

### **NA3 - Communication, Dissemination and Training**

The Communication, Dissemination and Training activity is intended to evolve with the life of the project. The objectives of this work package will be to disseminate project results and knowledge in order to raise awareness with the largest pool of potential users and partners, and to train software engineers, administrative personnel, technicians and end users both internal to the project and from scientific communities or other e-Infrastructures.

The work package will collaborate with the other NA work packages, NA1 for sustainability, NA2 for inter-projects collaboration, and in particular, NA4 and NA5 to stimulate interest around the notion of knowledge ecosystem, attract scientific communities and to promote cross-community collaboration. Historically separate disciplines are increasingly discovering shared interests and shared data needs. The outreach aspects of NA3 will be combined with the standards activities of NA4 to encourage cross-discipline communication.

The first activity will be to develop a Communication, Dissemination and Training Plan (DNA3.1) that will define the project's key messages and serve as a blue-print for reaching the targeted audiences. The brand identity defined for D4Science will be maintained. The Communication, Dissemination and Training Plan will encompass the three main steps of dissemination (i.e., Awareness, Understanding and Action) and will equally focusing on training. Communities involved in the project must have sufficient knowledge of the project's infrastructure in order to efficiently exploit it. Champions and decision makers in all areas will be targeted for a deeper understanding of the project activities and for training on the proposed set of tools. Training will address the diverse needs raised in the contexts of **development and exploitation of the infrastructure**. Training to new user communities by bringing them in contact with the instruments placed at their disposal will be a main activity. These scientific communities will not only become acquainted with the use and administration of the infrastructure, but will also learn to extend and enhance it with new resources, be it machinery, archives or services. As an example, INSPIRE is interested in showcasing to other repositories how it could grow its services through the on-demand processing power of the Grid accessed through the interoperability tools developed in this project.

Detailed metrics will be developed to measure dissemination activities and to evaluate the outcome and effectiveness of training events.

Communication, Dissemination and Training activities progress reports (DNA3.3a-b) will be produced at months 10 and 22 to highlight activities accomplished in the period, including achievements and lessons learned and to explain deviations from the Communication, Dissemination and Training Plan.

The necessary framework for dissemination and training activities will be created through a visible and **dynamic public web site** (community platform) and a range of promotional and training materials and instruments. The web site will enable the dissemination, discussion and sharing of results and continuing project progress and will also be a tool to communicate with the scientific communities involved.

A **proactive program** will be set up to optimize synergies between projects and raise awareness of the project's mission and objectives at targeted events. In order to maximise the impact of these events, the project will co-organize dissemination and training activities with relevant third parties.

The project will actively participate in concertation initiatives and meetings related to the e-Infrastructures and other related areas including the participation and contribution in relevant working groups established under the above initiative. The objective of the concertation activity is to optimise synergies between projects and the collective impact and value of the programme.

The project will also liaise with initiatives like the European Grid Initiative (EGI) and the DRIVER Confederation and with other initiatives in related areas and it will participate and contribute to relevant standardization working groups (e.g. W3C, OGF and ETSI on standards) and related scientific conferences (e.g., ECDL, JCDL, EGEE).

Other future EU project meetings, scientific conferences, and especially communities meetings (e.g., with Regional Fishery Bodies, OBIS and AquaMaps) and cross communities meetings (DRIVER and INSPIRE), and data-Infrastructure events, will be monitored or co-organized during the project lifetime in order to establish appropriate liaisons.

By exploiting its production e-Infrastructure and the operational VREs, the project intends to strongly rely on **training and live demonstrations** of results.

Given the importance of a project public web site as a communication and dissemination channel, it is a milestone (MNA3.1a-b) to inform the web community about the D4Science-II project at M1. To reinforce the D4Science brand and stress the continuity of the D4Science and D4Science-II projects, the D4Science web site will gradually integrate and combine information from both projects. At month 8, the common web site will provide full technical capabilities.

