3 Deliverables – This period

<i>Deliverable Code & Name</i>	<i>Planned delivery date</i>	<i>Actual delivery date</i>	<i>Comments</i>
There were no Deliverables scheduled for this quarter:			
Deliverables scheduled for the forthcoming quarter:			
D08 Design, Code and documentation for the Data Broker (including Test Plan)	End of March 2002	Expected End of March 2002	This deliverable is on schedule
D08.1 Established Data Broker on test Web Site	End of March 2002	Expected End of March 2002	This deliverable is on schedule
D08.2 Test Results against test Plan	End of March 2002	Expected End of April 2002	This deliverable is illogically scheduled, as it will not be possible to test it until the broker is completed and placed in a live environment, which is not scheduled for completion until end of March 2002. However, it is hoped that the Broker will be completed ahead of schedule during March.
D09 Data Broker activated with test data	End of Feb 2002	Expected End of March 2002	This deliverable is illogically scheduled, as it will not be possible to activate the broker until the broker is complete – which is not scheduled for completion until end of March 2002. However, it is hoped that the Broker will be completed ahead of schedule during March.
D09.1 Example application for marine emergency response	End of Feb 2002	Expected End of March 2002	This deliverable is illogically scheduled, as it will not be possible to activate the broker until the broker is complete – which is not scheduled for completion until end of March 2002. However, it is hoped that the Broker will be completed ahead of schedule during March.
D09.3 Second application for viewing data	End of Feb 2002	Expected End of March 2002	scheduled, as it will not be possible to activate the broker until the broker is complete – which is not scheduled for completion until end of March 2002. However, it is hoped that the Broker will be completed ahead of schedule during March.

1.4 Deviations from Plan

<i>Causes and Description</i>	<i>Corrective actions</i>
<p>Workpackage 7 The scheduling for the completion of WP7 deliverables in month 26 (Feb 2002) before the completion of WP6 deliverables in month 27 (March 2002) is illogical, since Broker itself must be completed in WP6 before the applications (WP7) can be tested.</p> <p>.</p> <p>.</p>	<p>It is hoped that the WP6 deliverables (completion of the Broker itself), will be completed slightly ahead of schedule during early - mid March, which will then allow the WP7 deliverables, including testing to take place. However, the testing phase itself will naturally take some time, and in fact should fall in WP8 (Performance Assessment), when the system will be fully tested.</p>

2 – Contractual Arrangements

.Dr Owen Harrop has replaced Dr Andrew Tyler as the Project Director at BMT, at the beginning of November 2001.

3 - Project Meetings (held and foreseen)

<i>Title</i>	<i>Data and Place</i>	<i>Main conclusions</i>
Technical Meeting	13 th December 2001 BMT Office, Southampton, UK,	BMT and MO – discussed BMT's requirements of the MO. Assured these would be met in January.
Project Status / Exploitation Meeting	14 th December 2001 BMT Office, Southampton, UK,	All partners: Project on schedule, but increased effort required by all partners in January. Met Office will be back on schedule by mid-January. Exploitation plan discussed, and working document initiated.
Integration Meeting	13 th – 14 th December 2001 BMT Office, Southampton, UK,	Successful integration of core components. However, need for another integration meeting in the new year realised. Fix the bugs in the IMGW-OM application, if possible to improve features of the application to allow transfer both ASCII and binary data sets before review meeting in February. To work with subcontractor to follow previously accepted data sets structures
Meetings Planned:		
Integration Meeting	Early January 2002 – TXT offices in Milan	Planned for continued integration of key components by BMT and TXT
Integration Meeting	Early February 2002 – BMT Office, Southampton, UK	Planned for finalisation of integration before the Review
Project Status Meeting	18 th February 2002 – Brussels – All partners – preparation for the review	To discuss status of project, and prepare for the review
2 nd Annual Review	19 th February 2002 – EU offices, Brussels	
WP8 Start-up Meeting	Early March – Brest, France	All partners. To begin the main testing phase of the project (WP8)

4 - Dissemination / Promotional Information**4.1 Conferences and/or Workshops attended/organised/foreseen by the project**

