

Project Acronym: Open-DAI

Grant Agreement number: 297362

Project Title: Opening Data Architectures and Infrastructures of European Public Administrations

Work Package: Management

## Deliverable Number: D1.5

### Revision History

Revision Date	Author	Organisation	Description
19/12/2013	A.Vigitello	CSI-Piemonte	first draft version
03/03/2014	A.Vigitello / A.Cavallo	CSI-Piemonte	final version

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**Correlation with other documents within the project**

- ODAI-WP1-D3 Quality assurance and risk assessment guidelines-v2
- ODAI-WP7-D3-Dissemination Plan-v2
- ODAI-WP8-D2-Exploitation Plan \_resubmission 2\_2014
- ODAI-WP7-D5 Dissemination Report Year2
- ODAI-WP1-Todo Actionlist.xls (wip auxiliary tool)
- "Auxiliary\_Doc" project repository dropbox folder, and its contents
- ODAI-WP6-draft\_plan\_v9 (wip auxiliary tool)
- OpenDAI-WP8-plan-M22 (wip auxiliary tool)
- ODAI-WP7- Dissemination Events Register.xlsx (wip auxiliary tool)

# 1 General Summary

The Open-DAI Second Annual Report aims to present a general overview of the second year of the project, taking into account all its technical and financial aspects, as they have developed from February 2013 to January 2014, and according to feedbacks from First Year Review that took place in March 2013.

With respect to this context, the following main pillars have been identified:

- I. Y2 executive summary: new & main issues which have driven project evolution in Y2;
- II. Description of project main achievements in Y2, in work-packages breakdown;
- III. Y2 project management & progress tracking main issues: deliverables state of art, consortium reorganizations, meetings summary;
- IV. Second year financial picture providing economics overview for each partner of the consortium.

**Grant Agreement number:** 297362

**Project acronym:** OPEN-DAI

**Project title:** Opening Data Architectures and Infrastructures of European Public Administrations

**Project type:**  Pilot A  Pilot B  TN  BPN

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**Periodic report:** 1<sup>st</sup> x 2<sup>nd</sup>  3<sup>rd</sup>  4<sup>th</sup>

**Period covered:** from 1st February 2013 to 31st January 2014

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## Declaration by the project coordinator

I, as coordinator of this project and in line with my obligations as stated in Article II.2 of the Grant Agreement declare that:

- The attached periodic report represents an accurate description of the work carried out in this project for this reporting period;
- The project (tick as appropriate):
  - has fully achieved its objectives for the period;
  - has achieved most of its objectives for the period with relatively minor deviations;
  - has failed to achieve critical objectives and/or is deviating significantly from the schedule.
- The public Website is up to date;
- To my best knowledge, the information contained in the financial statement(s) submitted as part of this report is in line with the actual work carried out and consistent with the reported resources and if applicable with the certificates on financial statements.

## 2 Project Second Year Executive Summary

New policies and tools to better performance of project management have been defined and applied, at the beginning of Y2, also following suggestions provided by EU Commission during the Y1 project review.

Detail description of these decisions and choices are in the "ODAI-WP1-D3-Quality assurance and risk assessment guidelines" document.

As a result of this approach, project progress tracking in Y2 has been improved and simplified.

The following main issues, related to project evolution in 2<sup>nd</sup> year, are better described in the workpackages breakdown chapters:

1. WP1: project mgmt -D1.3 "Quality assurance and risk assessment guidelines" has stated new tools and enforced monitoring of project progress
2. WP6: cloud node split => architecture change as remedial action to network partial instability => plus: new & alternative technological stack testing
3. WP6: integration with EU Homer project; this achievement was not included in the DoW initial contents but this decision was taken at WP6 activities startup, in order to improve metadata and datasets normalization results, and to strongly support a wider visibility of projects outcomes: APIs and services
4. WP6: new datasets involvement has been foreseen, and related activities are in progress; this issue is synchronized with results from Homer integration (above listed)
5. WP7: dissemination – the most significant achievements: video describing Open-DAI scope and benefits, a satellite event in Brussels, new enhanced project website
6. WP8: a significant shift has been applied to the exploitation roadmap approach = decision was taken to define and apply pricing lists to platform and services usage –beyond the project lifetime, instead of modeling a theoretical exploitation plan

### 3 Project main Achievements in WPs breakdown

#### 3.1 WP1 – Project Management

##### 3.1.1 Tasks plan & monitoring

At the end of second year, following workpackages are still in progress:

WP1 – Project Management

WP6 – Services Development, Implementation and Testing

WP7 – Dissemination

WP8 – Impact Evaluation and Exploitation

activities and tasks of all of them are mainly in time with their plans and detail scheduling.

One of the applied management tools is definition of a detailed plan & tasks scheduling of still wip workpackages, so allowing a sharp monitoring of activities progress, and supporting early detection of unpredicted problems /delays and consequent resolution in advance.

Detail plans have been defined -and activities progress monitored according to them- for WP6, WP7 and WP8; detail plans are used as a "running documentation" support tools for WP and Task Leaders. Currently wip WP detail plans will be updated immediately after the project 2<sup>nd</sup> year review, according to outputs of review itself.

The following picture displays the general project Gantt scheme

OPEN-DAI WP5, WP6, WP7, WP8 Detail Plans	Leader /Task	Effort in PM	2013												2014					
			start	end	F 13	M 14	A 15	M 16	J 17	J 18	A 19	S 20	O 21	N 22	D 23	J 24	F 25	M 26	A 27	M 28
<b>WP1 Management</b>			1	32																
Task 1.1 Overall project executive planning			1	32																
Task 1.2 Project progress monitoring			1	32																
Task 1.3 Project General administrative and financial coordination			1	32																
Task 1.4 Management and relationship with the Commission services			1	32																
<b>WP5 Pilot Development</b>			9	18																
Task 5.1 Pilots description			9	10																
Task 5.2 Pilots implementation			11	17																
Task 5.3 Pilots testing			16	18																
MS5.1 Check pilot development				17																
<b>WP6 Services Development, implementation and testing</b>	SAMPAS		19	32																
Task 6.1 User-driven service development & testing	SAMPAS	35	19	29																
Task 6.2 User-driven service orchestration and deployment of value added services	BDigital	35	19	32																
Task 6.3 Operational monitoring of the platform and the pilot scenarios	CSI Piemonte	28	19	32																
D6.1 User driven development and orchestration	T6.1, T6.2	70	19	30											35%		50%		75%	80%
D6.2 Operational monitoring reports 1	T6.3	14	19	24												100%				
D6.3 Operational monitoring reports 2	T6.3	14	25	32																
MS6.1 Check pilot status				24												100%				
<b>WP7 Dissemination</b>			1	32																
Task 7.1 Project communication strategy and dissemination plan	CSI Piemonte	5	1	32																
Task 7.2 Project web site	CSI Piemonte	3	1	32																
Task 7.3 Dissemination monitoring and report	CSI Piemonte	6	6	32																
Task 7.4 Organization of and participation in public events	CSI Piemonte	2	6	32																
D7.3 Dissemination Plan	T7.1	4	7	18		VI					100%									
D7.5 Annual Dissemination Plan Y2	T7.3	2	6	24											100%					
D7.6 Annual Dissemination Plan Y3	T7.3	2	25	32																
D7.7 Public workshop or satellite event	T7.4	2	6	22											100%					
T7.2-MS1 Project WEB site revision	T7.2			22											100%					
T7.3-MS1 Y2 monitoring report, intermediate check	T7.3			20											50%					
<b>WP8 Impact evaluation and Exploitation</b>			1	32																
Task 8.1 Exploitation strategy and plans			1	32																
Task 8.2 Exploitation monitoring and report			12	32																
Task 8.3 Development of the Business Plan for the Open-DAI services			12	32																
D8.3 Exploitation report				32																
D8.5 Business Plan Final				20											100%					

##### 3.1.2 Project Management policies & tools reorganization

An Open-DAI google-group has been started, to be used as a forum /broadcast service to share project information and news, and the partners directory has been invited to join and participate.

According to contents of deliverable D1.3 "Quality assurance and risk assessment guidelines-v2", new policies and tools have been applied to enhance project monitoring and management.

Dropbox has been intensively adopted as a useful tool to exchange and share info and documentation among partners. A folder named "Auxiliary\_Doc" is the repository where to find any needed general info about project management:

- Partners Directory List
- Project Gantt
- Deliverables List
- Risks Assessment Register

The file "ODAI-WP1-Todo Actionlist.xls" keeps track of activities and deadlines for all partners; it is updated after each meeting or conference call, recording decisions and agreements, besides being updated by Project Manager according to the project general plan & schedule.

### 3.1.3 General Objectives & Achievements progress

Second year of project has been the "solid building" stage, when pilots development has produced tangible results, stress-testing the system platform implemented in first year.

Realistic appliance of software architecture –as designed in first year- has brought to improvements and decisions to better the consolidation of the operative ICT environment.

The platform usage has demonstrated it is robust and that it has been correctly designed and developed.

Services development period has started, while dissemination activities have come to a vital stage, supported by real application demo cases –the pilots.

Pilots monitoring will go on during Y3, to allow for a correct evaluation supporting possible decisions to optimize their performances.

A first evaluation & analysis of the KPIs related to volumes of access to pilots /services shows that retrieval of Open-DAI outcomes on the network is somehow difficult for the PAs –target of our project.