The project will provide input for relevant European Commission initiated dissemination activities (e.g., press releases, news bulletins, brochures, success stories, posters, web-based publications, multimedia material, etc). In this context the project's dissemination messages will also reflect its broader societal and economic impact.

The project's dissemination material in relation to the above goal will be regularly updated to provide the latest version of its status and achievements. This will be reflected in deliverable DNA3.2.a-d (to be updated every 6 months).

All of the communication and dissemination activities will be augmented by the submission of papers to targeted publications and events, including journals, magazines and conferences and the preparation of press releases where appropriate.

The project's dissemination material will be regularly updated to provide the latest version of its status and achievements. This will be reflected in deliverable DNA3.2a-d.

#### **NA4 - E-Infrastructures Interoperability: Requirements and Solutions**

The objective of this work package is to investigate on possible approaches to the various interoperability issues inherent in the construction of a knowledge ecosystem, and then identify and promote proper solutions. Such solutions will have as much as possible to **rely on existing standards** (*de facto* standards also) and **common practices** for a series of reasons, including the well-recognised cross-domain interoperability role assigned to standards, the adequate users' experience on which any standard is based, , and, obviously, the “don't reinvent the wheel” principle. The concrete and effective scenario to be considered is characterized by that the main players forming the ecosystem, i.e. D4Science and the target e-Infrastructures (cf. Section B 1.1.1.2), are known *a-priori*; and their representatives - namely domain experts and software engineers driving the design and development of the systems implementing these e-Infrastructures and the policies governing them - actively participate to this activity by contributing with their true experiences and expertises. To make the WP meet its very ambitious objective in this scenario, three main activities are planned: (i) the operation of a *forum* for domain experts to discuss on the various interoperability issues and develop common approaches and standard-based solutions for them, (ii) the active *participation to standardisation bodies*, and (iii) the execution of a series of *feasibility studies* to investigate on the cost-of-participation to the developed ecosystem for new e-Infrastructures and data services.

For what concerns the **forum for developing interoperability solutions**, D4Science-II will set up and operate a task force consisting of domain experts and software engineers that have been directly involved in the design and development of the knowledge ecosystem e-Infrastructures (TNA4.1). The activities of such a task force will be supported by a cooperation environment allowing them to effectively and remotely collaborate without the need to physically meet (mailing lists, a shared workspace and a wiki for presenting the task force outcomes are fundamental tools hosted by such an environment (MNA4.1). The interoperability issues to be resolved range from content-related problems – probably the most expected, primary and wide issue in a knowledge ecosystem – to user, functionality, policy, quality and architecture-oriented issues. The task force will initially identify the core aspects of cross-e-Infrastructure interoperability then perform a throughout survey of existing approaches and standards for the identified core problems. This activity will initially analyse the problem per e-Infrastructure pair, e.g. the interoperability between D4Science and GENESI-DR (TNA4.1.1) is investigated by a different working group than the one dedicated to study the problem between D4Science and INSPIRE (TNA4.1.3). Subsequently the identified solutions and approaches are distilled and harmonised by the joint task force (TNA4.1.6) in which

<b>Work package number</b>	NA3				<b>Start date or starting event:</b>				M1	
Work package title	Communication, Dissemination and Training									
<b>Activity Type</b>	COORD									
<b>Participant number</b>	1	2	3	4	5	6	7	8	9	10
<b>Participant short name</b>	ERCIM	CNR	NKUA	CERN	ENG	BDM- USTRATH	FAO	FIN	4D SOFT	TERRA DUE
<b>Person-months per participant</b>	2	9	8	3		3	7			1

### Objectives

The Communication, Dissemination and Training activity is intended to evolve with the life of the project. Part of this activity will go beyond contractual obligations.

