



Contract No. 004420

eu-DOMAIN - enabling users for
 Distance-working & Organizational Mobility using Ambient Intelligence Networks

D1.2.2 Period 2 Activity Report

Specific Targeted Research or Innovation Project

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1. Introduction

This report is the eu-DOMAIN activity report for the project's second formal reporting period, Period 2: 1st June 2005 to 31st May 2006. It should be read in conjunction with the corresponding eu-DOMAIN D.1.2.2 Management Report for the same period. For clarity some information is duplicated in both reports.

This activity report encompasses a publishable executive summary, the project's progress against its objectives, workplan and management aims, and includes an updated dissemination and use plan.

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2. Executive summary

2.1 eu-DOMAIN aims and objectives

The eu-DOMAIN project will develop a new, innovative European ambient intelligence service platform which will interconnect people, devices, buildings and content in an interoperable network and open up entirely new ways of working in collaborative work environments.

An estimated 12 million Europeans travel everyday across Europe working outside their normal workspace. eu-DOMAIN will dramatically improve their ability to deliver quality services, increase the competitiveness and visibility of their host organisations and generally improve the quality of life for Europe's citizens.

European impact

<u>Strategic impact</u>: eu-DOMAIN places European companies at the forefront of ambient intelligent technologies *providing potential to significantly increase the competitiveness of European businesses*. It provides SMEs with an easy-to-deploy strategic platform allowing them to drastically improve time-to-market of their products by simply renting access to the platform from service providers.

<u>Economic impact</u>: eu-DOMAIN integrates a number of emerging technologies in an infrastructure and set of applications and services. The scenarios being validated are in the <u>eBusiness</u> and <u>eHealth</u> domains but the results will have wider applicability in many other domains. A platform that improves the efficiency and effectiveness of a market of this size must by definition have a major impact at the European level. Citizen users will similarly realise both economic and social benefits as a result of their more efficient and effective interaction with all types of organisation using eu-DOMAIN.

<u>Business innovation</u>: An integral part of the project is the analysis and development of realistic business models for users and service providers. *New research into defining and measuring value creation in web service networks will lead to innovative business structures involving content providers and service providers in collaborative systems.* Specific emphasis will be made on identifying new business opportunities for SMEs. Governments, especially in the healthcare and social services area, will be provided with a platform for delivering public services directly to the citizens' homes with enormous potential for improving quality and reducing costs.

Results exploitation

The intention is to establish eu-DOMAIN as a new joint-venture stand-alone business available to potential users throughout Europe initially, and then potentially worldwide. *It is expected that the joint venture will cover sufficient technological ground to be able to offer and operate a complete Europe-wide eu-DOMAIN platform.*

In addition to participation in the joint venture, the eu-DOMAIN partners will also be able to exploit the knowledge gained from participation to improve their consultancy services and/or research activities to all types of private and public sector organisations who are interested in exploiting emerging technologies to implement new and better ways of working.

Validation scenarios

Two innovative user scenarios have been defined to demonstrate the systems potential: In the field of *industrial pumps* the focus is '*Serving your every need*!': Combined with eu-DOMAIN, the basic product function of a pump will shift from simply moving water (or fluids) to be an integral, maybe even a crucial part, of the customer's solution. The pumps are "serving you – wherever you are – whatever you do – whenever you want it".

In the field of *Healthcare* the focus is '*Patients as customers':* A variety of new methods, devices and medication are available from various service providers, each of them offering their services to an informed patient - sometimes in competition; sometimes in cooperation. The patient chooses the providers that are most suited to their needs supported by eu-DOMAIN technology.

Approach

eu-Domain will realise its vision by developing a working example of 'Ambient Intelligence' infrastructure, combining state-of-the-art communications, decision support, semantic web and location-based technologies.

It will pave the way for its commercial deployment through the development of realistic business models for users and service providers.

The project's work is divided into five phases covering:

- Project coordination processes
- Research and development,
- Prototyping and system integration
- User testing and uptake
- Dissemination and exploitation.

Technology innovation

The main technological innovation in eu-DOMAIN lies in its 3-tier hierarchical client-server structure with multilevel distributed, configurable intelligence pools. This structure supports the wealth of different applications, which can be integrated into the Europe-wide ambient intelligence service network.

Another very innovative feature is self-configuring devices that use semantic agents to search for configuration set-up, protocols and user interfaces. Application specific intelligence pools perform intelligent adaptation and user set-up, tailored to the users precise needs in the actual real-world situation.

A further innovative feature of eu-DOMAIN is the web based service-provisioning platform, which allows any service provider (industrial, healthcare, government, etc.) to deliver web services to people and devices in any location across Europe.

2.2 Project participants

The eu-DOMAIN consortium has an excellent insight into the state of the art in this field. It encompasses highly skilled organisations with a wealth of experience necessary to the project's management, technical and business requirements. The consortium is:

- Functionally comprehensive with a very full and sound balance between user, technical and managerial expertise with clear and relevant roles established for each consortium partner; and:
- Skilled and experienced in the projects business and technical requirements with the
 projects requirements for user input well covered across the focus sectors of Building Facility
 Management and eHealth Services.

