



COSMOS

Cultivate resilient smart Objects for Sustainable city applicatiOnS

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Table of Contents

Executive Summary	7
1 Introduction	8
2 Dissemination Strategy	9
3 COSMOS Results for Dissemination	10
4 Target Groups.....	11
4.1 Scientific Community	11
4.2 Business/Industry Community	11
4.3 General Public Community.....	12
5 Dissemination Channels and Performed Activities	13
5.1 Website and Social Networks.....	13
5.1.1. Website Statistics	14
5.1.2. Social Networks Presence	15
5.2 Promotional Material	16
5.2.1. Flyer	16
5.2.2. Bookmarks.....	16
5.2.3. USB flash drives	17
5.2.4. Poster	17
5.2.5. Newsletters	18
5.2.6. Press Releases	19
5.2.7. Multimedia Recordings	20
5.3 Publications	20
5.3.1. Scientific Journals	20
5.3.2. Conferences, Workshops and other Events	21
5.3.3. Performed Publications	22
5.4 Events	22
5.4.1. Attended Events	22
5.4.2. Future Events	27
5.5 Project Documentation	28
5.6 Demonstration	28
5.7 Training Material	28
5.8 Collaboration with other IoT projects.....	29
6 Conclusions	30
References.....	31



List of Figures

Figure 1: COSMOS Website Screenshots	14
Figure 2: Web Site Statistics	15
Figure 3: COSMOS Flyer	16
Figure 4: COSMOS Bookmarks	17
Figure 5: COSMOS Poster	18
Figure 6: COSMOS Newsroom for Updates.....	19
Figure 7: COSMOS Booth in IoT Week	24
Figure 8: Researcher's Night Exhibition Room	25
Figure 9: DKMS Lab Booth.....	25
Figure 10: COSMOS Dissemination Material.....	26
Figure 11: Presentation of main COSMOS Concepts	26

Table of Acronyms

Acronym	Meaning
ACM	Association for Computing Machinery
ARM	Architecture Reference Model
CBR	Case Based Reasoning
D	Deliverable
DKMS	Distributed Knowledge and Media Systems
DoW	Description of Work
EU	European Union
FIA	Future Internet Assembly
GSMA	Groupe Speciale Mobile Association
ICPS	International Conference Proceedings Series
ICT	Information and Communication Technologies
IEEE	Institute of Electrical and Electronics Engineering
IoT	Internet of Things
IPR	Intellectual Property Rights
PCI	Panhellenic Conference on Informatics
RSS	Rich Site Summary
SME	Small and Medium Enterprise
UC	Use Case
WP	Work Package

Executive Summary

Deliverable D8.3.1 “Dissemination Plan and Activities” aims to highlight the strategy and necessary actions needed to reach the target audiences of COSMOS. To this end, the relevant target groups of the project are identified in terms of the scientific community, business and public bodies organisations, but also towards the general public.

A number of available dissemination channels are analysed and investigated, our involvement in them is described in addition to the potential effects and corrective actions that need to be taken are presented.

Major events and venues in which COSMOS should be present are identified and the Y1 performed activities are described. These include the participation in 4 major events and the identification of 3 upcoming ones for which concrete plans have been drafted for the project to be present. Thus, COSMOS has been very active in the relevant domain, focusing on high visibility events and preparing also the plan for Y2. The project has also been active in the preparation of promotional material that has been used in its participation in the various activities.

Weaknesses have also been identified, mainly with relation to social networks and website presence, which should be faced in the upcoming months, and for which specific corrective actions have been identified. The most prominent action is the submission of articles from the main experts in the project regarding their respective domains. These will be published through our LinkedIn group and may attract external readers. Scientific publications have been drafted during Y1 of the project and their number is expected to increase in the upcoming months.

Collaboration actions have been also active during Y1 and potential candidate projects for Y2 have been identified, mainly with relation to concurrently running projects with COSMOS (ALMANAC, CityPulse and RERUM). Training material to be used during the dissemination activities has also been highlighted and consists mainly of User and Installation guides of the various components, but also usage demonstration videos from the various tools.

1 Introduction

The aim of Task 8.3 is to make all the necessary actions to disseminate and promote the results of COSMOS as well as the project itself, through various channels. In order to accomplish this goal, we have to identify, define, organize and coordinate certain activities and subsequently to perform them.

All partners in the consortium will contribute to the creation of an agreed dissemination plan identifying clear routes for dissemination of project results. Also, all partners should be involved in dissemination activities related to their work.

The work covers the diffusion of information from the project to its diverse target groups, which encompass the relevant domains, industry sectors, research communities and end users.

The main items to be disseminated and therefore be included in this initial dissemination plan and future dissemination plans and reports will be mainly those arising from the activities of the program.

Dissemination work will focus on web presence and the design and production of project promotional material such as factsheets, brochures, presentation templates, project presentations and website content. Moreover, the project must be involved in social media, such as LinkedIn. The dissemination and promotion of the project must also contain the publication of scientific papers, the presentation of the project at key stakeholder events and, in the final stages, the production of more novel tools to highlight key results.

We perceive the dissemination in two respects:

- dissemination for the project as a whole (for example project workshop, demo, exhibition, clustering etc.);
- dissemination of particular innovative results (paper publications, conference attendance etc.).

Based on the COSMOS consortium experience, it is expected that dissemination as a whole will create large impact and critical mass for the project. Therefore, besides the noticeable and high-quality paper and article publications, COSMOS also intends to give tangible efforts for the whole project dissemination.

The document is structured as follows:

- Chapter 2 gives an overview of the strategy to be followed for the dissemination of the COSMOS project results.
- Chapter 3 identifies the different results of the project that will be disseminated and classifies them according to their nature.
- In Chapter 4 the different target groups towards which we will disseminate the COSMOS project results are identified. A description of each of them is given as well as a number of hints on how to approach them.
- Chapter 5 describes the different channels through which the COSMOS project results will be disseminated as well as performed activities during this period or planned ones for the upcoming months.
- Finally Chapter 6 concludes the document.