The objectives of this work package are to disseminate project results and knowledge in order to raise awareness within the largest pool of user communities and to design, plan, support, conduct and evaluate the training of software engineers, administrative personnel and end users, from within the project user communities and from other scientific communities. The first activity will be to develop a communication, dissemination and training strategy that will define the project's key messages, image and style and serve as blueprint to assure reaching targeted audiences. The second activity will be the creation of the necessary infrastructure for dissemination and training activities through the D4Science-II visible and dynamic public web site and a range of promotional materials. The third activity will be the preparation of a proactive program to raise awareness of the project's mission and objectives at targeted events as well as to disseminate and share results and continuous project progress. In particular a D4Science Workshop will be organised towards the end of the project to disseminate its outcomes. A specific action in awareness raising will be to transmit the objectives and activities of D4Science-II to other projects as the basis to develop and encourage synergies.

### Description of work

*Work package leader: FAO;*

#### **TNA3.1: Dissemination and Awareness**

*Task leader: FAO; Participants: ERCIM, CNR, NKUA, CERN;*

- Development of a Communication, Dissemination and Training Plan;
- Definition and development of a D4Science-II brand very similar to D4Science (e.g., mission statement, slight update of the logo, etc.);
- Design, content and upkeep of the single D4Science/ D4Science-II website;
- Design and production of publicity material (e.g., posters, flyers, brochures);
- Design and development of sharing mechanisms to foster knowledge exchange among members of the D4Science-II new user communities;
- Organisation of a project workshop;
- Organisation of /panels in targeted conferences;
- Organisation of community meetings;
- Planning of joint events with relevant projects (concertation);
- Preparation of press releases;
- Submission of papers to targeted publications and events, including journals, magazines and conferences;
- Provide input for relevant European Commission initiated dissemination activities (e.g. press releases, news bulletins, brochures, success stories, posters, web-based publications, multimedia material).

**TNA3.2: Training**

*Task leader: NKUA; Participants: CNR, CERN, BDM-USTRATH, FAO, TERRADUE;*

- Advising the targeted audience in the adoption and exploitation of the services offered by the project and its products;
- Design and planning of training adapted to the audience needs;
- Production of targeted training material;
- Conduction of training;
- Preparation of forms for the evaluation of course and trainer and trainee evaluation questionnaires

Regarding external Training, in collaboration with the technical management of the project and upon requests or proposals from partners, special training events will be organised for the targeted groups (end-users, infrastructure administrators, development teams etc), exploiting instruments such as presentations, workshops, and round table discussions on emerging technologies and standards, as well as internal intermediate products of the project's work plan. As an example, INSPIRE will raise awareness and eventually train managers of repositories outside the project in the potential to grow their services by using the on-demand processing power of the Grid accessed through interoperability tools developed in this project.

Regarding internal training, special training events will be organised for diffusing into the gCube team the required expertise for realising the objectives of the project. Evolving technologies, scientific advances and low/mid level development topics will be targeted by such activities, utilising a large part of the instruments that target external trainee groups.

**Deliverables**

- *DNA3.1 Communication, Dissemination and Training plan* (M2-regularly updated) serves as the guidelines for dissemination, liaison and training activities; to define key messages, target audiences (scientific communities) and methods of communication and training. The Communication, Dissemination and Training plan will also contain metrics to measure dissemination and training success;
- *DNA3.2a-d Production of Printed and Multimedia Promotional Material* (M6, M12, M18, M24) supports the project dissemination and promotion activity;
- *DNA3.3a-b Communication, Dissemination and Training Activities Progress Reports* (M10, M22) documents activities accomplished in the period and explains deviations from the dissemination plan, including figures about dissemination success (e.g., use of the D4Science web portal, Scientists linked to the D4Science e-Infrastructure, Institutes participating in the D4Science e-Infrastructure). It will define the types of training events to be performed during the period and report on achievements and lessons learned.