It is nationally and culturally diverse with partners from 6 European countries who conduct their business across Europe and beyond, providing a clear understanding of the dynamic business, sociological and cultural characteristics of its potential market place. The consortium partners are:

Contractors:

| Participant | Role | Country | Expertise |
|--|-------------------------|-------------------|---|
| C International Ltd (CIL) | Coordinating Partner | United Kingdom | Extensive experience of managing IST and other multi-partner projects. Substantial prior involvement in testing implementation and evaluation activities and substantial experience in business modelling. |
| Innova S.p.A. (INNOVA) | Partner | Italy | Long experience in bringing new technology to SMEs. Experience in conduction European Awareness Scenario Workshops (EASW) and substantial knowledge of Socio-economic issues in relation to technology deployment. |
| In-JeT ApS (IN-JET) | Partner | Denmark | Considerable knowledge on frameworks for ambient intelligence and web services. Also in business modelling and building business cases. |
| University of Aarhus, Dept of Computer Science (UAAR) | Partner | Denmark | Substantial scientific knowledge of software architectures and system analysis. Experience in gateway technology and OSGi frameworks and substantial scientific knowledge of trust and security analysis. |
| FORTH (FORTH) | Partner | Greece (Crete) | Expertise in all aspects of system design for healthcare. Substantial expertise in <i>e</i> Health devices and extensive expertise in EPR and ICRS systems. |
| CNet Svenska AB (CNET) | Partner | Sweden | Extensive experience in XML based content and web service application development. Substantial knowledge in web-based meta data creation for the construction industry. Experience in interactive environments for geographically distributed organisations. |
| T-connect S.r.l. (T-CON) | Partner | Italy | Experience in wireless broadband technologies. Substantial knowledge of deliveries of personalised services via wireless networks. |
| Software AG (SAG) | Partner | Belgium | Leading vendor of XML technology and solutions. Substantial experience in web services and content management. Comprehensive experience in mobile computing. |
| Telefónica I+D (TID) | Partner | Spain | Substantial experience in intelligent network and services creation on broadband. Comprehensive skills in artificial intelligence and software engineering. Experiences in real time systems and databases and knowledge bases. |
| Grundfos (GMA) | User | Denmark | Grundfos is one of the world's leading pump manufacturers and has decades of know-how about pumps and pump systems and is a typical case of a European Service Network user. |
| Eastern Birmingham Primary Care Trust (EBPCT) | User | United Kingdom | The PCT has extensive experience in commissioning hospital services as well as providing community services and running emergency services and is a typical case of a Healthcare for tomorrow user |

Additional supporting participants:

CONTRIBUTOR - ALEXANDRA INSTITUTE, Denmark;

SUBCONTRACTOR - ACIT GMBH, Germany;

SUBCONTRACTOR – LIWAS APS, Denmark.

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2.3 Progress to date

The eu-Domain project has completed its second formal reporting period covering June 2005 through May 2006. During this period the project has achieved its set objectives and is currently on schedule to complete its activities to plan.

The project has seen sound progress made to date with:

- The implementation of the EU-Domain client and server software has been completed.
- A key milestone has been reached with the specification of the common domain model and its transformation from a conceptual to operative model.
- The specification of application intelligence and web service provisioning techniques has been undertaken together with the development of operational rule engines.
- The ESN and Health Care demonstrators have been specified.
- Business modelling has been completed.
- The EASW workshops have been completed.
- The technology and competitor watch has been maintained to ensure that the development of the eu-DOMAIN system takes account of evolving technologies and that its business models remain ahead in the potential marketplace
- The project's dissemination and use plans have been updated and the well established dissemination programme and project website have been further enhanced.

The project's workplan has progressed largely as intended with most of the tasks and deliverables scheduled to this point in the project having been completed. The exception to this is the work on business modelling which longer than anticipated to complete and was not delivered until month 22 rather than month 15 as originally anticipated. This has not impacted the overall project's schedule, costs or quality.

The project is progressing under its sound organisational framework with each and every consortium partner playing a significant role in the project and deploying their skills and experience to maximum effect. The project's resource usage is running within plan.

2.4 Next Steps

The project is currently focusing upon the integration and validation of the eu-DOMAIN system components. Over the next few months:

- The communications infrastructure will be completed.
- The integration activities will be finalised.
- The EU-Domain system testing and validation activities will commence.
- A technology and competitor watch will be maintained to ensure that the development of the eu-DOMAIN system takes account of evolving technologies and that its business models remain ahead in the potential marketplace.
- The project's dissemination and use plans will be updated and the already established dissemination programme intensified for the final phase of the project's planned dissemination programme.

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3. Project objectives and achievements for the reporting period

3.1 Main achievements summary

This second formal reporting period (eighth quarterly reporting period) for months 13 to 24 of the eu-DOMAIN project has seen continued good progress being made with the set objectives for the period being achieved. This second 12 months of the project has seen:

- The completion of the work for the OSGI framework on gateways.
- The completion of the research on new device interactions.
- Substantial work on defining and establishing the communications infrastructure.
- The completion of the bus9iness modelling and EASW workshop.
- The completion of the client side and server side developments and their first stages of integration.
- The project's first phase dissemination initiated and completed through workshops and peer contacts, and the detailed planning of the project's dissemination and exploitation programme.

3.2 Progress in implementation of the 'Description of Work' / Problems encountered

With the exception of the delay in the business modelling activities the project's workplan has progressed largely as intended with the tasks and deliverables scheduled to this point in the project having been completed. The only exception to this is D9.6 – Exploitation Plan whish will be delivered in month 25.