A probable explanation for this poor performance is that Open-DAI itself is not exposing a catalogue of available data & APIs. Another low-performance consequence is that dissemination events do not reach the potential /desired visibility impact level.

To bypass this issue, increasing accessibility and perception over the network of Open-DAI outcomes, a decision has been agreed to connect /integrate with federated portal of HOMER EU Project (Harmonizing Open data in the MEditerranean through better access and Reuse of public sector information), so using the catalogue implemented by Homer to describe and index the data & information available through Open-DAI APIs set. As a further interesting by-product of this implementation, multilanguage will be automatically featured.

Data catalogue in Homer focuses on the following areas: energy, tourism, culture, environment.

Instead of pursuing a theoretical exploitation roadmap for the project outcomes, a more realistic approach has been chosen: to define a pricelist to be applied to PAs interested in adopting services and/or platform created by Open-DAI project, beyond project lifetime.

The pricing model is SAAS = Software As A Service, defining different rates for PAs who are partners of project consortium (or related to Open-DAI partners playing development roles) and for PAs totally external to project development team.

The pricing policy and concepts are described in the rlse.2 of D8.2 deliverable – "ODAI-WP8-D2-Exploitation Plan \_resubmission 2\_2014 ", to be delivered at beginning of March, 2014 (as agreed at its 1<sup>st</sup> release time).

### 3.1.4 Open-DAI Year 2 Meetings summary

Minutes of each meeting and conference call have been produced and distributed; they are kept in the project dropbox repository.

Two general meetings took place in 2013:

- June 2013 – Istanbul (Turkey), hosted by Sampas following project reassessment of project after Y1 review, management rules and some reorganization of activities and roles have been commonly shared and agreed;
- November 2013 – Lleida (Spain), hosted by Lleida Municipality this meeting has stated a consolidation of the main production stage of the project, confirming platform soundness and pilots development validation; future project results exploitation has been foreseen with a new and more realistic approach

An Executive Board meeting also took place in Istanbul, in June.

It was not possible to hold such a meeting also in Lleida, due to the fact that AGID (Agenzia Digitale) partner could not participate, while the main discussion issue was precisely reassessment of this partner's role in project.

Open-DAI project representatives participated to "Towards a cloud of public services projects" EU Workshop in September 2013, in Brussels.

Direct calls or mails exchange between partners, to discuss technical or executive issues have not been tracked at project management level; they have taken place whenever required or useful.

Conference-calls (Skype tool) were held with a roughly-monthly scheduling or when needed.

Three conference calls took place in February 2013, in preparation of Y1 Project Review: on the 05<sup>th</sup>, the 19<sup>th</sup> and the 26<sup>th</sup>.

After Y1 Project Review (March 2013), the here below listed conference calls have taken place:

- 09<sup>th</sup> April 2013
- 11<sup>th</sup> June 2013
- 19<sup>th</sup> July 2013
- 04<sup>th</sup> October 2013
- 10<sup>th</sup> October 2013
- 31<sup>st</sup> October 2013
- 10<sup>th</sup> december 2013
- 09<sup>th</sup> January 2014

### 3.1.5 Key Performance Indicators progress

The following table tracks KPIs actual values for Year2.

Id	Related Wp	Indicator	Computing Criteria	2nd Year Progress	
				Expected	Actual
1	WP1 -Management	Number of reports delivered in time	% of deliveries on due reports	100%	75%
10	WP5 – Pilot Development	Delivery performance: vs. planned deadlines	Percentage of pilots developed within expected deadlines	100%	100%
11	WP6 – Services Devtpt & Testing	Overall Pilots performance	Sum of overall quantity of accesses to the pilots: -API= calls /total API's number -APP= number of downloads /total APPs -GUI= web access&usage	300	496



## Annual Report Year 2

Id	Related Wp	Indicator	Computing Criteria	2nd Year Progress	
				Expected	Actual
12	WP6 – Services Devpt & Testing	Deployment & operations performance in production	Platform Uptime percentage	99%	99%
6	WP7 – Dissemination	Interest for the project public events	Audience /participants recording	300	some 6.000
7	WP7 - Dissemination	Dissemination to the public at large	Number of newspaper articles, blog posts, press clippings, and the like	6	some 12 or more
		Scientific dissemination	Articles submitted for publication (in conferences or journals) acknowledging Open-DAI	2	2
13	WP7 – Dissemination	Contribution to local and international events presenting project results	Number of participations	1 local, 2 international	3 international, 17 national or local
8	WP8 - Exploitation	Success of public organized contests	Number of services developed in the context of hackathons and other events	8	16
9	WP8 - Exploitation	PAs agreement on OPEN-DAI platform & solution	Number of PAs interested in adopting the solution	8	10

We have divided in two parts the KPI id#7 (WP7- about publications) to trace separately scientific articles and publications targeting a wider audience.

- Details about Dissemination KPIs are in the "ODAI-WP7-D5 Dissemination Report Year2" (D7.5 deliverable); here below are reported some brief issues supporting the figures in the above table.

Id	Details about KPIs tracking values
1	out of 8 deliveries (documents / reports) in Year2 = 6 ready in due time, 2 delayed (D5.2 and D5.3)
10	refer to chapter 3.5 in this document
11	refer to D6.2 Monitoring Report_1 document, reporting graphics and monitoring /tracing details
12	refer to D6.2 Monitoring Report_1 document, reporting graphics and monitoring /tracing details
6	more than 3.500 registered to Open-DAI stand in SMAU Italian fair, 150 FEMP representatives attending to Open-DAI presentation in Municipalia fair in Spain, 1.000 visitors during World Intelligent Cities Summit in Turkey, 900 participating to Google DevFest in Spain, average 50-100 receiving Open-DAI documentation in other events; please refer also to D7.5 deliverable
7	35 discussion in LN dedicated group; 2 submissions for conferences (due in May 2014) of scientific publications, naming Open-DAI, by PoliTO; several blog posts (social media, partners websites); references & quotations to Open-DAI in other LN groups, FB pages, other projects' /scientific communities blogs (Homer, OpenData Piemonte, Nexa, PoliTO, Top-IX, etc); please refer also to D7.5 deliverable
13	International events: Satellite event in Brussels (Nov 2013), presentations held in international contexts (Sampas & Ordu in Istanbul –Nov 2013, CSI in Torino –Jun 2013, IMI Lleida –Sep 2013); please refer also to D7.5 deliverable

Id	Details about KPIs tracking values
8	2 developments in Nexa & PoliTO hackathon in Turin-IT (Jul 2013) 3 developments (Power, Beer Round, ninjapi) in Netport/ Karlshamn –SW (Feb 2013) 7 apps were developed in DevFest in Barcelona-SP (Nov 2013) 4 apps /web mashups were developed in Open-DAI Hackathon in Lleida-SP (Nov 2013) it must be said that, being their quality a "hackathon" level, some of these apps were not officially published
9	Besides the five PAs which are Open-DAI partners, following PAs have declared strong interest /intention to adopt Open-DAI solution model, so far (even though they have not yet taken any formal commitment): Università di Torino (IT), Milano Municipality (IT), Regione Emilia-Romagna (IT), Regione Siciliana (IT), Alessandria Municipality (IT).

### 3.1.6 Project Economics Summary

The chapter 4 includes detail reporting of "**Use of Resources**" in Year2.

As significant workpackages have been completed and the project end comes into sight, most partners have realized that quite a few resources -initially assigned to early workpackages- in facts have not been spent, while a good execution of ultimate project activities would probably require more effort than foreseen.

Therefore, partners have agreed to ask EU for an Amendment of the project budget, not affecting the global figures but redistributing effort and resources among the workpackages. The corresponding procedure has been executed by the end of Year2 and the beginning of Year3: January-February 2014.

## 3.2 WP2 System and Architecture specification

WP Leader: NETPORT

### 3.2.1 Significant results

The workpackage was already closed at beginning of Y2

## 3.3 WP3 Data assessment and specification

WP Leader: DIGITPA

### 3.3.1 Significant results

The workpackage was already closed at beginning of Y2. According to agreements established at the workpackage closure, research of new datasets to be added to the project storage has still been pursued in the WP6 tasks and activities development.

## 3.4 WP4 System/Platform implementation

WP Leader: CSI-Piemonte

### 3.4.1 Significant results

The workpackage was already closed at beginning of Y2

## 3.5 WP5 Pilot Development

WP Leader: BDIGITAL

The WP5 objectives for the second year were development, testing and deployment of each pilot on different areas involved in project, over the platform provided by the WP4, to allow access to published data made available by the WP3.

The partners were committed to deliver the pilots on schedule through incremental development of pilot releases by

- Joint management of pilots progress
- Testing & refinement

### 3.5.1 Significant results, Deliverables and Milestones

The workpackage was closed in September 2013, achieving its expected results.

Pilots development & test were over by the end of July (M18), in due time.

The deliverables D5.2 "Pilots Development Report" and D5.3 "Pilots testing report" were delivered at beginning of October 2013 (M21).

D5.2 records the development results, indicating the resources repositories and providing the way to deploy all pilot applications.

D5.3 includes the pilot testing reports, showing the test methodology and indicating the resources repositories to check and validate all pilot applications. Each testing report has been produced by own pilot area.

MS5 milestone: Check on Pilot Status.

Its deadline was M17 = June 2013; actually, this deadline was respected, since development was over by the end of June.