2 Dissemination Strategy

In a general approach, each partner will be responsible for disseminating the project results based on the channels and backgrounds available to them. The academic side will be targeting specific and high impact publication at scientific conferences, journals and other scientific forums, while industry will focus on workshops, information days and internal and external client meetings. In order to achieve an effective dissemination, an integrated approach will be necessary, combining templates, guidelines and approval processes on one side with a communication platform, publications, event participation and release plans on the other. The consortium will participate collaboratively at international events to present the project achievements.

As a first step, in order to properly disseminate our work, we should identify which aspects will be covered.

- “What”: We have to identify the products, “what” we want to communicate
- “Who”: The audience. To “whom” we are going to tell it, “who” is interested on our results
- “How”, “Where” and “When”: Channels through which we are going to disseminate our products
- “Why”: The aim. What do we want to achieve with every dissemination action.

The dissemination is split into dissemination to the scientific community, where the focus is on transferring knowledge and tools into the scientific domain, so that they can be used in complementary research fields, and dissemination to the commercial community (Investors, Technology providers, Users, Consultants etc.), where the focus is on informing potential clients on the COSMOS capabilities. We will build interest in the project to complement the exploitation plan, garner feedback from the market and identify potential partners and users.

Scientific dissemination will include an emphasis on conferences, scientific workshops, academic papers and scientific magazines (online and in printed form). The main points include the approach taken, the results gained, the innovation and processes. The intention is to spread knowledge of the project and to foster feedback on complementary approaches.

Commercial dissemination will focus on typically shorter and more generic communication items (web coverage, flyers, press releases, whitepapers, exhibition stands, magazines and websites focused on software developers etc.) The key points revolve around what COSMOS will be able to do, what benefits it will confer, the conditions under which it can be used and how and when users can be involved. The main intention is to prepare the market, identify potential collaborators and users and to gather feedback.

3 COSMOS Results for Dissemination

The COSMOS project will produce different types of results that will be potential subjects to wider dissemination. The following sections list the identified relevant products for dissemination. They will be derived from the major project results and innovations. Some of the innovations have already been identified and are listed below, together with the concrete results and approaches:

- Things are able to learn based on others' experiences.
- Situational knowledge acquisition and analysis mechanisms make things aware of conditions and events affecting their behaviour.
- Adaptive selection approaches facilitate the management of the uncertainty and volatility introduced due to real-world dynamics.
- Decentralised management mechanisms in IoT based systems allow applications to exploit an increasing amount of interconnected things.
- Socially-enriched coordination considers the role and participation scheme of things in and across networks.
- Management decisions and run-time adaptability are based on things security, trust, administration, location, relationships, information and contextual properties.
- Integrated security and privacy in the IoT domain is developed.
- Extended complex event processing and social media technologies extract only the valuable knowledge from the information flows.
- Workload-optimised data object stores facilitate efficient storage by exploring the interplay between storage and analytics on networks of data objects.

Concrete results that are or will be available with relation to the aforementioned innovations include:

- Semantic models, based on which Things capabilities and properties can be interlinked.
- Case Based Reasoning (CBR) approaches for identifying concrete solutions to given problems that the Things are called to handle.
- Social mechanisms for discovering and evaluating Things and their quality of information.
- Prediction Models for identifying critical parameters in Things management, conclusions extraction and Things awareness.
- Dedicated Hardware boards for integrating security aspects in IoT.
- Enablement of information disclosure levels through the Privelets concept.
- Cloud based Object Storage incorporation, enabling per case specialised data processing, metadata search and manipulation through the application of the Storlets concept.

4 Target Groups

An essential step in order to develop a proper marketing strategy of our work is the identification of target groups. By identifying correctly these groups, we can devise promotional plans for each target group separately. Also, by collecting feedback from these groups, we can improve our work and the project itself.

Therefore, our aim is to disseminate COSMOS results among relevant stakeholders. We could say that the target groups, in order to build awareness and interest in the project, are categorised in the following three categories:

- Scientific Community;
- Business/Industry Community;
- General Public Community;

After this categorisation, in the following sections, we will present different strategies concerning target groups separately and how to approach each group in order to promote our work and the COSMOS project.

4.1 Scientific Community

The COSMOS project addresses many topics from different technological areas. Therefore, scientific and research communities may be highly interested in the results that we are going to have. We will not list all relevant working groups or research areas in detail here as this is not possible. Generally, the dissemination strategy in research and in scientific communities is anyway quite similar in the different research domains. In this section we have identified some of the research communities of interest for COSMOS. They will be approached through the attendance and presentation of COSMOS to major events (organised by the communities themselves or other organisations) and publication of project results in specialised journals and conferences.

In addition to the scientific conferences, we will also present our work and seek feedback in trade shows such as IoT Week, the Future Internet Assembly and similar commercial events.

We also plan to organise workshops and other public events, including demo sessions, tutorials, presentations and lectures.

Finally, as mentioned before, some standardisation bodies can also be considered as a meeting place of the scientific communities and therefore an interesting forum to disseminate the COSMOS project results.

4.2 Business/Industry Community

Different kinds of companies may be interested in the COSMOS results, depending on the different roles they may play within the COSMOS value chain and on the different fields of application, in relation to the COSMOS Exploitation Strategy.

The main industrial organisations that are of interest to disseminate COSMOS results are the potential users of the COSMOS technologies. They can mainly be classified in the Use Case scenarios sectors, which are those whose business is related to:

- Smart Cities Technologies and Platforms. Potential users of COSMOS technologies are companies already active in this domain, from SMEs to big organisations with thousands of employees.
- Smart Cities public facilities and administrations must be approached as potential end-users and customers of COSMOS.
- Application Developer Communities that may exploit data coming freely from Smart Cities environments and combine them with one or more COSMOS components functionalities in order to provide an added value application.

The COSMOS consortium has drafted a first version of the Market Analysis [20] and of the exploitation strategy [21]. The way COSMOS partners approach these organisations varies depending on their nature and goes hand in hand with the participation in relevant fora, as identified in Section 5.4. For example, the Polis Annual Conference is an excellent opportunity for addressing Smart Cities authorities.

SMEs represent a group of particular interest and special emphasis must be given on contacting them. These entities are expected to mostly be interested in individual components that can be easily integrated in their respective products.

COSMOS will disseminate its results towards the industry through different kinds of events, but mainly through exhibitions and communication activities as identified in Section 5.4.