There have been no issues or unexpected problems that have impacted the project's schedule, costs or quality.

3.3 Objectives achievement

eu-DOMAIN has achieved its aimed objectives for this reporting period with progress against these as follows:

| Objectives | Progress towards achieving objectives |
|--|--|
| Continue the project's operational project management | The project is progressing under its sound managerial framework. Each and every project partner continues to play their full role in the project. The project is currently running to schedule. |
| Develop business models for eu-DOMAIN deployment | Completion was rescheduled due to need to fully impact the recommendations of the first annual review. However, this objective was achieved within the perios. |
| Progress the project's dissemination framework | Dissemination activities have been continued by the partners in line with the project's Dissemination and Use Plan. |

| Progress the build of the eu-DOMAIN system | The building of both the client and server-side system components has been completed. |
|--|---|
| | The OSGi framework development has been completed to schedule. |
| | The common domain model has been specified. |
| | The industrial and healthcare scenario demonstrators have been updated. |
| Run EASW workshops | The first of these workshops has been completed and a second will take place in the final reporting period. |
| Progress the project's dissemination framework | Dissemination activities have been continued by the partners in line with the project's Dissemination and Use Plan. |

3.4 Highlights/anticipated problems for next reporting period

It is anticipated that during the next reporting period (project months 25 through 36) the project's work will continue to schedule with no deviations from plan:

- The integration of the eu-Domain client and server software under workpackage 7 will be completed.
- The eu-DOMAIN communications infrastructure will be put in place.
- The technical and functional testing of the overall platform will be completed in the context of the ESN and Healthcare scenarios.
- The validation of both the ESN and Healthcare scenarios will be undertaken.
- The dissemination and use plan will be updated and the already established dissemination programme intensified. The project website is being considerably enhanced to support this.
- The project's evaluation and assessment for the final reporting period will be completed.

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4. Workpackage progress of the period

4.1 Work progress

The project's workplan has progressed as intended with the scheduled tasks and deliverables completed to plan at this point in the project. There have been no issues or unexpected problems that have impacted the project's work schedule or its related costs or quality.

Workpackage 2 has been completed, Workpackages 1, 3, 4, 6, 9 and 10 progressed to schedule, and preparatory work has been undertaken on Workpackage 5.

An updated project Gantt chart illustrating current progress is provided in Section 5.

| Work Package | Activity status | | | | | |
|--|--|--|--|--|--|--|
| WP1 Project Management | | | | | | |
| T1.2 Operational Project Management and T1.3 Project reporting | Initiated with operation framework put in place and quality plan implemented. This has been on-going throughout the reporting period. | | | | | |
| WP3 Client side architecture | | | | | | |
| T3.2 OSGI framework on gateways | Development and testing of the gateway bundles completed on schedule. | | | | | |
| T3.3 Research device interactions | This activity was completed during the period and the deliverable D3.3 – Design guides and navigation for device interaction completed. | | | | | |
| WP4 Server side architecture | 9 | | | | | |
| T4.2 Network intelligence pool and databases | This task continued to schedule and was completed during quarter 7. | | | | | |
| T4.3 Application intelligence / Web services | This task has been completed. | | | | | |
| WP5 Communication infrast | ructure | | | | | |
| T5.1 Set up comms network | Infrastructure strategy has been updated in line with WP3 and WP4 finalisation and included installation of the server park at TID. | | | | | |
| WP6 Socio-economic issues | | | | | | |
| T.6.1 Business modelling | This task was progressed following its completion date being rescheduled for month 22. Two workshops were held with the user partners and the outcomes of these are currently being impacted on the business modelling. This task was completed at the beginning of quarter 8. | | | | | |
| T6.2 EASW workshops | The ESN workshop at Grundfos was successfully completed on schedule. However, the later development of the full healthcare scenario disrupted the planning of the healthcare workshop which will now take place in the next reporting period. | | | | | |
| WP9 Dissemination & exploit | WP9 Dissemination & exploitation | | | | | |
| T9.1 Dissemination | The project's planned dissemination programme has been continued and has included the incorporation of an eu-DOMAIN gateway demonstrator into the dissemination website. | | | | | |
| T9.2 Exploitation | The project's exploitation plan has been undergoing a revised drafting and the first version will be available during the next quarter to allow for its alignment with deliverable D6.1. | | | | | |

| WP10 Review and assessmen | nt |
|-------------------------------|---|
| T10.1 On-going project review | Final outcomes assessment of Workpackage 3 continue to be impacted upon the projects continuing activities. |