Monitoring of the test stages of pilots, on their way to finalization, went on in July.

Moreover, pilots development & test were over by the end of July, but their deployment was somehow delayed, being August traditionally a holidays period in the EMEA area –and thus most PAs were not available and willing to properly follow/ launch their deployment in this month.

Furthermore, the involved PAs decided to make available some of the pilots as a communication tool used by their political representatives.

Therefore, final deployment of some of the pilots was postponed to September, and the MS5 milestone could not be formally completed before; we may say that strict final occurrence date for this milestone has been September 2013 (M20), even though its M17 deadline was fulfilled in the facts.

### 3.5.2 Deviations

The workpackage accounted some delay in the delivery of the reports D5.2 and D5.3 (midst of M21 being the actual date): D5.2 was originally due at end of M17, D5.3 at end of M18.

As above explained, final deployment of some pilots was shifted to September (M20), and this rescheduling caused a delay also in the delivery of the pilots documentation = reports D5.2 and D5.3.

A positive deviation affected the Piedmont Region pilot corresponding to the accident collection smartphone application (*Accident*): the project released the source code with a permissive BSD open source license, since during the development there had been contacts with the private company that managed the Emergency ICT infrastructure. According to these agreements, this provider was to integrate the app with the emergency central system through available API -offered by the system itself. Finally, the private company decided to evolve the smartphone application -integrating it into their solution and proposing it as an added value service to the Emergency.

The Emergency System is independent from Regione Piemonte, and this is what makes this decision a most important achievement for the exploitation of the project results. In facts, it is a good opportunity to grant for survival of the pilot beyond the project end, while identifying a maintainer of this part of Open-DAI. Another important point is that this event opened a communication channel which gives the project

the chance to reach for new publishable data: the involved data sets are delicate data that include even sensitive information, but the project is trying to get available data from Emergency System as part of the new extra datasets to be added by the WP6 activities.

## **3.6 WP6 Services Development, implementation and testing**

WP Leader SAMPAS

### **3.6.1 Workpackage Progress Brief Description**

WP6 activities have started in month 19<sup>th</sup> = August 2013, and the work will be finalized by the end of the project, month 32.

According to new management policies decided at Year2 start, a detail plan has been prepared for this workpackage, identifying tasks and detail activities placed within a schedule that ensures correct exchange of output /input between different tasks at the most proper time. The detail plan includes also a WP Risks Assessment.

The current version of the detail plan (ref. to "ODAI-WP6-draft\_plan\_v9") is attached to this deliverable - being it a wip document and not an official deliverable; it is also available in the project repository dropbox folder "Running Documentation>WP1>WPs Detail Plans".

The detail plan drafts three main tasks, and aims at three main deliverables.

Please refer to the "detail plan" for a description of these tasks and other minor issues and info concerning sub-tasks and activities: they will not be repeated here.

#### **3.6.1.1 Task 6.1: User-driven service development & testing**

The task general goal is to ensure that different data will be opened in a standard way, a common unique way, across the different pilots. This achievement will also provide a guideline and methodology for Public Authorities while publishing their (further) data using Open-DAI platform, supporting easier generation of new APIs by PAs. A second aim of this task is to integrate Open-DAI platform data services with existing Open Data Catalogues in pilot countries where Open Data Catalogues exists.

After some shared discussion in last September and October, agreement was reached on the following issues –please ref. also to minutes doc "Open Dai Minutes and To do list\_20131010".

- The task aim is to give support to service users/participants providing easy configurable and automatic ways to create customized variants of their services, and to perform controlled extension of services across dynamically formed service supply chains.
- Standardizing the way APIs and metadata are described and documented would be quite useful to achieve this goal.
- T6.1 achievements are:
  - o metadata standardization
  - o to improve data description, applying the metadata standard

Experience so far has shown that publishing APIs in a web site is not enough to attract and involve potential users over the net: their metadata has to be federated and indexed by catalogs, so that it will be possible for interested users to actually find the API.

Since EU Homer project aims at defining to use CKAN standard for the data catalogues federation, the project team deemed that it would be good for Open-DAI to have the possibility to connect Homer somehow, investigating the possibility to adopt CKAN standards for metadata standardization.

For this purpose, it was agreed that integration aspects of "Homer federated open data catalogue" would be investigated.

This connection might also allow for integration of Open-DAI platform with existing Open Data Catalogues such as Open Dati Piemonte (<http://www.dati.piemonte.it/>).

Within this task a draft version of D6.1 has been released (in dropbox within WP6 folder). This document defines the common standards and metadata for Open-Dai such as JSON, REST, WMS, WFS protocols

and services. Public authority guideline, integration with open-data catalogues, new/extended datasets, service orchestration and workshops will be added in accordance with the WP6 plan.

### **3.6.1.2 Task 6.2: User-driven service orchestration and deployment of value added services**

The project needs to collect more data and possibly homogeneous information, to allow for user-driven orchestration; thus, this task includes among its activities the gathering of new datasets from the actual Public Administrations already involved on the project, but also searching for new ones.

In facts, this task pursues service orchestration between existing services in order to provide attractive APIs for the existing pilots or for new Public Authorities involvement.

Besides this goal, it is also expected to define new services and new data for the pilots final testing and deployment phases.

This task will also include the initial design, the organization and implementation of the project workshops in order to disseminate the Open-DAI public services and promote project assets.

Before the new datasets acquisition, the existing datasets in the Open-DAI platform have been described and classified according to the provided information.

Among all pilots datasets may be found data types of Geocoding and Geonaming such as streets names and codes, Environment Quality and Forecasts data, Traffic and road status, City facilities and POIs in the cities. All these dataset types have been "opened" and published during WP5; their accessibility and reporting data have been documented as well.

To complete the actual datasets catalogue and improve the added value on Open-DAI services, the WP6 defines and executes operation of the following subtasks:

- New datasets definition:
  - o List of new datasets from existing pilot public authorities.
  - o List of new datasets from new added public authorities.
- Development:
  - o Service development for new datasets access.
  - o Service composition for new complex service development.
- API Documentation Release for new services.
- Workshop management:
  - o Public presentations of Open-DAI APIs
  - o Hackathons and contests over Open-DAI APIs

### **3.6.1.3 Task 6.3: Operational monitoring of the platform and the pilot scenarios**

Details of the operational monitoring can be found in the D6.2 document.

The most significant issues are:

- Rearrangement in the monitoring architecture has been applied to optimize resources usage
- Monitoring has been done, and no problem occurred during the period: the cloud infrastructure offered a stable environment, the middleware worked within the operational parameters and pilots could run without any downtime.

## **3.6.2 Deliverables and Milestones**

D6.2) Operational monitoring reports 1: Operational monitoring reports period 1 [month 24];

D6.2 = monitoring infrastructure and first results reports have been released in due time.

D6.1) User driven development and orchestration [month 30]; *due in the next period.*

At end of Year2, 35% of D6.1 is ready. We have defined the metadata, API's and new data sets.

D6.3) Operational monitoring reports 2: Operational monitoring reports period 2 [month 32]; *due in the next period*

MS6.2 milestone) Check on Pilot Status = The milestone has been achieved. We setup the monitoring platform and report first results in D6.2.

### 3.6.3 Deviations

According to the project original architecture (as in DoW), Italy and Turkey nodes were to be implemented with the same cloud infrastructure.

However, as mentioned above, due to network instability problems, expected performance and results have not been attained. The cloud platform experienced timeouts which generated quite a few problems in the cloud management: active nodes were reported as being down –due to timeouts; even backup operations might have experienced similar events. These troubles were considered to be too risky for the operational continuity, and therefore the project decided to detach the Turkish node from the cloud and to use a different virtualization system in the Ordu location.

Actually, the project team has transformed this trouble in an opportunity: to test Open-DAI platform with a different technology stack in a heterogeneous environment.

Eventually, we decided to:

- change the technology,
- separate the nodes,
- use a different virtualization stack on Vmware,

because Ordu Municipality tech teams have capabilities on this environment, and also to investigate how Open-DAI approach would work when applied to a heterogeneous environment.

We used virtualization technology to connect with the management node in Italy and to be included in Puppet server and monitoring infrastructure management.

In addition to this, we have made some changes in the scope of the WP6 as defined above, detailed in the current version of the WP6 detail plan (here attached).

We have included new tasks such as new datasets identification, integration /link with HOMER EU project, metadata standards definition, PA Open-DAI guideline documentation. There are not any changes estimated in terms of the duration of the WP6.

We also prepared a detailed Gantt chart and a plan to track and monitor the activities progress.

## 3.7 WP7 Dissemination

WP Leader: CSI-Piemonte

### 3.7.1 Workpackage Progress Brief Description

Dissemination activities carried out by the Open-DAI consortium in second year of project have been driven by the revision of the Open-DAI project communication strategy, following the first year review recommendations, thus also taking into account the guidelines reported in the deliverable D7.3 v2.

This deliverable was released in July 2013; this fact, jointly with the summer-vacations period, has determined that most of dissemination activities have been performed by partners in the second half of 2013.

Main steps of second year have been the following:

- revision of the communication strategy, producing the deliverable ODAI-WP7-D3-Dissemination Plan\_v2;
- reshaping of Open-DAI website, according to indications coming out from first year project review;
- achievement of expected dissemination deliverables planned in Year 2, among which a satellite event in Nov.2013;
- contribution to communication events and workshops focused on Open-DAI and carried out by the partners;



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- release of communication materials produced by the partners, among which a video –uTube published- explaining benefits of Open-DAI outcomes;
- carrying out of social networks activities on Open-DAI web sites /pages.