4.3 General Public Community

The general public is considered a target group mainly for evoking possible interest in the general aspects of the COSMOS project and more specifically in the general concepts of the use case scenarios. The dissemination channels targeting the general public will mainly be mass media through e.g. press releases or relevant activities such as the Researcher's Night event identified in Section 5.4. The project web site will also constitute a channel to approach the general public.

5 Dissemination Channels and Performed Activities

In this chapter we will report, analyse and offer a general description of the methods and tools used and will be used again in the future, so that the results of the COSMOS project will get known world-wide and we will try to suggest other ways and methods by which we will be able to approach and inform the public that is interested in this innovative platform about our work.

5.1 Website and Social Networks

A first attempt to make our project known was to build the official website [2], through which every possibly interested person can be informed about our business, and to facilitate the worldwide dissemination of information to specific groups (the public, companies and research communities).

Apart from general information on the project description, the people involved and working on it, the objectives and progress of the project, we will publish other information related to our work that might be interesting for visitors.

Currently the website (Figure 1) contains information about the deliverables, various events, our project and more generally the IoT domain. This way, we keep all interested parties informed about any change in our work.

So far, links to social networks (LinkedIn) are supported and there is an RSS feed functionality.

We must ensure that we collect statistics on traffic to the website, through google analytics for example, so that we can see the exact number of visitors, their origin, how many times was the site visited via search engines (google, yahoo) and how many visitors have downloaded our documents. Furthermore, we may also evaluate our participation in various events following the increase in the website activity following a specific dissemination action.

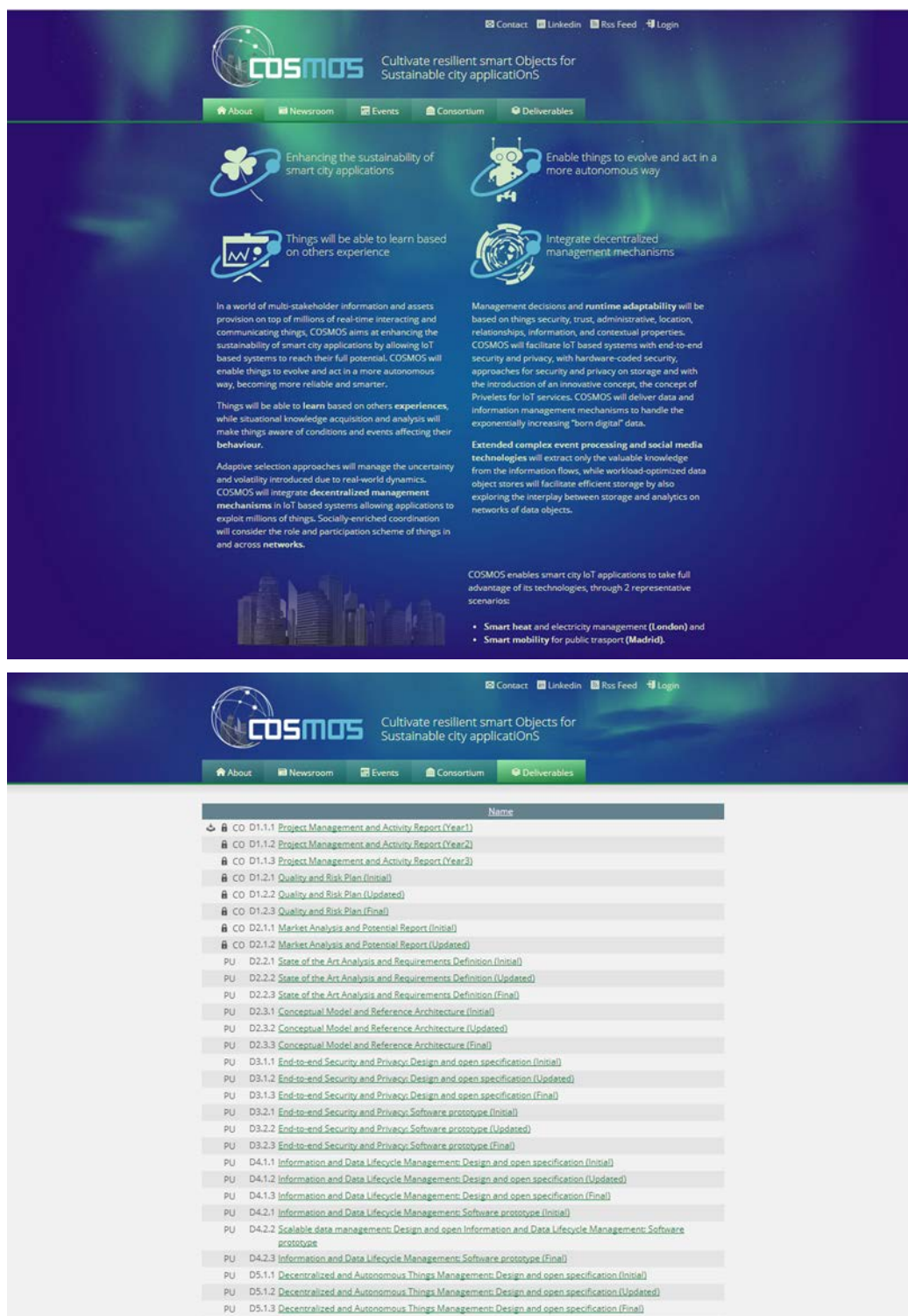


Figure 1: COSMOS Website Screenshots

5.1.1. Website Statistics

The Web portal created for COSMOS has received 156 users since the creation of it in the beginning of April.

We expect to have more visitors from now on, once we introduce information about COSMOS technical progressing in the upcoming period.