4.2 Milestones

The project's target milestones for this reporting period have been attained and are shown in he following table:

| Milestone | Planned month | Actual month | Comments |
|--|------------------|-----------------|--|
| M1.1 Acceptance of the consortium agreement by all partners. | 1 | 3 | |
| M1.2 PID produced for kick off meeting. | 2 | 1 | Project successfully initiated – kick-off meeting 21 st & 22 nd June 2004. |
| M1.3 Timely issuance of a Quality Manual to be used in all parts of the project and in all project material. | 3 | 3 | Quality manual adopted by consortium partners and will be updated as necessary throughout project. |
| M1.4 Timeliness of the planned reviews. | From 5 | | End of period 1 review held with Commission on 18 th May 2005 before end of period. Also expected to be attained to schedule for periods 2 and 3. |
| M1.5 Final project report produced. | 36 | | Expected to be attained to schedule |
| M2.1 Scenarios identifying key technological, socio- economic and business drivers for future technological development have been established and show no adverse impact on the overall concept of the eu-DOMAIN infrastructure. | 3 | 4 | Eight scenarios developed and two identified for implementation and validation. |
| M2.2 The comprehensive set of user requirements specifications based on users behaviours and simulated interaction infrastructure ensuring its market exploitation and social acceptance | 6 | 6 | Specifications successfully derived. Social acceptance to be included in validation work. |
| M3.1 Software architecture is defined in UML with no major points of conflict with user requirements. | 9 | 9 | Architecture defined. To be validated in first demonstrator. |
| M3.2 OSGi framework is operational with testing bundles | 18 | 18 | Completed on schedule |
| M3.3 Entire client side infrastructure is operational and can be integrated with the server side structure. | 21 | 21 | Completed on schedule |
| M41 Software architecture is defined in UML with no major points of conflict with user requirements. | 9 | 9 | Architecture defined. To be validated in first demonstrator. |
| M4.2 Entire server side infrastructure is operational and can be integrated with the client side structure. | 20 | 20 | Completed on schedule |
| M5.1 System architecture approved. | 18 | 18 | Completed on schedule |
| M5.2 Network access approved. | 18 | 18 | Completed on schedule |
| M5.3 Entire communication infrastructure is operational and can be integrated with the server | 26 | | Expected to be attained to schedule |

| and client side structure. | | | |
|--|--------|-------|--|
| M6.1 Successful business cases for each of the two user scenarios. | 15 | 22 | Delayed but completed within the reporting period |
| M6.2 Successful organisation of European Awareness Scenario Workshops with at least 15 participants in each event. | 21 | 21 | Partially completed with one EASW delivered and documented as planned. The healthcare workshop will take place in the next period. |
| M7.1 Infrastructure testing successful | 28 | | Expected to be attained to schedule |
| M7.2 Testing and population of user cases successful | 31 | | Expected to be attained to schedule |
| M8.1 User acceptance of the two user cases. | 35 | | Expected to be attained to schedule |
| M8.2 At least two potential new users from different domains have emerged and are planning new tests. | 35 | | Expected to be attained to schedule |
| M9.1 Project presentation completed. | 3 | 2 | |
| M9.2 Inaugural conference held | 2 | 1 | AMI communities workshop organised and attended |
| M9.3 Plan for disseminating and using knowledge. | 6 | 6, 12 | Dissemination programme updated from DUP following initial 6 months and at end of month 12. |
| M9.4 Final plan for disseminating and using knowledge | 35 | | Expected to be attained to schedule |
| M10.1 Draft evaluation updated at completion of each workpackage. | 7 - 36 | | On schedule at this first period report. |
| M10.2 Project fully evaluated | 36 | | Expected to be attained to schedule |

4.3 Deliverables

The scheduled deliverables for this reporting period have been completed and are shown below. Some small internal changes have been agreed in deliverable responsibility as follows:

| | Deliverable Code & Name | Planned month | Completed month | Comments |
|------|--|------------------|--------------------|---|
| D1.1 | Project Quality Plan | 1 | 3 | Delivered with progress report QMR1 for first reporting period |
| D1.2 | Periodic activity, management and financial reports | 12+24+36 | 14, 27 | First period reports completed. Period 2 and 3 expected to be delivered to schedule |
| D1.3 | Quarterly progress reports for the commission | 3 thru 33 | | Quarter 3, 6 and 9 reports completed. Remaining reports expected to be delivered to schedule |
| D1.4 | Final project report - activity, management and financial (draft & final versions) | 35 & 36 | | Expected to be delivered to schedule |
| D2.1 | User validation framework plan | 3 | 4 | Delivered with progress report QMR1 for first reporting period |
| D2.2 | State of the Art analysis | 4 | 4 | Delivered with progress report QMR1 for first reporting period |