The document "ODAI-WP7-D5-Annual Dissemination Report Year2" describes dissemination activities carried out during the second year of the project and contains an account of the main communication activities performed during the second year of the project.

This deliverable is due at the same time of this annual report (and its delivery is on schedule), therefore here below are listed only the most significant issues / outputs of this workpackage in Year2.

### **3.7.1.1 Task 7.1: Project communication strategy and dissemination plan**

This task has finished -in due time- on M18 (July 2013), delivering the second edition of D7.3 Dissemination Plan ("ODAI-WP7-D3-Dissemination Plan\_v2"), according to indications received by EU during project first year review.

### **3.7.1.2 Task 7.2: Project web site and dissemination tools**

A new dramatically enhanced Open-DAI website has been developed and delivered on the web, with contribution by all partners but with most of the development carried out by NetPort. It is installed and running on CSI-Piemonte datacenter platform.

Social networks pages for Open-DAI project have been started and are kept updated on most popular social media, such as Facebook, LinkedIn and Twitter; all partners contribute to publishing.

### **3.7.1.3 Task 7.3: Dissemination monitoring and report**

The deliverable "ODAI-WP7-D5-Annual Dissemination Report" reports all the communication activities performed by the partners from February 2013 to January 2014.

According to Project general Management Guidelines (D1.3 deliverable), a few work-in-progress tools have been applied to define and monitor in more detail tasks, deadlines and expected deliverables, even though the mainstream of this workpackage roadmap is defined in the ODAI-WP7-D3-Dissemination Plan\_v2.

These main tools are available in project dropbox repository:

- file "ODAI-WP7- Detail plan.doc", used as a "running documentation" support for WP and Task Leaders, a summary of tasks, deliverables and detailed activities schedules
- file "ODAI-WP7- Dissemination Events Register.xlsx", containing events planning and recording of main information about past events.

### **3.7.1.4 Task 7.4: Organization of and participation in public events**

A Gantt representation of planned events is in the sheet "ODAI Dissemination PLAN" in the "ODAI-WP7- Dissemination Events Register.xlsx" document/file.

The main achievements / dissemination past activities are tracked in the sheet "Events Register" of "ODAI-WP7- Dissemination Events Register.xlsx" document/file, which is continuously kept updated in dropbox, with contribution by all partners.

In the same dropbox are available templates for presentations, logos, and other dissemination tools useful to guarantee for all partners participation to public events with a harmonized approach.

## **3.7.2 Significant Results**

The "ODAI-WP7-D5-Annual Dissemination Report" deliverable reports the details and happenings within this workpackage in the second year of the project life; therefore, here below are listed only the most significant achievements of this year:

- restructuring of the project website
- preparation of a video describing Open-DAI scope and benefits
- a satellite event which took place in Brussels, jointly with EU projects Homer and ONE

### 3.7.3 Deliverables and Milestones

According to request by EU (in first project annual review), second edition of D7.3 Dissemination Plan was delivered at the end of July 2013, reviewed corresponding to new dissemination & communications strategic lines.

### 3.7.4 Deviations

No significant deviations applied to this workpackage, which may be worth reporting here; only a few schedule shiftings of planned events took place.

## 3.8 WP8 Impact evaluation and Exploitation

WP Leader: Year2= POLITO

### 3.8.1 Workpackage Progress Brief Description

The main goal of this work package is to identify, develop and monitor the exploitation strategy (including a business-oriented one) of the Open-DAI project.

In light of the change in the role of WP leader, assigned to POLITO, and according to new management policies decided at the beginning of Year2 start, a detailed plan has been prepared for this workpackage, identifying tasks and detail activities placed within a schedule that ensures correct exchange of output /input between different tasks at the most proper time scheduling tasks in such a way to ensure an efficient management of the workpackage.

The detail plan includes also a WP Risks Assessment. It is focused on the activities to be undertaken from M22 on.

The current version of the detail plan (ref. to "OpenDAI-WP8-plan-M22") is attached to this deliverable - being it a wip document in support of our activities, and not an official deliverable.; it is also available in the project repository dropbox folder "Running Documentation>WP1>WPs Detail Plans".

The detail plan drafts three main tasks, and encompasses at five main deliverables, four of which have already been delivered.

Please refer to the "detail plan" for a description of these tasks and other minor issues and info concerning sub-tasks and activities beyond M22: they will not be repeated here. Here below are reported activities and issues happened in Y2 before M22.

#### 3.8.1.1 Task 8.1: Exploitation strategy and plans

This task focuses on identifying the exploitable services/products realized within the project and defining the basic exploitation model of the project outcomes. Within this scope, a survey has been conducted before drafting D8.1: Exploitation Plan first version, in order to:

- i) Analyze the current situation related to exploitation of open government (PSI) data in partner countries;
- ii) Offer an overview of the EU approach on exploitation of open government (PSI) data;
- iii) Identify exploitable Open-DAI Services/Products and their potential use;
- iv) Identify best practices/success stories/scenarios from partner countries.

Following this survey, the findings were used in shaping D 8.1, which outlines in brief the PSI regulations in Open-DAI partner countries, Open-DAI exploitation objects and the exploitation strategy. The evaluation of the possible impact of Open-DAI Services to build a new platform for all EU Public Administrations is also discussed in this deliverable. Overall, D8.1 represents a draft, preliminary discussion, which is currently expanded and deepened, in order to draft D8.2. (Exploitation Plan 2: Exploitation Plan update version).

During Y2, Task 8.1 attention was focused on further exploring the feasibility of the four exploitation scenarios drafted in D8.2 (the first version of the Open-DAI exploitation plan), namely:

- *Scenario 1* = when Open-DAI ends as a EU-funded project, nobody maintains it as a unique platform and the various exploitation items become reused in other contexts. Obviously, this is a



sub-optimal scenario, since the project is based on the assumption that the overall value of Open-DAI is higher than the value of its individual components.

- *Scenario 2* = Open-DAI would be maintained as an open-source platform by one of the partners of the former consortium (most probably, the project leader) . Benefits could be experienced at different levels, not only in terms of tangible legacy, but also for third parties willing to engage in further developments.
- *Scenario 3* = a “data cloud” offer (essentially equivalent to the Open-DAI platform) would be promoted, as part of a major public procurement action, e.g. by a national / local public group purchasing organization (GPO) able to capture significant scale and scope economies.
- *Scenario 3* = setup of a market approach, defined through a detailed business plan, also considering the comparative analysis performed. Possible sources of revenue are identified as being mainly related with (i) start-up and integration of the platform, and (ii) supply of Open-DAI as a service (with reusers served in a “freemium” mode).

The partners developed an overall exploitation plan

- A not acceptable worst-case scenario
  - o open data; open source code for pilots and platform
- A more challenging achievable scenario (building on 1.)
  - o with a partner maintaining the open code and community
- An ambitious but realistic scenario (building on 1. and 2.)
  - o public procurement by a Group Purchasing Organization
- A completely market-based scenario

A feasibility assessment of the above mentioned scenarios was undertaken involving all partners, leading to the conclusion that Scenario 2 could be reasonably feasible, and it is the most likely alternative. Scenario 2 and Scenario 3 allow a fair valorization of the project outcomes, with an actual degree of exploitation depending on the demand for the Open-DAI services. In this respect, a source of information was represented by the project hackathons organized during Y2 by partners POLITO, Lleida Municipality and Netport. Those initiatives showed significant potential for Open-DAI, but also that thoroughly exposing and document its APIs, as well as further experimenting reuses of real time data exposure, is particularly important for our exploitation ambitions. Discussion about Open-DAI exploitation, including a comparison with other solutions, was also conveyed in lemma, R., Morando, F., Osella, M., “Breaking public administrations’ data silos: The case of Open-DAI, and a comparison between open data platforms.”, submitted in December 2013 for the CeDEM 2014 conference.

### 3.8.1.2 Task 8.2: Exploitation monitoring and report

This task is meant to collect the exploitation results, monitoring willingness to adopt Open-DAI by the partners. As far as Y2 is concerned, check-lists were circulated by POLITO in order to assess it, although not leading yet to specific commitments by any of the partners. However, interesting collaborations based on the use of Open-DAI were discussed, e.g. with the University of Turin (within a hackathon to be held in April 2014), and Italian local administrations, such as Emilia Romagna Region, Sicilia Region, Milan Municipality and Alessandria Municipality. Moreover, it has been planned to adopt and use the federated search engine of the HOMER project, the latter being an action aimed at federating open data strategies of public administrations in the Mediterranean area. Although only partially exploiting the actual key features of Open-DAI (e.g., real-time exposure of quickly changing data), this action is arguably an interesting example of integration with a front-end (actually, several front-ends, since several open data portals are involved), and of cooperation between EU-funded projects.

This task has not yet delivered any tangible result, since the actual exploitation activities of Open-DAI are still in an initial phase.

### 3.8.1.3 Task 8.3: Development of the Business Plan for the Open-DAI services

The project delivered its first analysis in the form of D8.4 Business Plan Draft: this deliverable develops the aforementioned exploitation Scenario 4 by proposing and discussing an actual business model.