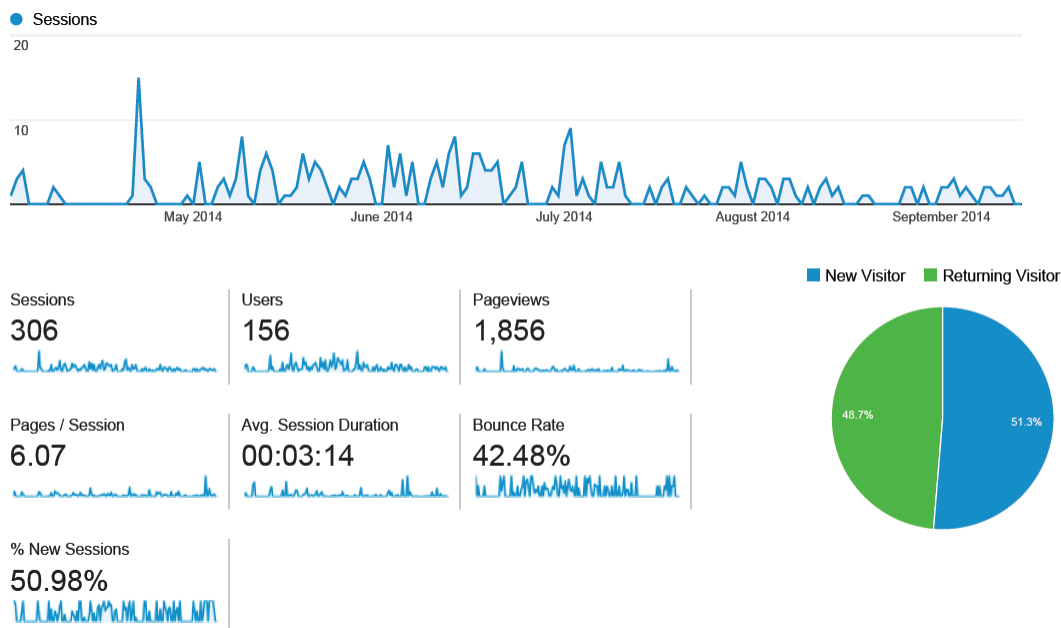


Figure 2: Web Site Statistics

5.1.2. Social Networks Presence

A group for COSMOS in LinkedIn has been created [1]. It has 46 members up to now. The Community has profiles from the ICT and IoT world. The content and the communications in this group has been very little during the time it has been open. We will try to raise the collaboration in the following period. One potential action to enrich its content and raise awareness is to create discussions and awareness following the publication of relevant articles from COSMOS members in a periodic and per topic manner.

5.2 Promotional Material

5.2.1. Flyer

We considered useful, in order to promote our work and make our project known, to produce flyers.

The flyer of the project (Figure 3) contains the following items:

- an overall description of the project, short and easy to read for a broad non-expert audience.
- the major innovations developed on the project.
- areas of application and some descriptions of application scenarios.
- the website URL and a barcode, through which anyone interested could be further informed.



Figure 3: COSMOS Flyer

5.2.2. Bookmarks

Another type of promotional material we thought about was bookmarks (Figure 4) that we could share in any event we would be asked to present COSMOS. The use of them is similar with the flyers.

The bookmarks also contain:

- a brief description of the project, short and easy to read.
- the partners list, everyone involved in the development of the project.

- the website URL and a barcode, through which anyone interested can be further informed.



Figure 4: COSMOS Bookmarks

5.2.3. USB flash drives

We thought of printable USB sticks as a great opportunity to promote our project. A USB flash drive is mandatory for conferences and a very useful “tool” in general. So, we ordered some pieces to distribute them on any chance. The USB flash drive has the COSMOS logo printed on it and a URL that directs to the website our project already has. We pre-loaded the flash drives with all the useful information anyone interested should know about the project and we expect this move to be effective on the dissemination plan of COSMOS.

5.2.4. Poster

Another object that we created in the context of the presentation and dissemination of the project, whenever we will be called to present it, is a poster.

Therefore we designed a poster for the entire lifecycle of the project, which will be with us in several events, such as special workshops, demonstration events and conferences.

The poster is designed to provide general information about the project, like the flyer, the innovations with which we work and develop, the partners list and the case scenarios considered.

The first appearance of the poster was on “IoT Week”, an event which took place in London.

The poster is presented in Figure 5.

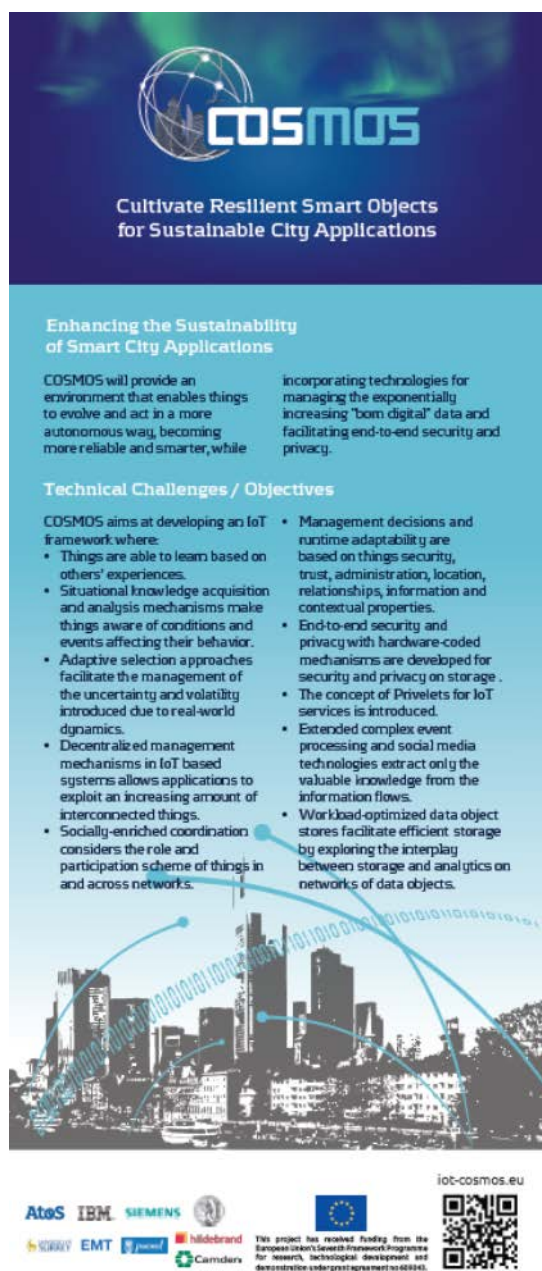


Figure 5: COSMOS Poster

5.2.5. Newsletters

A project Newsletter is intended to disseminate the most recent news of the project to a broad audience that may either belong to a specific technology sector or be classified within the general public audience. Our website offers the option of the Newsroom, from where anyone interested can retrieve our newsletters and be informed about COSMOS and the IoT in general.