| | | 1 | |
|---|---|---|--|
| Functional user requirements specifications | 6 | 6 | Delivered with progress report QMR2 for second reporting period |
| Trust and security user requirements specifications | 6 | 6 | Delivered with progress report QMR2 for second reporting period |
| Societal user requirements specifications. | 6 | 6 | Delivered with progress report QMR2 for second reporting period |
| Workflow procedures and potential for innovation | 6 | 9 | Delivered with progress report QMR3 for third reporting period |
| Client side architecture specification | 9 | 9 | Delivered as combined deliverable with D4.1 with progress report QMR3 for third reporting period |
| Gateway OSGi framework and device communication | 18 | 18 | Completed to schedule |
| Design guides and navigation for device interaction | 21 | 21 | Completed to schedule |
| Server side architecture specification | 9 | 9 | Delivered as combined deliverable with D3.1 with progress report QMR3 for third reporting period |
| Design Guidelines for user interfaces | 9 | 9 | Delivered with progress report QMR3 for third reporting period |
| Network intelligence, database and user interfaces | 20 | 20 | Completed to schedule |
| Application intelligence and web service provisioning | 22 | 22 | Completed to schedule |
| Communication architecture description | 21 | 21 | Completed to schedule |
| Prototype of communication infrastructure | 26 | | |
| Proposed business models and business cases | 15 | 22 | Delayed but completed within the reporting period |
| Organised European Awareness Scenario Workshops | 22 | 22 | Expected to be delivered to schedule |
| Public reports from the EASW Workshops | 22 | 22 | Expected to be delivered to schedule |
| Validated business models and business cases | 22 | | Delayed until first quarter of next reporting period |
| Test report of prototype platform | 31 | | Expected to be delivered to schedule |
| Testing platform for validation | 31 | | Expected to be delivered to schedule |
| User validation plan for eu-DOMAIN | 31 | | Expected to be delivered to schedule |
| Validation report: The European Service Network | 35 | | Expected to be delivered to schedule |
| Validation report: Healthcare for tomorrow | 35 | | Expected to be delivered to schedule |
| Evaluated platform for take-up activities | 35 | | Expected to be delivered to schedule |
| Take-up guideline and technology watch report | 35 | | Expected to be delivered to schedule |
| Project presentation | 2 | 3 | Delivered with progress report QMR1 for first reporting period |
| | Trust and security user requirements specifications Societal user requirements specifications. Workflow procedures and potential for innovation Client side architecture specification Gateway OSGi framework and device communication Design guides and navigation for device interaction Server side architecture specification Design Guidelines for user interfaces Network intelligence, database and user interfaces Application intelligence and web service provisioning Communication architecture description Prototype of communication infrastructure Proposed business models and business cases Organised European Awareness Scenario Workshops Public reports from the EASW Workshops Validated business models and business cases Test report of prototype platform Testing platform for validation User validation plan for eu-DOMAIN Validation report: The European Service Network Validated platform for take-up activities Take-up guideline and technology watch report | specifications Trust and security user requirements specifications Societal user requirements specifications. Workflow procedures and potential for innovation Client side architecture specification Gateway OSGi framework and device communication Design guides and navigation for device interaction Server side architecture specification Posign Guidelines for user interfaces Application intelligence, database and user interfaces Application intelligence and web service provisioning Communication architecture description Prototype of communication infrastructure Proposed business models and business cases Organised European Awareness Scenario Workshops Public reports from the EASW Workshops Validated business models and business cases Test report of prototype platform Testing platform for validation User validation plan for eu-DOMAIN Validation report: The European Service Network Validation report: Healthcare for tomorrow Evaluated platform for take-up activities Take-up guideline and technology watch report | Specifications Trust and security user requirements specifications Societal user requirements specifications. Workflow procedures and potential for innovation Client side architecture specification Gateway OSGi framework and device communication Design guides and navigation for device interaction Server side architecture specification Pesign Guidelines for user interfaces Pesign Guidelines for user interfaces Application intelligence, database and user interfaces Application intelligence and web service provisioning Communication architecture description Prototype of communication infrastructure Proposed business models and business cases Organised European Awareness Scenario Workshops Validated business models and business cases Test report of prototype platform Testing platform for validation User validation plan for eu-DOMAIN Validation report: The European Service Network Validation report: Healthcare for tomorrow Evaluated platform for take-up activities Take-up guideline and technology watch report |

| D9.2 | Project website | 2 | 2 | www.eu-domain.eu.com |
|-------|--|-----------|---|---|
| D9.3 | Plan for using and disseminating knowledge (drafts at 6 month intervals) | 6 thru 32 | | First version delivered with progress report QMR2 for second reporting period. Updated version delivered with Period 1 Activity report. Further version expected to be delivered to schedule |
| D9.4 | Final plan for using and disseminating knowledge | 35 | | Expected to be delivered to schedule |
| D9.5 | Raising public awareness report | 35 | | Expected to be delivered to schedule |
| D9.6 | Exploitation plans (Draft and final) | 16 and 34 | | Deferred to next reporting period due to delays in D6.1 |
| D10.1 | Evaluation & assessment report | 12+24+35 | | Period 2 report completed and delivered with this report. Period 3 report expected to be delivered to schedule |

4.4 Deviations from Plan

There are no deviations from plan that affect the overall project objectives, timescales or resources at this stage of the project.

D6.1 was delivered later than scheduled for the reasons given and this impacted on the production of the draft exploitation plan.

4.5 Dissemination

eu-DOMAIN has followed its schedule for second year dissemination and has completed the second phase of dissemination activity as planned:

- The project's dissemination and use plans have been updated and implemented as a series of dissemination activities
- The project 'Flyer' has continued to be used to publicise eu-DOMAIN
- The project website has continued to be operational and has a dissemination contact list in place.
- A range of presentations have been made at a variety of workshops and other events pertinent to the ambient intelligence research, industrial and healthcare arenas
- Peer contacts have been instigated with a number of projects and organisations in order to explore clustering possibilities
- Articles for peer-reviewed scientific journals have been prepared for publication in the coming reporting period

