SEVENTH FRAMEWORK PROGRAME

Specific Targeted Research Project

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D7.2.2 Report on Dissemination Activities V2

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TERMS AND ACRONYMS

AC	Activity Chain
ACM	Association for Computing Machinery
ARM	Architecture Reference Model
DoW	Description of Work
EC	European Commission
FIA	Future Internet Assembly
FIT	Future Internet (of Things)
GSN	Global Sensor Networks
IEEE	Institute of Electrical and Electronics Engineers
IERC	European Research Cluster on the Internet-of-Things
IFIP	International Federation for Information Processing
IoT	Internet-of-Things
NOMS	Network Operations and Management Symposium
PPI	Platform Provider Interface
R&D	Research and Development
SC	Smart Cities
SNS	Social Network Sites
SSN	Semantic Sensor Networks
W3C	World-Wide-Web-Consortium

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1 INTRODUCTION

1.1 Purpose and Scope

The purpose of this deliverable (D7.2) is to report on the dissemination accomplishments of the project. It is intended to be a living document, which will be regularly updated with the dissemination achievements of the project partners. These achievements will be a result of the actions specified as part of earlier deliverable D7.1, which reflects the dissemination planning of the project. As outlined in D7.1 VITAL employs a variety of dissemination modalities in order to reach a wide array of different stakeholders. The dissemination achievements outlined in this deliverable are organized and presented according to the various modalities i.e. to publications, presentations to conferences and workshops, organization of conferences and workshops, publication of press releases and newsletter editions and more.

Deliverable D7.2 is released periodically in three iterations and more specifically at the end of each year of the project's lifetime. The present document corresponds to its second release, which reports the project's dissemination accomplishments during the first and second years of the project's lifetime (i.e. in the period 01/09/2013-31/08/2015). At the same time, the deliverable presents the project's dissemination planning for the final period of the project i.e. the interval 01/09/2015-31/08/2016. The present (second) release of the deliverable presents also changes to the project's dissemination strategy following recommendations received by the project reviewers during the first technical review of the project. Note also that during the second period of the project, VITAL has increased its participation in exhibitions and other events.

1.2 Updates and Revisions to the VITAL Dissemination Strategy

During the first year of the project, VITAL focused on a wide range of dissemination activities, which have been reported in the earlier version of the deliverable D7.2.1 and are included in the version as well which also illustrates the activities within the second year as well. The activities that took place in the first year included publications and presentations of the project in various events, notably within the EU. The assessment of the first year's activities revealed a quite good dissemination performance within EC/EU related audiences, notably within the community of EC co-funded research projects (including the IERC cluster), EU researchers working on IoT, as well as R&D labs of European industries. However, gaps in engaging stakeholders beyond these communities were also identified, along with the needs to expand outreach towards the smart cities industry, especially once the project would produce tangible results (i.e. during the first years of the project). In the light of this assessment the project has revised its dissemination strategy in order to broaden its outreach, but without weakening its decent performance in terms of dissemination within the EC projects community. Hence, during the second year of the project, VITAL has participated in events that targeted the industry, including young developers, entrepreneurs and start-up owners, but also managers in larger enterprises. Furthermore, an effort to disseminate the project's results within policy makers in the UK has been made. These efforts are reflected in the diversification of the events where the project participated during the second year of its lifetime. Note

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however that the project has strived to maintain its dissemination momentum towards the EU project's community, on the basis of its active participation in EC organized conferences and exhibitions, as well as on the basis of an active participation in events organized by the IERC cluster. During the third and final year of the project, VITAL will attempt to broaden its participation in industry-facing events in the areas of smart cites, while also pursuing the active participation/engagement of stakeholders (notably developers and smart city authorities) in the evaluation of the project's results.

1.3 Target Audience

This living document is targeted towards the EC and the consortium, aiming to provide a 360° view of the project's dissemination efforts, but also of the dissemination planning for the coming periods. Note that the document includes also an overall quantification of the project's activities, and their auditing against the targets set in the DoW document of the project.

1.4 Structure of the Document

The document is structured in the following sections:

- Section 1 is the present introductory section.
- Section 2 is devoted to a presentation of the project's publications, including publications in conference/workshop proceedings, journal and magazines.
- Section 3 provides information about VITAL presentations in workshops and conferences.
- Section 4 illustrates the workshops, events and sessions that were organized or co-organized by the project.
- Section 5 presents the project's newsletter editions and discusses the project's press releases.
- Section 6 elaborates on the structure of the VITAL web site and its use as dissemination channel.
- Section 7 illustrates the project's presence in social media.
- Section 8 presents dissemination efforts undertaken within the cities of the consortium, along with meetings and collaborations with other (related) projects.
- Section 9 provides the consortium plans for the next (annual) period of the project's lifetime.
- Section 10 concludes the deliverable.

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2 DISSEMINATION PLAN

This chapter describes the dissemination plans for the remainder of the project. Past dissemination activity results are reported in D1.8 “Annual Management Report”.

2.1 Overall Plan

In the context of the exploitation and dissemination of the results, the project will rely on the following main dissemination activity types:

1. **Publishing and Presenting** in international scientific journals and prestigious conferences as well as technical papers in telecom conferences, journals and magazines. This gives the project wide visibility, and opens up opportunities for engaging and involving external stakeholders. Special attention will be given to webinars, conferences and workshops targeting open source communities. Also, the project will publish and present beyond Europe.
2. **Public Reports/White Papers**: There are topics inside the context of the project that meet extensive scientific and industrial interest. The project has already created a couple of white papers in the form of short reports. In addition, public deliverables will be placed online to become input to clusters and to be referenced by newsletters.
3. **Cluster Participation** in IERC, NetFutures: VITAL will continue actively participating in EU meetings to disseminate results and to promote collaboration with other organizations and projects. VITAL will continue organising IERC co-located workshops during the project lifetime.
4. **Newsletter** distribution: The newsletter will continue to be published to coincide with select project milestones. This is distributed by partners and on the VITAL external mailing list.
5. **Media Promotion Campaigns**: Towards the mid to end of the last year of the project, an intensive media campaign will be launched that promotes the current results to all audiences targeted. This campaign will use a combination of dissemination materials, tools, events and press releases. The aim is to maximize media reach through face-to-face, paper and online channels – for example, getting visibility via press articles and interviews. The creation of press packs for technical journalists and street publications will help technical journalists to have information at hand and not have to look for them online. This is normally a good strategy to adopt if one wants to get visibility. The information in the press packs will be complemented by posting in the online channels described above; however, the tone would be slightly different since the audience of traditional medial would be a complete cross-section of society.
6. **Public Website** updates: The second year of the project started with an overhaul of the public website towards VITAL-IoT that is regularly updated and used to promote newsletters, as well as key project results and events. The external mailing list will be kept updated.
7. **Demonstrations ad Prototypes**: Demonstrations relating to VITAL middleware platforms and related applications/trials was implemented as permamnet online

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demonstrators and will continue to be performed. These demonstrations have been used to present proof-of-concept implementations in prominent events relating to smart cities systems and solutions. Involvement of industrial actors and SMEs will be given priority towards the end of the third year. Also, other events relating to the project application domains (i.e Smart Cities) will be pursued. These events should have to be a slightly wider audience than the Internet-of-Things / Future Internet communities, since the aim in this case is to find users and application domain stakeholders rather than developers.

8. **Workshops:** Apart from being present at external conferences and workshops, VITAL will continue to organize its own workshops and events. VITAL will organize panel discussions as well.

2.2 Target Groups

In this chapter, we describe the four main target groups for VITAL project dissemination, namely researchers, open source communities, businesses and system integrators and end-users.

2.2.1 Researchers

VITAL will contribute to this research community by providing an innovative and comprehensive software platform solution. VITAL software will be made available to provide an easy way to adopt and reuse the software and to boost the exchange and creativity within the research community.

We believe that the research community will benefit from this open way of sharing innovative concepts, and that VITAL will benefit from the resulting feedback and the impact of this sharing.

The dissemination activities of VITAL will be oriented towards the European Research clusters, like the IERC Cluster and the AIOTI Alliance, and the academic networks that the VITAL consortium partners are linked.

2.2.2 Open-Source Communities

VITAL software platform is willing to use open source software philosophy and involve developers to participate in its development. Such people are in favour of the idea of software being free of limitations and intended to be adopted, reused and enhanced by their own ideas and contributions. The Open-source software community will be addressed by using well-known information channels, such as GitHub, Wikipedia, and Freecode for example.

The VITAL platform will be based on other open source projects and their experiences, like GSN[1], AspireRFID[2], OpenIoT[3] and the extended software foundation Apache[4]. It is intended to make a clear reference to these initiatives and to

[1] http://sourceforge.net/apps/trac/gsn/

[2] http://wiki.aspire.ow2.org/xwiki/bin/view/Main/WebHome

[3] https://github.com/OpenIotOrg/openiot

[4] http://www.apache.org

network with developers from such related source projects to gain experience and build up the open-source community expansion. The overall dissemination goal towards the open source community is to study the possibility to establish VITAL as an active and well-known node in the open source project community network.

2.2.3 Systems Integrators

The VITAL solution is designed to enable various forms of business models. The licence model will support an open and extendable core of software modules to be used in any kind of solution, either open source or commercial. This provides the system integrators with tools to implement their own solutions and allows them to access sensors and actuators in a simpler way. The major dissemination message to the system integrators community is that this is a solid ground for developing innovative commercial smart city solutions.

The system integrator community has a high priority in the VITAL dissemination strategy in order to demonstrate that it is possible to build successful business upon the VITAL platform.

The VITAL Platform solution is applicable to several business categories. However, the VITAL use case demonstrations will primarily address the smart city services.

2.2.4 End Users

The final and most important target group will also be the most challenging one to reach. A typical end user will most likely not be aware of the VITAL architecture or its features, but will use the services provided by solution providers using the VITAL framework. Consequently, the message for the end users will be based on the demonstrators, developed as proof-of-concept implementations for VITAL and the online provide services.

The end users to be addressed by the VITAL dissemination will primarily be citizens, students, elderly, municipal government officials (e.g., mayors), SME owners, manufacturing staff, environmental scientists, and farmers.

2.3 Dissemination Phases

In this section, we describe the dissemination objectives for each project year, and the overall method for achieving each yearly objective.

2.3.1 Create Awareness – Year 1

Objective: Establish VITAL as a key project in the Smart Cities domain.

Method: Create dissemination material with *differentiated* messages per target group:

- Towards **Researchers**, VITAL is presented itself as a good research partner for addressing key research questions within the smart cities area. VITAL leads the IERC cluster's Activity Chain and is involved in WG8 in AIOTI alliance.

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- Technical feasibility demonstrators for **open source communities & system integrators**. The respective partners have been openly discussing and showcasing the concepts and focus of these demonstrators in public fora like NetFutures 2015.
- VITAL has a message also for system Integrators: The Internet-of-Things has the potential to transform how business is conducted in many sectors, and VITAL will facilitate new and improved businesses within Smart Cities.

2.3.2 Promote & Engage – Year 2

Objective: Widen participation to external stakeholders.

Method: Publish *concrete* information for each target group:

- The VITAL **Architecture** for researchers & open source communities was presented at NetFutures 2015 in Brussels (May 2015), at ICT 2015 in Lisbon (October 2015).
- Towards **Open Source Communities**, VITAL is working towards create aits own open source project and we are working to make it available as open source project and repository, https://github.com/VitalIotOrg. VITAL will be presented itself to open source communities as bringing in new application scenarios and attracting business interest for future smart connecting cities.
- **Demonstrators** for system integrators are available online – the aim was to engage businesses in looking at the potential business models that might be disruptive and change the way that certain services are consumed and charged for them.

2.3.3 Demonstrate & Involve – Year 3

Objective: Disseminate results for post-project use.

Method: Publicize *executable* assets:

- Proof-of-concept **prototypes** for Smart Cities and citizens mobility (smarter workers) – Towards the first semester of Year 3 the prototypes will be stable and possible to be shared and shown publicly. VITAL will engage with the three different communities in order to find strategic stakeholders for post-project exploitation.
- Public reference **platform** (from the open source project) – Further involvement in the open source project of developers outside the consortium will be encouraged, to find leverage for establishing a public platform instance giving access to open data.
- Downloadable **apps and web services** – the executable apps and web services reporting tools created will be provided for download and testing by users outside of the development community, as a teaser for showing off the power of the VITAL Platform.

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2.4 Scientific Papers and Journals

The academic partners and institutes will publish papers in peer-reviewed journals, reputable international conferences and book chapters on scientific findings from the technical research. The following tables list the key venues that the VITAL partners target for the publication of their research results.

2.4.1 Conferences

International Conference on Cloud Computing (CloudCom)

CloudCom is the premier conference on Cloud Computing worldwide, attracting researchers, developers, users, students and practitioners from the fields of big data, systems architecture, services research, virtualization, security and privacy, high performance computing, always with an emphasis on how to build cloud computing platforms with real impact. The conference is co-sponsored by the Institute of Electrical and Electronics Engineers (IEEE), is steered by the Cloud Computing Association, and draws on the excellence of its world-class Program Committee and its participants.

International Conference on Advances in Cloud Computing (ACC)

ACC provides an international forum for researchers, professionals, and industrial practitioners to share advances in the area of Cloud Computing. The main topics of interest are Cloud application architectures, brokering and optimization, support for scalable and elastic services, and performance comparison studies.

International Conference on Computer Communications (INFOCOM)

INFOCOM addresses key topics and issues related to computer communications, with emphasis on traffic management and protocols for both wired and wireless networks. Topics of interest include sensor networks and embedded systems, data centres and Cloud computing, middleware support for networking, self-organizing networks, etc.

International Conference on Communications (ICC)

ICC is one of the most significant scientific and one of the largest events of the networking and communications community, Technical symposia, academic and industry panels, workshops, and tutorials cover a broad spectrum of related topics. Among many more, these include: ad-hoc and sensor networks, wireless networking, communication software and services, next-generation networking.

International Conference on Data Engineering (ICDE)

ICDE is a top-tier conference addressing research issues in designing, building, managing, and evaluating advanced data-intensive systems and applications. It is a leading forum for researchers, practitioners, developers, and users to explore cutting-edge ideas and to exchange techniques, tools, and experiences.

