

Financial/Administrative co-ordinator

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Executive Summary

Main Achievements

- Completion of Deliverables for WP4
- Completion of first phase of DAE development(WP6)
- Initial integration tests successful
- Presentation of Mermaid at Conference in Quito, Equador
- Completion and delivery of 2nd Cost Statements

Progress in implementation of the 'Description of Work'

- Completion of Implementation Testing of 'SOAP'
- Completion of Broker Interface Component Design (D5)
- Completion of Communications Protocols Design (D6)
- Continued development of all major Broker components (DAE, RDAE, Products Catalogue, Search Interface, E-commerce Engine)
- Continuation of applications development (WP7)
- Design of web-hosting service complete

Problems encountered

- Late Delivery of WP4 Deliverables
- Late Delivery of 7th Quarterly Report
- Late Delivery of 2nd Period Cost Statement due to lack of cooperation by the Dutch partner, NC
- Communication problems with the Dutch partner, NC
- On-going contract Amendment issue – communications problems with the Israeli partner MCED.
- Another change to Project Manager at the Met Office
- Late delivery of work from the Met Office
- Postponement of Integration meeting, due to a fear of flying caused by the crisis in Afghanistan

Highlights for next reporting period

- Completion of all core Broker Components
- Completion of component Integration
- Commencement of testing phase

- Continuation of applications development (WP7)
- Establishment of hosting service

Anticipated problems for next reporting period

- Delay in completion of work assigned to the Met Office
- Change in Project Director at BMT

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 4:</p> <ul style="list-style-type: none"> ❑ design and development of the communications protocols between the Data Broker to external data provider and user systems ❑ Establishment of data and messaging communications protocols between the Data Broker and the Broker Interface Applet ❑ Design and development of Broker Interface Applet to be hosted by user systems and service communications protocols with the data broker ❑ Implementation and testing of data despatch systems using realistic datasets 	<p>Regular correspondence by e-mail to assess the status of each partner.</p> <p>Progress meeting between BMT and MO at Bracknell.</p> <p>Completion of design and documentation of Broker Interface Component (Applet) – D5</p> <p>Completion of design and documentation of communications protocols – D6.</p> <p>Implementation of SOAP technology in the initial integration of core components</p> <p>Continued communication between design teams at BMT and TXT, including the exchange of components for testing at each site.</p>

1.1 Objectives – cont.

<i>Objectives</i>	<i>Progress towards achieving objectives</i>
<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>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>Continued detailed development of DAE and RDAE, including the search interfaces.</p> <p>Completion of core DAE prototype component, and the sample RDAE.</p> <p>Source code of sample RDAE supplied to the MO partner, together with instructions for the development of the MO RDAE for GRIB data extraction.</p> <p>Continued detailed development of E-commerce engine.</p> <p>Continued development of Data Warehouse, and Products Catalogue databases, including communication between these.</p> <p>Initial testing of the integration between core components.</p> <p>Continued compilation of test datasets, and test plans.</p> <p>Continued development of the Interface Component for interaction with the end applications.</p> <p>Refinement of concept design of end applications.</p> <p>Completion of design of BMT on-line application, and commencement of development of this application.</p> <p>Completion of design of IMGW application, and commencement of development of this application.</p>

1.2 Milestones

<i>Milestone</i>	<i>Planned date</i>	<i>Actual date</i>	<i>Comments</i>
M05.1 Completion of designs for interfacing and communications	End of Sept. 2001	Early Nov. 2001	This document is now complete, and has been submitted to the EU.
M06.1 Completion and Testing of code and Documentation	End of Sept. 2001	-	This milestone is likely to be delayed by up to 3 months. This is due to a slight delay in the completion of the core components required for integration. Testing cannot begin until these have been integrated. The date for this milestone as set in the contract was unrealistic, as the deadline for completion of the interfacing coincides with the deadline for completion of testing. This is impossible, since a period after the completion of the interfacing is required to perform the testing. This is scheduled to be 6 –8 weeks from the time of interface completion,
Milestones foreseen for the forthcoming quarter:			
M08.1 Completion of Data Broker Components	End of Feb. 2002	Expected by End of Dec. 2001	This milestone is scheduled for Feb. 2002, but the core components are likely to be completed before this, to allow the initial testing phase to begin.
M08.2 Integration of all components to create Data Broker Prototype	End of Feb. 2002	Expected by End of Dec. 2001	This milestone is scheduled for Feb. 2002, but the core components at least are likely to be integrated before this, to allow the initial testing phase to begin.