The following table illustrates some of the above activities:

| Date | Title | Number of persons attended + other information |
|---|---|---|
| 7-8 June 05 in Rome | Mobile Business 2005 | T-Connect participated in the conference and made presentation of the project to mobile device manufacturers |
| 21 June 05 in Rome | European conference WOMEN2FP6 | T-Connect participated in the European conference WOMEN2FP6 "Women entrepreneurs and European funding and research opportunities" and made a description of eu-DOMAIN project "eu-DOMAIN: IT for SMEs". |
| 19 th -27 th August 05 | Critical Computing – Between Sense and Sensibility Conference and Workshops in Aarhus | Presentation of eu-DOMAIN at workshop |
| September 19 th 05 | MobileHCl'05 conference, Salzburg. | T-Connect will participate in the 4th Workshop on "HCI in Mobile Guides". |
| September 2005 | eu-DOMAIN domains | The eu-DOMAIN domains were presented in an innovation meeting hosted in Telefónica. |
| October 2005 | The eu-DOMAIN project | The eu-DOMAIN project was presented at a workshop hosted at Telefónica. |
| November 2005 | IFMBE European Conference on Biomedical Engineering, Prague, Czech Republic, | FORTH attended for a poster presentation - R&D challenges in developing an ambient intelligence eHealth platform. |
| February 2006 | INNOVACTION fair in Udine | T-CON participated in the INNOVACTION fair in Udine as an expositor and will dedicate two days in the promotion of research activities done for the project |
| 25th January 2006 in Kolding (Denmark) | ITEKs Elektronik seminar 2006 Globalisation and innovation | 37 persons The speech carried out by Mauro De Bona was titled "Value based business modelling" |
| 13 February 2006 | INNOVACTION fair in Udine | T-CON participated in the INNOVACTION fair in Udine as an expositor and will dedicate two days in the promotion of research activities done for the project |
| 27 February 2006 | EU project summary at Technological Institute, Taastrup | 40 |
| 26-27 June 2006 | The Fifth International Conference on m>Business | A paper has been prepared and submitted for this event. The topic of the paper is value modelling in industrial markets. |
| 14 March 2006 | DIAG meeting (Danish ICT managers association) in Copenhagen | 35 senior ICT managers from Danish companies IN-JET presented the eu-DOMAIN project and value modelling tools |
| 14 June 2006 | Conference on Denmark's mobile and wireless future | Technological council reporting on future technologies including mobile healthcare solutions. |
| 26-27 June 2006 | The Fifth | A paper has been prepared and submitted for this |

| International Conference on | event. The topic of the paper is value modelling in industrial markets. |
|-----------------------------|---|
| m>Business | |

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5. Consortium management

5.1 Contractual

No contractual issues have arisen during the course of the second reporting period.

5.2 Coordination and work schedule

It can be seen from Section 3 of this report that good progress has been made against the project's workplan and towards achieving the projects aims and objectives. An updated project GANTT chart showing current progress is shown under 5.5 below.

The project deliverables due in the second reporting period have been completed and the resource usage and costs incurred are running in line with the project schedule and activities undertaken to date. Actual person-months are slightly above planned months for this point in the project as some of the work planned for Workpackages 3, 4, 5 currently runs ahead of schedule. The project is well placed for maintaining its schedule to project conclusion. Project resource usage is shown under 5.4 below.

The project partners have continued to work closely together and supported each other in a highly professional and committed manner. The roles of the partners are illustrated in the table under 5.3 – Partner activities. Excellent liaison between the project partners and wider audience has been maintained throughout the past 12 months and a number of project meetings and workshops have been held, including:

| Title | Data and Place | Main conclusions |
|--|--|--|
| Project technical meeting | 8 th June 05, Brussels | Review of EC review and consideration of technical roadmap for next 12 month period. |
| Partner technical meetings | 19 th July 05, Trieste | T-Connect and CNet – WP4 planning for completion |
| Presentation at Trieste Science Park, Italy | 2 nd September 2005 | 30 Attendees briefed. |
| 5 th Project steering meeting | 12 th -13 th September 2005 in Copenhagen. | Workplan agreed for next 3 months. |
| Project technical meeting | 15 th October 2005, Bruxelles | Discussion on agreement of rules engine structure and functionality. |
| Workshop with "Dansk Jordbrugsforskning", Aarhus | 1st November 2005 | 10 Participants. |
| IT Security and Pervasive Communication, Copenhagen | 15 th November 2005 | 30 Participants. |
| Project consortium meeting | 23 to 24 January 2006 in Valladolid | Consortium meeting. Technical meeting on server architecture and project status. |
| EASW in GRUNDFOS | 20th April 2006 – Bjerringbro (DK) | Validated industrial scenario |
| Project consortium and technical meetings | 2-3 May 2006 in Heraklion | Consortium meeting. Technical meeting on server architecture and project status. |

5.3 Project Effort

The following table shows resource usage for each partner from 1st June 2005 to 31st May 2006.