**B 1.3.5. Efforts for the full duration of the project**

## Project Effort Form 1 - Indicative efforts per beneficiary per WP

<b>Participant number</b>	<b>Participant short name</b>	<b>NA1</b>	<b>NA2</b>	<b>NA3</b>	<b>NA4</b>	<b>NA5</b>	<b>Total person months</b>
1	ERCIM	<b>14</b>	2	2	2	0	20
2	CNR	4	<b>11</b>	9	12	11	47
3	NKUA	1	1	8	<b>16</b>	9	35
4	CERN	3	1	3	7	6	20
5	ENG	0	0	0	8	0	8
6	BDM-USTRATH	0	0	3	13	0	16
7	FAO	1	1	<b>7</b>	7	<b>11</b>	27
8	FIN	0	0	0	5	6	11
9	4D SOFT	0	0	0	0	0	0
10	TERRADUE	0	0	1	8	0	9
<b>Total</b>		<b>23</b>	<b>16</b>	<b>33</b>	<b>78</b>	<b>43</b>	<b>193</b>

## Project Effort Form 2 - indicative efforts per activity type per beneficiary

<i>Activity Type</i>	ERCIM	CNR	NKUA	CERN	ENG	BDM- USTR ATH	FAO	FIN	4D SOFT	TERRA DUE	TOTAL ACTIVITIES
<i>Joint Research (RTD) activities</i>											
Total 'JRAs'	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<i>Networking (Coordination) activities</i>											
NA2 Scientific & Technical Coordination	2	11	1	1	0	0	1	0	0	0	16
NA3 Communication and Dissemination	2	9	8	3	0	3	7	0	0	1	33
NA4 Training	2	12	16	7	8	13	7	5	0	8	78
NA5 Communities Applications Building, Validation and Exploitation	0	11	9	6	0	0	11	6	0	0	43
Total 'NAs'	<b>6</b>	<b>43</b>	<b>34</b>	<b>17</b>	<b>8</b>	<b>16</b>	<b>26</b>	<b>11</b>	<b>0</b>	<b>9</b>	
<i>Support activities</i>											
Total 'Support'	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<i>Consortium Management activities</i>											
NA1 Project Management	14	4	1	3	0	0	1	0	0	0	23
Total 'Management'	<b>14</b>	<b>4</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>23</b>
<i>Service (Other) activities</i>											
Total 'SAs'	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>TOTAL BENEFICIARIES</b>	<b>20</b>	<b>47</b>	<b>35</b>	<b>20</b>	<b>8</b>	<b>16</b>	<b>27</b>	<b>11</b>	<b>0</b>	<b>9</b>	<b>193</b>

**B 1.3.6. List of milestones**

<b>Milestone number</b>	<b>Milestone name</b>	<b>Work package(s) involved</b>	<b>Expected date</b>	<b>Means of verification</b>
MNA1.1	Formation of the Quality Assurance Task Force (QATF)	NA1	M1	Web pages made available by the QATF for the monitoring of deliverables and milestones status (internal review and submission).
MNA2.1	Formation of Project Management Board	NA2	M1	Public schedule of anticipated meetings of the Project Management Board for the duration of the project.
MNA3.1a	Project Web Site	NA3	M1	The initial web site is available to the public.
MNA5.1	Community Cooperation Environment	NA5	M1	The environment supporting NA5 activities is set up. This environment mainly consists in services for supporting collaboration between the communities involved in the project by providing them with an organised view of the project' instruments (e.g. BSCW, Wikis, shared calendars) and outcomes (VREs).
MNA4.1	Approaches to Interoperability and Standards Cooperation Environment	NA4	M2	The environment supporting NA4 activities is set up. It consists in services for supporting collaboration between the work package participants. It promotes a fruitful exchange of information among them (e.g. BSCW, Wiki, shared calendars).
MNA3.1b	Project Web Site	NA3	M8	An enhanced version of the initial web site set up at start up of the project. It offers full technical capabilities to the public. It hosts the training environment.
MNA1.2	Outline for Action Plan for Exploitation and Sustainability	NA1	M12	A detailed outline is made available serving as the structure for further investigation in the development of the <i>Action Plan for Exploitation and Sustainability</i> .