International Conference on Embedded Networked Sensor Systems (SenSys)

SenSys is a highly selective conference for the presentation of research results on systems issues in the area of embedded, networked sensors. It provides a cross-disciplinary venue for researchers addressing the rich space of networked sensor system design issues, including sensor technologies and pervasive computing, sensor data quality, integrity, and trustworthiness, as well as security and privacy in sensor networks.

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International Conference on Mobile Data Management (MDM) MDM is a leading conference dedicated to innovative and important research on mobile data management. It focuses on the rapid and dramatic evolution of mobility-related hardware, addressing issues of mobile data management particularly w.r.t. spatial, spatiotemporal and multimedia data generated by sensors, smartphones to portable computers.
International Conference on Mobile and Ubiquitous Multimedia (MUM) MUM is a leading annual international conference, which provides a forum for presenting the latest research results on mobile and ubiquitous multimedia. The conference brings together experts from both academia and industry for the exchange of ideas and discussion on future challenges, including middleware and distributed computing support for mobile ubiquitous systems and architectures, systems and algorithms for mobile systems.
International Conference on Pervasive Computing and Communication (PerCom) PerCom is top-tier conference in the areas of pervasive computing and communications. It addresses state-of-the-art research in the respective fields; among others, topics include data management for pervasive computing, middleware for pervasive services and applications, sensors and RFIDs in pervasive environments, smart devices in intelligent environments, and communication architectures for pervasive computing.
International Semantic Web Conference (ISWC) ISWC is the premier international conference for the Semantic Web / Linked Data Community. Here, scientists, industry specialists, and practitioners meet to discuss the future of practical, scalable, user-friendly, and game changing solutions for the management of Semantic Web data and Linked Data, the Sematic Sensor Web, Semantic Web and Linked Data in Cloud Environments, and related topics
International Joint Conference on Pervasive and Ubiquitous Computing (Ubicomp) Ubicomp is the premier conference for novel research contributions that advance the state of the art in the design, development, deployment, evaluation and understanding of ubiquitous computing systems. Ubicomp is an interdisciplinary field of research and development that utilizes and integrates pervasive, wireless, embedded, wearable, and/or mobile technologies to bridge the gaps between the digital and physical worlds.
International Conference on Very Large Databases (VLDB) VLDB is top-tier conference for data management and database researchers, vendors, practitioners, application developers, and users. It features research talks, tutorials, demonstrations, and workshops covering current issues in data management, database and information systems research. Data management and databases remain among the main technological cornerstones of emerging applications of the twenty-first century.
International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC) PIMRC is a premier conference in the wireless research arena and has a long history of bringing together academia, industry and regulatory bodies. The conference features technical sessions, tutorials, workshops, and technology and business panels revolving around the following areas: mobile and wireless networks; services, applications and business; as well as fundamental technical topics in the context of wireless communication.
Conference on Smart Spaces (ruSMART) ruSMART invites state-of-the-art research and development in all areas of computer networking and data communications. Key areas are the Internet of Things and related technologies, Semantic Web including distributed information management and processing, Cloud computing in smart spaces, and service discovery and composition in smart environments.

International Conference on Extending Database Technology (EDBT)

The EDBT series of conferences is an established and prestigious forum for the exchange of the latest research results in data management. Held in an European locations, the conference provides unique opportunities for database researchers, practitioners, developers, and users to explore new ideas, techniques, and tools, and to exchange experiences. EDBT and ICDT are held annually as joint conferences, beginning in 2009.

International Conference on Ubiquitous Intelligence and Computing (UIC)

UIC is a premier venue in the area of ubiquitous intelligence and computing, and offers a forum for researchers to exchange ideas and experiences in developing intelligent/smart objects, environments and systems.

International Conference on Pervasive Intelligence and Computing (PICom)

PICom is intended to cover all kinds of these intelligent paradigms as well as their applications in various pervasive computing. PICom2013 is to bring together computer scientists, industrial engineers, and researchers to discuss and exchange experimental and theoretical results, novel designs, work-in-progress, experience, case studies, and trend-setting ideas in the areas of Pervasive Intelligence and Computing.

2.4.2 Workshops

International Workshop on Data Engineering for Wireless and Mobile Access (MobiDE)

MobiDE serves as a forum for researchers and technologists to discuss the state of the art, present their contributions, and set future directions in data management for mobile and wireless access. The topics of interest related to mobile and wireless data engineering include, but are not limited to: static and mobile sensor network databases, mobile database management in the Cloud, pervasive computing, and context-aware data access and query processing.

International Workshop on Internet-of-Things Communications and Networking (IoT-CN)

The International Workshop on Internet-of-Things Communications and Networking (IoT-CN) is particularly focusing on all aspects of networking that aims at providing a forum for researchers as well as practitioners from industry and government to share advances on all aspects of the IoT-enabling technologies (RFID, sensors, Cloud, standardization etc.).

2.4.3 Journals

Communications Surveys & Tutorials (IEEE)

The IEEE Communications Surveys & Tutorials is a free online journal published by the IEEE Communications Society for tutorials and surveys covering all aspects of the communications field. It provides researchers and other communications professionals with the ideal venue for publishing on-line tutorials and surveys which are exposed to an unlimited global audience. Topics of interest include all areas of communications and networking, including but not limited to: communication Networking, and networking technology, applications, and services; security, trust, and privacy in communication networking; Smart Grid communications and networking; network management; wireless and mobile networks, including ad hoc and sensor networks

Internet Computing (IEEE)

IEEE Internet Computing provides journal-quality evaluation and review of emerging and maturing Internet technologies and applications. The magazine targets the technical and scientific Internet user communities as well as designers and developers of Internet-based applications and enabling technologies. It publishes refereed articles on the latest developments and key trends in Internet technologies and applications. A crossroads between academic researchers and software professionals, the magazine presents novel content from academic and industry experts on a wide range of topics, including applications, architectures, information management, middleware, policies, security, and standards. In addition to peer-reviewed articles, Internet Computing features industry reports, surveys, tutorials, columns, and news.

Pervasive and Mobile Computing (Elsevier)

The Pervasive and Mobile Computing Journal (PMC) is a professional, peer-reviewed journal that publishes high-quality scientific articles (both theory and practice) covering all aspects of pervasive computing and communications. It captures the tremendous developments in such technologies as wireless communications and networking, mobile computing and handheld devices, embedded systems, wearable computers, sensors, RFID tags, smart spaces, middleware, software agents, and the like, have led to the evolution of pervasive computing platforms as natural successor of mobile computing systems.

Pervasive Computing (IEEE)

IEEE Pervasive Computing delivers the latest peer-reviewed developments in pervasive, mobile, and ubiquitous computing to developers, researchers, and educators who want to keep abreast of rapid technology change. With content that is accessible and useful today, the quarterly publication acts as a catalyst for realizing the vision of pervasive (or ubiquitous) computing. The essence of this vision is the creation of environments saturated with computing and wireless communication, yet gracefully integrated with human users. Many key building blocks needed for this vision are now viable commercial technologies: wearable and handheld computers, high-bandwidth wireless communication, location-sensing mechanisms, and so on. The challenge is to combine these technologies into a seamless whole. This will require a multidisciplinary approach, involving hardware designers, wireless engineers, human-computer interaction specialists, software agent developers, and so on.

Pervasive Computing and Communications (Emerald)

The Journal of Pervasive Computing and Communications provides an international premier channel to report, discuss and exchange experimental or theoretical results, novel algorithms, design methodologies, work-in-progress, experiences, case studies, and trend-setting ideas in the emerging field of pervasive computing and communications as well as potential future directions and issues. The objective of the journal is to provide a descriptive, analytical, and comprehensive assessment of factors, trends, and issues in the ever-changing field of pervasive computing. This authoritative research-based publication also offers in-depth explanations of mobile solutions and their specific applications areas. This timely reference source provides direction for future researchers to pursue when examining issues in the field, and is also the perfect tool for practitioners interested in applying pioneering concepts in practical situations.

Sensor Journal (IEEE)

The IEEE Sensors Journal is a peer-reviewed, monthly online, bi-monthly print journal devoted to sensors and sensing phenomena. The topics of interest include all types of sensing: mechanical, thermal, optical, magnetic, radiation, microwave, chemical, biological, mass, etc., both on the macro and micro levels. Also of interest are sensor packaging, interconnection, modeling, telemetry, CAD, stability (including both systematics and noise), characterization, sensor signal processing, sensor arrays (e.g., e-nose), sensor systems, sensor-actuators, and applications. The Journal was founded in part to create a high quality archival sensors publication whose subscription fees are within the reach of individual practitioners in the field. In our opinion, this goal has been achieved.

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Transactions on Communications (IEEE) IEEE Transactions on Communications is a top journal in computer science focusing on all telecommunication including telephone, telegraphy, facsimile, and point-to-point television, by electromagnetic propagation, including radio; wire; aerial, underground, coaxial, and submarine cables; waveguides, communication satellites, and lasers. Other topics include marine, aeronautical, space, and fixed station services; repeaters, radio relaying, signal storage and regeneration; telecommunication error detection and correction; multiplexing and carrier techniques; communication switching systems; data communications; and communication theory.
Transactions on Knowledge and Data Engineering (IEEE) IEEE Transactions on Knowledge and Data Engineering is designed to inform researchers, developers, managers, strategic planners, users, and others interested in state-of-the-art and state-of-the-practice activities in the knowledge and data engineering area. This includes well-defined theoretical results and empirical studies that have potential impact on the acquisition, management, storage, and graceful degeneration of knowledge and data, as well as in provision of knowledge and data services. Of further interest is the role of knowledge and data in the development and use of information systems and in the simplification of software and hardware development and maintenance. Specific topics include, but are not limited to: (a) knowledge discovery and data mining, (b) data modelling and management, (c) underlying computational platforms for knowledge and data engineering tools, techniques and systems, and (d) emerging knowledge and data engineering applications
Transactions on Parallel and Distributed Systems (IEEE) IEEE Transactions on Parallel and Distributed Systems publishes a range of papers, comments on previously published papers, and survey articles that deal with the parallel and distributed systems research. Topics in parallel systems include: (a) the design, analysis, implementation, of parallel architectures, (b) parallel languages and compilers, scheduling and task partitioning; operating systems, etc., and (c) models of computation, the analysis and design of parallel algorithms, etc. Topics in distributed systems include: (a) models of computation, algorithms and theory for building distributed system infrastructure and for running distributed applications; (b) systems and middleware design for scalable distributed systems; resource sharing and allocation; fault resilience; security and privacy issues; (c) Internet computing and distributed applications: such as grid systems, autonomic computing, web services, distributed event processing, information centric networking, online social networks, Cloud computing, data centres, and data management in the Internet; (d) emerging applications and networking technologies for distributed systems such as wireless networks, mobile software systems, and cyber-physical systems.
Transactions on Sensor Networks (ACM) The Transactions on Sensor networks serves as a central, archival venue for the interdisciplinary sensor network research community. It covers research contributions that introduce new concepts, techniques, analyses, or architectures, as well as applied contributions that report on development of new tools and systems or experiences and experiments with high-impact, innovative applications. The Transactions places special attention to contributions on systemic approaches to sensor networks. Among other topics, the journal covers: applications of sensor and actuator networks, data storage and query processing, foundations of sensor networks, Sensor fusion and distributed inference, and in-network processing and aggregation.
Journal of Grid Computing (Springer) The Journal of Grid Computing explores an emerging technology that enables large-scale resource sharing problem solving within distributed, loosely coordinated groups sometimes termed "virtual organizations". Coverage includes protocols, security, scaling and more. Although the advantages of this technology for classes of applications have been acknowledged, research in a variety of disciplines is needed to broaden the applicability and scope of the current body of knowledge. This journal fills the need, covering such topics as protocols, middleware, and services, security, discovery, sharing, scaling, and more.

3 PAPERS AND PUBLICATIONS

3.1 Overview

During the reporting period, VITAL has published the following papers:

1. Roudy Dagher, Nathalie Mitton, Ibrahim Amadou, «Towards WSN-aided Navigation for Vehicles in Smart Cities: An Application Case Study», 1st International IEEE Percom Workshop on Pervasive Systems for Smart Cities (PerCity 2014) (2014).
2. Riccardo Petrolo, Nathalie Mitton, John Soldatos, M. Hauswirth, G. Schiele. «Integrating Wireless Sensor Networks within a City Cloud», Self-Organizing Wireless Access Networks for Smart City (SWANSITY), in conjunction with IEEE SECON 2014, Singapore June 30th 2014.
3. Sila Ozen, Sema Oktug, "Adaptive Sink Selection for WSNs Using Forwarder Set Based Dynamic Duty Cycling," Self-Organizing Wireless Access Networks for Smart City (SWANSITY), in conjunction with IEEE SECON 2014, Singapore June 30th 2014.
4. Gregor Schiele, John Soldatos and Nathalie Mitton, «Moving Towards Interoperable Internet-of-Things Deployments in Smart Cities» in ERCIM News, Special Theme: «Smart Cities», Number 98 July 2014.
5. R. Petrolo, V. Loscrí, N. Mitton, « Towards a Smart City based on Cloud of Things»,*WiMobCity – International ACM MobiHoc Workshop on Wireless and Mobile Technologies for Smart Cities, Aug 2014, Philadelphia, United States.*
6. Valeria Loscri, Michele Magno, Rosario Surace,Video Surveillance Applications based on ultra-low power sensors," in the 1st International Workshop on Autonomous Monitoring and Networking (WAMN'14), in conjunction with ADHOCNETS, 18-19 August 2014.
7. Danh Le Phuoc, Le Tuan Anh, Gregor Schiele and Manfred Hauswirth, «Querying Heterogeneous Personal Information On The Go» 13th International Semantic Web Conference (ISWC'14), Trentino, Italy, October 2014.
8. R. Petrolo, V. Loscrí, N. Mitton, «Towards a smart city based on cloud of things, a survey on the smart city vision and paradigms» Transactions on Emerging Telecommunications Technologies, Wiley, 2015, DOI: 10.1002/ett.2931.
9. R. Petrolo, R. Morabito, V. Loscrí. «Design of a Gateway for the Cloud of Things» International conference Cloudification of the Internet of Things (CIoT'15), June 2015, Paris, France.
10. Aikaterini Roukounaki, John Soldatos, Riccardo Petrolo, Valeria Loscri, Nathalie Mitton "Visual Development Environment for Semantically Interoperable Smart Cities Applications", in the Proceedings of the EAI International Conference on Interoperability in IoT, October 26-27, Rome 2015.