The COSMOS Newsroom is electronic and the first news feed was published on April 2014. It is expected to get people in a first touch with the term “Internet of Things” and explain the

general aim and goals of the COSMOS project. Soon, the newsletters to come, will contain the latest results of the project, release of public deliverables and other publications, events where we have been present, future actions we plan to perform etc. In the case of extraordinary events related to the project, special editions of the newsletter will be released.

A screenshot of the Newsroom is provided in Figure 6.

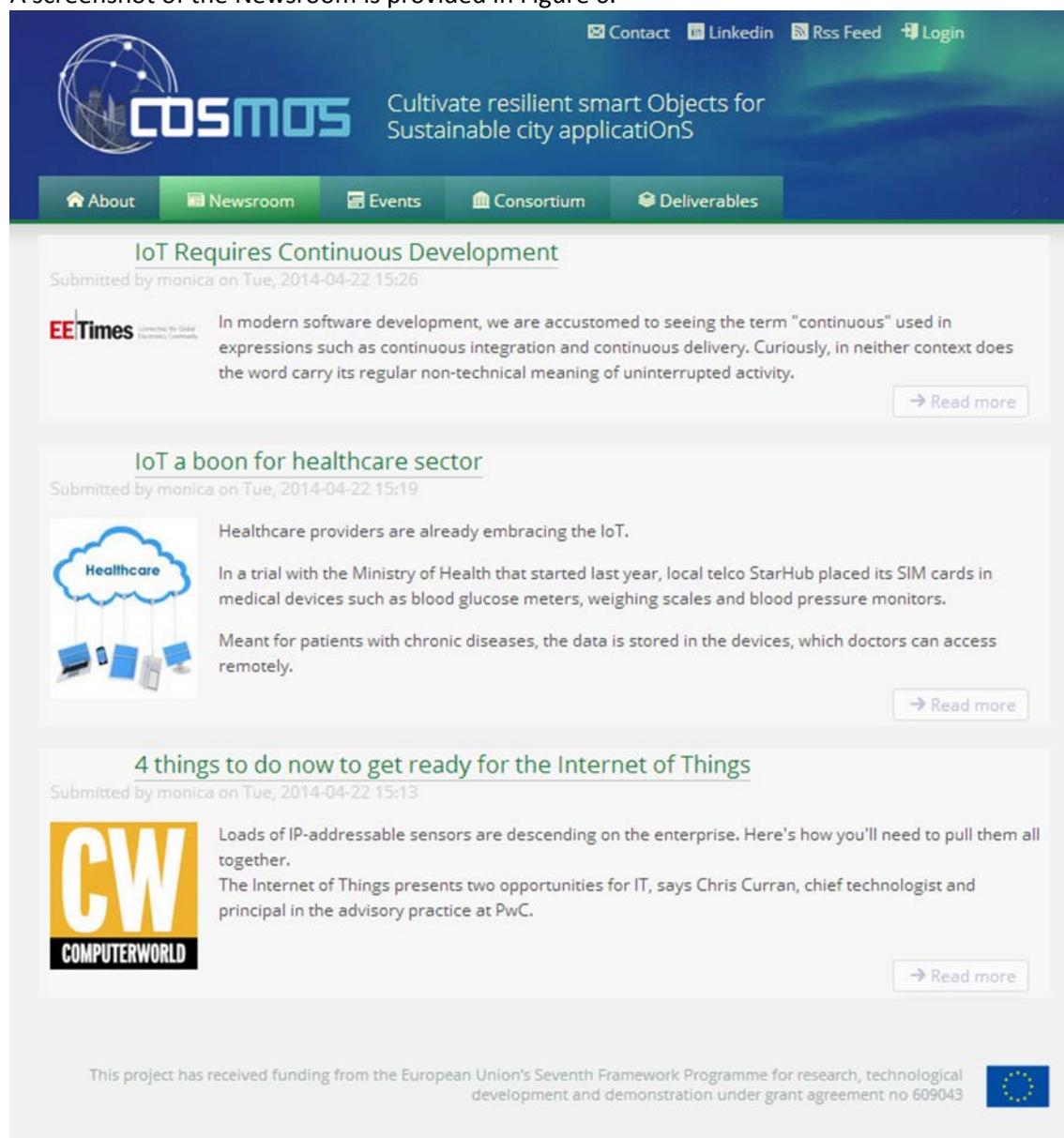


Figure 6: COSMOS Newsroom for Updates

Furthermore, anyone will be able to download through the project website and access the news and the public deliverables, at any moment, without the need to be subscribed.

5.2.6. Press Releases

The publication of press releases in national and international media is an efficient way to reach a broad audience. Therefore, the possibility to publish press releases will be investigated by all the partners in the consortium in their respective countries and organisations.

They can be either general articles including general concepts of the project or more specialised articles on concrete topics, targeted to specific sectors press. Their purpose is usually to announce something recently occurred or to taking place in the near future, therefore COSMOS press releases will be published coinciding with major milestones of the project (e.g. release of a prototype, demonstration event, release of a concrete technology innovation etc.). They can be published in different media, from newspapers and magazines to radio and TV stations.

At this early stage of the project, initial press releases are issued by the partners to inform the public about the project's start and its objectives.

On the 12th of May 2014, IBM made an announcement in an event in Boston called Signature Moment. IBM announced Elastic Storage and as a glimpse into the future included Storlets in this announcement. It also mentions that Storlets are developed in the context of several EU funded projects. COSMOS is one of these projects. However, it was not mentioned specifically in the announcement since it is a much newer project than those mentioned and specific COSMOS Storlets had not yet been developed or demonstrated at the time of the announcement.

The event is available for replay at [3]. Storlets are described by Michael Factor, a Distinguished Engineer from the IBM Haifa Research Lab from minute 38 until minute 48. A description of Storlets is also included in Michael Factor's blog entitled "Storlets: Turning Object Storage into a Smart Storage Platform" [4].