<i>Date</i>	<i>Title</i>	<i>Number of persons attended + other information</i>
10-12 October 2001	15th International Symposium Informatics for Environmental Protection: "Sustainability in the Information Society", Zurich, Switzerland	M. Villa attended for TXT. The whole Mermaid project was presented. An article was also issued (see section 4.2)

4.2 Articles Published , Press coverage, development web sites, etc.

<i>Date and Type</i>	<i>Details</i>
October 2001, short paper, Title "MERMAID: Marine Environmental Response data Management and Acquisition using Internet Data brokerage" (authors: Matteo Villa , Michel Girin and Paul Taylor)	Presented and published at the 15th International Symposium Informatics for Environmental Protection: "Sustainability in the Information Society", Zurich, Switzerland, October 2001

5 – Main results

<i>Description</i>	<i>Details</i>
IMGW-OM prototype Application	Beta version of the application was developed by subcontractor to IMGW-OM Prototype version of the visualisation module was developed by IMGW-OM to be integrated within the application for the end-user

6 - Reporting per partner and per workpackage

Partner name: BMT (CO 1)

WP 1: Project Management

Activities:

- Management of partners effort and cooperation in the delivery of required documents.
- Preparation and delivery of project reports and deliverables
- Preparation and delivery of Consortium Amendment documentation
- Preparation and delivery of MO /BMT budget re-allocation request
- Preparation for project meetings
- General Administration

WP 4: Data Broker Interfacing and Communications

Activities:

- Assistance with the development of Broker Interface Component.
- Integration of components with the Broker Interface Component.

WP 6: Data Broker Prototyping

Activities:

- Refinement of core components (DAE and RDAE, Search and Extraction Routines, Products Catalog, Data Warehouse Database)
- Integration of core components
- Design of Web site begun
- Assistance to MO in their development work
- Documentation of designs
- Compilation of test datasets
- Commencement of Test Plan

WP7: Data Broker Application Prototyping

Activities:

- Refinement of concept design of on-line application
- Continued development of application.

WP8: Performance Assessment and Exploitation Evaluation

Activities:

- Initiation and draft of working exploitation plan

Partner name: TXT (CR 2)

WP 1: Project Management

Activities:

- Standard project management activity performed
- Presentation of the Mermaid project at the Zurich – EMPA conference (see section 4.1)

WP6: Data Broker Prototyping

Activities:

- Integration of the Data Access Engine component continued
- Interface Component integration with the Broker Gateway
- New Provider pages (DOT NET technology) integration started
- Bugs fixing

WP7: Data Broker Application Prototyping

Activities:

- BMT and IMGW application integration requirements reflected to an update in the "IFComponent" developed within WP 4

Partner name: CEDRE (CR 3)

WP1 – project management

Activities :

- Participation to Project management decisions and progress reporting

WP 4 – Data Broker Interfacing and Communications

Activities :

- Preparation to and participation in Southampton meeting in UK
- Follow up of actions undertaken by project partners in charge.
- Preparation and search of realistic datasets (from Polmar Plan) for the future implementation and testing of data despatch systems.

WP 6 - Data broker prototyping

Activities :

- Preparation to and participation in Southampton meeting in UK
- Preparation of the testing plan (DAE).
- Beginning of the key-words translation.
- Improvement of prototype French "Polmar Plan" data sets and expectancy of other partners comments.

WP 7 – Data Broker Applications Prototyping

Activities :

- Follow up of actions undertaken by project partners in charge.

WP 9 – Dissemination and use

Activities :

- Supply list of potential end-users extract from "Polmar Plan" (decision-makers)
- Participation to Business plan

Partner name: MO (CR 4)

WP1: Project management

Activities:

- Project planning and resource agreement for input into WPs 4 and 6.
- Liaison with BMT over reallocation of funds from original MO budget, to account for increased effort incurred by BMT.

WP4: Data broker interfacing

Activities:

- Project meeting on 13th Dec'01 with BMT to discuss RDAE modification and data broker prototyping (WP6).
- Java development work carried out to modify RDAE to handle extraction of data subsets from GRIB files.
- Fortran development work carried out so that java-based RDAE can interact with Fortran based GRIB subroutines.