| | | | | | | | | RTD and | l Innovat | ion Activ | /ities | | | | | | | | Manac | ement | | |
|------------|---------|------|-------|-------|-------|-------|-------|---------|-----------|-----------|--------|------|------|------|------|------|------|------|----------|---------|--------|--------|
| Contractor | WP2 WP3 | | | | W | P4 | W | P5 | W | P6 | V | /P7 | V | /P8 | W | P9 | W | /P10 | Iviarias | Cilicit | TO | TAL |
| | Α | Р | Α | Р | Α | Р | Α | | | Р | Α | Р | Α | Р | Α | Р | Α | Р | Α | Р | Α | Р |
| CIL | 0.40 | 0.25 | | | | | | | 2.65 | 1.70 | | | | | 2.45 | 3.10 | 2.45 | 1.20 | 7.75 | 7.00 | 15.70 | 13.25 |
| Innova | 1.10 | 1.00 | | | | | | | 7.40 | 7.50 | | | | | | | | | | | 8.50 | 8.50 |
| In-JeT | 2.50 | 2.30 | | | 1.20 | 0.80 | 0.50 | 0.30 | 9.30 | 4.40 | 0.30 | 0.50 | 0.80 | 1.00 | 2.10 | 1.90 | 0.20 | 0.15 | 1.50 | 1.40 | 17.90 | 12.75 |
| UAAR | 1.24 | 1.10 | 8.63 | 7.70 | 6.74 | 4.50 | | | | | | | | | | | | | 0.32 | 0.30 | 16.93 | 13.60 |
| FORTH | | | 5.00 | 5.00 | 5.00 | 1.50 | 12.00 | 8.30 | | | | | | | | | | | | | 10.00 | 14.80 |
| Cnet | | | 0.40 | 0.50 | 9.30 | 5.10 | 0.30 | 0.40 | 0.60 | 0.40 | 0.60 | 0.80 | 2.10 | 2.50 | 1.10 | 1.20 | 0.80 | 0.55 | 2.70 | 2.50 | 17.60 | 13.95 |
| T-Connect | | | 3.90 | 4.00 | 7.30 | 4.90 | 2.05 | 1.85 | | | 2.00 | 1.90 | 1.70 | 1.30 | 2.35 | 1.98 | | | 0.75 | 0.60 | 18.00 | 16.53 |
| SAG | | | | | 7.85 | 5.60 | | | | | 0.71 | 0.75 | | | | | 0.36 | 0.33 | 0.30 | 0.30 | 9.22 | 6.98 |
| TID | 0.30 | 0.30 | 3.70 | 3.00 | 4.50 | 2.20 | 16.30 | 17.60 | | | | | 1.30 | 1.60 | 0.25 | 0.20 | | | | | 10.05 | 24.90 |
| Grundfos | | | | | | | | | 0.64 | 0.90 | | | 0.30 | | 0.20 | | | | 0.10 | 0.30 | 1.24 | 1.20 |
| EBPCT | 0.50 | 0.50 | | | | | | | 0.24 | 0.90 | | | 0.80 | | 0.60 | | | | 0.09 | 0.10 | 2.23 | 1.50 |
| TOTAL | 6.04 | 5.45 | 21.63 | 20.20 | 41.89 | 24.60 | 31.15 | 28.45 | 20.83 | 15.80 | 3.61 | 3.95 | 7.00 | 6.40 | 9.05 | 8.38 | 3.81 | 2.23 | 13.51 | 12.50 | 127.37 | 127.96 |

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The next table shows the cumulative resource usage for each partner from the beginning of the project.

| | | RTD and Innovation Activities | | | | | | | | | | | | | | Manac | gement | | | | | |
|------------|-------|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|------|-------|-------|-------|--------|-------|-------|--------|--------|--------|
| Contractor | W | P2 | W | P3 | W | P4 | W | P5 | W | P6 | W | /P7 | ٧ | /P8 | W | P9 | W | /P10 | Wanaç | Jement | TO | TAL |
| | Α | Р | Α | Р | Α | Р | Α | | | Р | Α | Р | Α | Р | Α | Р | Α | Р | Α | Р | Α | Р |
| CIL | 2.60 | 2.00 | - | | - | | 1 | | 3.15 | 2.20 | - | 3.50 | - | 1.60 | 3.70 | 6.50 | 3.20 | 4.00 | 14.35 | 20.20 | 27.00 | 40.00 |
| Innova | 22.78 | 12.50 | - | | - | | - | | 9.65 | 11.50 | - | 3.00 | - | 8.50 | 0.32 | 3.00 | 0.25 | 2.00 | 1.00 | 2.50 | 34.00 | 43.00 |
| In-JeT | 5.80 | 5.00 | 0.60 | 0.40 | 3.20 | 4.00 | 0.50 | 2.50 | 9.90 | 5.00 | 0.30 | 1.20 | 1.10 | 9.00 | 4.10 | 3.70 | 0.20 | 3.50 | 3.40 | 7.70 | 29.10 | 42.00 |
| UAAR | 6.49 | 5.00 | 16.43 | 25.20 | 7.79 | 7.00 | - | | - | 0.40 | - | 9.00 | - | 1.10 | - | 3.40 | 0.20 | 2.20 | 0.52 | 1.90 | 31.43 | 55.20 |
| FORTH | - | 4.00 | 18.75 | 10.00 | 11.50 | 6.00 | 12.00 | 10.00 | 1 | 0.40 | - | 6.50 | - | 2.00 | 0.40 | 1.50 | 0.25 | 2.00 | 0.10 | 0.40 | 43.00 | 42.80 |
| Cnet | 4.90 | 0.90 | 1.60 | 1.00 | 27.90 | 24.60 | 0.30 | 4.00 | 0.60 | 0.40 | 0.60 | 15.00 | 2.10 | 1.90 | 2.10 | 3.00 | 1.10 | 2.75 | 3.70 | 1.20 | 44.90 | 54.75 |
| T-Connect | 1.38 | | 6.90 | 6.00 | 10.30 | 6.00 | 2.05 | 11.50 | ı | | | 6.00 | 1.70 | 2.25 | 2.60 | 1.10 | 0.15 | 1.00 | 0.95 | 0.40 | 26.03 | 34.25 |
| SAG | - | | - | | 13.40 | 13.50 | - | | - | | 0.71 | 3.00 | 0.31 | 1.20 | - | | 0.81 | 1.50 | 0.58 | 0.30 | 15.81 | 19.50 |
| TID | 2.92 | | 10.82 | 5.00 | 11.76 | 7.60 | 17.70 | 20.00 | 1.20 | 0.40 | - | 17.00 | 1.30 | 2.00 | 0.45 | 3.10 | 0.30 | 3.50 | 0.12 | 3.90 | 46.57 | 62.50 |
| Grundfos | 2.38 | 4.00 | 2.00 | | - | | ı | | 0.64 | 0.90 | - | 3.00 | 0.30 | 7.20 | 0.45 | 2.00 | 0.22 | 0.70 | 0.20 | 0.20 | 6.19 | 18.00 |
| EBPCT | 2.83 | 4.00 | 0.60 | | - | | - | | 0.24 | 0.90 | - | 3.00 | 0.80 | 7.20 | 0.85 | 2.00 | 0.22 | 0.10 | 0.19 | 0.20 | 5.73 | 17.40 |
| TOTAL | 52.08 | 37.40 | 57.70 | 47.60 | 85.85 | 68.70 | 32.55 | 48.00 | 25.38 | 22.10 | 1.61 | 70.20 | 7.61 | 43.95 | 14.97 | 29.30 | 6.90 | 23.25 | 25.11 | 38.90 | 309.76 | 429.40 |