5.2.7. Multimedia Recordings

Multimedia recordings, such as promotional or demonstration videos illustrating the main concepts of the project, are envisioned to be produced.

They will serve as a support to present the project in different events, workshops and as demonstration and training material. The target audience can be of every nature, being thus a general kind of dissemination channel to introduce the project to the interested people that can, in future, follow the progress through more specific dissemination tools. The relevant material may also be uploaded on YouTube [5] or made available through the COSMOS web-site, in order to gain more visibility (for the case of YouTube) and direct people on the main source of documentation for the project (the COSMOS web site).

5.3 Publications

5.3.1. Scientific Journals

The DoW provides a long list of Journals we are going to address for the publication of COSMOS results, depending obviously on the particular technical focus of the publication. In general, universities tend to favour journals with a high impact factor like IEEE [6] or ACM series. The following lines describe some new journals which were not yet identified during the writing of the proposal:

- **IEEE Internet of Things Journal:** Newly created (1st issue beginning of 2014), the IEEE IoT-J publishes papers on the latest advances, as well as review articles, on the various aspects of IoT from open call and special issues. Topics will include IoT system architecture, IoT enabling technologies, IoT communication and networking protocols,

IoT services and applications, and the social implications of IoT. Examples are IoT demands, impacts, and implications on sensors technologies, big data management, and future internet design for various IoT use cases, such as smart cities, smart environments, smart homes, etc. The fields of interest include:

- IoT architectures such as things-centric, data-centric, service-centric architecture, CPS and SCADA platforms, future Internet design for IoT, Cloud-based IoT, and system security and manageability.
 - IoT enabling technologies such as sensors, radio frequency identification, low power and energy harvesting, sensor networks, machine-type communication, resource-constrained networks, real-time systems, IoT data analytics, in situ processing, and embedded software.
 - IoT services, applications, standards, and test-beds such as streaming data management and mining platforms, service middleware, open service platform, semantic service management, security and privacy-preserving protocols, design examples of smart services and applications, and IoT application support.
- **IEEE Communications Surveys & Tutorials:** IEEE Communications Surveys & Tutorials is an online journal published by the IEEE Communications Society for tutorials and surveys covering all aspects of the communications field. Telecommunications technology is progressing at a rapid pace, and the IEEE Communications Society is committed to providing researchers and other professionals the information and tools to stay abreast. IEEE Communications Surveys and Tutorials focuses on integrating and adding understanding to the existing literature on communications, putting results in context. Whether searching for in-depth information about a familiar area or an introduction into a new area, IEEE Communications Surveys & Tutorials aims to be the premier source of peer-reviewed, comprehensive tutorials and surveys, and pointers to further sources. IEEE Communications Surveys & Tutorials publishes only articles exclusively written for IEEE Communications Surveys & Tutorials and go through a rigorous review process before their publication in the quarterly issues.
 - **IEEE Transaction on Cloud Computing (TCC):** IEEE Transactions on Cloud Computing will publish peer-reviewed articles that provide innovative research ideas and applications results in all areas relating to Cloud computing. The transactions will consider submissions specifically in the areas of Cloud security, standards, architecture, development tools, applications management, and more. For further information, visit <http://www.computer.org/portal/web/tcc>. IEEE Transactions on Cloud Computing is now accepting manuscript submissions. To submit your manuscript, please use the ScholarOne Manuscripts manuscript submission site. - See more at: <http://Cloudcomputing.ieee.org/publications#sthash.fBY79pa9.dpuf>.

5.3.2. Conferences, Workshops and other Events

Similarly with the journal publications, we will tend to favour Conferences and Workshops which are affiliated to IEEE or ACM because of a higher impact factor. Among the most well-known conferences we can find –in addition to the list already identified in the DoW- are:

- **IEEE international conference on Internet of Things (iThings-2015)**
 - Dates to be announced;
- **IEEE International conference on Communications (ICC-2015):**
 - Paper Topic: “Contextual Occupancy Detection Using Non-Intrusive Load Monitoring”;

- Paper Submission Deadline: 15th Sep, 2014;
- **IEEE International Conference on Future Internet of Things and Cloud (FiCloud-2015):**
 - Dates to be announced;
- **IEEE International Conference on Intelligent Sensors, Sensor Networks and Informative Processing (ISSNIP 2015)**
 - Dates to be announced;

5.3.3. Performed Publications

The publications we have already submitted are the following.

- **18th Panhellenic Conference on Informatics (PCI2014) [7].** COSMOS submitted a paper with title “Achieving Autonomicity in IoT systems via Situational-Aware, Cognitive and Social Things” and authors: Orfefs Voutyras, Spyridon V. Gogouvitis, Achilleas Marinakis, Theodora Varvarigou, on the conference which took place on 02-04/10/2014 in Athens, Greece, was accepted and published on the conference proceedings by ACM in ICPS after the presentation of the paper.
- **Third International Workshop on Internet of Things Communications and Technologies (IoT-CT 2014) [8].** The workshop took place on 08-10/10/2014 Larnaca, Cyprus. COSMOS submitted a paper there with title “An Architecture supporting Knowledge flow in Social Internet of Things systems” and authors: Orfefs Voutyras, Panagiotis Bourellos, Dimosthenis Kyriazis, Theodora Varvarigou and was also accepted and presented at the conference. The paper will be included in the conference proceedings of WiMob 2014 and IEEE Xplore.
- **IEEE International Conference on Communications.** The event will take place on 08-12/06/2015. COSMOS has submitted a paper with title “Contextual Occupancy detection using Non-Intrusive Load Monitoring for Smart Office” and authors: Adnan Akbar, Michele Nati, Francois Carrez, Klaus Moessner.

5.4 Events

There is a wide range of events that can offer us visibility, networking and dissemination/communication opportunities. On such events we will be able to demonstrate our work and our results. There are many events that we target and we would like to attend. We will present briefly the events that we already attended and we will provide some information for the upcoming events.