Considering products such as Socrata Open Data portal and CKAN as direct competitors, Open-DAI's advantages lie in a stronger integration (and automatization of such integration) with legacy databases

(TEIID connectors). This is fundamental, in particular, for dynamic (i.e. frequently changing) data. Moreover, Open-DAI provides broad set of services /formats, and fine-grained API management (through WSO2) .

As far as value proposition is concerned, Open-DAI outcomes provide a platform for data publication, mainly targeted on public administrations needs in this respect.

At the same time, project results enable other activities: downstream, anyone can build services and apps by using the data services made available by public administrations through Open-DAI.

Finally, public administrations themselves can achieve better results in terms of data intelligence -by orchestrating information from different (internal) sources.

Sources of revenue are mainly related with:

- start-up and integration of the platform;
- supply of Open-DAI as a service, on both sides of the market (PAs and data reusers).

The premium pricing model actually involves only public administrations.

The use of the platform by developers will be charged - not overcoming the marginal costs of Open-DAI to provide the services - only in case their volume of requests exceeds a given threshold (i.e., in a freemium model). The latter approach is adopted to maximize the (expected) positive externalities of open data reuse.

Structured interviews with partners have allowed to perform cost estimations for Open-DAI.

Expected demand from Public Administrations has been estimated assuming for instance that, up to date, Regione Piemonte is arguably the user with the highest willingness to pay for Open-DAI, because of its ongoing plans to integrate the platform in its open data portal ([dati.piemonte.it](http://dati.piemonte.it)).

An amount of 25,000€ represent about half of its annual budget specifically devoted to the open data portal and complementary products.

At a lower price, all the current and perspective (in the near future) users of [dati.piemonte.it](http://dati.piemonte.it) might join, also because Open-DAI would be offered at a price significantly undercutting Socrata.

At a cost undercutting CKAN plain vanilla installation, Open-DAI could arguably get a market share of half of the Italian Regions and Big Cities currently offering an open data portal.

Break even projections elaborating on the aforementioned cost breakdown and demand assumptions lead to a loss in the short term, with potential gains from year 5.

At year 1 (after the end of the funded period), the gross profit of the Open-DAI maintainer (i.e., the profit without considering the investment in software development to keep the platform up to date) would be maximized offering Open-DAI to four customers willing to pay 12,500 € each. This would require three new Open-DAI domains in the Italian market (since the Regione Piemonte one would obviously remain active at the end of the project, also to support the Open-DAI pilots).

This is a challenging -but not unrealistic- scenario, since such a number of PAs is already using or planning to use [dati.piemonte.it](http://dati.piemonte.it) as its open data platform and therefore, in marketing terms, CSI Piemonte should just aim at demonstrating that Open-DAI expands the potential of its open data platform in a way worth a bit more than 10,000 € / year.

At year 5, in a scenario encompassing a yearly growth rate of demand of 15% (and considering again 15,000 € of yearly contribution from Open-DAI supporting institutions, such as Regione Piemonte), Open-DAI could generate a ROI of almost 19%, with five active domains.

The project delivered its first analysis in the form of D8.4 Business Plan Draft: this deliverable represents one of the possible declination of the Open-DAI business model, namely the exploitation of Open-DAI as a product offered on the market by private players and/or in-house firms supporting public administrations.

This was a first approach to the difficult task of identifying the different models for the artefacts that the project is delivering.

The new work package leader is finalizing the final business plan defining and gathering key quantitative parameters to verify the financial viability of a market-oriented exploitation of Open-DAI collecting data on:

- Market size
  - PSI holders' customer base

- PSI holders' consumption profile
- Developers/re-users' customer base
- Developers/re-users' consumption profile
- Cost structure
  - Start-up costs
  - Fixed recurring costs
  - Variable costs
- Additional considerations on pricing

### 3.8.2 Significant results

For many partners, the work directed at preparing the first version of the exploitation plan represent the first occasion ever to design a consistent strategy for the publication and reuse of their public sector information (by private parties or other public administrations). Therefore, even if the first documents delivered by this WP (D8.1 and D8.4) just represent draft versions (consistently with the DoW), they significantly raised the level of awareness of project partners with respect to the WP goals and supported the partners to determine their exploitation plans. This work was also used in the pilot design and description.

Moreover, the work directed at the drafting of D8.2 is currently producing significant results, testifying a higher level of awareness and cleared exploitation goals.

Hackathons produced interesting results, e.g., a small pilot on energy consumption from streetlights starting from the data of the Karlshamn partner.

This is the kind of results that the project expect to obtain and this first result will be analyzed as an example of return of investment generated by the adoption of Open-DAI.

In general, the work carried out within WP8 during Y2 allowed achieving:

- a better acknowledgement of our positioning, e.g. with respect to other platforms, . In fact, Open-DAI can be conceived as a 'bus' that, by federating governmental data repository, breaks silos existing among governmental agencies making data available for a twofold goal: on one hand, Open-DAI becomes a propellant for a fluid flow of data (even in case of confidential data not bound to be published) among public bodies and, on the other hand, allows the exposure of Open Government Data to the outside world. The process under which data are extracted from legacy DBs is arguably one of the distinctive features of Open-DAI. In fact, others, such as Socrata OD Portal, CKAN and ENGAGE, enable data exposure in a 'push' mode, i.e. using "publish" APIs. Open-DAI is not designed to encompass any full-fledged user-friendly interface, and its integration with a front-end is arguably one of its most promising exploitation opportunities;
- a more advanced awareness of the Open-DAI potential business logic, discussed in D8.4 Business plan final (useful also for the elaboration of individual exploitation plans, as briefly presented in page 10 and ff.). Possible sources of revenue are identified as being mainly related with (i) start-up and integration of the platform, and (ii) supply of Open-DAI as a service (with reusers served in a "freemium" mode. Realistic cost and demand scenarios make Open-DAI economically sustainable even at the level of a single European country and with a single software maintainer. In any case, the incentive to offer Open-DAI to public administrations, even if barely reaching break-even, would be strong;
- actual interactions with interested third parties, especially local public administrations;
- 'hands-on' workshops and hackathons (organized by POLITO, Netport /Karlshamn, Barcelona, Lleida). In this respect, the involvement of developers has been mainly oriented towards raising the awareness on the technical functioning of Open-DAI. Nonetheless, several apps and web-mashups have been produced, using Open-DAI data. It must be said that, being their quality a "hackathon" level, some of these apps were not officially published, but the interest raised by these events was always appreciable.

### 3.8.3 Deviations

No significant deviations applied to this workpackage.

## 4 Project progress

### 4.1 Year2 Deliverables and Milestones tables

(\*) = the project team deems that reports tracking performances of a time period may be prepared in draft version by the end of the period, then shared within the project team, peer-reviewed by partners, and delivered in final version after one month of the end of the reported period.

TABLE 1. DELIVERABLES									
Del. #	Deliverable name	WP #	Lead participant	Nature	Dissemin. Level	Due delivery month from Annex I	Delivered Yes/No	Actual / Forecast delivery date	Comments
D1.3	Quality Assurance and Risk Assessment Guidelines	WP1	CSI-Piemonte	R	P	original v.1 M3, actualized to M15	Yes	v.1 M15, v.2 M17	v.1 (M15) rejected by EU-PO, v.2 as requested review
D1.4	Annual report Year 1	WP1	CSI-Piemonte	R	P	v.1 M12 (*)	Yes	v.1 M14, v.2 M17	v.1 (M14) rejected by EU-PO, v.2 as requested review
D5.2	Pilots implementation	WP5	BDigital	P	P	M17	Yes	M21	ref. to 3.5.1= pilots dev&test ended at M18 (due date)
D5.3	Pilots testing	WP5	BDigital	P	P	M18	Yes	M21	ref. to 3.5.1= pilots dev&test ended at M18 (due date)
D6.1	User driven development and orchestration	WP6	Sampas	O	P	original M20, replanned M30		M30	replanned in first annual review
D6.2	Operational monitoring reports 1	WP6	Sampas	R	P	M24 (*)	Yes	M25	
D7.2	Project WEB site	WP7	CSI-Piemonte	O	P	original V.1 M2, enhanced v.2 M18	Yes	M18	EU-PO requested improvements to be applied => v.2 (OK); added social media communication
D7.3	Dissemination plan	WP7	CSI-Piemonte	R	P	v.1 M4, v.2 M18	Yes	M18	v.1 (M14) rejected by EU-PO, v.2 as requested review
D7.4	Annual Dissemination report Y1	WP7	CSI-Piemonte	R	P	M12 (*)		M13	
D7.5	Annual Dissemination report Y2	WP7	CSI-Piemonte	R	P	M24 (*)		M25	renamed vs. DoW (mistyped)
D7.7	Public Workshop or satellite event	WP7	CSI-Piemonte	R	P	M20	Yes	M22	renamed vs. DoW (mistyped)

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**TABLE 1. DELIVERABLES**

Del. #	Deliverable name	WP #	Lead participant	Nature	Dissemin. Level	Due delivery month from Annex I	Delivered Yes/No	Actual / Forecast delivery date	Comments
D8.2	Exploitation Plan 2	WP8	Politecnico Torino (ex-Sampas)	R	P	v.1 M12	Yes	v.1 M12, v.2 M14	v.2 as requested review on v.1 (M12), by EU-PO; at end of Y1 PoliTO took charge of WP8
D8.4	Business Plan Draft	WP8	Politecnico Torino (ex-Sampas)	R	C	M10	Yes	M13	at end of Y1 PoliTO took charge of WP8
D8.5	Business Plan Final	WP8	Politecnico Torino (ex-Sampas)	R	P	M20	Yes	M21	at end of Y1 PoliTO took charge of WP8

**TABLE 2. MILESTONES**

Milestone no.	Milestone name	Due achievement date from Annex I	Achieved Yes/No	Actual / Forecast achievement date	Comments
MS5	Check Pilots Development	M17	YES	actual: M17, formal: M20	renamed vs. DoW (mistyped); results in D5.2, D5.3 deliverables
MS6	Check Pilots Status	M24	YES	M24	renamed vs. DoW (mistyped); results in D6.2 deliverable

## 4.2 Management bodies within Open-DAI

The Executive board members are listed below

Partner	Board Member in year 2
CSI-Piemonte	Anna Cavallo
BDIGITAL	Antoni Felguera
Netport	Petra Arrenas
SAMPAS	Gonca Kara Demir / Serdar Yümlü
AGID	Daniele Tatti / Mauro Draoli
POLITO	Federico Morando
Regione Piemonte	Alessandro Fianza
Barcelona	Isaac Aparicio
Karlshamn	Annette Sandberg
ORDU	Esref Oner
Lleida	Antoni Saldaña Lapeña

Work Package leaders are listed below.