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3.2 Detailed Description of Publications

The following tables provide more information about each one of the above-listed publications, based on the publication template specified as part of Deliverable D7.1.

Full citation	Roudy Dagher, Nathalie Mitton, Ibrahim Amadou, «Towards WSN-aided Navigation for Vehicles in Smart Cities: An Application Case Study», 1st International IEEE Percom Workshop on Pervasive Systems for Smart Cities (PerCity 2014) (2014).
Responsible	Nathalie Mitton
Partners Involved	Inria
Hash tags for Social Media Dissemination	#interoperability #iot #navigation
Dissemination Level	International
Type of Audience	Select one or more of the following: 1. Academia and Research 2. Industry
URL	http://hal.inria.fr/hal-00923611/en
Attachment	See VITAL web site

Table 1: Information about VITAL Publication in IEEE PerCom

Full citation	Riccardo Petrolo, Nathalie Mitton, John Soldatos, M. Hauswirth, G. Schiele. «Integrating Wireless Sensor Networks within a City Cloud», Self-Organizing Wireless Access Networks for Smart City (SWANSITY), in conjunction with IEEE SECON 2014, Singapore June 30th 2014.
Responsible	Nathalie Mitton
Partners Involved	Inria, AIT, NUIG
Hash tags for Social Media Dissemination	#interoperability #iot #cloud #FIT #OpenIoT
Dissemination Level	International
Type of Audience	Select one or more of the following: 1. Academia and Research 2. Industry
URL	http://hal.inria.fr/hal-00987081/en
Attachment	See VITAL web site

Table 2: Information about VITAL Publication in IEEE SECON 2014

Full citation	Sila Ozen, Sema Oktug, «Adaptive Sink Selection for WSNs Using Forwarder Set Based Dynamic Duty Cycling», Self-Organizing Wireless Access Networks for Smart City (SWANSITY), in conjunction with IEEE SECON 2014, Singapore June 30th 2014.
Responsible	Sema Oktug
Partners Involved	ITU
Hash tags for Social Media Dissemination	#sensornetworks #adaptive #routing
Dissemination Level	International

Type of Audience	Select one or more of the following: 1. Academia and Research
URL	http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=6979697&sortType%3Dasc_p_Sequence%26filter%3DAND (p_IS_Number%3A6979690)
Attachment	See VITAL web site

Table 3: Information about VITAL Publication in IEEE SECON 2014

Full citation	Gregor Schiele, John Soldatos and Nathalie Mitton, «Moving Towards Interoperable Internet-of-Things Deployments in Smart Cities» in ERCIM News, Special Theme: «Smart Cities», Number 98 July 2014.
Responsible	Gregor Schiele
Partners Involved	AIT, INRIA, NUIG
Hash tags for Social Media Dissemination	#interoperability #iot
Dissemination Level	International
Type of Audience	Select one or more of the following: 2. Enterprises and other beneficiaries 3. Academia and Research 4. Industry 5. Public Administration 6. IERC Cluster
URL	http://ercim-news.ercim.eu/en98/special/moving-towards-interoperable-internet-of-things-deployments-in-smart-cities
Attachment	See VITAL web site

Table 4: Information about VITAL Publication in IEEE SECON 2014

Full citation	R. Petrolo, V. Loscrí, N. Mitton, «Towards a Smart City based on Cloud of Things» *WiMobCity – International ACM MobiHoc Workshop on Wireless and Mobile Technologies for Smart Cities, Aug 2014, Philadelphia, United States.*
Responsible	Nathalie Mitton
Partners Involved	Inria
Hash tags for Social Media Dissemination	#interoperability #iot #cloud #FIT #OpenIoT
Dissemination Level	International
Type of Audience	Select one or more of the following: 1. Academia and Research 2. Industry
URL	http://hal.inria.fr/hal-01004489/en
Attachment	See VITAL web site

Table 5: Information about VITAL Publication in ACM WiMobCity

Full citation	Valeria Loscri , Michele Magno , Rosario Surace,Video Surveillance Applications based on ultra-low power sensors," in the 1st International Workshop on Autonomous Monitoring and Networking (WAMN'14), in conjunction with ADHOCNETS, 18-19 August 2014.
Responsible	Valeria Loscri
Partners Involved	Inria
Hash tags for Social Media Dissemination	#interoperability #iot #cloud #FIT #OpenIoT
Dissemination Level	International
Type of Audience	Select one or more of the following: 1. Academia and Research 2. Industry
URL	N/A
Attachment	See VITAL web site

Table 6: Information about VITAL Publication in WAMN (in conj. W. Adhocnets)

Full citation	Danh Le Phuoc, Le Tuan Anh, Gregor Schiele and Manfred Hauswirth, «Querying Heterogeneous Personal Information On The Go» 13th International Semantic Web Conference (ISWC'14), Trentino, Italy, October 2014.
Responsible	Danh Le Phuoc
Partners Involved	NUIG
Hash tags for Social Media Dissemination	#linkeddata #android
Dissemination Level	International
Type of Audience	Select one or more of the following: 1. Academia and Research 2. Industry
URL	N/A
Attachment	See VITAL web site

Table 7: Information about VITAL Publication in ISWC'14

Full citation	R. Petrolo, R. Morabito, V. Loscrí. «Design of a Gateway for the Cloud of Things» International conference Cloudification of the Internet of Things (CIoT'15), June 2015, Paris, France.
Responsible	Valeria Loscri
Partners Involved	Inria
Hash tags for Social Media Dissemination	#CloudOfThings #iot #cloud #virtualization
Dissemination Level	International
Type of Audience	Select one or more of the following: 1. Academia and Research 2. Industry
URL	N/A
Attachment	See VITAL web site

Table 8: Information about VITAL Publication in CIoT'15

Full citation	R. Petrolo, V. Loscrí, N. Mitton, «Towards a smart city based on cloud of things, a survey on the smart city vision and paradigms» Transactions on Emerging Telecommunications Technologies, Wiley, 2015, DOI: 10.1002/ett.2931.
Responsible	Nathalie Mitton
Partners Involved	Inria
Hash tags for Social Media Dissemination	#interoperability #iot #cloud #smartcity
Dissemination Level	International
Type of Audience	Select one or more of the following: 1. Academia and Research 2. Industry
URL	N/A
Attachment	See VITAL web site

Table 9: Information about VITAL Publication in ETT'15

Full citation	Aikaterini Roukounaki, John Soldatos, Riccardo Petrolo, Valeria Loscri, Nathalie Mitton "Visual Development Environment for Semantically Interoperable Smart Cities Applications", in the Proceedings of the EAI International Conference on Interoperability in IoT, InterIoT '15 October 26-27, Rome 2015.
Responsible	Nathalie Mitton and John Soldatos
Partners Involved	AIT, INRIA
Hash tags for Social Media Dissemination	#vital #tool #interoperability #iot #cloud #smartcity
Dissemination Level	International
Type of Audience	Select one or more of the following: 1. Academia and Research 2. Industry
URL	http://interoperabilityiot.org/2015/show/home
Attachment	See VITAL web site

Table 10: Information about VITAL Publication in InterIoT '15

4 PRESENTATIONS IN CONFERENCES AND WORKSHOPS – PARTICIPATION IN EXHIBITIONS AND PUBLIC DEMONSTRATIONS

The following tables provide information regarding the project's publications in the scope of conferences and workshops. The relevant templates (established as part of deliverable D7.1) are used.

4.1 Joint Korea-EU-Workshop, September 2013

Table 11: Information about VITAL's participation in the EU-Korea workshop

Type	Participation in Workshop / Summit
Event Name	Joint Korea-EU-Workshop
Venue	Seoul, South Korea
Date	30.9.+1.10. 2013
Event objectives	Coordination with partners from South Korea, dissemination
Size of audience (approx.)	50
Dissemination Level	International
URL	Provide a relevant URL, if one exists
Description of activity	Gregor Schiele gave a presentation about the goals of VITAL and the technologies used in it. This provided a basis for discussions with partners from Europe as well as from South Korea about possible connection points and collaborations.
Title	Linked Data Technologies for the Internet of Things
Presenter	Gregor Schiele
Other Partners Involved	N/A
Type of Audience	Select one or more of the following: 1. Enterprises and other beneficiaries 2. Academia and Research 3. Industry 4. Public Administration 5. IERC Cluster 6. FIA / NESSI, etc. (please specify which one)
Size of audience (approx.)	40
Dissemination Level	International
Hash tags for Social Media Dissemination	#iot #eu #korea
URL	http://eeas.europa.eu/delegations/south_korea/press_corner/events/2013/20130930_en.htm
Relevant Resources	See VITAL web site

4.2 SUBICO 2013 (in the scope of Informatik 2013), Koblenz, Germany

Table 12: Information about VITAL's participation in the SUBICO workshop

Type	Participation in Workshop
Event Name	Sozio-technisches Systemdesign im Zeitalter des Ubiquitous Computing (SUBICO 2013), a workshop at the Informatik 2013 conference
Venue	Koblenz, Germany
Date	September 2013
Event objectives	Scientific event
Size of audience (approx.)	10
Dissemination Level	National
URL	http://www.uni-kassel.de/eecs/iteg/venus/konferenzen/subico-2013.html
Description of activity	Gregor Schiele gave an invited keynote about the topic of linked data technologies for the internet of things. This included a discussion of the main challenges in IoT systems, possible solutions and how VITAL will address these issues.
Title	Linked Data Technologien für das Internet der Dinge (Linked Data technologies for the Internet of Things)
Presenter	Gregor Schiele
Other Partners Involved	N/A
Type of Audience	1. Academia and Research 2. Industry 3. Public Administration 4. Other (please specify) the German association of computer scientists
Hash tags for Social Media Dissemination	N/A

4.3 Future Internet Assembly (preFIA workshop co-organized by VITAL), March 17, 2014, Athens, Greece

Table 13: Information about VITAL's participation in FIA Athens, March 2014

Type	Participation in Workshop – Co-Organisation of the Workshop titled «*IoT as a proponent of new Business Models and Social Engagement in Smart Cities*»
Event Name	Future Internet Assembly, Athens, Greece (preFIA workshops)
Venue	Athens, Greece
Date	The date that the event took place
Event objectives	To promote discussions and common understanding associated with the following crucial issues of IoT deployments in smart cities: • IoT as enabler of new business opportunities in SCs. • The role of SC stakeholders in the development of a successful business ecosystem. • The role of communities and social media/networks in IoT applications. • Incentives and barriers for citizens' engagement in SCs.

Size of audience (approx.)	40 participants
Dissemination Level	International (mainly EU)
URL	http://fi-athens.eu/
Description of activity	(~10 lines)
Title	«Social Networks as a means for Citizens Participation in smart cities»
Presenter	John Soldatos, Athens Information Technology
Other Partners Involved	N/A
Type of Audience	Select one or more of the following: 1. Academia and Research 2 Industry 3 Public Administration 4 IERC Cluster 5 FIA 5. Other (please specify): EU Projects
Hash tags for Social Media Dissemination	#fiaathens
URL	http://fi-athens.eu/program
Relevant Resources	See FIA Conference web site for a copy of the presentation

4.4 IOT Week, June 17-20, 2014, London, UK

Table 14: Information about VITAL's participation in the IOT-Week

Type	Participation in Conference
Event Name	IOT Week 2014
Venue	London, UK
Date	19. June 2014
Event objectives	Coordination of prototype activities, dissemination
Size of audience (approx.)	30
Dissemination Level	International
URL	http://www.iot-week.eu/iot_innovation.html
Description of activity	Gregor Schiele gave a presentation regarding the planned prototypes and demonstrators of VITAL as part of the session of activity chain AC3 of the IERC.
Title	VITAL: Integrating Silo IoT Systems
Presenter	Gregor Schiele
Other Partners Involved	AIT

Type of Audience	Select one or more of the following: 6 Enterprises and other beneficiaries 7 Academia and Research 8 Industry 9 Public Administration 10 IERC Cluster
Size of audience (approx.)	30
Dissemination Level	International
Hash tags for Social Media Dissemination	#iot #iotweek #vital
URL	http://www.iot-week.eu/iot_innovation.html
Relevant Resources	See VITAL web site

4.5 OpenIoT Summer School, August 5-8, 2014, Galway, Ireland

Table 15: Information about VITAL's participation in OpenIoT's Summer School

Type	Participation in Summer School
Event Name	OpenIoT Summer School 2014
Venue	Galway, Ireland
Date	6 August 2014
Event objectives	Summer school to promote and train the usage of OpenIoT
Size of audience (approx.)	15
Dissemination Level	International
URL	http://openiot.eu/?q=summerschool2014
Description of activity	Gregor Schiele gave a presentation about VITAL and its relation with OpenIoT as well as how users of OpenIoT could benefit from VITAL.
Title	VITAL: Smart, secure & cost-effective integrated IoT deployments in Smart Cities
Presenter	Gregor Schiele
Other Partners Involved	none
Type of Audience	Select one or more of the following: 11 Enterprises and other beneficiaries 12 Academia and Research 13 Industry 14 IERC Cluster (AC3)
Size of audience (approx.)	15
Dissemination Level	International
Hash tags for Social Media Dissemination	#iot #openiot #vital
URL	http://openiot.eu/?q=summerschool2014

4.6 Web We Want Festival, September 27, 2014, London, UK

Table 16 - Information about VITAL's participation in Web We Want Festival

Type	Public festival organised by Sir Tim Berners-Lee
Event Name	Web We Want Festival – IoT Seminar
Venue	London Soutbank Centre
Date	28 September 2014
Event objectives	Public discussion of ethics of IoT and web technologies
Size of audience (approx.)	100
Dissemination Level	Public
URL	http://www.southbankcentre.co.uk/sites/default/files/Web%20We%20Want/WWWF-Sun.pdf
Description of activity	Public seminar chaired by Malcolm Garrett RDI, master of the UK Faculty of Royal Designers and creative director of VITAL partner Images&Co. The panel included Kevin Palmer and Matt Wade of Kin Design, Adrian Hon, author of A History of the Future in 100 Objects, and cognitive neuropsychologist and Google Glass Explorer Sarah Weldon.
Title	WebWeWant: The Internet of Things
Presenter	Malcolm Garrett
Other Partners Involved	N/A
Type of Audience	2 Public
Hash tags for Social Media Dissemination	#iot #webwewant