5.4.1. Attended Events

In addition to conferences we also aim at targeting large events which are more “Dissemination & Networking” oriented events than purely scientific ones. In the following paragraphs we list relevant events that we have attended during Y1 of the project:

Mobile World Congress:

The GSMA Mobile World Congress [9] is the place where mobile leaders gather, collaborate and conduct business. The annual event provides the planet’s best venue for mobile industry networking, new business opportunities and deal-making. Mobile World Congress includes a world-class conference featuring visionary keynotes and action-provoking panel discussions;

an exhibition with more than 1,800 companies displaying the cutting-edge products and technologies that define the future of mobile; App Planet; and the annual Global Mobile Awards ceremony, which recognises the most innovative mobile solutions and initiatives from around the world. In 2014, Mobile World Congress hosted more than 85,000 mobile professionals from more than 200 countries in our largest-ever event. Make your plans now to be part of the excitement at Mobile World Congress 2015, in the Mobile World Capital, Barcelona. The exhibition was organised on 24-27 February 2014 in Barcelona with main subject on the mobile industry. COSMOS was presented on a wide industrial and general audience and showed great success via a general rolling presentation and a stand-alone poster.

Future Internet Assembly:

FIA Athens 2014 [10] took place at the Megaron Athens International Conference Centre. FIA Athens has featured an exhibition of innovative ICT projects, technologies and their demonstrations. The aim was to provide Future Internet stakeholders and other participants with up-to-date information and a hands-on experience on the latest Future Internet applications, systems and services, prototypes and innovative solutions. Moreover, the exhibition aimed at addressing key questions for delegates and providing an informal networking environment. COSMOS showed participation in the FIA event which took place in Athens on 17/3/2014 where has been a general presentation of the project and the objectives that we aim for.

IoT Week:

The IoT week [11] is a yearly event organised by the IoT Forum [22]. The IoT Week 2014 was hosted in London between the 16th and 20th June at the Grange Tower Bridge Hotel located in the heart of the city. The event was the pre-eminent event attracting industry and academia from around the world. Building on the successes of Helsinki, Venice and Barcelona, the IoT Week London continues the journey,

- Bringing focus to the emerging opportunities;
- Connecting the global business and research communities innovating at the boundaries of IoT;
- Promoting international collaboration and addressing societal and market issues.

The 2015 event will be organised in Copenhagen – Denmark in June. In the former 2014 event COSMOS had a booth for early dissemination of project objectives and early results (in the form of slide sets, brochures, USB flash drives and a roll-up poster in particular). More interest on the project was shown on the planned autonomous nature of virtual entities, the Cloud storage technologies used and the potential scenarios regarding the implementation of the project. The exhibitors of the project had the chance to attend certain presentations relevant to the main goals of COSMOS such as “Smart IoTs - Edinburgh Napier University”, “ARM - small data, big data” and “Smart Homes & Buildings Association- IoT-Bay”. A software demonstration of the project results will be ensured during the two next IoT Week events.



Figure 7: COSMOS Booth in IoT Week

European Researchers' Night.

European Researcher's Night [12] is a mega event which takes place every year simultaneously in several hundred cities all over Europe. This year, among other venues in Greece, the event took place in NTUA's premises in downtown Athens, on Friday, 26 September 2014 between 18:00 and 24:00. It addresses mainly the general public but also fellow researchers, NTUA students etc.

COSMOS was included in the DKMS lab booth (Figure 8, Figure 9) and material from the project was made available through the following channels:

- DKMS Lab presentation through a projector, including all of the lab projects with main highlights and achievements (Figure 11)
- Distribution of the COSMOS Factsheet and bookmarks in a printed version (Figure 10)

Furthermore, we were enquired throughout the event regarding current hot topics and directions in the industry, giving us the chance to disseminate COSMOS goals and the generic concepts of Internet of Things and Big Data.



Figure 8: Researcher's Night Exhibition Room



Figure 9: DKMS Lab Booth



Figure 10: COSMOS Dissemination Material



Figure 11: Presentation of main COSMOS Concepts

5.4.2. Future Events

In the following paragraphs, future events are identified in which COSMOS has plans or intention to participate in.

IoT-360:

The IoT360 [13] is a unique event bringing a 360 degree perspective on IoT-related projects and activities and aiming to coach involved people on the whole path between research to innovation and all the way through to commercialisation of ideas, projects and technologies. The Summit is a powerful and inspirational event that brings together industry representatives, makers, vendors, experts, developers and others to plan, learn, network, collaborate, strategize and more effectively tap into the immense potential of the IoT domain. The event offers a wide set of activities among which tutorials, presentations, panels and keynotes covering new methods to accelerate in the market, monetize technologies & IPR and raise funds in Europe. Structured professional networking to turn cutting edge into business through exploitation and commercialisation opportunities is a key priority. We will participate with a big presentation. Currently we are investigating what will the results to be presented and on which way. We could present the results live or in video.

OpenStack Summit

The OpenStack Summit [14] is a five-day conference for developers, users, and administrators of OpenStack Cloud Software. It's a great place to get started with OpenStack. The Design Summit sessions are collaborative working sessions where the community of OpenStack developers come together twice annually to discuss the requirements for the next software release and connect with other community members. It is not a classic track with speakers and presentations. The event will take place in Paris on 3-7/11/2014. The thematic area of the event that we are interested of is "OpenStack - Cloud Storage and Compute Platform". It is expected that the event will have more than 5000 participants. COSMOS will participate also and IBM Research Haifa will present 2 sessions related to our work. A) "The Perfect Match : Apache Spark Meets Swift" and B) "Docker Meets Swift : A Broadcaster's Experience".

Annual Polis Conference

The 2014 Polis Conference [19] is a major platform for cities, metropolitan areas and regions to exchange on their transport challenges. High-level plenary sessions are complemented by technical sessions showing innovation in policy and practice across the transport spectrum. The event includes also an exhibition area, in which projects may expose and disseminate their results. Attendance to this event is planned for the future (most probably in the 2015 venue), given that the cost of attendance (1000-5000 euros) is high and we want to achieve maximum impact. Thus we anticipate to participate in Y2, during which the COSMOS demonstrators will have matured more, in order to achieve the expected impact.

5.5 Project Documentation

Other general project documents that are not focused on a concrete event are under this group, e.g. public deliverables, general presentations, whitepapers, etc.