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Work Package	WP leader in year 2
WP1	Anna Cavallo
WP2	NA
WP3	NA
WP4	NA
WP5	Marc Planaguma
WP6	Caner Tosunoglu
WP7	Elsa Pilone
WP8	Federico Morando

### 4.3 Use of resources

#### 4.3.1 Person-Months Status Overview (cumulative)

The following table matches actual resources consumption –at the end of second year of project- against planned (total) values. The "planned" values are in line with a project Amendment, which has been prepared by the end of Year2, and informally anticipated and likely approved by EU. The formal approval procedure is in process in these days; therefore the below "planned" figures, even though different from DoW original planned values, may be considered as "updated planned" values.

	WP1		WP2		WP3		WP4		WP5		WP6		WP7		WP8		TOTAL per Beneficiary	
	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned
<b>Coordinator CSI Piemonte</b>	29,55	41	3,97	4	2,875	3	15,16	16	26	26	12,59	22	1,7	10	1,74	10	93,585	132
<b>Beneficiary 2 BDIGITAL</b>	0,57	1	1,13	1,5	0,9	1	0	0	38,7	40	8,58	21,5	0,18	2	0,18	4	50,24	71
<b>Beneficiary 3 NP</b>	1	1	7,51	8	2,6	3	7,42	8	23,88	24	5,52	10	0,29	11	0	2	48,22	67
<b>Beneficiary 4 SAM</b>	0,9	1	4	4	2	2	10	10	33,7	34	11,8	34	0,75	3	2,75	3	65,9	91
<b>Beneficiary 6 POLITICO</b>	0,99	1	8	8	6	6	0	0	0	0	1,3	2,52	5,97	4	18,82	13,88	41,08	35,4
<b>Beneficiary 7 RP</b>	0,97	1	0	0	0,22	0,2	0	0	0	0	0,92	1	0,99	2,8	0,23	1	3,33	6
<b>Beneficiary 8 IMIBCN</b>	0,75	1	0	0	1,8	2	2,05	2	5	5	2,4	4	0,95	2	0,4	1	13,35	17
<b>Beneficiary 9 Karl</b>	0	1	0	0	1	1	0	0	0	0	0	1	0	1	0,18	1	1,18	5
<b>Beneficiary 10 ORDU</b>	0,7	1	0	0	1	1	1	1	0	0	3,9	11	0,5	2	0,6	1	7,7	17
<b>Beneficiary 11 IMIAL</b>	1	1	0	0	2	2	3	3	4,93	5	0,18	5	0,56	1	0	1	11,67	18
<b>Beneficiary 12 AGID</b>	0,3	1	2	2	5	5	0	0	0	0	0	0	0,4	9	1,9	4	9,6	21
<b>TOTAL</b>	<b>36,73</b>	<b>51</b>	<b>26,61</b>	<b>27,5</b>	<b>25,395</b>	<b>26,2</b>	<b>38,63</b>	<b>40</b>	<b>132,21</b>	<b>134</b>	<b>47,19</b>	<b>112,02</b>	<b>12,29</b>	<b>47,8</b>	<b>26,8</b>	<b>41,88</b>	<b>345,86</b>	<b>480,4</b>

Data about the person/month report of Karslhamn and AGID are (today) still missing. The Yellow-outlined figures refer to Y1 final balance.



### 4.3.2 Resources employment details

Table of Personnel, subcontracting and other Major cost items for beneficiary 1 for the period. CONSORZIO PER IL SISTEMA INFORMATIVO (CSI PIEMONTE)				
Work Package	Item description	Amount in €	Explanation	Free Text
WP1	Personnel costs	70.721	Staff costs as per 15,30 PMs	P/Ms 2,02 of CAVALLO, ANNA;P/Ms 1,92 of GIOPPO, LUCA;P/Ms 2,94 of PILONE, ELSA;P/Ms 2,12 of PREMOLI, MARIA CLOTILDE;P/Ms 2 of Adriana Vigitello (in House consultant);P/Ms 4,1 of REALE, SAVERINO;P/Ms 0,2 of CATTANEO (in House consultant)
WP2	Personnel costs	-	Staff costs as per PMs	
WP3	Personnel costs	-	Staff costs as per PMs	
WP4	Personnel costs	-	Staff costs as per PMs	
WP5	Personnel costs	68.035	Staff costs as per 17,58 PMs	P/Ms 2,31 of CAMPO, MAURO WILLEM;P/Ms 1,29 of CORSANEGO, FABRIZIO;P/Ms 0,63 of DEIRO, ALBERTO;P/Ms 1,25 of FRANCESCHETTI, ALESSANDRO;P/Ms 3,57 of GIOPPO, LUCA;P/Ms 0,52 of MANCUSI, PATRIZIA;P/Ms 2,64 of MONASTEROLO, STEFANO;P/Ms 1,88 of MORSANIGA, GIANLUCA;P/Ms 0,64 of NOTELLI, MATTEO;P/Ms 0,,24 of Gastaldi;P/Ms 0,8 of SECCO, CLAUDIA
WP6	Personnel costs	53.313	Staff costs as per 12,60 PMs	P/Ms 1 of CAMPO, MAURO WILLEM;P/Ms 1,42 of CORSANEGO, FABRIZIO;P/Ms 0,35 of COUE, NATHALIE;P/Ms 1,82 of DEIRO, ALBERTO;P/Ms 1,2 of FRANCESCHETTI, ALESSANDRO;P/Ms 4,63 of GIOPPO, LUCA;P/Ms 0,48 of MONASTEROLO, STEFANO;P/Ms 1,15 of CATTANEO (in House consultant);P/Ms 0,25 of PITOCCHI, ELENA;P/Ms 0,3 of MUZZANI, PAOLA ELISA
WP7	Personnel costs	2.620	Staff costs as per 0,71 PMs	P/Ms 0,71 of PILONE, ELSA;
WP8	Personnel costs	6.052	Staff costs as per 1,74 PMs	P/Ms 0,67 of ALCIATO, NIVES;P/Ms 0,88 of PILONE, ELSA;P/Ms 0,19 of REALE, SAVERINO



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<b>Table of Personnel, subcontracting and other Major cost items for beneficiary 1 for the period. CONSORZIO PER IL SISTEMA INFORMATIVO (CSI PIEMONTE)</b>				
<b>Work Package</b>	<b>Item description</b>	<b>Amount in €</b>	<b>Explanation</b>	<b>Free Text</b>
WP1	Other direct cost	5.442	Travel and other direct costs	Name of Travellers: Luca Gioppo, Elsa Pilone, Anna Cavallo Annual Review in Bruxelles 14 Marchh, 2013. Name of Travellers: Luca Gioppo, Elsa Pilone, Anna Cavallo Executive Board Meeting in Istambul 18 June, 2013. Name of Travellers: Luca Gioppo, Elsa Pilone, Anna Cavallo Lleida Meeting in Lleida 11-12 November 2013.
WP7	Other direct cost	3.124	Travel and dissemination costs	Name of Travellers :Luca Gioppo, Claudia Secco, Anna Cavallo workshop bruxselles 21 November 2013.
	Indirect costs	€ 60.222		
	<b>TOTAL COSTS</b>	<b>€ 269.529</b>		

<b>Table of Personnel, subcontracting and other Major cost items for beneficiary 2 for the period. FUNDACIO PRIVADA BARCELONA DIGITAL CENTRE TECNOLOGIC</b>				
<b>Work Package</b>	<b>Item description</b>	<b>Amount in</b>	<b>Explanatio</b>	<b>Free Text</b>
WP 1	(MMT) Personnel costs	1.481 €	Staff costs as per 0,43 PMs	<i>Effort provided for the preparation and attendance to the June'13 and November'13 Plenary Meetings: 0,38 PMs for Marc Planagumà (Engineer) + 0,05 PMs for Marcel Malet (junior Engineer) – both of them at part time dedication to the project</i>