4.7 EU-USA IoT Workshop, October 08, 2014, Boston, MA, USA

Table 17 - Information about VITAL's participation in IoT EU-USA Workshop

Type	International Workshop
Event Name	EU-US Workshop Promoting Global IoT Success Stories
Venue	Massachusetts Institute of Technology (MIT) – Media Lab
Date	08 October 2014
Event objectives	EU-US workshop on IoT collaboration and Success Stories
Size of audience (approx.)	100
Dissemination Level	Public
URL	http://www.iot-conference.org/iot2014/workshop-on-promoting-global-iot-success-stories/ https://www.smart-action.eu/events/eu-us-iot-workshop-2014/

Description of activity	In the framework of the Intenret of Things 2014 conference BILAT 2.0 organises a workshop on EU-USA cooperation for Internet of Things. BILAT 2.0 is a project funded by the European Commission under FP7 (GA N° 312081). BILAT USA 2.0 aims at enhancing Science, Technology and Innovation collaboration between the EU and the US.
Title	Spotlighting Market Innovation with Open Platforms
Presenter	Dr. Martin Serrano
Other Partners Involved	N/A
Type of Audience	2 Enterprises and other beneficiaries 3 Academia and Research 4 Industry 5 Public Administration 6 ERC Cluster
Hash tags for Social Media Dissemination	#iot2014

4.8 IOT360, October 28-29, 2014, Rome, IT

Table 18 - Information about VITAL's participation in IOT360 Conference & Exhibition

Type	Participation in Conference
Event Name	IOT360
Venue	Rome, IT
Date	28-29 October 2014
Event objectives	A 360° perspective on IoT innovation, converting research into business.
Size of audience (approx.)	
Dissemination Level	International
URL	http://competitions.eai.eu/2014/iot360-ideas/startups/gallery/vital
Description of activity	VITAL Booth with Demos & Presentations
Title	VITAL and the future of Smart Cities
Presenter	Reply
Other Partners Involved	N/A
Type of Audience	2 Enterprises and other beneficiaries 3 Academia and Research 4 Industry 5 Public Administration 6 ERC Cluster
Size of audience (approx.)	20
Dissemination Level	International
Hash tags for Social Media Dissemination	#iot #iot360 #vital #smartcities
URL	http://iot-360.eu/2014/conferences

4.9 IoT Guildford Meetup, 20 January, 2015, Guildford, UK

Table 19 - Information about VITAL's participation in IoT Guildford Meetup

Type	MeetUp networking event
Event Name	IoT Guildford MeetUp
Venue	The Keystone, 3 Portsmouth Road, Guildford GU2 4BL
Date	20 January 2015
Event objectives	Networking with other IoT developers and projects in the local area and creating awareness of the VITAL project
Size of audience (approx.)	20
Dissemination Level	Local
URL	http://www.meetup.com/Internet-of-Things-Guildford/events/218875925/
Description of activity	Presentation of the VITAL project
Title	VITAL IoT for Smart Cities
Presenter	Kasper de Graaf (Images&Co)
Other Partners Involved	
Type of Audience	2 Academic 3 Professional
Hash tags for Social Media Dissemination	
URL	N/A

4.10 ICT2B, February 20–22, 2015, Frankfurt, DE

Table 20: Information about VITAL's participation in ICT2B Conference

Type	Innovation Runway Even
Event Name	ICT2 Business
Venue	Frankfurt (Germany)
Date	20-22 February 2015
Event objectives	Making ICT research idea convertible in business idea
Size of audience (approx.)	100-150
URL	https://www.ict2b.net/servlet/is/Entry.516.Display/#slideru
Description of activity	The VITAL project has been described in terms of business potential impact: https://www.ict2b.net/servlet/is/526/
Title	Virtualized programmable InTerfAces cost-effective IoT deployments in smart cities – VITAL
Presenter	Valeria Loscri
Other Partners Involved	N/A
Type of Audience	4

4.11 EC NetFutures Conference, March 25-26, 2015, Brussels, Belgium

Table 21 : Information about VITAL's participation in NetFutures Conference & Exhibition

Type	Conference
Event Name	Net Futures 2015
Venue	The EGG, Brussels
Date	March 25th -26th 2015
Event objectives	DG CONNECT
Size of audience (approx.)	500-1000
Dissemination Level	Public
URL	
Description of activity	VITAL Booth with Demos & Presentations
Title	Virtualized Programmable Interfaces for innovative cost-effective IoT deployments in Smart Cities - *Complex Event Processing (CEP) on Istanbul Traffic Data*
Presenter	ATOS –ISTANBUL
Other Partners Involved	NUIG
Type of Audience	5 Researchers; 6 Business Community
Size of audience (approx.)	300-500
Dissemination Level	Public
Hash tags for Social Media Dissemination	
URL	http://netfutures2015.eu/

4.12 SIDO Conference, April 7-8, 2015, Lyon, France

Table 22: Information about VITAL's participation in SIDO Conference & Exhibition

Type	Industrial Conference
Event Name	Sido Conference
Venue	Palais du Congres, Lyon,
Date	April 7th -8th , 2015
Event objectives	Industrial Dissemination
Size of audience (approx.)	5000
Dissemination Level	Public
URL	
Description of activity	VITAL Booth with Demos & Presentations
Title	Virtualized Programmable Interfaces for innovative cost-effective IoT deployments in Smart Cities - *Complex Event Processing (CEP) on Istanbul Traffic Data*

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Presenter	ATOS – ISTANBUL
Other Partners Involved	Reply
Type of Audience	French IoT Business Community (mostly SMEs)
Size of audience (approx.)	5000
Dissemination Level	Public
Hash tags for Social Media Dissemination	
URL	http://www.sido-event.com

4.13 IoT Course, May 16-18, 2015, San Luis Obispo, California, USA.

Table 23: Information about VITAL's participation in IoT Week 2015 Conference & Exhibition

Type	Participation in Industrial Internet of Things Course
Event Name	IoT Course Summer 2015
Venue	San Luis Obispo – California State University (CalPoly)
Date	May 06-20, 2015
Event objectives	Smart City Solutions
Size of audience (approx.)	20
Dissemination Level	International
URL	
Description of activity	Dr. Martin Serrano gave the tutorial on Tools for Smart Cities: - "VITAL and OpenIoT Platforms. - "Smart City Solutions using Internet of things".
Title	The Future of Smart City Open Platforms
Presenter	NUIG/Insight
Other Partners Involved	AIT, SiLo, IMM Live Demos
Type of Audience	International
Hash tags for Social Media Dissemination	#IoTweek
URL	http://users.csc.calpoly.edu/~foaad/IOTS15.pdf

4.14 IoT Week, June 16-18, 2015, Lisbon, Portugal

Table 24: Information about VITAL's participation in IoT Week 2015 Conference & Exhibition

Type	Participation in Conference and exhibition
Event Name	IoT Week 2015
Venue	Lisbon
Date	June 16-18, 2015

Event objectives	Towards Large-Scale Internet-of-Things deployments
Size of audience (approx.)	200
Dissemination Level	International
URL	http://iot-week.eu/wp-content/uploads/2015/07/40-Open-Platforms-leading-Innovation-MSerrano.pdf https://photos.google.com/share/AF1QipOWBj2TnW-Gh5bEw4SzUZEPiyp1fAsWWKW4StrgKBgzlayvwIiA6cCTYWhXJR3PQQ?key=SHR3bEEzRDZIWHJpSksyNzVWNGhTaUtGTVh3MzJ3
Description of activity	Prof. Martin Serrano gave a presentation to introduce the panels: - "Open Platforms Leading Innovation". The Intro was about the open source adoption, the tendencies in industry explaining the model on "direct innovation" from Research Success to Industry Adoption. - "Action plan on Semantic Interoperability for large scale IoT".
Title	Open Platforms Leading Innovation
Presenter	NUIG/Insight
Other Partners Involved	ATOS, REPLY - VITAL Booth with Live Demos
Type of Audience	International
Hash tags for Social Media Dissemination	#IoTweek
URL	http://iot-week.eu

4.15 RESCOM Summer School, June 22-26, 2015, Lyon, France

Table 25: Information about VITAL's participation in RESCOM Summer School

Type	Organization and participation to summer school
Event Name	RESCOM Summer School on Smart Cities
Venue	Lyon
Date	18-22 June 2015
Event objectives	Train researchers and industrials on state of the art Smart Cities, networking
Size of audience (approx.)	70
Dissemination Level	PhD and Master Students, researchers, industrials
URL	https://project.inria.fr/ersc/
Description of activity	Organization of the summer school, program setting (Inria) and VITAL presentation (AIT)
Title	Internet-of-Things technologies for Smarter Cities
Presenter	John Soldatos
Other Partners Involved	Inria (Nathalie Mitton, Riccardo Petrolo)
Dissemination Level	Mainly French and European
Hash tags for Social Media Dissemination	#RescomSmartCities

4.16 Joint CHINA-EU-Workshop, September 2015

Table 26: Information about VITAL's participation in the EU-Korea workshop

Type	Participation in Workshop / Summit
Event Name	Joint China-EU-Workshop
Venue	Beijing, China
Date	02.09.2013
Event objectives	Coordination with partners from China, dissemination
Size of audience (approx.)	30
Dissemination Level	International
URL	Provide a relevant URL, if one exists
Description of activity	Dr. Martin Serrano gave a presentation about the progress and current implementation of VITAL platform and the overall technologies used in it. This provided a basis for discussions within IoT Experts from Europe as well as from China and also drove the connecting points towards collaboration.
Title	Linked Data Technologies for the Internet of Things
Presenter	Dr. Martin Serrano
Other Partners Involved	N/A
Type of Audience	Select one or more of the following: 1. Enterprises and other beneficiaries 2. Academia and Research 3. Industry 4. Public Administration
Size of audience (approx.)	40
Dissemination Level	International
Hash tags for Social Media Dissemination	#iot #eu #china
URL	http://eeas.europa.eu/delegations/south_korea/press_corner/events/2013/20130930_en.htm
Relevant Resources	See VITAL web site

4.17 Open IoT Summer School, September 21-25, 2015, Galway, Ireland

Table 27: Information about VITAL's participation in OpenIoT's Summer School

Type	Participation in Summer School
Event Name	Open IoT Summer School 2015
Venue	Galway, Ireland
Date	23 September 2015
Event objectives	Summer school to promote Federation, Service Openess and Semantic Interoperability
Size of audience (approx.)	30

Dissemination Level	International
URL	https://www.siliconrepublic.com/machines/2015/10/07/iot-summer-school-insight
Description of activity	Dr. Martin Serrano gave a presentation about VITAL and its relation with the theme of the Open IoT summer School as well as how users could benefit from VITAL.
Title	VITAL: Smart, secure & cost-effective integrated IoT deployments in Smart Cities
Presenter	Dr. Martin Serrano
Other Partners Involved	All consortium (co-located VITAL Project meeting)
Type of Audience	Select one or more of the following: 2 Enterprises and other beneficiaries 3 Academia and Research 4 Industry
Size of audience (approx.)	14
Dissemination Level	International
Hash tags for Social Media Dissemination	#iot #openiot #vital
URL	https://www.eventbrite.com/e/2015-open-internet-of-things-summer-school-tickets-18320619466?aff=erelexpcat

4.18 Open Agile Smart Cities Ireland Launch, September 28, 2015, Dublin, Ireland

Table 28: Information about VITAL's participation in OASC Ireland

Type	Organization and Presentation VITAL Platform tools
Event Name	Open Agile Smart Cities Ireland Initiative
Venue	Dublin
Date	28 September 2015
Event objectives	Train researchers and industrials on state of the art Smart Cities, networking
Size of audience (approx.)	20
Dissemination Level	Policy makers, Academics and Citizens
URL	http://connectedsmartcities.eu/three-irish-cities-join-open-and-agile-smart-cities/ http://connectedsmartcities.eu
Description of activity	A workshop to launch the connected smart cities initiative on Open Agile Smart Cities (OASC)
Title	Beyond Smart regions: Internet-of-Things technologies for Smarter Cities
Presenter	Dr. Martin Serrano
Other Partners Involved	NA
Dissemination Level	International
Hash tags for Social Media Dissemination	#IoT #Vital-FP7, #OASC

5 CONFERENCES, WORKSHOPS AND SESSIONS ORGANIZED

5.1 PerCity 2014

NUIG in cooperation with the coordinator of the FP7 project GAMBAS organised the first international IEEE workshop on pervasive systems for smart cities at the IEEE conference on Pervasive Computing and Communications (PerCom2014) in Budapest, Hungary in March 2014. PerCom is one of the leading and most prestigious conferences in the area of pervasive computing. Workshops are highly competitive. The goal of PerCity was to bring together researchers, practitioners and industry experts from both the pervasive computing community and the smart city and IoT community. The workshop was very successful and received very positive feed-back from its participants. As a scientific workshop, PerCity included a keynote given by Manuel Serrano Matoses (ETRA group), a number of paper presentations from international scientists and a panel discussion about the future of smart city and pervasive technologies. We are currently preparing the next iteration of the workshop, PerCity 2015.

5.2 SWANSITY 2014

The SWANSITY (**S**elf-organizing **W**ireless **A**cces **N**etworks for **S**mart c**ITY**) workshop, part of IEEE SECON 2014, took place in Singapore at NUS (National University of Singapore). The workshop was organized by: Gianluca ALOI (University of Calabria), Marco DI FELICE (Univesity of Bologna), Valeria LOSCRI' (Inria Lille – Nord Europe), Pasquale PACE (University of Calabria) and Giuseppe RUGGERI (University Mediterranea of Reggio Calabria). The chairs of the 2 sessions were Pasquale Pace and Giuseppe Ruggeri.