WP6: Data broker prototyping

Activities:

- Work carried out to configure and install a test server in a secure environment to enable testing of the data broker with sample datasets.

WP8: Performance assessment and exploitation evaluation

Activities:

- Initial work on assessing options for future commercial exploitation.

Partner name: IMGW-OM (CR 5)

WP 1

Activities:

- Management of the activities in frame of WP7
- Reporting
- Participation in the Project status meeting

WP 6

Activities:

- Cooperation in frame of the Data Broker Components development related to the application to be developed in frame of WP 7

WP7

Activities:

- Advice to the subcontractor on the development of the application.
- Development of beta version of the module responsible for data visualization using commercially available software, i.e.: SURFER of Golden Software
- Testing the application in conjunction with Data Broker engine. Advising in the improvement of the IF Component.
- Study of the need of the development of the conversion program necessary to prepare IMGW-OM data to work with Data Broker

Subcontractor:

- Further development of the application. Preparation of its beta version for the evaluation of IMGW-OM
- Working on the improvement of the application in accordance to requirements of IMGW-OM

Partner name: NC (CR 7)

No activities were scheduled for this reporting period

6 – Project Effort

Effort for the reporting period (person-hours)											
<small>(preferably presented as an Excel sheet either per partner or per person)</small>											
Contractor designation	Acronym	WP 01	WP 02	WP 03	WP 04	WP 05	WP 06	WP 07	WP 08	WP 09	Total
CO1	BMT	117	-	-	91	-	355	554	53	-	1170
CR2	TXT	43	-	-	392	-	464	140	-	-	647
CR3	CEDRE	14	-	-	96	-	15	5	-	10	140
CR4	MO	84	-	-	84	-	106	-	30	-	304
CR5	IMGW (BMT-MC)*	16	-	-	-	-	104	332 560	-	-	452 560
CR7	NC	-	-	-	-	-	-	-	-	-	-
Total		274	-	-	271	-	1044	1031	83	10	2713

* The BMT-MC are being sub-contracted by the IMGW for work on this workpackage.

Cumulative Effort to-date (person-hours)

(preferably presented as an Excel sheet either per partner or per person)

Contractor designation	Acronym	WP 01		WP 02		WP 03		WP 04		WP 05		WP 06		WP 07		WP 08		WP 09		Total	
		P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A
CO1	BMT	672	962	1120	1813	2009	2143	900	913	280	303	829	1010	840	959	0	53	140	363	6790	8518
CR2	TXT	224	232	1120	1232	1540	1540	600	854	1820	2086	1658	1486	280	308	-	-	140	140	7382	7878
CR3	CEDRE	112	116	280	128	0	32	240	168	280	114	237	97	140	5	-	-	0	57	1289	717
CR4	MO	112	346	1260	223	560	554.5	360	159	560	75	503	126	-	-	-	30	70	17	3425	1530
CR5	IMGW (BMT-MC)*	112	152	420	284	280	294	240	260	140	105	385	342	1400	788	-	-	0	152	2977	2377 **
CR7	NC	112	29	280	76	0	0	0	0	0	0	0	0	140	-	-	-	0	5	532	110
Total		1344	1837	4480	3756	4389	4564	2340	2354	3080	2683	3613	3061	2800	2060	-	83	350	733	22396	21130

NB. The unit of person-hours has been used, with 1 month = 140 hours. The number of productive hours per month in fact varies between partners from 132 to 140 hours.

Estimates for effort planned have been calculated as a linear average per month over the entire workpackage duration. Please note that there were some errors in the figures in previous reports, which have been amended in this report.

* The BMT-MC are being sub-contracted by the IMGW-OM for work on this workpackage.

** There was an error in the effort recorded for the IMGW-OM for WP7 in last quarter's report. The effort for WP7 should have read 456 person-hours (rather than 356 as was stated). This also lead to an error in the total effort spent, which should have read 2377, rather than 2277 hours. This error has been corrected in this report.