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Table of Personnel, subcontracting and other Major cost items for beneficiary 2 for the period.				
FUNDACIO PRIVADA BARCELONA DIGITAL CENTRE TECNOLOGIC				
Work Package	Item description	Amount in	Explanatio	Free Text
WP 5	(RTD) Personnel costs	128.924 €	Staff costs as per 31,27 PMs	2,45 PMs for Rafael Giménez (senior Researcher) + 2,72 PMs for Antoni Felguera (Head of Unit) + 0,14 PMs for Marc Torrent (Head of Unit) + 2 PMs for Marc Planagumà (Engineer) + 2,17 PMs for Marcel Malet (junior Engineer) + 4,44 PMs for Fernando Mora (Engineer) + 4,87 PMs for Mario Reyes (senior Researcher) + 0,86 PMs for David Solans (junior Engineer) + 0,77 PMs for Borja Górriz (junior Engineer) + 3,63 PMs for Marc Rivero (Engineer) + 7,22 PMs for Daniel Susín (Engineer) - <i>all of them at part time dedication to the project</i>
WP 6	Personnel costs	25.003 €	Staff costs as per 5,97 PMs	0,71 PMs for Rafael Giménez (senior Researcher) + 0,04 PMs for Antoni Felguera (Head of Unit) + 0,12 PMs for Marc Planagumà (Engineer) + 0,17 PMs for Marcel Malet (junior Engineer) + 1,31 PMs for Mario Reyes (senior Researcher) + 3,62 PMs for Daniel Susín (Engineer) - <i>all of them at part time dedication to the project</i>
WP 7	Personnel costs	620 €	Staff costs as per 0,18 PMs	0,18 for Marc Planagumà (Engineer) - <i>at part time dedication to the project</i>
WP 8	Personnel costs	1.028 €	Staff costs as per 0,18 PMs:	0,18 for Mario Reyes (senior Researcher) - <i>at part time dedication to the project</i>
WP5	Other direct cost	559 €	Travel and accommodation expenses	) Project meetings: EC Review (March 2013) Attendance to the meeting (1 pax). Rafael Giménez, 14th March 2013, Brussels, Belgium
WP5	Other direct cost	950 €	Travel and accommodation expenses	Project meetings: Consortium Plenary meeting - Istanbul (June 13) Attendance to the meetings (2 pax). Marc Planagumà and Marcel Malet, 11-12th November 2013, Lleida, Catalonia (Spain)

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Table of Personnel, subcontracting and other Major cost items for beneficiary 2 for the period.				
FUNDACIO PRIVADA BARCELONA DIGITAL CENTRE TECNOLOGIC				
Work Package	Item description	Amount in	Explanatio	Free Text
WP5	Other direct cost	391 €	Travel and accommo dation expenses	Project meetings: Consortium Plenary meeting – Lleida (November 13) Attendance to the meetings (2 pax). Marc Planagumà and Marcel Malet, 11-12th November 2013, Lleida,
	Indirect Costs *	47.116 €		
<b>TOTAL COSTS</b>		<b>206.072 €</b>		

**COMMENTS:**

- 1) BDIGITAL use of resources (cumulate for P1 and P2) **is well aligned with the work plan**. During the two first years of the project implementation, BDIGITAL consumed ~65% of monetary budget and ~70% of the PMs. As per result, **a third of the global allocation is available for the 8 last months** of the project implementation.
- 2) Minor mismatches (at € cents level) occur between the “rounded” figures herein presented (to be filled out in the electronic form C) and the real ones registered in BDIGITAL accounting books. The reason is *that the electronic tool (NEF) forces users to fill out entire numbers* while the real costs are (logically) registered with €cents figures. This minor incoherence is totally beyond beneficiaries control and no partner should be accountable for it.
- 3) **IMPORTANT NOTE:** BDIGITAL cost claim for the Period includes a minor **adjustment for P1 cost statement**. This adjustment relates to an invoice (hotel accommodation) which was unfortunately registered twice. This error was detected and counter-registered out of the P1 cost claim timeline. Therefore, **an adjustment of -374 € in Other Direct Costs** (no indirect costs apply) resulting in **-374 € in Total Costs and -187 € in the requested EC contribution** will be filled out within the current NEF cost claim session.

Table of Personnel, subcontracting and other Major cost items for beneficiary 3 for the period.				
NetPort Karlshamn AB				
Work Package	Item description	Amount in €	Explanation	Free Text
WP 5	Personnel costs	€ 86 024,71	<b>14,34 PMs:</b> P/Ms 4,67 of Petra C Arrenäs P/Ms 3,54 of Fredrik Broman P/Ms 6,13 of Alexander Hansson	

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<b>Table of Personnel, subcontracting and other Major cost items for beneficiary 3 for the period.</b>				
<b>NetPort Karlshamn AB</b>				
<b>Work Package</b>	<b>Item description</b>	<b>Amount in €</b>	<b>Explanation</b>	<b>Free Text</b>
WP 6	Personnel cost	€ 33 149,85	<b>5,52 PMs:</b> P/Ms 0,17 of Petra C Arrenäs P/Ms 2,04 of Fredrik Broman P/Ms 3,31 of Alexander Hansson	
WP 7	Personnel cost	€ 1 764,86	<b>0,29 PMs:</b> P/Ms 0,2 of Petra C Arrenäs P/Ms 0,02 of Fredrik Broman P/Ms 0,07 of Alexander Hansson	
WP 1	Other direct cost	€ 1 415,10	Review meeting Brussels	Alexander Hansson 13-14/3-2013
WP 6	Other direct cost	€ 2 178,18	Project meetings	Istanbul Alexander Hansson Lleida Alexander Hansson Fredrik Broman
WP 5	Other direct cost	€ 39,-	Project meeting Karlshamn municipality	Petra C Arrenäs, Alexander Hansson, Jens Odevall, Linus de Petris
WP 6	Other direct cost	€ 20,-	Project meeting Karlshamn municipality	Petra C Arrenäs, Alexander Hansson, Jens Odevall.
WP 7	Other direct cost	€ 1 954,73	Dissemination travel and other direct costs	Name of Travellers: Open Data Forum Alexander Hansson 30-31/1-13. SSWC 14-18/8 Petra C Arrenäs, Fredrik Broman, Alexander Hansson. Open-DAI-workshop satellite event, 21 November Fredrik Broman
	Indirect costs	€ 36 280,26		
<b>TOTAL COSTS</b>		<b>162 826,69</b>		

Table of Personnel, subcontracting and other Major cost items for beneficiary 4 for the period.				
Sampas Bilisim Ve Iletisim Sistemleri Sanayi Ve Ticaret A.S.				
Work Package	Item description	Amount in €	Explanation	Free Text
WP1	Personnel costs	2.289,37	Staff costs as per PMs	0,50 PM of Serdar Yümlü
WP5	Personnel costs	154.872,77	Staff costs as per PMs	2,50 PM of Caner Tosunoğlu, 3,50 PM of Hakan Kurtuluş, 2,30PM of Selçuk Ilıkcan, 3,00 PM of Eser Karakaya, 6,00PM of Erdal Toros, 3,00PM of Hayrullah Yılmaz, 6,00PM of Inan Atıcı, 2,00 PM of Selçuk Çelik
WP6	Personnel costs	72.742,94	Staff costs as per PMs	1,80 PM of Caner Tosunoğlu, 4,00 PM of Selçuk Çelik, 6,00 PM of Selçuk Ilıkcan
WP7	Personnel costs	2.328,67	Staff costs as per PMs	0,35 PM of Eser Karakaya
WP8	Personnel costs	3.606,32	Staff costs as per PMs	1,00 PM of Gonca Kara Demir, 0,40 PM of Bilal Gül.
WP7	Other direct cost	1.997,04	Dissemination	World Intelligent Cities Summit Exhibition Fee and the brochures + roll up fee
WP1	Other direct cost	577,33	Travel	Serdar Yümlü Travel to Leida Meeting 11-12 November 2013
WP7	Other direct cost	510,53	Istanbul Project Meeting Organization	Social Dinner and Travel
	Indirect costs	€70.737,02		
	<b>TOTAL COSTS</b>	<b>€309.611,99</b>		

Table of Personnel, subcontracting and other Major cost items for beneficiary 6 for the period.			
POLITECNICO DI TORINO			
Work Package	Item description	Amount in €	Explanation
WP1	Personnel costs	1.216,84	<b>Staff costs as per 0,48 PMs:</b> P/M 0,31 of Federico Morando P/M 0,17 of Raimondo Iemma
WP6	Personnel costs	4.493,18	<b>Staff costs as per 1,3 PMs:</b> P/M 0,40 of Juan Carlos De Martin P/M 0,44 of Federico Morando P/M 0,46 of Raimondo Iemma

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Table of Personnel, subcontracting and other Major cost items for beneficiary 6 for the period.			
POLITECNICO DI TORINO			
Work Package	Item description	Amount in €	Explanation
WP7	Personnel costs	13.435,92	<b>Staff costs as per 4,97 PMs:</b> P/M 0,59 of Juan Carlos De Martin P/M 1,93 of Federico Morando P/M 1,50 of Luca Leschiutta P/M 0,95 of Giuseppe Futia
WP8	Personnel costs	44.439,05	<b>Staff costs as per 11,82 PMs:</b> P/M 4,72 of Juan Carlos De Martin P/M 3,66 of Federico Morando P/M 2,94 of Raimondo lemma P/M 0,50 of Claudio Artusio
<b>TOTAL</b>	<b>Personnel costs</b>	<b>63.584,99</b>	
WP1	Other direct cost	1.432,14	Name of Traveller: Federico Morando, Project meeting, Istanbul, 16 -19/06/2013 Name of Traveller: Raimondo lemma, Project meeting, Lleida, 11-13/11/2013
WP8	Other direct cost	1.302,25	Name of Traveller: Federico Morando, project review meeting, Bruxelles, 13-14/03/2013 Name of Traveller: Raimondo lemma, OPEN-DAI Workshop satellite event, Bruxelles, 20-22/11/2013
<b>TOTAL</b>	<b>Direct costs</b>	<b>2.734,39</b>	
<b>Indirect Costs</b>		<b>19.075,49</b>	
<b>TOTAL claimed cost First Year</b>		<b>85.394,86</b>	

**COMMENTS:**

PoliTO involved some junior staff in the project. Their salary is lower than the average considered in the calculation of the person-months presented in the proposal.