The workshop aims to address issues regarding the fragmentation presents in the “smart city paradigm”. Novel network deployments are required to make the infrastructure of a smart-city able to control and decide its behaviour like a living object rather than like a passive entity. These solutions can take advantage of existing studies on self-organizing networks that are able to modify their functionalities through the cooperation and self-configuration of the wireless nodes, without any human intervention. The topics of interests for the workshop included the following issues:

- Models of network components’ interactions on a smart-city;
- Techniques and tools for modelling self-organizing wireless networks on large-scale urban environments;
- Self-organizing wireless networks for pervasive urban access;
- Self-organizing and self-repairing wireless networks for disaster recovery;
- Evolutionary design of wireless network components and devices;
- Enabling technologies and algorithms for self-configuring wireless nodes;
- Cooperative Smart Objects supporting Wireless Networks Interoperability and Management;

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- Emerging collective intelligence in self-organizing wireless networks;
- Network virtualization for heterogeneous wireless networks;
- Controlled mobility algorithms for self-placing wireless networks.

The presented papers dealt with different aspects of the issues above-mentioned, in particular:

- *"Self-organizing TCP with Multiple Wireless LAN"* – Alvin Lim et al. (presented by Alvin Lim)
- *"Adaptive Sink Selection for WSNs Using Forwarder Set Based Dynamic Duty Cycling"* – Sila Ozen *et al.* (presented by Sila Ozen)
- *"NDN-Q: An NDN Query Mechanism for Efficient V2X Data Collection in Smart Cities"* – Wassim Drira et al. (presented by Wassim Drira)
- *"Maximizing the Route Capacity in Cognitive Radio Networks"* – Angela Sara Cacciapuoti *et al.* (presented by Francesco Marino)
- *"Simulating Dynamic Spectrum Access using ns-3 for Wireless Networks in Smart Environments"* – Abdulla Al-Ali *et al.*
- *"Database Access Strategy for TV White Space Cognitive Radio Networks"* – Marcello Caleffi *et al.* (presented by Francesco Marino)

VITAL contributed to the workshop with the paper: "*Integrating Wireless Sensor Networks within a City Cloud"* – Riccardo Petrolo *et al.* (presented by R. Petrolo) in which the authors present the integration between Open IoT and FIT IoT-lab. The proposed solution represents a way to reduce the gap existing in the Internet of Things fragmentation, and, moreover, allows users to develop smart city applications by interacting directly with sensors at different layers.

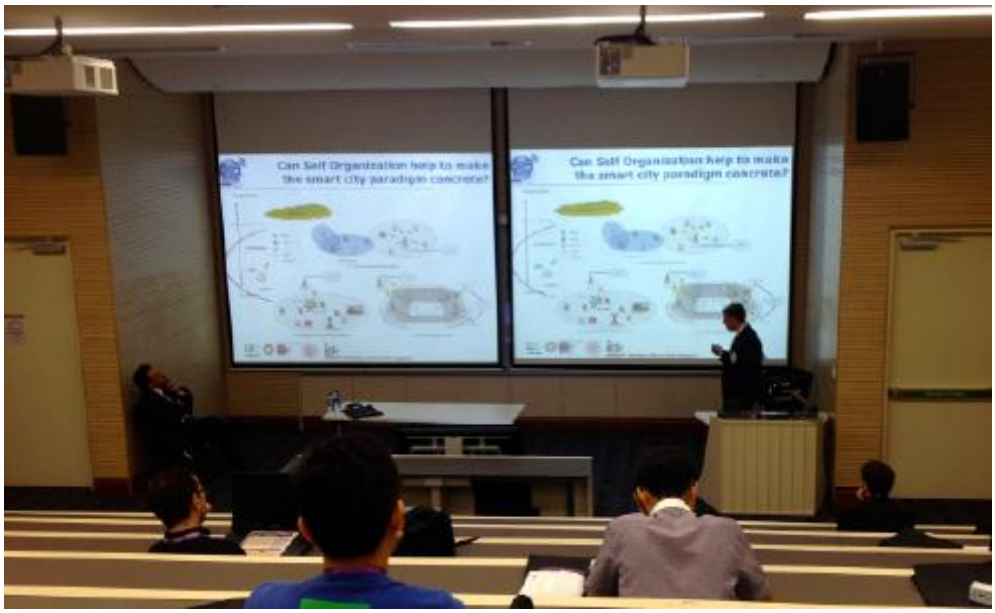

Figure 1: Picture from the SWANSITY workshop at IEEE SECON 2014

5.3 IOT Week, June 17-20, 2014, London, UK

IoT Week is one of the premier IoT annual events in Europe, attracting industry and academia from around the world. In 2014 it was hosted in London at the Grange Tower Bridge Hotel from 16–20 June. Building on the successes of previous years, IoT Week London has yet again confirmed wide interest in the emerging opportunities, creating a link between global business and the research communities, encouraging international collaboration and working groups. The VITAL project was represented by John Soldatos (AIT) and Gregor Schiele (NUIG), who organised a session on identification and discovery (IERC AC2). The session was highly successful with input from European, Chinese and US experts on IoT identification and discovery. More details about the organization of the session, the speakers, the follow-up discussions and the conclusion are illustrated in deliverable D7.3 – which details the IERC cluster related activities.

Figure 2: Dr. Sam Sun from CNRI, USA, presenting during the "IoT Identification and Discovery" Session of the IoT Week 2014 in London (session organized by VITAL)

5.4 VITAL Smart Cities Stakeholders Workshop, September 15-16, 2014, Istanbul, TR

A visit to the Istanbul Municipality Traffic Control Centre was an impressive and informative start to a two-day workshop held by the city partners of the VITAL project on 15 and 16 September. The workshop was held to brainstorm and decide the use cases in each city and how the project would be best served by their collaboration.

The workshop was held in the state of the art Suleyman Demirel Conference Centre at Istanbul Technical University and was attended by: Dr Gregor Schiele (NUIG), Dr Martin Serrano (NUIG), Prof Dr Eşref Adali (ITÜ), Prof Dr Sema Oktug (ITÜ), Ahmet Aris (ITÜ), Ilhan Son (ITÜ), Esma Dilek (IBB), Rabia Çevik (IBB), Simon Pitkeathley (CTU), Kasper de Graaf (Images&Co), Malcolm Garrett RDI (Images&Co), Dr Paul

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Lefrère (Images&Co), Dr Angelos Lenis (SingularLogic), Roberta Caso (Reply), Andrea Martelli (Reply), Paola del Zovo (Reply), Huseyin Umut Yildirim (Atos).

In addition, Sercan Erhan of IBB's GIS Directorate and Orhan Aktas of Itanbul Ulasim Metro and Railways company, made presentations about technology projects undertaken in their areas which could represent additional data sources to be used in the VITAL platform. Specific initiatives mentioned were City SDK (Service Development Kit for smart mobility) (IBB) and the IBM First of a Kind project linking Istanbul Ulasim, IBM and Vodafone to infer trips from mobile phone data.

Esma Dilek gave a guided tour round the IBB Traffic Control Centre and the applications and systems that currently exist (a number of of which can be accessed via the mobile app IBB CepTrafik). Angelos Lenis gave a presentation of the current state of play of the VITAL platform and user interface. At the end of the first day, Istanbul Municipality hosted a dinner for the consortium partners in the beautiful surroundings of Istinye Sosyal Tesisteri, a city-owned restaurant overlooking the marina at Istinye on the Bosphorus.

The partners reviewed the city use cases to be explored in the VITAL project, along with functionalities and features that should be provided by the VITAL platform in order to support them.

5.5 WebWeWant Festival, September, 2014, London (UK)

The WebWeWant Festival at London's South Bank Centre is an initiative by internet inventor Sir Tim Berners-Lee to promote public discussion and participation in the future development and direction of the internet. Malcolm Garrett, creative director of VITAL partners Images&Co and master of the UK's Faculty of Royal Designers, was invited to chair the IoT Symposium at the festival's opening weekend, taking the opportunity to present VITAL to a wider audience.

Figure 3 - Keynote speaker Malcolm Garrett (Images&Co)

5.6 «Bringing Space down to Earth-Smart Cities Services», Smart Cities Workshop, October 30th, 2014, Athens, Greece

SiLo's Dr Lenis Angelos has represented the VITAL team at a smart cities workshop in Athens, Greece. The workshop was titled: "«Bringing Space down to Earth-Smart Cities Services», and was devoted to the presentation of new smart city applications, technologies and platforms, with particular interest in how data from satellites or smart cities can be used to develop advanced services for end users. The VITAL presentation focused on the integration of heterogeneous sources to improve information, and how the tools created in the project (such as the orchestrator and the management tools developed in WP4 and WP5 respectively) can support the development of advanced applications.

The audience of the event included developers of mobile applications and young entrepreneurs (start-up owners) relating to mobile apps and satellite applications. The workshops was co-organized by HAMAC (Hellenic Association of Mobile Application Development Companies) and included sessions dedicated to smart cities platforms and applications. Therefore, the audience included developers of smart city applications and employees in the ICT and/or technology departments of local/regional governments. Furthermore, the workshop was co-organised by the FP7 SMART project (www.smartfp7.eu), which permitted a closer interaction and exchange of view between SMART and VITAL.

Figure 4: Dr. Lenis Angelis presenting VITAL during the «Bringing Space down to Earth-Smart Cities Services» smart cities workshop in Athens, Greece

5.7 IOT360, October 28-29, 2014, Rome, IT

IoT360 is an annual summit where those involved in IoT innovation have an opportunity to take "a 360 degree perspective" on current and anticipated developments. The VITAL team took part in the inaugural event last October at the Centro Congressi Ferrari in Rome, with Andrea Martelli and Dr Roberta Caso of Reply.

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The event featured an exhibition of new technologies from startups and established companies as well as demonstrations of European R&D projects. The VITAL team gave demonstrations and outlined the progress achieved in the first year of the project.

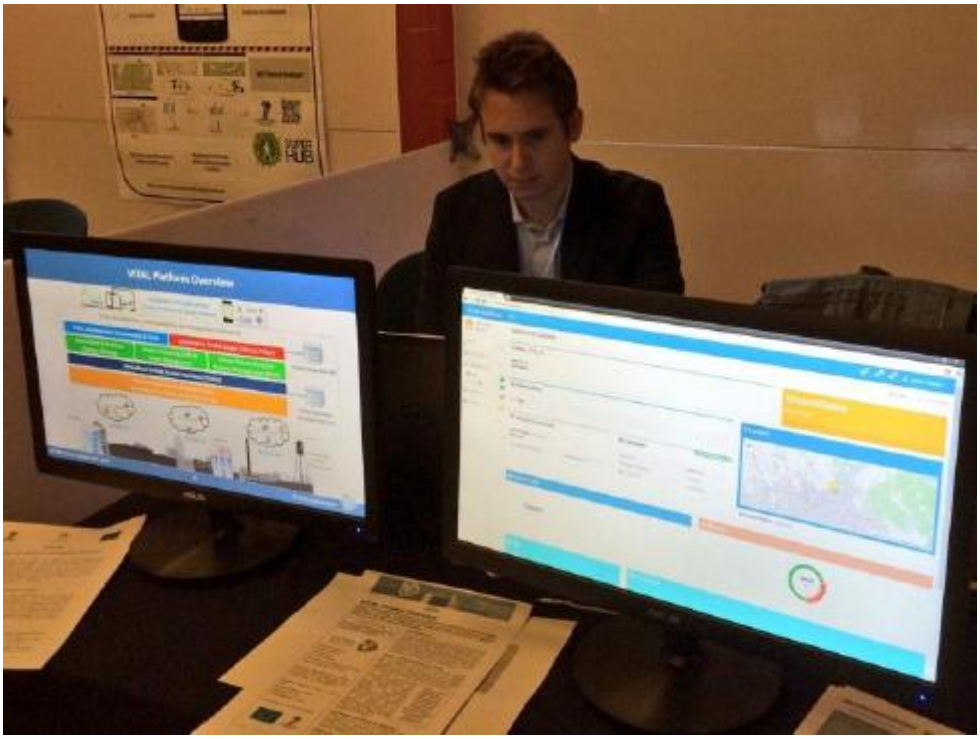

Figure 5 - VITAL Booth at IoT360

5.8 Smarter London Conference, November 28, 2014, London, UK

Smarter London was a research study, exhibition and conference jointly organised by New London Architecture and the Centre for Advanced Spatial Analysis at University College London. VITAL consortium partner Images&Co contributed to the study and created a video display used in the exhibition, which opened on 9 October.

On 28 November, Images&Co's Kasper de Graaf presented VITAL at the well-attended NLA conference alongside other speakers from key players including the GLA, UCL, Arup and Canary Wharf Group.

5.9 Smart City Workshop in connection with Holland-Turkey Business Forum, December 4, 2014, Istanbul, TR

4th Turkey Holland Business Forum took place during the Turkey Innovation Week 2014 in Istanbul on December 4th and 5th (http://www.hollandturkey.com/). The event consisted of a plenary session followed by a range of high-level workshops.

“Smart City Institute” of NOVUSENS facilitated the “Smart Cities” Workshop on 4th of December, 2014 co-organized with Embassy of Holland within the “Turkey Holland Business Forum” during the Turkey Innovation Week Conference

(http://www.hollandturkey.com/?page_id=10). At the workshop, Prof. Sema Oktug presented the VITAL project and its importance for smart city application developers. The speakers of the smart city workshop can be seen in the figure below.

Figure 6 – Smart City Workshop Speakers, Holland Turkey Business Forum (Dec. 4, 2014)

5.10 IoT Guildford Meetup, January 20, 2015, Guildford, UK

With a network of almost 200,000 people and 593 groups in 235 cities across 52 countries all over the world, Internet of Things MeetUps offer valuable opportunities for meeting with local developers and connecting grass roots thinking into the global debate about IoT.

On 20 January 2015, VITAL Strategy Board member Kasper de Graaf presented VITAL's concepts and development at one such MeetUp in Guildford, Surrey. Participants in the MeetUp included researchers from the University of Surrey, home of the 5G Innovation Centre and Coordinating Partner of Sociotal, an FP7-funded project aiming to create "a socially aware and citizen-centric Internet of Things". The discussion centred on VITAL's ability to connect IoT systems and services and the use case to support smarter working in Camden.

Figure 7 - Keynote speaker Kasper de Graaf (Images&Co)

5.11 ICT2B, February 20–22, 2015, Frankfurt, DE

From 20–22 February 2015, VITAL was presented at an Innovation Runway Event at the Lufthansa Training Centre at Seeheim in Germany. The event was organised by ICT2B, a dynamic multi-platform programme for matching innovative researchers with good business people to stimulate the creation of successful new ICT ventures. The interest in VITAL in this context is the radical shift in the development, deployment and operation of IoT applications that is offered by VITAL's introduction of an abstract virtualized digital layer that can operate across multiple IoT architectures, platforms and business contexts.