1.3 Deliverables – This period

<i>Deliverable Code & Name</i>	<i>Planned delivery date</i>	<i>Actual delivery date</i>	<i>Comments</i>
D5 Broker Interface Component Design /Documentation	End Sept 2001	Early Nov. 2001	This deliverable was completed by mid Oct (i.e. on schedule), but it's submission was late due to a delay in the Q.A procedures and acceptance by all partners of the consortium
D6 Communications Protocols and Despatch Systems Design /Documentation	End Sept 2001	Early Nov. 2001	This deliverable was completed by mid Oct (i.e. on schedule), but it's submission was late due to a delay in the Q.A procedures, and acceptance by all partners of the consortium
There are no Deliverables scheduled for the forthcoming quarter:			

1.4 Deviations from Plan

<i>Causes and Description</i>	<i>Corrective actions</i>
<p>Workpackage 4 The deliverables within workpackage 4 are significantly dependent on work that is scheduled to be carried out in Workpackage 6:- at a later date. Some re-scheduling of work was therefore required, which may well mean a slightly late delivery of some workpackage 4 deliverables. However, this should be compensated by the fact that work scheduled for later in the project has already been addressed, at least in principal.</p> <p>D5 and D6 slightly delayed – time required for third parties technologies assesments (i.e. MS SOAP)</p>	<p>It was not possible to design the interfaces and communication protocols (WP4 deliverables), before at least the draft design of the Broker components had been completed. This work was scheduled for WP6 (after WP4). The original schedule was therefore not logical in its sequence, and has had to be re-organised. However, the main WP4 deliverables should still be completed on time.</p> <p>The re-scheduling of work in WP6 and other related WP's has already been documented in previous reports. However, the delays seen in other WP's (i.e. WP3 and WP5) are now beginning to be recovered in this WP, and work scheduled for completion by Feb. 2002 should hopefully be completed ahead of schedule.</p> <p>These WP4 Deliverables D5 and D6 were issued in November 2001</p>
<p>Workpackage 7 Rather than developing two, very similar end-user applications, to interface with the Broker, BMT intend to develop only one of these. In compensation, the extremely simple web-viewer that was to be developed by the IMGW will be replaced with a much more sophisticated application.</p> <p>This was caused by the fact that there will be an increased effort on the development of the IMGW application, and the DAE, which impacts the timescales of BMT.</p>	<p>It was originally specified that there would be two very similar end-user applications developed by BMT (Oil Spill and Search and Rescue Models) to interface with the Broker, together with a much simpler web-viewer, developed by the IMGW. As documented previously, it was decided that there was very little merit in developing a simple web-viewer, of which there are numerous examples on the market. Instead, it was agreed that the IMGW should develop a much more sophisticated application, which would be more useful to both IMGW and the potential end-users of the application. In addition, since this application would be hosted on a server, this would complement BMT's client-hosted application, and which together would much more powerfully demonstrate the flexibility and usability of MERMAID. This lead to an increased effort in the development of the DAE by BMT, and it has been decided that BMT should only develop one of their current emergency response applications (the Oil spill simulator) to interface with the broker. It should be noted that the other application is very similar in any case, and by dedicating all of their effort on one product, the finished application should be more sophisticated.</p>

2 – Contractual Arrangements

Paul Lancaster has replaced Jack Hopkins as the Project Manager at the Met Office.

Dr Owen Harrop will shortly replace 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 September - Bracknell, UK	MO and BMT in attendance. The development and implementation of the 2 nd phase of the RDAE was discussed, and BMT provided the MO with sample source code in JAVA, with instructions, to assist them with their development of the RDAE. The MO raised the fact that they did not feel they had the technical competence in place to complete the work, and that their internal deliverable may well be late.
Meetings Planned:		
Technical Meeting	End of Nov. 2001 - Southampton, UK	Planned for integration of key components currently being development in parallel by BMT and TXT. This has been postponed due to recent events in Afghanistan
Project Meeting	Early Dec - TBA	To discuss status of project, and implement the testing phase in detail. Also to discuss the business plan for the end of the project

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>
July 2001	5 th Eurolat IS meeting – Quito (Ecuador)	Matteo Villa, of TXT attended. EUROLAT-IS is a Thematic Network which general objective is to boost Euro-Latin American collaboration in areas of application of Information Society Technologies. More specifically to boost the number of concrete actions undertaken by consortia of European and Latin American companies, researchers and intermediaries, in areas of importance for social and economic development in the Latin American region. See http://www.eurolatis.upm.es/eurolatis.asp MERMAID project was presented and discussed

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

<i>Date and Type</i>	<i>Details</i>

5 – Main results

<i>Description</i>	<i>Details</i>
WP4 Deliverables (D5 and D6)	Agreed, Completed and Issued to the EU Project Officer

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 Project Cost Statements
- General Administration

WP 4: Data Broker Interfacing and Communications

Activities:

- Development of communication technologies
- Contribution to deliverables D5 and D6
- Revision and amendment of WP deliverables (D5 and D6).
- Assistance with the development of Broker Interface Component.