Consequently, with the same budget allocated, the total number of the person-months at the end the project will be higher than the one indicated as planned (originally in the "Description of Work", later in the Project Amendment at Year3 start).

Table of Personnel, subcontracting and other Major cost items for beneficiary 7 for the period.				
REGIONE PIEMONTE.				
Work Package	Item description	Amount in €	Explanation	Free Text
WP 1	Personnel costs	1,640 €	Staff costs as per 0.38 P/M	0.38 P/M of A. Fianza for managing activities
WP 6	Personnel costs	3,936 €	Staff costs as per 0.92 P/M	0.92 P/M of A. Fianza for work done for services

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Table of Personnel, subcontracting and other Major cost items for beneficiary 7 for the period.				
REGIONE PIEMONTE.				
Work Package	Item description	Amount in €	Explanation	Free Text
WP 7	Personnel costs	1,421 €	Staff costs as per 0.33 P/M	0.33 P/M of A. Fianza for the preparation of material for dissemination activities
WP 8	Personnel costs	984 €	Staff costs as per 0.23 P/M	0.23 P/M of A. Fianza for work done for impact evaluation
	Indirect costs	2,394 €		
<b>TOTAL COSTS</b>		<b>10,375 €</b>		

Table of Personnel, subcontracting and other Major cost items for beneficiary 8 for the period.				
INSTITUT MUNICIPAL D'INFORMATICA DE BARCELONA				
Work Package	Item description	Amount in €	Explanation	Free Text
WP 1	Personnel costs	934,70 €	Staff costs as per 0.15PMs	P/M 0.15 of X. Roca
WP 5	Personnel costs	30.842,82 €	Staff costs as per 4.80 PMs	P/M 0.65 of I. Aparicio P/M 0.8 of L. Sanz P/M 3.35 of X. Roca
WP 6	Personnel costs	14.364,48 €	Staff costs as per 2.40 PMs	P/M 0.75 of J. Lopez, P/M 0,65 of X.Roca, P/M 0.35 of I.Aparicio, P/M
WP 7	Personnel costs	5.329,35 €	Staff costs as per 0.80 PMs	P/M 0.15of I. Aparicio, P/M 0.35 of L.Sanz, P/M 0.3 of X. Roca
WP8	Personnel costs	2.606,64 €	Staff costs as per 0.40 PMs	P/M 0.1 of L.Sanz P/M 0.25 of X. Roca P/M 0.05 of I. Aparicio
	Indirect costs	16.223,39 €		
<b>TOTAL COSTS</b>		<b>70.301,37€</b>		

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Table of Personnel, subcontracting and other Major cost items for beneficiary 9 for the period.				
<b>Karlshamns Kommun</b>				
Work Package	Item description	Amount in €	Explanation	Free Text
<b>TOTAL COSTS</b>				

**COMMENTS:**

Karshamn Kommun cost detail for Y2 has not been provided (at end of Feb.2014).

Table of Personnel, subcontracting and other Major cost items for beneficiary 4 for the period.				
<b>BELEDIYE BASKANLIGI ORDU</b>				
Work Package	Item description	Amount in €	Explanation	Free Text
WP1	Personnel costs	1.036,73	Staff costs as per PMs	0,50 PM of Lütfü Can Düzgören
WP6	Personnel costs	7.823,18	Staff costs as per PMs	3,90 PM of Lütfü Can Düzgören
WP7	Personnel costs	983,65	Staff costs as per PMs	0,50 PM of Lütfü Can Düzgören
WP8	Personnel costs	635,56	Staff costs as per PMs	0,30 PM of Lütfü Can Düzgören
WP7	Other direct cost	152,18	Travel	Eşref Öner and Lütfü Can Düzgören Travel fee of Istanbul Meeting.
	Indirect costs	€3.141,04		
<b>TOTAL COSTS</b>		<b>€13.763,34</b>		

Table of Personnel, subcontracting and other Major cost items for beneficiary 11 for the period.				
<b>AYUNTAMIENTO DE LLEIDA</b>				
Work Package	Item description	Amount in €	Explanation	Free Text
WP4	Personnel costs	1.074 €	Staff costs as per 0,22 PMs	P/Ms 0,22 of Xavier Piñol.
WP5	Personnel costs	342 €	Staff costs as per 0,07 PMs	P/Ms 0,07 of Xavier Piñol
WP6	Personnel costs	878 €	Staff costs as per 0,18 PMs	P/Ms 0,18 of Xavier Piñol



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Table of Personnel, subcontracting and other Major cost items for beneficiary 11 for the period.				
AYUNTAMIENTO DE LLEIDA				
Work Package	Item description	Amount in €	Explanation	Free Text
WP7	Personnel costs	1.839 €	Staff costs as per 0,41 PMs	P/Ms 0,10 of Xavier Piñol P/Ms 0,10 of Lluís Comet P/Ms 0.08 of Antoni Saldaña P/Ms 0.13 of Gemma Moliné
WP7	Other direct cost	289 €	Dissemination costs	Hackathon working lunch. 16 th november 2013.
WP7	Other direct cost	674 €	Dissemination costs	Lleida Meeting, working lunches. 11/12 November 2013.
WP6	Subcontracting	9.339 €	Operational monitoring,, pilot testing and tuning.	
WP3	Subcontracting	3.300 €	Assessment of dataset to be used in pilots and technical specifications and requirements – Services specification.	
WP5	Subcontracting	4.100 €	Integration of services on the Open Dai platform and pilot implementation	
WP6	Subcontracting	4.885 €	Implementation operational monitoring, pilot testing and tuning.	
	Indirect costs	1.240 €		
	<b>TOTAL COSTS</b>	<b>27.960 €</b>		

Table of Personnel, subcontracting and other Major cost items for beneficiary 12 for the period.				
Agenzia per l'Italia Digitale				
Work Package	Item description	Amount in €	Explanation	Free Text
	<b>TOTAL COSTS</b>			

**COMMENTS:**

AGID cost detail for Y2 has not been provided (at end of Feb.2014).

## 5 Glossary

<b>Web Service</b>	A <b>web service</b> is a method of communication between two electronic devices over the internet. A web service can be exposed through SOAP protocol or as a REST resource
<b>SOAP</b>	<b>SOAP</b> , originally defined as <b>Simple Object Access Protocol</b> , is a protocol specification for exchanging structured information in the implementation of Web Services in computer networks. Services are described with WSDL files
<b>WSDL</b>	The <b>Web Services Description Language</b> is an XML-based interface description language that is used for describing the functionality offered by a web service. A WSDL description of a web service (also referred to as a WSDL file) provides a machine-readable description of how the service can be called, what parameters it expects, and what data structures it returns. It thus serves a roughly similar purpose as a method signature in a programming language.
<b>REST</b>	<b>Representational State Transfer</b> is a style of software architecture for distributed systems. REST-style architectures consist of clients and servers. Clients initiate requests to servers; servers process requests and return appropriate responses. Requests and responses are built around the transfer of representations of resources. A resource can be essentially any coherent and meaningful concept that may be addressed. A representation of a resource is typically a document that captures the current or intended state of a resource.
<b>Json</b>	<b>JavaScript Object Notation</b> , is a text-based open standard designed for human-readable data interchange. Typically is the resource representation of a REST transfer.
<b>PSI</b>	Public sector information as intended in the EU's Directive on the re-use of public sector information
<b>WSO2</b>	WSO2 is a global enterprise middleware corporation with offices in USA, UK and Sri Lanka. All WSO2 products are 100% open source and released under the Apache License Version 2.0.
<b>SOA</b>	<b>Service-oriented architecture</b> is a software design methodology based on structured collections of discrete software modules, known as services, that collectively provide the complete functionality of a large or complex software application. Each service that makes up an SOA application is designed to provide a tightly defined set of functions.
<b>ESB</b>	An <b>enterprise service bus</b> is a software architecture model used for designing and implementing the interaction and communication between mutually interacting software applications in service-oriented architecture (SOA).
<b>VPN</b>	The <b>Virtual Private Network</b> is an affordable and easy way to connect remote offices to corporate networks. Instead of building or leasing a system of lines, VPN uses the Internet to provide a secure access to data and applications like email CRM and extranet portals. VPN uses security policies on a shared public infrastructure for tunneling protocols and encrypting data.

## 6 Annexes

- ODAI-WP6-draft\_plan\_v9 document
- OpenDAI-WP8-plan-M22 document