5.12 E-Government Success Stories, March 15-19, 2015, Kingdom of Bahrain

VITAL-IoT was invited to present the advances in developing the smart city operating system and the solution(s) for connecting the smart cities at the e-Government conference at Kingdom of Bahrain in the framework of the 2015 Bahrain International eGovernment Forum 15th-19th March 2015 “Smart Cities Beyond Innovation”. The VITA-IoT project was selected among the smart city projects in Europe as success project by its demonstrated progress and philosophy on enabling the future of smart cities. The architecture designs, the semantic-enabled model and the demonstrators and plan for continuous development and implementation have made of VITAL-IoT an example to follow for other projects in the smart cities domain. At the eGovernment Forum the main topic was enabling data for the citizens and the available solutions for open data. Other two smart city projects were also awarded with this recognition for their work on Privacy and security and for Energy Management smart city solutions.

Figure 8 - Keynote speaker Dr. J. Martin Serrano (DERI)

5.13 NetFutures Conference, March 25-26, 2015, Brussels, Belgium

NetFutures 2015: born to scale, held in Brussels on 25–26 March 2015, was the first edition of a new EU-organized conference building on the success of the Future Internet Assembly conferences.

Aiming to maximise the competitiveness of the European technology industry, NetFutures 2015 brought participants together to form an interconnected community of companies, organisations and individuals in the fields of Research & Innovation, Market Validation & Living Lab Research, Business Development, Entrepreneurship & Enterprise Strategy and Policy Making. VITAL presented its progress in integrating technologies for smart cities and visitors to the VITAL stand, including European Commission representatives, were able to view the VITAL Live Demos in action.

5.14 SIDO, April 23-24, 2015, Lyon, FR

VITAL-IoT has been showcased in the Salon de l'Internet des Object in Lyon from 23rd to 24th April 2015. This major event for IoT professional was a powerful mix of companies and research projects consortia presenting products, services and ideas around the wide landscape of connected objects. The VITAL booth was demonstrating the Istanbul site live demo where several sensors form the city of Istanbul are integrated in a monitoring tool that detect possible traffic problems in specific points of the city associated with the deployed sensors and that are now connected with the VITAL-IoT platform to provide such additional value services. The demonstrations attracted the attention of several visitors to observe how smart city future technologies can be adapted to current deployed systems re-using city infrastructures. A live demo of the HI REPLY gateway pulling data from a "smart sock" and enabling the collection of real-time information from smart citizens for city activity planning and monitoring has been also shown to complement and expand the VITAL interoperability potential. The VITAL project was sharing the boot with OPEN IOT and FIESTA EU-funded projects where a high level of synergy has been demonstrated.

Figure 9 - VITAL booth at SIDO

5.15 Exploitation and Technology Transfer Workshop, June 9th, 2015, Athens, Greece

AIT collaborates closely with companies that belong to its founding group of companies (i.e. the INTRACOM group of companies) in the exploitation of the project's results. INTRASOFT International is one of these companies, which is already active in the integration of smart city solutions for public sector accounts (e.g., municipalities and local governments). In June 9th, 2015, AIT invited managers of INTRASOFT International to participate in a short technology transfer workshop, where AIT presented its smart cities project and solutions. VITAL was one of the most prominent solutions that were presented, with particular emphasis on integration and semantic interoperability issues. Discussions on the applicability of VITAL solutions and technological components in the scope of enterprise smart cities solutions were accordingly held. The goals of the workshops were to update the managers about the latest research developments of AIT in smart cities, but also to explore how these solutions could be developed furthered in order to become part of Intrasoft's solutions portfolio. Overall, the workshop has a technology transfer and exploitation planning character, rather than dissemination purposes.

5.16 IoT Week, June 16-18, 2015, Lisbon, PT

IoT Week is one of the premier IoT annual events in Europe, engaging industry and academia from around the world to exhibit and discuss the Internet of Things of today and of the future. This year it was hosted in Lisbon at the Congress Centre from the 16th to the 18th June and focused mainly on the discussion and preparation of future Large Scale IoT deployments.

The three-day event was organized along three tracks, Research, Industry, and Innovation (one for day), and VITAL-IoT led the effort of organizing a session on "Large Scale IoT Analytics" during the day dedicated to Research (16 of June). The session was intended to provide a forum for presenting IoT analytics work that is on-going in the scope of IERC cluster projects. VITAL is one of these projects, since it provides modules and tools for the definition and execution of data analytics functions over data streams stemming from multiple IoT platforms/systems within a smart city.

The session included several presentations, which covered three main areas: (A) IoT analytics architectures and technologies; (B) IoT analytics applications in domain such as public safety and healthcare; (C) The ever important policy issues (including privacy and security issues).

Moreover, the session included a discussion on the potential development of a new activity chain on IoT analytics, including main research topics, prototype systems that could be developed, datasets that could be used for research and experimentation, potential interested parties and more.

VITAL was also one of the exhibitors during whole IoT Week, sharing the boot with OPEN IOT and FIESTA - EU-funded projects - and demonstrating the Istanbul and London live demos which attracted the attention of several visitors.

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Figure 10 – VITAL Booth at IoT Week 2015

5.17 RESCOM Summer School 2015

ResCom Summer School is an annual event organized by the GDR (Groupement De Recherche). The main objective is to federate the French and francophone “research and development” community. In 2015, ResCom was hosted in Lyon (France) from the 22-26 June, and the topic was “Smart City”. The VITAL project was represented by Nathalie Mitton (INRIA), who was a co-organizer of the school; John Soldatos (AIT), who was a keynote speaker; Riccardo Petrolo (INRIA) who was attending the event.

Figure 11 – Keynote speaker Prof. John Soldatos (AIT)

6 VITAL NEWSLETTER AND PRESS RELEASES

6.1 1st VITAL Newsletter

6.1.1 Overview

The first Public Newsletter of VITAL, edited by Roberta Caso (REPLY) and Kasper de Graaf (IMAGES) was circulated and posted online on 31 July 2014. The email newsletter was opened by 677 unique recipients in 46 countries, including 23 EU Member States and 2 Candidates. The Newsletter provides a general introduction to the project with information about the Project Concepts, the Partners and the status of the Deliverables. Details are provided about the planned architecture of the VITAL platforms and the background IoT platforms selected for inclusion during the development phase. Reports are given of four noteworthy events in which VITAL has participated: the IoT Week in London, Swansity in Singapore, the IoT World Forum and a liaison meeting of London-based partners of FP7-funded ICT projects to explore synergies and collaboration.

6.1.2 Detailed circulation report

VITAL Newsletter #1 was sent to a total of 8876 recipients in eight lists, of which five (totalling 406 recipients) were qualified to some degree in relation to the VITAL project. The three other lists (totalling 8470) were worldwide and European contacts in the smart city field built up over some years. Using this mix of recipients enabled us to achieve a broad reach and to use this first newsletter to establish a sound foundation for building effective email communications over the period of the project. Of the total circulated, 4455 emails bounced (50.2%) and of the remaining 4421, the number opened by unique recipients was 677 (15.3% of delivered emails). There were 14 clicks and a total of 33 recipients unsubscribed, of which 4 were from the qualified lists. Further details are shown in the tables and diagrams below.

6.1.3 Steps towards improvement

Following this useful exercise we have created an integrated VITAL list by removing all recipients who returned as Bounced, Unopened or Unsubscribed, leaving a solid foundation of 644 subscribers who are geographically well spread. We will grow the mailing list using the accepted rules for single opt-in mailing lists, whereby subscribers may be added as follows:

1. By opting in using the subscription form in the footer of the project website at www.vital-iot.com. This places the subscriber directly into the mailing system.
2. Partners can contribute subscribers to the list (either by using the opt-in form on the website or sending the details singly or in .csv list to VITAL@images.co.uk), provided that the subscriber falls into one of these categories:
    a. Customer who has purchased a product from the partner in the last 2 years,

   b. Contact who has given their email in person or over the phone knowing that this would be used to contact them,
   c. Contacts who have completed an online form indicating they want to be emailed.
3. Subscribers should NOT be added if:
   a. They are taken from a purchased subscriber list,
   b. The recipient's email address has not been emailed for more than two years,
   c. The email address was obtained from a third party,
   d. The address was scraped or copied from the Internet.

Partners are requested and encouraged to make every effort to grow the list with good contacts using these criteria since this will optimise the effectiveness to this channel.

The second VITAL Newsletter is scheduled for distribution in December 2014.

VITAL

1st Public Newsletter
4 July 2014

A VITAL, Vibrant, New Ecosystem

Competing versions of Smart Systems and the Internet of Things (IoT) are definitely here and many, if not most, of the puzzle's pieces made of silicon, software, networks and people are finally beginning to fall into place. In every field of our lives, interactions and collaboration among objects, individuals and society is increasingly mediated by miniaturized, pervasively connected computers.

But has anyone seen an Open-to-All ecosystem for the Internet-of-Things? Not yet. Here is why: IoT applications are currently based on multiple competing

Figure 12: First Page of VITAL Newsletter

Campaign **VITAL Newsletter #1**

Date 31/07/204

List Ref	Sent	Opened	Unopened	Clicked	Bounced	Hardbounce	Unsubscribed
VM	35	22	13	3	0	0	0
V2	66	22	44	4	0	0	0
G1	3000	172	1294	2	1534	876	9
G2	2999	181	1214	0	1604	870	14
G3	2471	134	1056	1	1281	742	6
IM	69	35	31	1	3	1	2
KG	131	59	57	1	15	12	0
MX	105	52	35	2	18	12	2
Totals	**8876**	**677**	**3744**	**14**	**4455**	**2513**	**33**

NB Opened shows Uniques only

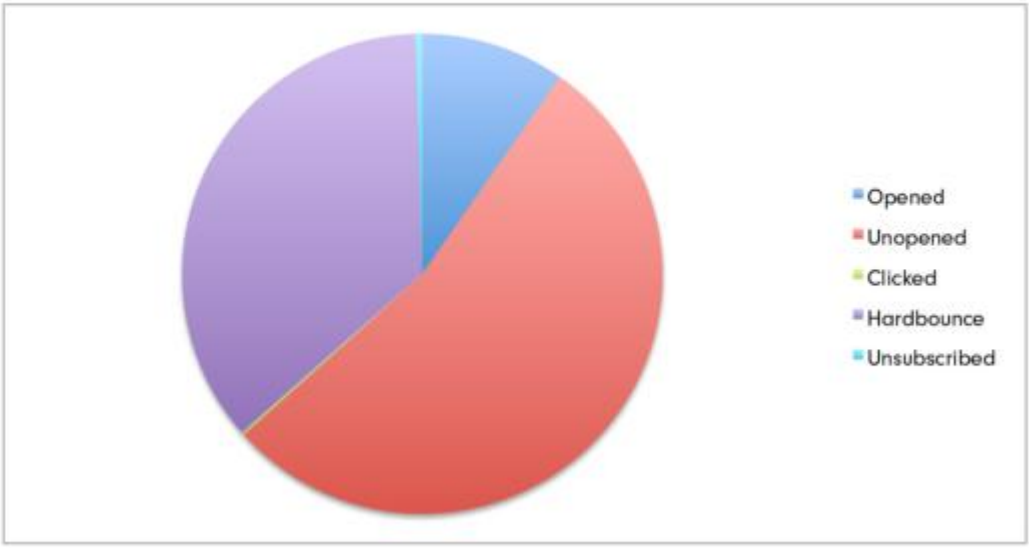

Figure 13: VITAL Newsletter #1 Dissemination Report (Recipients)

TOP 10 TERRITORIES

List Ref	UK	ITA	FRA	BE	NOR	DEU	NL	POL	IRL	KOR
VM	49	1	12	0	34	0	0	0	1	20
V2	16	16	3	0	0	3	0	0	9	0
G1	12	115	18	19	2	4	3	2	2	0
G2	19	71	15	15	5	12	14	7	0	0
G3	11	75	14	14	4	13	4	20	2	0
IM	48	0	0	0	0	1	4	0	0	0
KG	205	0	1	0	0	2	6	0	1	0
MX	367	2	0	0	2	5	0	0	11	0
Totals	**727**	**280**	**63**	**48**	**47**	**40**	**31**	**29**	**26**	**20**

NB Top territories show ALL opens (including multiples), not Uniques

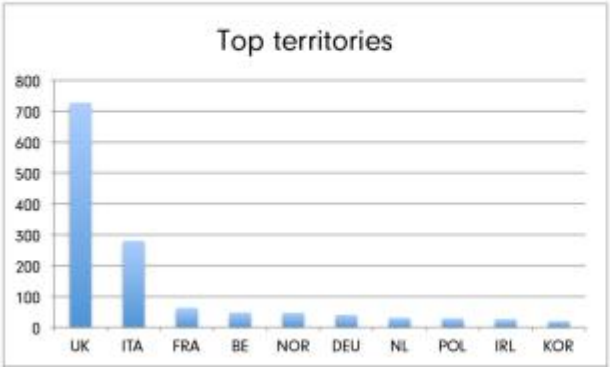

Figure 14: VITAL Newsletter #1 Dissemination Report (by territory)

6.2 2nd VITAL Newsletter

6.2.1 Overview

The second Public Newsletter of VITAL, edited by Roberta Caso (REPLY) and Kasper de Graaf (IMAGES) was circulated and posted online on 29 December 2014 (https://imagesco.createsend.com/campaigns/reports/viewCampaign.aspx?d=r&c=10C744B7FCD99687&ID=85F44A143208A58D2540EF23F30FEDED&temp=False&tx=0). The email newsletter was opened by 367 unique recipients in 34 countries. The Newsletter reports on the progress and development status of the project, including the infrastructure, management environment, discovery module and use case demonstrators. Details are also given of events and publications, and an update on the use case scenarios.

6.2.2 Detailed circulation report

After the first public newsletter the mailing lists were consolidated and VITAL Newsletter #2 was accordingly sent to a total of 716 unique subscribers, an increase of 310 over the 406 qualified recipients in the previous lists. Thus, while the overall numbers are smaller (367 unique opens against 677 for Newsletter #1) the proportion

opened (52.5%) was more than three times greater than that achieved last time (15.3%), indicating successful progress in our aim to develop quality communications with a targeted and valuable audience. 14 recipients (against 33 last time) unsubscribed.

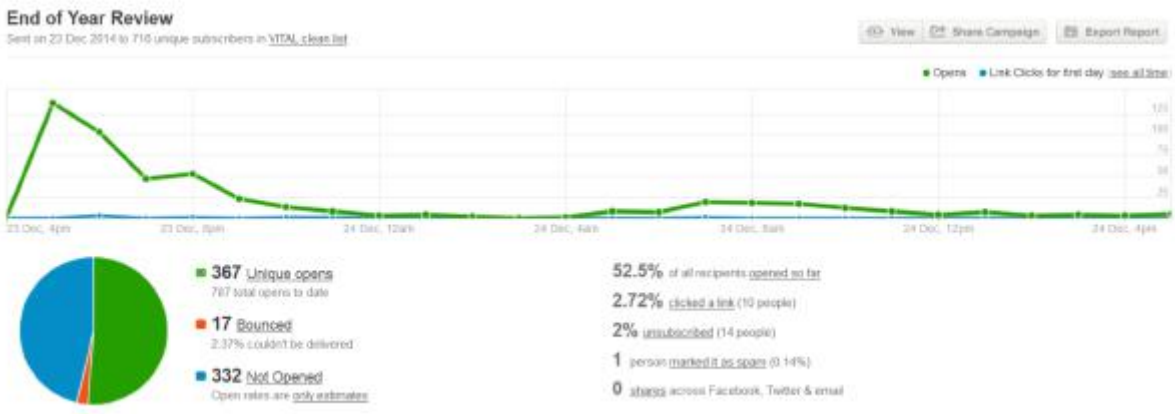

Figure 15 – Campaign Newsletter#2

6.3 3rd VITAL Newsletter

6.3.1 Overview

The third Public Newsletter of VITAL, edited by Roberta Caso (REPLY) and Kasper de Graaf (IMAGES) was circulated and posted online on 31 July 2015 (https://imagesco.createsend.com/campaigns/reports/viewCampaign.aspx?d=r&c=10C744B7FCD99687&ID=D47F696EE34E3AFA2540EF23F30FEDED&temp=False&tx=0). The Newsletter reports that a milestone has been reached in the development of the project with the launch of three live demos. Details are also given of events and publications, and an update on the use case scenarios.

6.3.2 Detailed circulation report

VITAL Newsletter #2 was accordingly sent to a total of 722 unique subscribers and opened by 322 unique recipients in 32 countries.

The proportion opened (47.57%) is slightly lower than the previous issue that achieved last time (52.5%), indicating a stable trend in our aim to develop quality communications with a targeted and valuable audience. 12 recipients (against 14 last time) unsubscribed.

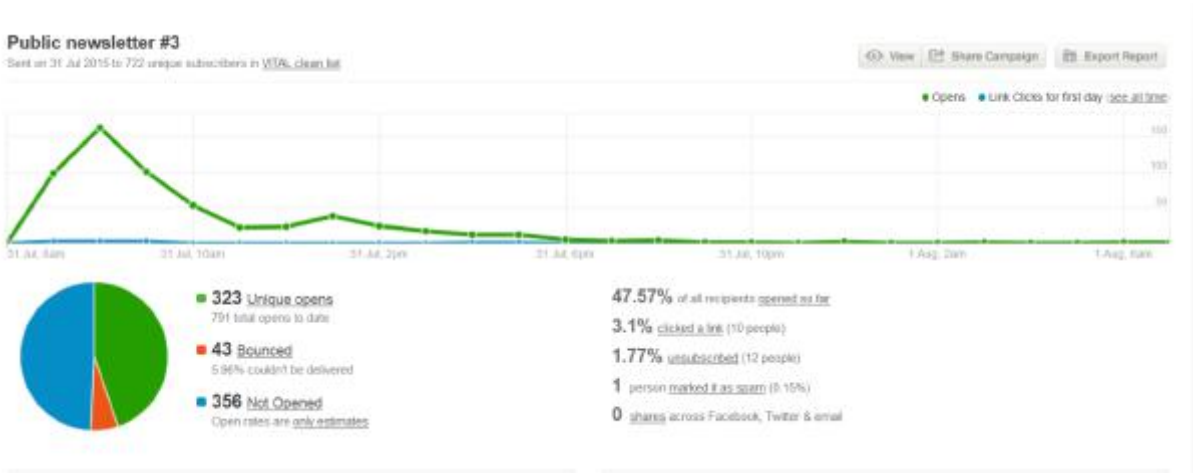

Figure 16 - Campaign Newsletter#3

6.4 VITAL Press Releases

A press release has been created and circulated upon the commencement of the project. This was a global press release that was used/disseminated by all partners. Additional announcements have been prepared and circulated by individual partners upon the completion of certain milestones and activities of the project, such as workshops/conferences organized by the project, participation of the project in important events (such as the IoT Week, Meet IoT, etc.) and release of major results (such as the VITAL architecture).

7 VITAL WEB SITE AS A DISSEMINATION CHANNEL

7.1 Web Site Structure & Contents

The Project Website (http://vital-IoT.com/) developed by IMAGES offers public access to and dissemination of the work being undertaken by the Partners. It is arranged in nine main sections:

Figure 17: Snapshots of VITAL Web Site homepage

1. The **Homepage**, which provides top-level information about the project and the use cases, with quick links to the social media accounts on Twitter and LinkedIn. A global footer accessible from any page on the site credits the European Union funding contribution and encourages visitors to sign up for newsletters and updates, with further links to the social media pages.
2. The **Vision** sets out the vision of the project, with details of the six main challenges which have been identified as being addressed.
3. The **Project** page gives further information about the funding, with details of all seven Work Packages.
4. **Events** provides details of both past and upcoming events in which VITAL Partners are participating.
5. The **Partners** landing page gives introductions to each of the project partners, linking to individual Partner pages with more detailed information and links to Partner websites.
6. The **Blog** page allows news items and discussion pieces to be posted by project partners. Each blog entry is automatically posted to the project Twitter page.
7. The **Library** provides descriptions of and links to project publications, including public project deliverables, with download PDFs or links to academic publishers as appropriate.
8. The **Contact** page provides an easy to use Contact form allowing any visitor to the website to contact the Project Coordinator.
9. The **Live Demos** page provides the proof of the developed VITAL-IoT functionalities and the solutions' capabilities.

Internal communication and file exchange between partners is handled via the list and subversion service maintained by NUIG. Further evolutions of the VITAL website are being kept under review.

7.2 VITAL BLOG

To make the VITAL project website more up to date and engaging, all project Partners participate in posting blogs, publishing news, progress reports, thoughts and discussions as appropriate: http://vital-iot.eu/blog. Each Partner posts upcoming events where his/her participation is expected and after the event the Partner describe the whole experience, the conference, the exhibition, what about VITAL has been showcased and the feedback from the visitors.

The blog posts and articles are disseminated via social media in order to increase visibility and attempt to create viral effect.

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7.3 SOCIAL MEDIA IN THE VITAL WEB SITE

VITAL-IoT website adopts a Web 2.0 oriented approach, encouraging visitors to join VITAL's social networks or to share its content in such networks.

In general, the VITAL dissemination strategy will not have a portal-centric approach, but will reach out for discussions happening in other Web 2.0 media. The social media strategy utilizes Web 2.0 resources as input material for the dissemination strategy, in order to successfully achieve its objectives. The main principles of this strategy are the following:

- VITAL public material will be uploaded to the respective social media as follows:
    - Videos will be uploaded to YouTube.
    - Photographs and Illustrations will be uploaded to Twitter (social media icon on website) and the project Blog website.
    - Announcements Information about the availability of the above mentioned material are shared via Blog, Website, Twitter and LinkedIn (social media icons on website)
- Other project-related material coming from external sources are disseminated through the VITAL Twitter, LinkedIn, YouTube and Facebook accounts for enhancing visibility and diffusing information to the followers of the VITAL social media accounts.

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8 VITAL PRESENCE IN SOCIAL MEDIA

Social Network Sites (SNSs) have presented a vast explosion in popularity and they represent one of the fastest growths of a communication technology in recent history: in the latest years, three out of the top 10 most popular websites worldwide belonged to the SNSs cluster (more specific Facebook, YouTube and Twitter). SNSs are used to upload and share documents, videos, photos, presentations, and the possibility that SNSs will constitute the main search area of users for information and material is very high.

SNSs have become increasingly appealing to a vast audience; even the professional branch is utilizing properly developed social network sites, such as LinkedIn. VITAL aims to take full advantage of the potential of the SNSs and has embedded Social Media well in its electronic dissemination strategy and will continue to develop a strong presence in the Social Networking, Micro blogging, Videos Sharing, Photos Sharing, etc.

Social Media is already used extensively in order to share news and results of the project and establish a bidirectional communication channel with this audience. A specific strategy for the effective management of the social media channels to be used for the project has been already designed and was presented in Deliverable 7.1.

8.1 Overview of VITAL Social Media Accounts

The use of different tools and channels according to the need for dissemination and stakeholder involvement will differ based on the character of the dissemination material and on the specific objective. The tools and channels that are adopted are the following:

- **Facebook VITAL fan page**: A Facebook fan page named VITAL Project has been created (https://www.facebook.com/vitalprojecteu) to help, reach out and engage stakeholders during various phases of the project's activities. The Facebook page is expected to enlarge the scope of audiences by its engagement nature.

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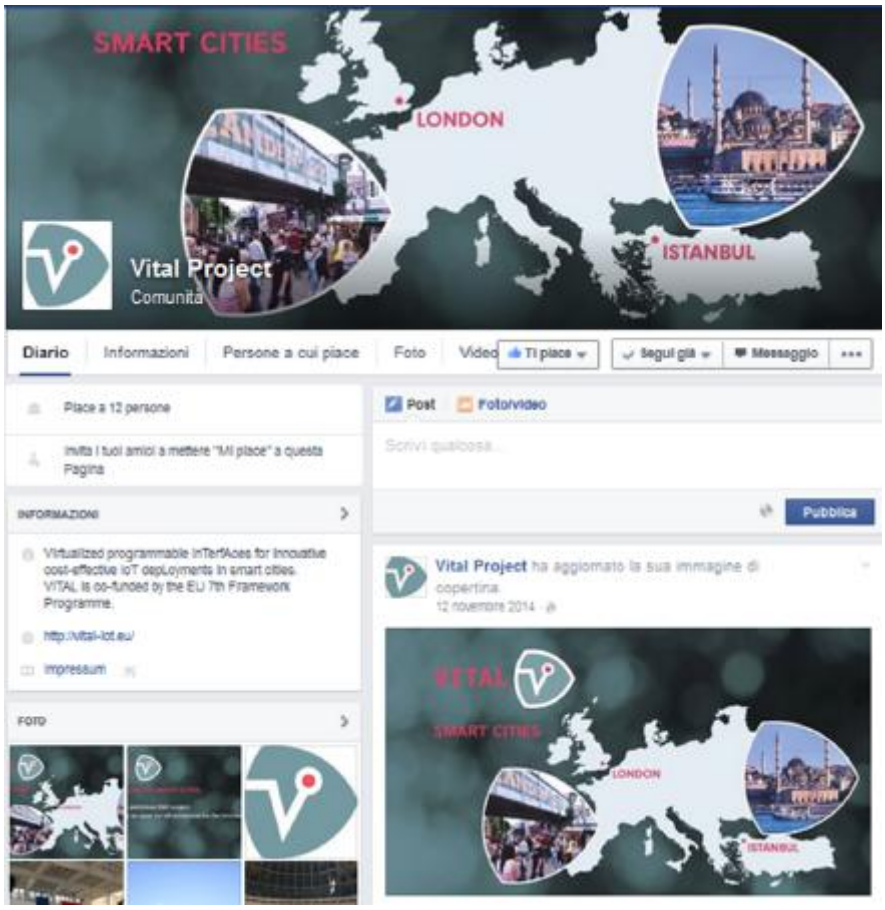

Figure 18: VITAL Page on Facebook

- **LinkedIn VITAL group**: The Project LinkedIn group (https://www.linkedin.com/grp/home?gid=8125502) is used as a discussion and validation mechanism between the community experts and other interested parties.

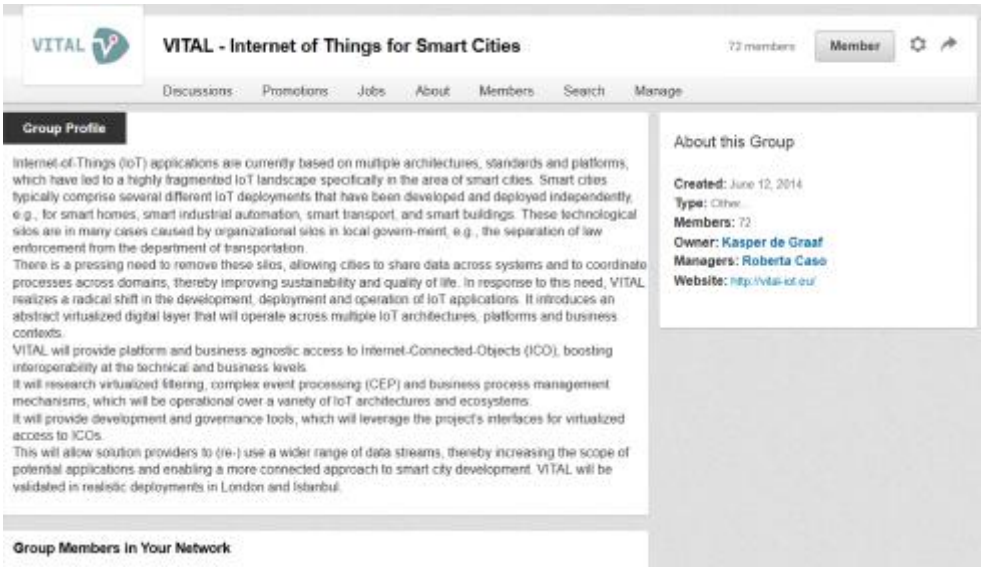

Figure 19 - Snapshot of VITAL's LinkedIn Page

- **Twitter VITAL account**: A dedicated Twitter account Figure 20is already in use as a news dissemination tool, particularly for breaking news, events announcements, calls and as a means for enlarging the VITAL community.

Figure 20: Snapshot from VITAL's Twitter Account

- **YouTube channel**: the YouTube channel (https://www.youtube.com/channel/UChhkN7Am20NX-jAlB6YgdNA) is used to deliver short videos on the main events of the project. YouTube will increase VITAL-IoT dissemination, as it is a popular video-sharing venue online that attracts users daily.

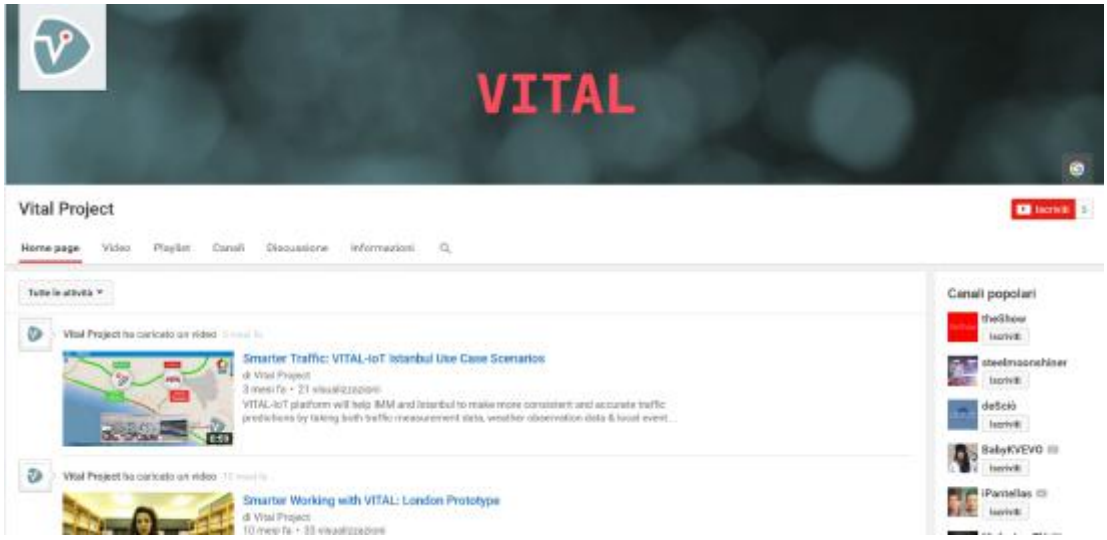

Figure 21 - Snapshot from VITAL YouTube channel

8.2 Metrics for Social Media Dissemination

The following metrics will be used to assess the impact of the VITAL social media dissemination strategy. The targets for Year 3 assume a steady increase in almost every metric, as compared to the values of Year 2.

Table 29 - Social Media Engagement Performance Metrics

Activity	Achieved in Year 1	Achieved in Year 2	Target for Year 3	Comments
Level of Engagement				
How many entries in the social media channels?	20	+150	+200	Photos, Videos, News Items, Discussions, Presentations
How many are the VITAL followers in the different social media channels?	40	+160	+100	Facebook, Twitter, LinkedIn, YouTube
How many people received the VITAL newsletter?	677	722	800	Three Newsletters sent
Level of Influence				
How many times were messages reproduced in the Web 2.0 (re-tweets, sharing, +1 etc.)?	30	+200	+300	Re-tweets, Shares

9 VITAL DISSEMINATION IN CITIES AND COLLABORATION WITH OTHER PROJECTS AND INITIATIVES

9.1 Coordination Meeting with DaPaaS and STRATEGIC Projects

The London partners of three international technology R&D projects met on 12 July at The Clarence Centre in London to discuss the potential benefits of cross-project collaboration. Between them, these projects are investing more than €14m in improving the usability of and access to data and services, backed by almost €9m in public funding under the European Commission's Seventh Framework Programme.

DaPaaS (http://project.dapaas.eu/), represented by Amanda Smith and Tom Heath of the Open Data Institute, is developing a cross-platform environment where government agencies, developers and companies can publish data sets or data-intensive applications and make them available to end user applications. DaPaaS aims to make it cheaper and easier for companies and organisations at all levels to use open data and deploy open data applications. The other DaPaaS partners are Manchester-based linked data specialist Swirrl, Bulgarian semantic database experts Ontotext, Korea's big data analysts Saltlux, the networked systems and services division of Norway's Sintef Group and mobile app developer Sirma in Sofia.

The aim of STRATEGIC, represented by Arturo Dell and Chris Widgery from the London Borough of Camden, and Theo Dimitrakos, Gery Ducatel and Joshua Daniel from BT's research and technology division, is to help public bodies and other organisations make better use of cloud services by migrating existing services, adapting cloud-based services deployed by others for their own requirements, and creating new services. Strategic aims to develop a marketplace of public cloud services with easy to use tools and interfaces together with effective security and authentication. The other partners in the Strategic project are the Spanish arm of global technology giants Atos, the leading Greek software specialists SingularLogic (the latter two both VITAL partners as well), Estonia's National Institute of Chemical Physics and Biophysics, London's Uranus cloud platform and services provider, the City of Genoa and the Belgrade municipality of Stari Grad.

VITAL was represented at the meeting by project coordinator Gregor Schiele (NUIG), Simon Pitkeathley and Hasanul Hoque (CAMDEN), and Malcolm Garrett, Paul Lefrère and Kasper de Graaf (IMAGES&Co).

While each of the projects needs to stay focused on its own objectives to succeed, the participants identified potential for collaboration in dissemination, longer term research and short-term use case development, with benefits for the outcomes of all the projects. There were common issues around security, interoperability, ontologies and dealing with legacy systems. Opportunities discussed included platform linking and integration, providing an element of ongoing consultation and peer review, and possible collaboration on creating a public competition for application developers.

The partners decided to plan a technical working session to exchange information about the R&D approaches being pursued, and to establish a liaison group to maintain contact and deepen the collaboration.

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9.2 Coordination meetings with OpenIoT Project

During the first year of the project, several bi-lateral meetings between VITAL project members and OpenIoT project members have been organized, mainly in order to discuss possibilities for reusing OpenIoT infrastructures and components within VITAL. Some of the meetings were organized internally in NUIG and AIT, which are two common partners and main contributors in both projects. In addition to these internal meetings, several audio conferences were also held.

9.3 Coordination with CityPulse

VITAL coordinates actively with the FP7 project CityPulse on the area of online event processing and complex event processing. NUIG is a member of both VITAL and CityPulse, maintaining the contact between the projects. VITAL is especially interested in semantic models for data as well as queries and service descriptions for (complex) event processing. Meetings were organized internally at NUIG. A coordination audio conference that will involve further partners of the projects is currently being planned to take place in September.

9.4 Coordination with COMPOSE

The FP7 project COMPOSE has achieved a deep understanding and know-how in the area of semantic (web) service descriptions and composition. This is very valuable for the VITAL project. We are planning to coordinate our efforts in this regard to ensure that services (and their descriptions) in COMPOSE and VITAL are interoperable as much as possible. VITAL also plans to reuse tools developed in the context of COMPOSE (e.g. iServe) for its own development. VITAL and COMPOSE (represented by Gregor Schiele, NUIG and Carlos Pedrinaci, Open University) are currently exploring possibilities for further cooperation between the projects in this and similar areas.

9.5 Coordination with H2020 FIESTA

The H2020 FIESTA project commenced in February 2015 and focuses on interoperability across different IoT experiments and testbeds. In particular, the project is developing an infrastructure for the definition and execution of interoperable experiments that leverage data from multiple testbeds, much in the same way VITAL leverages data and services from multiple IoT platforms and deployments. Hence, the VITAL developments in terms of ontologies, platform agnostic interfaces (e.g., PPIs) and visual development tools are of great interest to the FIESTA consortium. A relevant collaboration within the two projects have been established. So far, the VITAL PPIs and development tools have been presented to the FIESTA consortium in the scope of the project's meetings where representatives of NUIG and AIT have participated (being common partners in both projects). FIESTA is considering the reuse of concepts and software associated with the VITAL PPIs and the VITAL visual development tool (described in deliverable D5.2).

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10 PLANNING FOR NEXT ANNUAL PERIOD

The project does not plan any significant deviations from the dissemination targets established in the DoW and as part of earlier deliverable D7.1. It will pursue the targets already presented in these documents in terms of publications, participation and organizations of workshops, participation in the IERC cluster activities and other EU concentration activities, preparation/publications of newsletters and more. At this stage of the project (i.e. the end of the second year) the partners have already planned several dissemination activities, which are presented in the following paragraphs. Note that the activities listed in the following paragraphs are by no means exhaustive. The project plans to participate in additional conferences, workshops and exhibitions, beyond the ones listed in the following paragraphs. Moreover, it will produce additional documentation and dissemination materials, such as white papers that will illustrate the project's solutions.

10.1 Planned Publications and Participation in Conferences and Workshops

During the third year of its lifetime the project will actively pursue journal publications, which will be based on the final versions of the technical deliverables of the project. It will also participate in a number of conferences, which will include small or medium scale exhibitions. In particular, the project has planned already to participate in the following conferences and/or exhibitions:

- **Summer School on IoT and Smart Cities**, scheduled September 22-25, 2015 in Galway, Ireland and organized by NUIG. VITAL will participate in this summer school with presentations and demonstrations.
- **Workshop on Platforms and Applications for Smart Cities (PASC)** to be held in connection with IEEE/IFIP Network Operations and Management Symposium (NOMS) 2016 (noms2016.ieee-noms.org) in Istanbul, Apr. 25-29, 2016. The workshop will provide an opportunity to publish VITAL papers and interact with other researchers working on IoT and smart cities area. Note that NOMS is a prominent IEEE conference on Network Management, which brings together large international audiences.
- **Meet IoT, October 1– 2, 2015, Turin**, where VITAL will participate with oral presentations and exhibit of its results.
- **SIDO, April 6-7, 2016, Lyon,** where VITAL will contribute to on the basis of presentation and demonstrations.
- **IoT Week 2016 and NetFutures 2016**, where VITAL will participate in the organization of sessions and through demonstrations.

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10.2 Participation in IERC and EU Concentration Events

As already outlined in deliverable D7.3, VITAL will continue its active presence and participation in IERC activities, including IERC meeting and activity chains. It will also contribute to the organization of sessions and the editing of position papers and publications.

10.3 Participation in events outside the EC community

During the third year, VITAL will participate in smart cities' events focused on a target audience extended also to communities outside the EC. At the moment it has planned already to participate in the following conferences and/or exhibitions:

- **Smart To Future 2016** (http://smarttofuture.com/), 26 - 27 April 2016, Thistle Marble Arch, London. Target Audience: a whirlwind tour of global smart city projects and innovation – from Tianjin City to Singapore, Bilbao, Turin, Copenhagen, Yanbu, Glasgow and many more – join us at Urban IoT / Smart to Future Cities 2015.
- **Smart City Event 2016** (http://www.smart-circle.org/smartcity/), 7 – 10 June 2016, Amsterdam (TBC). Target Audience: 800 Smart City experts from more than 30 different countries.

10.4 Press Releases and Newsletter Editions

10.4.1 Press Releases

In addition to English, press releases will be prepared in major European languages for distribution to the media and other stakeholders on completion of specific milestones of the project's third year.

10.4.2 Newsletter Editions

Each newsletter is designed on the basis of the periodic project outcomes and published on 6-month basis, presenting the progress and the intermediate results of the project. During the third year of the project, the newsletter's issue will be increased and the publication will be on 4-5 month basis:

- Newsletter # 4: to be issued by 09.11.2015
- Newsletter # 5: to be issued by 31.03.2016
- Newsletter # 6: to be issued by 30.08.2016

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11 CONCLUSIONS AND ASSESSMENT

This deliverable has reported the dissemination activities and achievements of the project, which took place during the first two years of VITAL's lifetime. It provides detailed information about publications, presentations in conferences and workshops, events and sessions organized by the project, newsletters and press releases produced by VITAL, as well as the use of VITAL's web site and social media as dissemination tools. The project has overall managed to ensure its active presence in events and conferences organized by EC co-funded projects and initiatives, such as the NetFuture conference, the IoT Week, the SIDO exhibition and more. Likewise, it has managed to disseminate its result to relevant audiences (e.g., clusters and communities of EU research projects).

During the second year of its lifetime, the project has also attempted to broaden its outreach towards other stakeholders and audience, including smart cities, the industry and developers' communities, without however reducing its dissemination effort and participation in EC project's events and activities. This effort will be intensified during the third-year of the project. Relevant dissemination activities will be propelled by the availability of mature research results concerning the VITAL platform, the VITAL development tools, as well as the VITAL deployments in Camden and Istanbul. The project will pursue participation in conferences, workshops and exhibitions targeting smart cities stakeholders beyond the more limited community of EC projects. At the same time the project will attempt to engage in dissemination activities that boost VITAL's exploitation and sustainability plans such as participation in smart city exhibitions and organizations of workshops with industry. Furthermore, events aiming at receiving stakeholders' (e.g., developers') feedback will be organized.

In terms of the dissemination activities/plan listed in the DoW, the project has managed to achieve several of its dissemination targets. The following table quantifies the project's dissemination achievements and compares them to the overall dissemination targets of the project (as the latter have been included in the DoW document of the project):

Dissemination Activity	**Target Value (whole project duration)**	**Achieved Value (1st and 2nd year)**
Participation in FIA and Net Futures Meetings	Participation in All Meetings	2 {**Achieved**}
Participation in IERC Meetings	Participation in All Meetings	6 {**Achieved**}
Journal Publications (International Referred Journals)	8	1
Publications and Presentations in International Conferences (Reviewed Papers)	12	8

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VITAL Newsletter Issues	4 (on average one issue every 6 months after M6)	3
Participations in Public Exhibitions and Demonstrations	3	4 {**Achieved**}
VITAL Workshops and/or Conferences	2	3 {**Achieved**}
Flash studies	2	0
Production of VITAL leaflets	2	1
Participation in major IoT events outside Europe	1	1 {**Achieved**}

Table 30: Quantification of VITAL Dissemination Accomplishment vs. Target

During the third year of the project, VITAL will work towards accomplishing the dissemination targets that have not been fulfilled, including journal submissions/publications and production of flash studies/white papers as dissemination materials towards potential users and customers.

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