- *Deliverables*: The document must display clearly project title, Activity and WP number, deliverable number, filename, scheduled and actual delivery dates. It must declare dissemination level, Public, Restricted to other program participants and group specified by the consortium or Confidential to members of the consortium. Responsible editor and its revision history are also identified as well as the authors and internal reviewers. All deliverables will be available to the European Commission and only the ones classified as Public will be available through the project web site to the general public.
- *Presentation*: Presentation templates will be used by any member of consortium when presenting any project material. It must contain official COSMOS logo, name of the presenter, date of presentation and name of the partner organisation. The presentation must display clearly COSMOS logo with confidentiality information. A general project presentation has been prepared as a basis for general presentations of the project. This will be updated with the latest results as the project progresses.
- *Whitepapers*: Whitepapers about different topics addressed in COSMOS project, from an overview of the project to a concrete technology innovation, will be made available through the project website. In principle they should not be targeted to a concrete event, but they may be considered also as dissemination material to be distributed in events, conferences, etc.

5.6 Demonstration

Demonstrators will be setup, in order to show real scenarios where the main project objectives are put in practice. In the Demonstration activities, a specialised version of the integrated prototype will be presented to users for exhibition in real contexts of use like the Madrid use case scenario and the Camden use case scenario, to elicit 'pre-launch' interest from potential customers, obtain experience of use, and identify any customisation that is required.

The demo events may be included in dedicated project Workshops or external ones organised by other projects.

5.7 Training Material

Training material will be produced during project duration, that will enable the description and usage of the COSMOS provided tools by external users. The first step of this process has been performed in M10 with the initial release of the project's prototypes, that includes an Installation and usage section for each software component.

Furthermore, demo videos will be produced, demonstrating the combined usage of the COSMOS components in accordance with the scenarios identified in D7.7.1 [23], to display the overall functionality. We will also investigate the production of individual videos for each component, to indicate the necessary sequence of actions for their installation and usage.

Especially for the video training material, a YouTube channel may be created that is focused on COSMOS, including also more generic dissemination items.

5.8 Collaboration with other IoT projects

IoT-A & IoT Forum: The IoT-A project has officially finished on 30th November 2013, but its main result, the IoT Architectural Reference Model, is being sustained and evolved since within the IoT Forum. In this context COSMOS has from the beginning been considering reusing the ARM methodology within its own architecture work (taking place in WP2) and will maintain close coordination with the IoT Forum as far as the ARM validation and evolution are concerned (the COSMOS WP6 Leader is also chair of the Architecture Working Group at the IoT Forum). Details on how COSMOS has been reusing the ARM are available in the D2.3.1 Architecture COSMOS Deliverable [18] and is mainly focussing so far on applying the Requirement engineering methodology and tailoring the IoT-A Domain Model to the COSMOS peculiarities (more to come in next project phases).

Besides this performed action and alignment, potential target projects for Collaboration are the concurrently running projects with COSMOS in the same subprogramme ("ICT-2013.1.4 - A reliable, smart and secure Internet of Things for Smart Cities") and call ("FP7-SMARTCITIES-2013"):

- ALMANAC [15], mainly with relation to real-time data modelling and management
- RERUM [16], mainly with relation to security aspects
- CITYPULSE [17], mainly with relation to data analysis, social and semantic aspects

The fact that there are also common partners with the 2 out of the 3 projects (RERUM and CITYPULSE) makes this action easier to be accomplished.

6 Conclusions

The initial version of the Dissemination Plan and Activities has indicated a number of aspects with relation to Dissemination organisation and activity implementation. To this end, relevant items, channels, audiences and activities have been highlighted.

During Y1, COSMOS has been very active in participating in major events and these actions will be further pursued in Y2 of the project. New events have been identified and plans for our participation in them are being drafted, either in the form of presentations or demonstrations, based also on the COSMOS technical results level of maturity.

Material has been created at this stage to support our presence in these activities and will be enriched in the future with the new project developments. For Y2, a major target is the drafting of more scientific publications and our heavier involvement in available social networks like LinkedIn.

References

- [1]. COSMOS LinkedIn group: https://www.linkedin.com/groups?viewMembers=&gid=7464238&sik=1410772206276&split_page=2
- [2]. COSMOS webpage: <http://www.iot-cosmos.eu/>
- [3]. Storlets description on video: http://www.livestream.com/fastdataforum/video?clipId=pla_3c46e138-faed-41a1-b20e-61867b32e061
- [4]. Storlets description on blog: <http://ibmresearchnews.blogspot.co.il/2014/05/Storlets-turning-object-storage-into.html>
- [5]. YouTube: <https://www.youtube.com/>
- [6]. IEEE : <https://www.ieee.org/index.html>
- [7]. Panhellenic Conference on Informatics: <http://pci2013.epy-mathra.gr/>
- [8]. International Workshop on Internet of Things Communications and Technologies: <http://wcnc2014.ieee-wcnc.org/>
- [9]. Mobile World Congress: <http://www.mobileworldcongress.com/>
- [10]. Future Internet Assembly: <http://www.fi-athens.eu/>
- [11]. IoT Week: <http://www.iot-week.eu/>
- [12]. European Researchers' Night: http://ec.europa.eu/research/researchersnight/index_en.htm
- [13]. Iot360: <http://iot-360.eu/>
- [14]. OpenStack Summit 2014: <https://www.openstack.org/summit/openstack-paris-summit-2014/>
- [15]. ALMANAC Project: http://cordis.europa.eu/project/rcn/109709_en.html
- [16]. RERUM Project: http://cordis.europa.eu/project/rcn/109710_en.html
- [17]. CityPulse Project: http://cordis.europa.eu/project/rcn/109806_en.html
- [18]. COSMOS Deliverable D2.3.1: "Conceptual Model and Reference Architecture ", ICCS/NTUA and other partners, April, 2014
- [19]. Annual Polis Conference: <http://www.polisnetwork.eu/events2/polisconference/2014conference>
- [20]. COSMOS Deliverable D2.1.1 "Market Analysis and Potential Report", ATOS and other partners, February 2014
- [21]. COSMOS Deliverable D8.1.1 "Exploitation Strategy and Plan", ATOS and other partners, September 2014
- [22]. IoT Forum: www.iotforum.org
- [23]. COSMOS Deliverable D7.7.1 "Integration of Results", ICCS/NTUA and other partners, September 2014