WP 6: Data Broker Prototyping

Activities:

- Development of DAE and RDAE
- Development of Search and Extraction Routines
- Development of Products Catalog
- Development of Data Warehouse Database
- Integration Testing of these components
- Limited Integration Testing with E-commerce Engine
- Assistance to MO in their development work
- Compilation of test datasets

WP7: Data Broker Application Prototyping

Activities:

- Refinement of concept design of on-line application
- Initial development of application commenced.
- Assessment of integration issues with the IF component.

Partner name: TXT (CR 2)

WP 1: Project Management

Activities:

- Standard project management activity performed

WP4: Data Broker Interfacing and Communications

Activities:

- Completing and testing the communication protocols based on the SOAP technology
- Completing and testing the "Interface Component", including a dedicated GUI
- Preparation and completion of deliverables D5 and D6

WP6: Data Broker Prototyping

Activities:

- Integration of e-Commerce engine in the DataBroker
- Commencement of the integration of the Data Access Engine component
- Interface Component integration with the eCommerce Gateway

WP7: Data Broker Application Prototyping

Activities:

- BMT and IMGW application integration issues (technology, functionalities) were furtherly analysed further, and their requirements impacted on the work carried out within WP4

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

- Follow-up of actions undertaken by Project partners in charge

WP 6 - Data broker prototyping

Activities

- Improvement of prototype French “Polmar Plan” data sets and expectancy of other partners comments.

Partner name: MO (CR 4)

WP1: Project management

Activities:

- Various activities to identify resources to carry out tasks for WPs 4 and 6.

WP3: Data management

Activities:

- GRIB2 encoder and decoder written. Alpha version of decoder was released, which has now passed into a beta testing phase. An alpha version of the encoder has also been released.

WP 6: Data Broker Prototyping

Activities:

- Server identified that can be used as a platform for testing of the data broker prototype. This will allow installation of the RDAE and interfacing with the data broker.
- Meeting to discuss adaptation of RDAE.
- Work carried out to identify java expertise necessary to adapt RDAE, including writing of requirement specification.

Partner name: IMGW-OM (CR 5)

WP1: Project management

Activities:

- Management of the activities in frame of WP7
- Reporting

WP4: Data broker interfacing and Communications

Activities:

- Working with partner responsible for the communication issues related to the application.

WP 6: Data Broker Prototyping

Activities:

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

WP7: Data Broker Applications

Activities:

- Detailed study of the commercially available software to be incorporated into application
- Working on the development of the application, preparation of the module responsible for data visualization using commercially available software, i.e.: SURFER of Golden Software
- Detailed study together with subcontractor on the structure of the modules of the application to be developed under subcontract.
- Start to develop visualization modules of the application using Microsoft Visual Basic 6.0

Subcontractor:

- Start to develop of the main modules of the application

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	161.5	-	-	138	-	577.5	135.5	-	-	1012.5
CR2	TXT	29	-	-	392	-	406	84	-	-	911
CR3	CEDRE	2	-	-	2	-	5	-	-	-	9
CR4	MO	39	-	160	20	-	20	-	-	-	239
CR5	IMGW (BMT-MC)*	16	-	-	56	-	96	208 140	-	-	376 140
CR7	NC	-	-	-	-	-	-	-	-	-	-
Total		247.5	-	160	841	-	760.5	678.5	-	-	2687.5

* 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	588	845	1120	1813	2009	2143	900	822	280	303	603	655	560	405	-	-	140	363	6200	7348.3
CR2	TXT	196	189	1120	1232	1540	1540	600	854	1820	2086	1206	1022	187	168	-	-	140	140	6809	7231
CR3	CEDRE	98	102	280	128	0	32	240	72	280	114	172	82	93	-	-	-	0	47	1164	577
CR4	MO	98	262	1260	223	560	554.5	360	75	560	75	366	20	-	-	-	-	70	17	3274	1226
CR5	IMGW (BMT-MC)*	98	136	420	284	280	294	240	260	140	105	280	238	693	356	-	-	0	152	2151	1825
															240	240					240
CR7	NC	98	29	280	76	0	0	0	0	0	0	0	0	93	-	-	-	0	5	471.3	110
Total		1176	1563	4480	3756	4389	4564	2340	2083	3080	2683	2628	2017	1867	1169	-	-	350	724	20309	18557

P: planned A: actual

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.