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5.4 Progress against workplan

The following table shows progress against the project's activity workplan as at 31st May 2006:

| | V (0) | | 4.4 | | | 4.10 | 1 | 4.10 | | | 4.4 | | | 0.14 | | T | 0.10 | | | 0.10 | | | 0/4 | | | 0.44 | | | 0.10 | | | 0.40 | | | 0./4 | \neg |
|------|---|---|-----|---|---|------|---|------|---|---|-----|---|---|------|---|---|------|---|---|------|----|---|-----------------|------|-------|------|---|---|------|---|---|------|------|---|------|--------|
| | Year/Quarter | | 1/1 | | | 1/2 | | 1/3 | 1 | | 1/4 | | | 2/1 | | | 2/2 | 1 | | 2/3 | | | 2/4 | | | 3/1 | | | 3/2 | | | 3/3 | | | 3/4 | |
| | Month | 1 | 2 | 3 | 1 | 2 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 |
| | = Completed work | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | = Pending work | | 1 | | | ĺ | | | | | 1 | | п | | | 1 | i | | | ı | 11 | | 31 ^s | t Ma | ay 20 | 006 | | | | | | 1 1 | . 11 | | 1 | |
| WP1 | Project management | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| T1.1 | Project initiation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| T1.2 | Operational project management | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| T1.3 | Project reporting | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WP2 | User requirement specifications | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| T2.1 | Analyse State of the Art | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| T2.2 | Define trust and security requirements | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| T2.3 | Workflow analysis and optimisation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WP3 | Client side architecture | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| T3.1 | Software architecture analysis & design | | | | | | _ | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| T3.2 | OSGI framework on gateways | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| T3.3 | Research new devices, interactions. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WP4 | Server side architecture | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| T4.1 | Software architecture analysis & design | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| T4.2 | Network intelligence pool & databases | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| T4.3 | Application intelligence / web services | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WP5 | Communications infrastructure | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| T5.1 | Set up fixed/mobile comms. networks | | | | | | | | | | | | | | | | | _ | _ | _ | - | _ | _ | | | | | | | | | | | | | |
| T5.2 | Set up TETRA network | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WP6 | Socio-economic issues | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| T6.1 | Business modelling | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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eu-DOMAIN

D1.2.2 Period 2 Activity Report

| | | Year/Quarter | | 1/1 | | | 1/2 | | | 1/3 | | | 1/4 | | | 2/1 | | | 2/2 | | | 2/3 | | | 2/4 | | | 3/1 | | | 3/2 | | | 3/3 | | | 3/4 | |
|-------|------------------|--------------------------------|---|-----|---|---|-----|---|---|-----|---|---|-----|---|---|-----|---|---|-----|---|---|-----|---|---|-----|---|---|-----|---|---|-----|---|---|-----|---|---|-----|---|
| | | Month | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 |
| T6.2 | Europe w/shop | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WP7 | | System integration | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| T7.1 | Integra | ition of system components | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| T7.2 | Technic | cal testing overall platform | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| T7.3 | Testing | and user scenarios | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| T7.4 | Validati | ion plans | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WP8 | | Testing and validation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| T8.1 | Validati | ion of ESN | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| T8.2 | Validati | ion of Healthcare tomorrow | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| T8.3 | Prepara up | ation for exploitation & take- | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | _ | | | |
| WP9 | Dissem | ination and exploitation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| T9.1 | Project | dissemination | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| T9.2 | Exploita | ation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WP10 | Review | and Assessment | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| T10.1 | On-goir | ng project review | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| T10.2 | Final as | ssessment | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |