interiot

INTEROPERABILITY
OF HETEREOGENEUS
IOT PLATFORMS.

D8.6

Report on Impact Creation at M36

December 2018

INTER-IoT

INTER-IoT aim is to design, implement and test a framework that will allow interoperability among different Internet of Things (IoT) platforms.
Most current existing IoT developments are based on ”closed-loop” concepts, focusing on a specific purpose and being isolated from the rest of the world. Integration between heterogeneous elements is usually done at device or network level, and is just limited to data gathering. Our belief is that a multi-layered approach integrating different IoT devices, networks, platforms, services and applications will allow a global continuum of data, infrastructures and services that can will enable different IoT scenarios. As well, reuse and integration of existing and future IoT systems will be facilitated, creating a de-facto global ecosystem of interoperable IoT platforms.
In the absence of global IoT standards, the INTER-IoT results will allow any company to design and develop new IoT devices or services, leveraging on the existing ecosystem, and bring get them to market quickly.
INTER-IoT has been financed by the Horizon 2020 initiative of the European Commission, contract 687283.

INTER-IoT

Report on Impact Creation at M36

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Executive Summary

The Deliverable D8.6 summarises the impact created by the project during its 36 monts duration. It takes into consideration three different aspects: the Dissemination, the Communication aspects and the Exploitation ones.

Regarding the Dissemination aspects, there has been a steady production of scientific papers since the very beginning of the project. As the consortium basically started working together almost one year before the actual start of the project, and the main concepts were defined at the time of the submission, it's possible to understand why the project was very prolific since its inception.

For what concerns Communication, the first 18 months were focusing on understanding the audience, while the second part of the project allowed us to target the users of the technology we developed. It's important to notice that the end of the project will not mark the end of the communication: several partners are heavily involved in actions that will last well beyond 2018.

This links directly with our Exploitation section, where we explain our strategy and our actions in the IoT technological interoperability sector; furthermore, we will explain in details the Open Call and the Advisory Board interactions.

Contents

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Acronyms

PC	Project Coordinator
D#.#	Deliverable number #.# (D2.1 deliverable 1 of work package 2)
DoA	Description of Action of the project
INTER-IoT	Interoperability of Heterogeneous IoT Platforms
EC	European Commission
EU	European Union
GA	Grant Agreement
H2020	Horizon 2020 Programme for Research and Innovation
IoT	Internet of Things
IPR	Intellectual Property Rights
M#	#th month of the project (M1=January 2016)
WP	Work Package
IPR	Intellectual Property Rights
PCC	Project Coordination Committee
PIC	Project Implementation Committee
STPM	Scientific and Technical Project Manager
TL	Task Leader
WPL	Workpackage Leader

1 Introduction

INTER-IoT contributes to the H2020 ICT30-2015 call for proposals: ”Internet of Things and Platforms for Smart Objects”, addressing strategic high-level goals set by the European Union as well as practical stakeholders’ and end users’ needs for IoT platforms for smart objects interoperability. Deliverable D8.5 summarizes all activities undertaken by the INTER-IoT consortium supported to promote project’s results and get feedback from stakeholders, industry, EU bodies, and public institutions. As such this deliverable proves that INTER-IoT presented:

- framework, methodology and tools to provide integrated and interoperable services at different layers,
- proposals of new semantic components for IoT,
- representative scenarios and use-cases,
- documented novel architecture for IoT platforms interoperability,
- implementation issues and prove-of-concept, for external projects and wide audience.

The project used many communication channels to distribute results and for different audiences and relevant agents (e.g. SMEs, IoT application developers, infrastructure integrators and operators). This deliverable reports all achievements for INTER-IoT activities of the impact creation plan described in D8.3(M4) that was revised in D8.3 v2(M12) in order to include the recommendations of the project reviewers in the different three planned areas:

- Dissemination results in terms of contributions to books, journal papers, conferences, workshops and events, considering two kinds of dissemination actions: scientific and industrial. Scientific actions started early in the project due to the long term collaboration between project partners in the areas addressed by the project and the industrial dissemination actions have already started with a plan to be increased in the second half of the project.
- Communication results in terms of the different channels used by the project. During the first 12 months of the project the consortium created the image of the project and started to communicate results using broad channels (e.g website and social networks), following the communication plan, a questionnaire was submitted to the different agents already contacted during the market analysis (D2.1) to understand other communication channels and exploit them in order to increase impact. In terms of communication INTER-IoT partners have continued collaborating actively with IoT-EPI, and with other projects like IoT-LSP cluster.
- Exploitation in close relationship with D8.7a (released as an intermediate deliverable as requested by the reviewers), includes a review of the plan for OS delivery of the INTER-IoT products and the evolution of the actions taken by the exploitation team in this area.

The different actions related with the creation of impact have been addressed to different agents, already identified in D2.1 (Market and Stakeholder analysis) and by the definition of the dissemination, communication and exploitation plans. The main agents towards the consortium focused to achieve impact, as indicated in D8.3, have been:

- SME: are a major target for INTER-IoT, as INTER-IoT products will help the SMEs to open boundless business opportunities and unparalleled possibilities to develop new services and improve current portfolios, including the exploitation of new user-centric business models in sectors such as Transportation/ Logistics, m-Health and cross-domain. Five of the third parties from the open call are SMEs. Several actions in dissemination and communication have been addressed to create impact among SME and clusters of SME. One of the main goals related with the exploitation strategy is that SME within and outside the project are able to use the different defined products with independence of the application domain in which they develop their activity.
- Integrators: can benefit from the outcomes of the project and with the new definition of INTER-IoT products will allow them to embed different IoT objects and also to improve the applicability of INTER-IoT technologies on robustness, cross platform interoperability and cost of ownership. Moreover, the need of interoperability including communications, semantics and security will be required in future deployments in which more than one platform was involved. An example of the impact with these kind of agents has been achieved in the liaison with H2020 IoT1 LSP and through different communication actions.
- Telecom Operators: have always been interested in new kind of services and data to be transported in their networks. Although some of European Telecom operators are abandoning the vertical markets, the advent of 5G is going to increase the link between IoT interoperability and Telecom Operators. It may be considered that 5G should develop and exploit network programmability functions to capture the IoT market. INTER-IoT products are of high interest for telecom operators and we are addressing the agents with the channels and actions identified for them (e.g. interoperability as a service or the link between SDN/NFV and IoT interoperability).
- Stakeholders and end users are the primary target of INTER-IoT products and for creating impact, with independence of the application domain. Currently the two areas addressed have been transportation and logistics and mobile health, however through the open call and INTER-DOMAIN pilot we have addressed other application domains like emergency management and smart cities. Many of the dissemination and communication actions, for the industrial sector are addressed to stakeholders and end users, some of them have been developed and some others have been planned for the second half of the project.
- Academics: with three universities and two research centers in the consortium and involvement in several major clusters, the impact created in this environment through scientific dissemination, PhD and MSc thesis, courses, ... will be large. Actions have been taken in different areas, and actions to be taken in the second half of the project are already planned (e.g. inter university courses or MSC actions related with IoT interoperability).

The remainder of the deliverable is organized as follows:

- Section 2 summarizes the identified project's results for dissemination, scientific and industrial.
- Section 3 summarizes the main communication actions, including IoT-EPI and liaison with other projects.

- Section 4 revisits the exploitation plan and summarizes the major achievements with close link with D8.7a.

2 Dissemination

2.1 Introduction

As described in D8.3 dissemination activities aim to establish critical mass and long-term commitment from different selected target groups. Dissemination of project results is one of the tasks (T8.2) within WP8. Therefore, results from various project activities will be disseminated to the widest possible, though precisely selected, communities through a number of focused activities. The dissemination plan considered a continuous activity since the start of the project, giving the right amount of flexibility to adapt to upcoming opportunities. It should be stressed that the dissemination activities have been continuous and that the plan of such activities evolved throughout the lifetime of the project. The evolution was due both by the growth of internal knowledge (e.g. discovery of new target group, like conferences, research cluster or as a result of the Open Call); as well as changes in the ecosystem of research in which INTER-IoT project grew. The project partners have been working together in areas related with IoT interoperability for several years before the start of the project, so the project has not suffered the typical 'slow start' effect in terms of dissemination activities, as some of the work were already ongoing during the negotiation phase of the project and were linked to INTER-IoT. The identified target audiences, identified in the dissemination plan in D8.3 have remained the same:

- Academic institutions
- R&D departments of industrial companies
- Start-ups
- Business in general, including the remaining stakeholders
- EU-funded projects
- General public, including IoT enthusiasts

Following the recommendation of the project reviewers we split dissemination activities in two blocks:

- **Scientific dissemination:** Disseminate the scientific and policy oriented research done in the framework of INTER-IoT by participating to academic and policy oriented conferences, by presenting working papers and scientific contributions, and by submitting scientific articles to peer-review journals.
- **Industrial Dissemination:** Disseminate the different exploitable services and products of INTER-IoT in the main industrial conferences and exhibitions of the sectors and markets addressed in the project (Ports, Health, IoT, etc.), in order to attract the attention of potential customers and users.

Each dissemination activity had their own development plan and the following sections describe the achievements during the whole duration of the project.

2.2 Scientific Dissemination

For a RIA action, scientific dissemination is a key impact enabler, and the consortium did a considerable effort in order to deliver substantial number of high impact publications. Following the scientific dissemination plan the main publication targets have been journals, conferences, workshops and book chapters. The activity has been successful and the results are listed since the beginning of the project. The identification of the relevant venues was identified in D8.3, and the list has been periodically monitored and updated.
Members of the consortium have also organised a number of scientific events, in line with the activity of the project. It should be stressed that these events are either stand-alone (and in this case organised under the umbrella of respective organisations, e.g. European Alliance for Innovation), or associated with events organised by well established organisations representing IT professionals (e.g. the IEEE). In the following sections we present, in more detail, our activities in this area.
It has to be highlighted that as part of the dissemination strategy some activities related with academics will continue after the end of the project (e.g. joint seminars, joint PhD thesis,Postgraduate Master degrees, ...).

2.2.1 Scientific papers

In what follows we list publications produced so far, describing results related to the project. In order to provide a complete overview of all the papers submitted, we also list the ones released during the first 18 months of the project (in gray)

2.2.1.1 Book and Book Chapters

1	Interconnection, Integration and Interoperability of IoT Systems
Publication Type	Book
Authors	Raffaele Gravina, Carlos E. Palau, Marco Manso, Antonio Liotta, Giancarlo Fortino
Publisher	Springer
ISBN	978-3-319-61300-0 (2018)

2	Advancing IoT Platform Interoperability
Publication Type	Book
Authors	A. Bröring, A. Zappa, O.Vermesan, K. Främling, A. Zaslavsky, R. Gonzalez-Usach, P. Szmeja, C. Palau, M. Jacoby, I. P. Zarko, S. Soursos, C. Schmitt, M. Plociennik, S. Krco, S. Georgoulas, I. Larizgoitia, N. Gligoric, R. García-Castro, F. Serena, V. Oravec, R. Giaffreda, C. Kiraly
Publisher	River
ISBN	978-87-7022-006-4 (2018)

3	Transmission Power Control in WSNs: From Deterministic to Cognitive Methods
Publication Type	Book Chapter
Authors	Michele Chincoli, Antonio Liotta
Book Title	Interconnection, Integration and Interoperability of IoT Systems
Publisher	Springer
ISBN	978-3-319-61300-0 (2018)

4	Towards Multi-layer Interoperability of Heterogeneous IoT Platforms: The INTER-IoT Approach
Publication Type	Book Chapter
Authors	Giancarlo Fortino, Claudio Savaglio, Carlos E Palau, Jara Suarez de Puga, Maria Ganzha, Marcin Paprzycki, Miguel Montesinos, Antonio Liotta, Miguel Llop
Book Title	Interconnection, Integration and Interoperability of IoT Systems
Publisher	Springer
ISBN	978-3-319-61300-0 (2018)

5	Interoperability in IoT
Publication Type	Book Chapter
Authors	Regel Gonzalez, Diana Yacchirema, Matilde Julian, Carlos E. Palau
Book Title	Concepts, Technologies, Applications, and Implementations
Publisher	CRC Press (Taylor & Francis Group)
ISBN	(2017

6	Tools for Ontology Matching - Practical Considerations from INTER-IoT Perspective
Publication Type	Book Chapter
Authors	Maria Ganzha, Marcin Paprzycki, Wieslaw Pawlowski, Pawel Szmeja, Katarzyna Wasielewska
Book Title	Internet and Distributed Computing Systems
Publisher	Springer
ISBN	978-3-319-61300-0 (2018)

7	Edge-of-Things Computing-based Smart Healthcare System
Publication Type	Book Chapter
Authors	Diana Yacchirema, Carlos Palau, Manuel Esteve
Book Title	Handbook of Research on the IoT, Cloud Computing, and Wireless Network Optimization, IGI Global, 2018 (Accepted November 2018)
Publisher	
ISBN	

8	Interoperability in IoT
Publication Type	Book Chapter

Authors	Regel Gonzalez-Usach, Diana Yacchirema, Carlos Palau, Manuel Esteve
Book Title	Handbook of Research on Big Data and the IoT, IGI Global, 2018 (Accepted)
Publisher	
ISBN	

9	AmI Open Source System for the Intelligent Control of Residences for the Elderly. Interoperability, Safety and Security in IoT
Publication Type	Book Chapter
Authors	Regel Gonzalez-Usach, Diana Yacchirema, Vicente Collado and Carlos Palau
Book Title	Proceedings of the Third International Conference, interIoT 2017, and Fourth International Conference, SaSeIot 2017 (Vol. 242)
Publisher	,
ISBN	Springer

10	*Digitising the Industry Internet of Things Connecting the Physical, Digital and Virtual Worlds.*
Publication Type	Book Chapter
Authors	Sylvain Kubler; Kary Främling; Arkady Zaslavsky; Charalampos Doukas; Eneko Olivares Gorriti; Giancarlo Fortino, Carlos E. Palau, Sergios Soursos, Ivana Podnar Zarko, Yiwei Fang, Srdjan Krco, Christopher Heinz, Christoph Grimm, Arne Broering, Jelena Mitic, Kathleen Olstedt, Ovidiu Vermesan
Book Title	IoT Platforms Initiative.
Publisher	River Publishers (2016)
ISBN	

11	*Micro Virtual Machines (MicroVMs) for Cloud-Assisted Cyber-Physical Systems*
Publication Type	Book Chapter
Authors	Juan V. Pradilla, Carlos E. Palau
Book Title	R. Buyya, A. V. Dastjerdi (ed.), Internet of Things; Principles and Paradigms
Publisher	Elsevier
ISBN	978-0128053959

2.2.1.2 Journals

We would like to stress that our consortium is publishing results in very good journals, with high impact factors (e.g. Journal of Network and Computer Applications or Computer Networks). Furthermore, while pilots will start next month, we already have a number of publications related to, broadly understood, e-Health. Finally, publication in Journal of Medical Systems is devoted to IoT security.

12	Fall detection system for elderly people using IoT and Ensemble machine learning algorithm

Publication Type	Journal
Authors	D. C. Yacchirema, Suárez de Puga-García, M. Esteve, C. E. Palau
Title Journal and Equivalent	Personal and Ubiquitous Computing
Number, Date Place	Accepted Dec. 2018

13	A Smart System for Sleep Monitoring by Integrating IoT With Big Data Analytics
Publication Type	Journal
Authors	D. C. Yacchirema, D. Sarabia-Jácome, C. E. Palau and M. Esteve
Title Journal and Equivalent	IEEE Access
Number, Date Place	vol. 6, pp. 35988-36001, 2018. doi: 10.1109/ACCESS.2018.2849822.

14	System for Monitoring and Supporting the Treatment of Sleep Apnea using IoT and Big Data
Publication Type	Journal
Authors	D. C. Yacchirema, D. Sarabia-Jácome, C. E. Palau and M. Esteve
Title Journal and Equivalent	Pervasive and Mobile Computing
Number, Date Place	50, 25-40. doi:https://doi.org/10.1016/j.pmcj.2018.07.007.

15	Architecture For Internet of Things Interoperability: SmartCities
Publication Type	Journal
Authors	D. C. Yacchirema, J. Pradilla, M. Esteve and C. E. Palau
Title Journal and Equivalent	IEEE Latin America Transactions.
Number, Date Place	(Accepted Nov. 2018)

16	A Multimodal Fingerprint-Based Indoor Positioning System for Airports
Publication Type	Journal
Authors	B. Molina and E. Olivares and C. E. Palau and M. Esteve
Title Journal and Equivalent	IEEE Access
Number, Date Place	2018, https://doi.org/10.1109/ACCESS.2018.2798918

17	Mobile Health: Studio pilota sul "Monitoraggio decentralizzato ed in mobilita degli stili di vita" nell'ambito del progretto europeo "Interoperabilita di piattaforme eterogenee IoT-INTER-IoT

Publication Type	Journal
Authors	M. Gulino,C. Maggi, A. Costa, M. Mortara, I. De Luca, M. Minutolo, M. Uberti, M. Corona, F. Maio, B. Avataneo, A. Aldrighetti, D. Pata, L. Albano, M. Rinaldi, M. Cialdini, A. M. Cerrato, R. Quattroccolo, C. E. Palau, E. Olivares, M. Esteve, G. Fortino, G. Aloi, R. Gravina, A. Fides, G. Ibañez, V. Traver
Title Journal and Equivalent	Rivista italiana di nutrizione e metabolismo
Number, Date Place	December 2017

18	Agent-Oriented Cooperative Smart Objects: from IoT System Design to Implementation
Publication Type	Journal
Authors	Giancarlo Fortino, Wilma Russo, Claudio Savaglio, Weiming Shen, Mengchu Zhou
Title Journal and Equivalent	IEEE Transactions on Systems, Man, and Cybernetics: Systems
Number, Date Place	Volume: 48 (11), art. no. 8241454, pp. 1949-1956. DOI: 10.1109/TSMC.2017.2780618

19	Activity Level Assessment Using a Smart Cushion for People with a Sedentary Lifestyle
Publication Type	Journal
Authors	Congcong Ma, Wenfeng Li, Raffaele Gravina, Jingjing Cao, Qimeng Li, Giancarlo Fortino
Title Journal and Equivalent	Sensors MDPI
Number, Date Place	October 2017

20	Modeling and Simulating Internet-of-Things Systems: A Hybrid Agent-Oriented Approach
Publication Type	Journal
Authors	,
Title Journal and Equivalent	G Fortino, R Gravina, W Russo, C Savaglio
Number, Date Place	Computing in Science & Engineering Volume 19(5), September 2017

21	Workshop Networks Integration Using Mobile Intelligence in Smart Factories
Publication Type	Journal
Authors	Luo, Y., Duan, Y., Li, W., Pace, P., Fortino, G.

Title Journal and Equivalent	IEEE Communications Magazine
Number, Date Place	Volume 56 (2), pp. 68-75., February 2018

22	Evaluating critical security issues of the IoT world: Present and Future challenges
Publication Type	Journal
Authors	M. Frustaci, P. Pace, G. Aloi, G. Fortino
Title Journal and Equivalent	IEEE INTERNET OF THINGS JOURNAL
Number, Date Place	ISSN: 2327-4662, doi: 10.1109/JIOT.2017.2767291, October 2017

23	A Novel Mobile and Hierarchical Data Transmission Architecture for Smart Factories
Publication Type	Journal
Authors	Y. Luo, Y. Duan, W. Li, P. Pace, G. Fortino
Title Journal and Equivalent	IEEE TRANSACTIONS ON INDUSTRIAL INFORMATICS
Number, Date Place	10.1109/TII.2018.2824324 April 2018

24	An Edge-based Architecture to Support Efficient Applications for Healthcare Industry 4.0
Publication Type	Journal
Authors	P.Pace, G. Aloi, R. Gravina, G. Caliciuri, G. Fortino, A. Liotta
Title Journal and Equivalent	IEEE TRANSACTIONS ON INDUSTRIAL INFORMATICS
Number, Date Place	10.1109/TII.2018.2843169 April 2018

25	Interference Graphs to Monitor and Control Schedules in Low-Power WPAN
Publication Type	Journal
Authors	T. van der Lee, A.Liotta, G. Exarchakos
Title Journal and Equivalent	Future Generation Computer System (Journal), Special Issue on Emerging Edge of Things
Number, Date Place	September 2018

26	Semantic interoperability in the Internet of Things: an overview from the INTER-IoT perspective
Publication Type	Journal

Authors	Maria Ganzha, Marcin Paprzycki, Wieslaw Pawlowski, Pawel Szmeja, Katarzyna Wasielewska
Title Journal and Equivalent	Journal of Network and Computer Applications
Number, Date Place	Elsevier, 2017

27	Enabling IoT interoperability through opportunistic smartphone-based mobile gateway
Publication Type	Journal
Authors	Gianluca Aloi, Giuseppe Caliciuri, Giancarlo Fortino, Raffaele Gravina, Pasquale Pace, Wilma Russo, Claudio Savaglio
Title Journal and Equivalent	Journal of Network and Computer Applications
Number, Date Place	vol 81 March 2017

28	Short-long term anomaly detection in wireless sensor networks based on machine learning and multi-parameterized edit distance
Publication Type	Journal
Authors	Francesco Cauteruccio, Giancarlo Fortino, Antonio Guerrieri, Antonio Liotta, Decebal Constantin Mocanu, Cristian Perra, Giorgio Terracina, Maria Torres Vega
Title Journal and Equivalent	Information Fusion
Number, Date Place	Volume 52 2019

29	Swarm Intelligence-Based Algorithms within IoT-Based Systems: a Review
Publication Type	Journal
Authors	Zedadra Ouarda, Antonio Guerrieri, Nicolas Jouandeau, Giandomenico Spezzano, Hamid Seridi, Giancarlo Fortino
Title Journal and Equivalent	Journal of Parallel and Distributed Computing
Number, Date Place	Volume 122, December 2018

30	Emotion-relevant activity recognition based on smart cushion using multisensor fusion
Publication Type	Journal
Authors	Raffaele Gravina, Qimeng Li
Title Journal and Equivalent	Information Fusion
Number, Date	volume 48 2019

Place	

31	An Emerging Wearable World: New Gadgetry Produces a Rising Tide of Changes and Challenges
Publication Type	Journal
Authors	Minhua Zheng, Peter X. Liu, Raffaele Gravina, and Giancarlo Fortino
Title Journal and Equivalent	IEEE Systems, Man, & Cybernetics Magazine
Number, Date	October 2018
Place	

32	A collaborative task-oriented scheduling driven routing approach for industrial IoT based on mobile devices
Publication Type	Journal
Authors	Y. Duan, Y. Luo, W. Li, P. Pace, G. Aloi, G. Fortino
Title Journal and Equivalent	AD HOC NETWORKS
Number, Date	Vol. 81, pages: 86-99, December 2018
Place	

33	Adaptive re-scheduling web service of time synchronized low-power wireless networks
Publication Type	Journal
Authors	George Exarchakos, Ilkar Oztelcan, Dimitris Sarakiotis, Antonio Liotta
Title Journal and Equivalent	Journal of Network and Computer Applications, Elsevier
Number, Date	Volume 81 Issue C, March 2017, Pages 62-73
Place	

34	Semantic interoperability in the Internet of Things: an overview from the INTER-IoT perspective
Publication Type	Journal
Authors	Maria Ganzha, Marcin Paprzycki, Wieslaw Pawlowski, Pawel Szmeja, Katarzyna Wasielewska
Title Journal and Equivalent	Journal of Network and Computer Applications, Elsevier
Number, Date	Volume 81, 1 March 2017, Pages 111–124
Place	

35	Spatial Anomaly Detection in Sensor Networks Using Neighborhood Information
Publication Type	Journal
Authors	Hedde Bosman, Giovanni Iacca, Arturo Tejada, Heinrich J. Wörtche, Antonio Liotta

Title Journal and Equivalent	Information Fusion Journal, Elsevier
Number, Date Place	Volume 33 Issue C, January 2017, Pages 41-56

36	Fusing Bluetooth Beacon Data with Wi-Fi Radiomaps for Indoor User Localization
Publication Type	Journal
Authors	L. Kanaris, A. Kokkinis, A. Liotta, S. Stavrou
Title Journal and Equivalent	Sensors. Vol.17(4), MDPI
Number, Date Place	2017

37	Telemedicine and Prevention: electromedical devices experimentation in the nutritional counseling
Publication Type	Journal
Authors	Gulino Margherita, Maggi Claudio, Costa Anna, Mortara Marina, De Luca Ilaria, Minutolo Monica, Uberti Massimo, Bernini Luciano, Corona Massimo, Della Torre Angelina, Avataneo Bartolomeo, Aldrighetti Anna, Pata Domenica, Albano Lucia, Maio Fortunata , Rinaldi Maurizia, Cialdini Mario; Palau Carlos E., Olivares Eneko, Esteve Manuel, Fortino Giancarlo, Aloi Gianluca, Gravina Raffaele , Fides Alvaro, Ibañez Gema, Traver Vicente.
Title Journal and Equivalent	Progress in Nutrition
Number, Date Place	To appear (2017) Journal

38	Mobile Health: studio pilota sul ”Monitoraggio decentralizzato ed in mobilitá degli stili di vita” nell’ambito del progetto europeo ”Interoperabilitá di piattaforme eterogenee IoT- INTER- IoT”
Publication Type	Journal
Authors	Gulino Margherita, Maggi Claudio, Costa Anna, Mortara Marina, De Luca Ilaria, Minutolo Monica, Uberti Massimo, Bernini Luciano, Corona Massimo, Della Torre Angelina, Avataneo Bartolomeo, Aldrighetti Anna , Pata Domenica, Albano Lucia, Maio Fortunata, Rinaldi Maurizia, Cialdini Mario; Palau Carlos E., Olivares Eneko, Esteve Manuel, Fortino Giancarlo, Aloi Gianluca, Gravina Raffaele, Fides Alvaro, Ibañez Gema, Traver Vicente
Title Journal and Equivalent	Journal of the Italian Association of Dietetics and Clinical Nutrition (ADI Magazine)
Number, Date Place	To appear (2017) Journal

39	Interoperabilitá di piattaforme eterogenee internet delle cose (inter-iot): studio pilota mobile health
Publication Type	Journal
Authors	A.Costa, M. Gulino, C. Maggi, C. E. Palau Salvador, G. Fortino, P.Pace, M. Uberti, L. Bernini, M. Corona, M. Minutolo, I. De Luca, M. Mortara, F. Maio, A. Aldrighetti, A. Della Torre, D. Pata, B. Avataneo, M. Rinaldi, M. Cialdini, L. Albano
Title Journal and Equivalent	Acts of Scientific XXXVII National Conference- Human nutrition Italian Society- SINU Acts Volume
Number, Date	30 November – 2 December 2016.
Place	Journal

40	Semantically enriched data access policies in eHealth
Publication Type	Journal
Authors	Michał Drozdowicz, Maria Ganzha, Marcin Paprzycki
Title Journal and Equivalent	Journal of Medical Systems
Number, Date	Volume 40 Issue 11, November 2016, Pages 1-8
Place	

41	Impact of Transmission Power Control in Multi-hop Networks. Future Generation
Publication Type	Journal
Authors	Roshan Kotian, George Exarchakos, Stavros Stavrou, Antonio Liotta
Title Journal and Equivalent	Computer Systems Journal (Special Issue on Cyber-physical Systems, Internet of Things and Big Data), Elsevier
Number, Date	October 2016
Place	

42	A Topological Insight into Restricted Boltzmann Machines
Publication Type	Journal
Authors	Decebal C. Mocanu, Elena Mocanu, Phuong H. Nguyen, Madeleine Gibescu, Antonio Liotta
Title Journal and Equivalent	Machine Learning Journal, Springer
Number, Date	Volume 104 Issue 2-3, September 2016, Pages 243-270
Place	

43	Smart IoT Gateway For Heterogeneous Devices Interoperability
Publication Type	Journal
Authors	Diana C. Yacchirema, Carlos E. Palau
Title Journal and Equivalent	IEEE Latin America Transactions
Number, Date	No 8, vol 14, pp 3900-3906, 2016
Place	

44	Power Control in Wireless Sensor Networks with Variable Interference
Publication Type	Journal
Authors	Michele Chincoli, Aly Syed, George Exarchakos, Antonio Liotta
Title Journal and Equivalent	Mobile Information Systems, Hindawi
Number, Date Place	July 2016

45	Sample Size Determination Algorithm for Fingerprint-Based Indoor Localization Systems
Publication Type	Journal
Authors	Stavros Stavrou, Loizos Kanaris, Akis Kokkinis, Giancarlo Fortino, Antonio Liotta
Title Journal and Equivalent	Computer Networks (special issue on Industrial Technologies and Applications for the Internet of Things), Elsevier
Number, Date Place	Vol. 101, June 2016

46	Interoperabilitá di Piattaforme Eterogenee Internet Delle Cose (INTER-IoT)
Publication Type	Journal
Authors	Fortunata Maio, Margherita Gulino, Claudio Maggi, Carlos Enrique Palau Salvador, Massimo Uberti, Luciano Bernini, Massimo Corona, Monica Minutolo, Anna Aldrighetti, Angelina Della Torre, Domenica Pata, Bartolomeo Avataneo, Maurizia Rinaldi, Mario Cialdini; Gianluca Aloi, Giuseppe Caliciuri, Giancarlo Fortino, Raffaele Gravina, Pasquale Pace, Wilma Russo, Claudio Savaglio, Carlo Aldera, Fabio D'Ercoli, Alberto Delpiano, Giovanna Larini
Title Journal and Equivalent	Studio Pilota Mobile Health, Acts of Scientific Journal of the Italian Association of Dietetics and Clinical Nutrition (ADI Magazine), Acts Volume
Number, Date Place	April 2016

2.2.1.3 Conference presentations and publications

INTER-IoT consortium is very active in participation and publication in academic conferences. These conferences are not only organized by the likes of the IEEE, but also take place not only in venues within EU, but also around the world, e.g. in US, Canada, China or Japan.

47	Flow-Based Programming Interoperability Solution for IoT Platform Applications
Publication Type	Conference
Authors	A. Belsa, D. Sarabia-Jacome, C. E. Palau and M. Esteve
Title Journal and Equivalent	IEEE International Conference on Cloud Engineering (IC2E)
Number, Date	17 April 2018

Place	Orlando, FL, USA

48	oneM2M based-Interworking Architecture for heterogeneous devices Interoperability in IoT
Publication Type	Conference
Authors	Diana Yacchirema, Andreu Belsa Pellicer, Carlos Palau, Manuel Esteve
Title Journal and Equivalent	7th Conference on Standards for Communications and Networking
Number, Date	31 October 2018
Place	Paris, France

49	Towards high throughput semantic translation
Publication Type	Conference
Authors	Maria Ganzha, Marcin Paprzycki, Wieslaw Pawlowski, Pawel Szmeja, Katarzyna Wasielewska, Bartlomiej Solarz-Niesluchowski and Jara Suárez de Puga García
Title Journal and Equivalent	International Conference on Safety and Security in IoT, INTERIOT
Number, Date	22 November 2017
Place	Valencia, Spain

50	High-Speed M2M Data Transmission with Embedded MPTCP on WebRTC
Publication Type	Conference
Authors	R. Gonzalez-Usach, D. Molla, C. Palau
Title Journal and Equivalent	DUM IV
Number, Date	29 May 2018
Place	Murcia, Spain

51	IoT Community Support
Publication Type	Conference
Authors	R. Gonzalez-Usach, D. Molla, H. Gil, R. Oltra
Title Journal and Equivalent	Eu-SPRI ECC Science, Technology and Innovation: New challenges and practices
Number, Date	10 May 2018
Place	Valencia, Spain

52	Innovation strategies in IoT
Publication Type	Conference
Authors	R. Gonzalez-Usach, H. Gil, R. Oltra
Title Journal and Equivalent	Eu-SPRI ECC Science, Technology and Innovation: New challenges and practices
Number, Date	11 May 2018

Place	Valencia, Spain

53	WiFi Termograph for Cold Chain Monitoring with MPTCP support
Publication Type	Conference
Authors	R. Gonzalez-Usach, R. Ordonez
Title Journal and Equivalent	Transport Research Arena 2018
Number, Date	16-19 April 2018
Place	Vienna, Austria

54	Interoperability of IoT Platforms applied to the transport and logistics domain
Publication Type	Conference
Authors	D. Yacchirema, R. Gonzalez-Usach, M. Esteve, C. E. Palau
Title Journal and Equivalent	Transport Research Arena 2018
Number, Date	16 April 2018
Place	Vienna, Austria

55	Smart Interoperable Dynamic Lighting for Port Terminals
Publication Type	Conference
Authors	R.Gonzalez-Usach, C.E. Palau
Title Journal and Equivalent	Transport Research Arena 2018
Number, Date	17 April 2018
Place	Vienna, Austria

56	AmI Open Source System for the Intelligent Control of Residences for the Elderly
Publication Type	Conference
Authors	R. Gonzalez-Usach, D. Yacchirema, V. Collado, C. E. Palau
Title Journal and Equivalent	InterIoT 2017 Conference
Number, Date	22 November 2017
Place	Valencia, Spain

57	A Methodology for Integrating Internet of Things Platforms
Publication Type	Conference
Authors	Giancarlo Fortino, Raffaele Gravina, Wilma Russo, Claudio Savaglio
Title Journal and Equivalent	Globe-IoT 2018, Collocated Conference ACM/IEEE International Conference on Internet-of-Things Design and Implementation, 2018
Number, Date	April 17-20, 2018
Place	Orlando, Florida, USA

58	Toward Opportunistic Services for the Industrial Internet of Things
Publication Type	Conference
Authors	Giancarlo Fortino, Claudio Savaglio, and Mengchu Zhou
Title Journal and Equivalent	13th IEEE Conference on Automation Science and Engineering (CASE)
Number, Date	August 20-23, 2017
Place	Xi'an, China

59	An Embedded Risk Prediction System for Wheelchair Safety Driving
Publication Type	Conference
Authors	Congcong Ma, Wenfeng Li, Qimeng Li, Raffaele Gravina, Yi Yang, Giancarlo Fortino
Title Journal and Equivalent	12th International Conference on Body Area Networks (Bodynets2017)
Number, Date	September 28-29, 2017
Place	Dalian, China

60	Activity recognition of wheelchair users based on sequence feature in time-series
Publication Type	Conference
Authors	Congcong Ma, Raffaele Gravina, Qimeng Li, Yu Zhang, Wenfeng Li, Giancarlo Fortino
Title Journal and Equivalent	IEEE International Conference on Systems, Man, and Cybernetics (SMC 2017)
Number, Date	October 5-8, 2017
Place	Banff, Canada

61	Agent-Based Computing in the Internet of Things: A Survey
Publication Type	Conference
Authors	Claudio Savaglio, Giancarlo Fortino, Maria Ganzha, Marcin Paprzycki, Costin Bădică, Mirjana Ivanović
Title Journal and Equivalent	International Symposium on Intelligent and Distributed Computing
Number, Date	11th-13th October 2017
Place	Belgrade, Serbia

62	Opportunistic Cyberphysical Services: A Novel Paradigm for the Future Internet of Things
Publication Type	Conference
Authors	Giancarlo Fortino, Wilma Russo, Claudio Savaglio, Mirko Viroli, MengChu Zhou
Title Journal and Equivalent	IEEE 4th World Forum on Internet of Things
Number, Date	05-08 February 2018
Place	Singapore

63	Securing the IoT world: Issues and perspectives
Publication Type	Conference
Authors	M. Frustaci, P. Pace, G. Aloi
Title Journal and Equivalent	IEEE Conference on standards for Communications and Networking (CSCN)
Number, Date	18-20 Sept. 2017
Place	Helsinki, Finland

64	From relational databases to an ontology - Practical considerations
Publication Type	Conference
Authors	Rafal Tkaczyk, Maria Ganzha, Pawel Szmeja, Marcin Paprzycki, Bartlomiej Solarz-Niesluchowski
Title Journal and Equivalent	Proceedings of 21st International Conference on System Theory, Control and Computing (ICSTCC)
Number, Date	October, 2017
Place	Sinaia, Romania

65	Streaming Semantic Translations
Publication Type	Conference
Authors	Maria Ganzha, Marcin Paprzycki, Wieslaw Pawlowski, Pawel Szmeja, Katarzyna Wasielewska
Title Journal and Equivalent	Proceedings of 21st International Conference on System Theory, Control and Computing (ICSTCC)
Number, Date	October, 2017
Place	Sinaia, Romania

66	Alignment-based semantic translation of geospatial data
Publication Type	Conference
Authors	Maria Ganzha, Marcin Paprzycki, Wieslaw Pawlowski, Pawel Szmeja, Katarzyna Wasielewska
Title Journal and Equivalent	ICACCA 2017
Number, Date	September, 2017
Place	Dehradun, India

67	Fog and Cloud in the Transportation, Marine and eHealth Domains
Publication Type	Conference
Authors	Matija Cankar, Eneko Olivares Gorriti, Matevž Marković, Flavio Fuart
Title Journal and Equivalent	Euro-Par 2017: Parallel Processing Workshops
Number, Date	8 February 2018
Place	Santiago de Compostela, Spain

68	Time-scheduled Network Evaluation based on Interference

Publication Type	Conference
Authors	T. van der Lee, A.Liotta, G. Exarchakos
Title Journal and Equivalent	Globe-IoT 2018, Collocated Conference ACM/IEEE International Conference on Internet-of-Things Design and Implementation, 2018
Number, Date	April 17-20, 2018
Place	Orlando, FL, USA

69	Distributed TSCH Scheduling: A Comparative Analysis
Publication Type	Conference
Authors	T. van der Lee, G. Exarchakos, A.Liotta
Title Journal and Equivalent	2017 IEEE International Conference on Systems, Man and Cybernetics
Number, Date	October 2017
Place	Banff, Canada

70	TSCH schedules assessment
Publication Type	Conference
Authors	T van der Lee, A Liotta, G Exarchakos
Title Journal and Equivalent	Networking, Sensing and Control (ICNSC), 2017 IEEE 14th International Conference on
Number, Date	April 2017
Place	Lamezia Terme, Italy

71	Towards high throughput semantic translation
Publication Type	Conference
Authors	Maria Ganzha , Marcin Paprzycki, Wieslaw Pawlowski, Pawel Szmeja, Katarzyna Wasielewska, Bartlomiej Solarz-Niesluchowski and Jara Suàrez de Puga García
Title Journal and Equivalent	InterIoT 2017 Conference
Number, Date	October, 2017
Place	Valencia, Spain

72	Integrating Internet of Things Platforms: A Methodological Perspective
Publication Type	Conference
Authors	G. Fortino
Title Journal and Equivalent	The 16th IEEE International Conference on Pervasive Intelligence and Computing
Number, Date	14 August 2018
Place	Athens, Greece

73	Flow-Based Programming Interoperability Solution for IoT Platform Applications
Publication Type	Conference

Authors	Andreu Belsa, David Sarabia-Jácome, Carlos E. Palau, Manuel Esteve
Title Journal and Equivalent	Globe-IoT 2018, Collocated Conference ACM/IEEE International Conference on Internet-of-Things Design and Implementation, 2018
Number, Date	April 17-20, 2018
Place	Orlando, Florida, USA

74	Exploiting IoT Data and Smart City Services for Chronic Obstructive Pulmonary Diseases Risk Factors Monitoring
Publication Type	Conference
Authors	David Sarabia-Jacome; Andreu Belsa; Carlos E. Palau; Manuel Esteve
Title Journal and Equivalent	Globe-IoT 2018, Collocated Conference ACM/IEEE International Conference on Internet-of-Things Design and Implementation, 2018
Number, Date	April 17-20, 2018
Place	Orlando, Florida, USA

75	Fall detection system for elderly people using IoT and Big Data
Publication Type	Conference
Authors	Diana Yacchirema, Jara Suárez de Puga, Carlos Palau and Manuel Esteve
Title Journal and Equivalent	ANT-2018
Number, Date	May, 2018
Place	Porto, Portugal

76	Re-Engineering IoT Systems through ACOSO-Meth: the IETF CoRE based agent framework case study
Publication Type	Conference
Authors	Claudio Savaglio, Teemu Leppänen, Wilma Russo, Jukka Riekki, Giancarlo Fortino
Title Journal and Equivalent	Proc. 19th Workshop From Objects to Agents
Number, Date	June, 28-29, 2018
Place	Palermo (Italy)

77	Developing Agent-based Smart Objects for IoT Edge Computing: Mobile Crowdsensing use case
Publication Type	Conference
Authors	Teemu Leppanen, Claudio Savaglio, Lauri Loven, Wilma Russo, Giuseppe Di Fatta, Jukka Riekki, Giancarlo Fortino
Title Journal and Equivalent	The 11th International Conference on Internet and Distributed Computing Systems (IDCS2018)
Number, Date	October, 11-13, 2018
Place	Tokio, Japan

78	From implicit semantics towards ontologies - practical considerations from the INTER-IoT perspective
Publication Type	Conference
Authors	Maria Ganzha, Marcin Paprzycki, Wieslaw Pawlowski, Pawel Szmeja, Katarzyna Wasielewska, Carlos E. Palau
Title Journal and Equivalent	Proceedings of 14th IEEE Annual Consumer Communications & Networking Conference (CCNC)
Number, Date	January 2017
Place	Las Vegas, Nevada, USA

79	Towards semantic interoperability in Internet of Things and beyond
Publication Type	Conference
Authors	Marcin Paprzycki
Title Journal and Equivalent	2018 5th International Conference on Control, Decision and Information Technologies (CoDIT)
Number, Date	April 2018
Place	Thessaloniki, Greece

80	Identifier Management in Semantic Interoperability Solutions for IoT
Publication Type	Conference
Authors	Maria Ganzha, Marcin Paprzycki, Wieslaw Pawlowski, Pawel Szmeja, Katarzyna Wasielewska
Title Journal and Equivalent	ICC Workshops 2018
Number, Date	May. 2018
Place	Kansas City, Kansas, USA

81	Cataloging Design Patterns for Internet of Things Artifact Integration
Publication Type	Conference
Authors	Rafal Tkaczyk, Katarzyna Wasielewska, Maria Ganzha, Marcin Paprzycki, Wieslaw Pawlowski, Pawel Szmeja, Giancarlo Fortino
Title Journal and Equivalent	ICC Workshops 2018
Number, Date	May. 2018
Place	Kansas City, Kansas, USA

82	Towards IoT Platforms' Integration Semantic Translations between W3C SSN and ETSI SAREF
Publication Type	Conference
Authors	João L. R. Moreira, Laura Daniele, Luís Ferreira Pires, Marten van Sinderen, Katarzyna Wasielewska, Pawel Szmeja, Wieslaw Pawlowski, Maria Ganzha, Marcin Paprzycki
Title Journal and Equivalent	SEMANTICS Workshops 2017
Number, Date	September 2017

Place	Amsterdam, The Netherlands

83	Recognition of human fall events based on single tri-axial gyroscope
Publication Type	Conference
Authors	S. Zhao, W. Li, W. Niu, R. Gravina and G. Fortino
Title Journal and Equivalent	15th IEEE International Conference on Networking, Sensing and Control (ICNSC 2018)
Number, Date	27-29 March, 2018
Place	Guangdong, China

84	A mobile multi-technology gateway to enable IoT interoperability,
Publication Type	Conference
Authors	Aloi, G., Caliciuri, G., Fortino, G., Gravina, R., Pace, P., Russo, W., & Savaglio, C.
Title Journal and Equivalent	2016 IEEE First International Conference on ..
Number, Date	April 2016
Place	Berlin, Germany

85	Simulation of Agent-oriented Internet of Things Systems
Publication Type	Conference
Authors	G Fortino, W Russo, C Savaglio
Title Journal and Equivalent	Proc. 17th Workshop From Objects to Agents
Number, Date	July 2018
Place	Reggio Calabria, Italy

86	Opportunistic IoT Service to support safety driving from heterogeneous data sources
Publication Type	Conference
Authors	G. Fortino, R. Gravina, Q.Li, C. Savaglio
Title Journal and Equivalent	BODYNETS 2018
Number, Date	October 2-3, 2018
Place	Oulu, Finland

87	Software Defined Wireless Sensor Networks: A Review
Publication Type	Conference
Authors	Y. Duan, Y. Luo, W. Li, P. Pace, G. Fortino
Title Journal and Equivalent	IEEE 22nd International Conference on Computer Supported Cooperative Work in Design, CSCWD 2018
Number, Date	May, 2018
Place	Nanjing, China

88	Edge computing-enabled body area networks
Publication Type	Conference
Authors	G. Aloi, G. Fortino, R. Gravina, P. Pace, G. Caliciuri
Title Journal and Equivalent	32nd IEEE International Conference on Advanced Information Networking and Applications Workshops, WAINA 2018
Number, Date	May 2018
Place	Krakow, Poland

89	Recognition of Human Fall Events Based on Single Tri-axial Gyroscope
Publication Type	Conference
Authors	Shizhen Zhao, Wenfeng Li, Wenyu Niu, Raffaele Gravina, Giancarlo Fortino
Title Journal and Equivalent	15th IEEE International Conference on Networking, Sensing and Control (ICNSC 2018)
Number, Date	May 28-29, 2018
Place	Tokyo, Japan

90	Inter-IOT and Agriculture
Publication Type	Fair & Conference
Authors	Roel Vossen, Frans Gevers, Dennis Engbers
Title Journal and Equivalent	AgriFoodTech
Number, Date	11-12 December 2018
Place	Den Bosch, Netherlands

91	Distributed TSCH Scheduling: a Comparative Analysis
Publication Type	Conference
Authors	Tim van der Lee, Georgios Exarchakos, Antonio Liotta
Title Journal and Equivalent	IEEE Conference on Systems, Man, and Cybernetics (SMC'17)
Number, Date	5-8 October 2017
Place	Banff, Canada

92	Modeling Opportunistic IoT Services in Open IoT Ecosystems
Publication Type	Conference
Authors	G.Fortino, W. Russo, C. Savaglio, M. Viroli, M. Zhou
Title Journal and Equivalent	WOA 2017 (Workshop "From Objects to Agents")
Number, Date	15-17 June 2017
Place	Reggio Calabria, Italy

93	IoT platforms Interoperability for Active and Assisted Living Healthcare services support
Publication Type	Conference

Authors	G. Aloi, Á. Fides-Valero, G. Fortino, R. Gravina, G. Ibáñez Sánchez, P. Pace, C. E. Palau, V. T. Salcedo, D. Yacchirema
Title Journal and Equivalent	Global IoT Summit
Number, Date	6-9 June 2017
Place	Geneva, Switzerland

94	TSCH Schedule Assessment
Publication Type	Conference
Authors	T. van der Lee, A. Liotta, G. Exarchakos
Title Journal and Equivalent	14th IEEE International Conference on Networking, Sensing and Control, Special Session on Marine Sensing
Number, Date	May 16-18 2017
Place	Lamezia, Italy

95	AAL open source system for an intelligent control and monitoring of nursing homes
Publication Type	Conference
Authors	Regel Gonzalez-Usach, Vicente Collado, Manuel Esteve, Carlos E. Palau
Title Journal and Equivalent	14th IEEE International Conference on Networking, Sensing and Control (ICNSC 2017)
Number, Date	15-18 May 2017
Place	Lamezia, Italy

96	Combining Smart Lighting and Radio Fingerprinting for Improved Indoor Localization
Publication Type	Conference
Authors	L. Kanaris, A. Kokkinis, A. Liotta, S. Stavrou
Title Journal and Equivalent	proc. of the 14th IEEE International Conference on Networking, Sensing and Control (ICNSC'17), special session on Smart Lighting
Number, Date	May 16-18, 2017
Place	Calabria, Italy

97	Reliable low-power wireless networks over unstable transmission power
Publication Type	Conference
Authors	R. Kotian, G. Exarchakos, A. Liotta
Title Journal and Equivalent	proc. of the 14th IEEE International Conference on Networking, Sensing and Control (ICNSCÕ17), special session on Smart Lighting
Number, Date	May 16-18, 2017
Place	Calabria, Italy

98	Quality of Fingerprint Radiomaps for Positioning Systems
Publication Type	Conference
Authors	L. Kanaris, A. Kokkinis, A. Liotta, S. Stavrou

Title Journal and Equivalent	proc. of the 24th IEEE International Conference on Telecommunication (ICT'17)
Number, Date	May 3-5, 2017
Place	Cyprus

99	Graphical Interface for Ontology Mapping with Application to Access Control
Publication Type	Conference
Authors	Michal Drozdowicz, Motasem Alwazir, Maria Ganzha, Marcin Paprzycki
Title Journal and Equivalent	9th Asian Conference ACIIDS
Number, Date	3-5 April, 2017
Place	Kanazawa, Japan

100	Towards Common Vocabulary for IoT Ecosystems – preliminary Considerations
Publication Type	Conference
Authors	Maria Ganzha, Marcin Paprzycki, Wieslaw Pawlowski, Pawel Szmeja, Katarzyna Wasielewska
Title Journal and Equivalent	9th Asian Conference ACIIDS
Number, Date	3-5 April, 2017
Place	Kanazawa, Japan

101	Enable IoT Interoperability in Ambient Assisted Living: Active and Healthy Aging Scenarios
Publication Type	Conference
Authors	Diana C. Yacchirema; Manuel Esteve; Carlos E. Palau
Title Journal and Equivalent	The 14th Annual IEEE Consumer Communications & Networking
Number, Date	8-11 January 2017
Place	Las Vegas, USA

102	A Survey of Open Body Sensor Networks: Applications and Challenges
Publication Type	Conference
Authors	N. Yang, Z. Wang, R. Gravina, G. Fortino
Title Journal and Equivalent	Globe-IoT 2017: Towards Global Interoperability among IoT Systems
Number, Date	8-11 Jan. 2017
Place	Las Vegas, USA

103	From implicit semantics towards ontologies – practical considerations from the INTER-IoT perspective
Publication Type	Conference

Authors	Maria Ganzha, Marcin Paprzycki, Wieslaw Pawlowski, Pawel Szmeja, Katarzyna Wasielewska, Carlos E. Palau
Title Journal and Equivalent	The 14th Annual IEEE Consumer Communications & Networking
Number, Date	8-11 January 2017
Place	Las Vegas, USA

104	Towards Interoperability of IoT-based Health Care platforms: the INTER-Health use case
Publication Type	Conference
Authors	P. Pace, G. Aloi, R. Gravina, G. Fortino, G. Larini, M. Gulino
Title Journal and Equivalent	11th EAI International Conference on Body Area Networks (Bodynets 2016)
Number, Date	15-16 December 2016
Place	Turin, Italy

105	Towards interoperable, cognitive and autonomic IoT systems: An agent-based approach
Publication Type	Conference
Authors	C. Savaglio, G. Fortino and M. Zhou
Title Journal and Equivalent	The 2016 IEEE 3rd World Forum on Internet of Things (WF-IoT)
Number, Date	12-14 Dec. 2016
Place	Reston, VA, U.S.A.

106	Big IoT data mining for real-time energy disaggregation in buildings
Publication Type	Conference
Authors	Decebal C. Mocanu, Elena Mocanu, Phuong H. Nguyem, Madeleine Gibescu, Antonio Liotta
Title Journal and Equivalent	IEEE Conference on Systems, Man, and Cybernetics (SMC'16)
Number, Date	9-12 October 2016
Place	Budapest, Hungary

107	Design and Implementation of a Gateway for Pervasive Smart Environments
Publication Type	Conference
Authors	Diana C. Yacchirema, Carlos E. Palau
Title Journal and Equivalent	IEEE Conference on Systems, Man, and Cybernetics (SMC'16)
Number, Date	9-12 October 2016
Place	Budapest, Hungary

108	A Topological Insight into Restricted Boltzmann Machines

Publication Type	Conference
Authors	Decebal C. Mocanu, Elena Mocanu, Phuong H. Nguyen, Madeleine Gibescu, Antonio Liotta
Title Journal and Equivalent	27th European Conference on Machine Learning and Principles and Practice of Knowledge Discovery (ECMLPKDD'16)
Number, Date	19-23 September 2016
Place	Riva del Garda, Italy

109	Agent-oriented Modeling and Simulation of IoT Networks
Publication Type	Conference
Authors	Giancarlo Fortino, Wilma Russo, Claudio Savaglio
Title Journal and Equivalent	The 10th International Workshop on "Multi-Agent Systems and Simulation" (MAS&S'16)
Number, Date	11-14 September 2016
Place	Gdansk, Poland

110	Simulation of Agent-oriented Internet of Things Systems
Publication Type	Conference
Authors	Giancarlo Fortino, Wilma Russo, Claudio Savaglio
Title Journal and Equivalent	17th Workshop "From Object to Agents" (WOA16)
Number, Date	29 – 30 July 2016
Place	Catania, Italy

111	The synergy of network science and artificial intelligence
Publication Type	Conference
Authors	Decebal C. Mocanu
Title Journal and Equivalent	Twenty-Fifth International Joint Conference on Artificial Intelligence - International Joint Conferences on Artificial Intelligence
Number, Date	9-15 July 2016
Place	New York, USA

112	The double link between network science and artificial intelligence. A key to scalable learning solutions?
Publication Type	Conference
Authors	D.C. Mocanu, G. Exarchakos, A. Liotta
Title Journal and Equivalent	proc. of the European Data Forum
Number, Date	June 29-30, 2016
Place	Eindhoven, The Netherlands

113	Hybrid Delay-Based Congestion Control for Multipath TCP
Publication Type	Conference
Authors	Regel Gonzalez, Juan Pradilla, Manuel Esteve, Carlos E. Palau

Title Journal and Equivalent	Proceedings of the 18th Mediterranean Electro technical Conference MELECON 2016
Number, Date	18-20 April 2016
Place	Limassol, Cyprus

114	Sensor Observation Service (SOS) / Constrained Application Protocol (CoAP) Proxy Design
Publication Type	Conference
Authors	Juan.V. Pradilla, Regel GonzĞlez, Manuel Esteve, Carlos E. Palau
Title Journal and Equivalent	Proceedings of the 18th Mediterranean Electro technical Conference MELECON 2016
Number, Date	18-20 April 2016
Place	Limassol, Cyprus

115	A Mobile Multi-Technology Gateway to Enable IoT Interoperability
Publication Type	Conference
Authors	G. Aloi, G Caliciuri, Giancarlo Fortino, Rafaelle Gravina, P. Pace, Wilma Russo, Claudio Savaglio
Title Journal and Equivalent	1st IEEE First International Conference on Internet-of-Things Design and Implementation (IoTDI)
Number, Date	April 4-6 2016
Place	Berlin, Germany

116	Predictive Power Control in Wireless Sensor Networks
Publication Type	Conference
Authors	Michele Chincoli, Aly Syed, Decebal C. Mocanu, Antonio Liotta
Title Journal and Equivalent	1st IEEE First International Conference on Internet-of-Things Design and Implementation (IoTDI)
Number, Date	April 4-6 2016
Place	Berlin, Germany

117	Semantic Technologies for the IoT - an Inter-IoT Perspective
Publication Type	Conference
Authors	Maria Ganzha, Marcin Paprzycki, Wieslaw Pawlowski, Pawel Szmeja, Katarzyna Wasielewska
Title Journal and Equivalent	1st IEEE First International Conference on Internet-of-Things Design and Implementation (IoTDI)
Number, Date	April 4-6 2016
Place	Berlin, Germany

118	Dimensions of ontological similarity
Publication Type	Conference
Authors	Pawel Szmeja, Maria Ganzha, Marcin Paprzycki, Wieslaw Pawlowski

Title Journal and Equivalent	IEEE Tenth International Conference on Semantic Computing (ICSC)
Number, Date	4-6 February 2016
Place	Laguna Hills, USA

2.2.1.4 Newsletters

In addition to publications in books, journals and conferences, we also communicate results of the project using (possibly online) magazines / newsletters for professionals in domains of our pilots.

119	Smart and Visible. Internet of Things Performance
Publication Type	Article
Authors	Felicity Landon (Independent journalist)
Title Journal and Equivalent	Port Strategy, vol. 1017 Issue 9
Number, Date	November 2017
Place	

120	The Internet of Things
Publication Type	Magazine/ newsletter
Authors	Pablo Gimenez
Title Journal and Equivalent	Valencia Port Foundation Newsletter
Number, Date	July-August 2016
Place	Spain

121	Smart port, a system of systems approach
Publication Type	Magazine/ newsletter
Authors	Miguel Montesinos, Jose Garcia de la Guia
Title Journal and Equivalent	Automation and optimisation
Number, Date	vol. 69, February 2016
Place	UK

122	Abitudini alimentari. Parte il progetto europeo per il monitoraggio decentralizzato ed in mobilitá degli stili di vita
Publication Type	Magazine/ newsletter
Authors	
Title Journal and Equivalent	”Quotidiano sanità” -Regione Piemonte
Number, Date	June 2017
Place	Italy

2.2.1.5 Scientific Presentations

The following presentations have been delivered to the scientific community.

123	Interoperability in Internet of Things
Publication Type	Presentation
Authors	M. Paprzycki
Title Journal and Equivalent	BASE 2017
Number, Date	October, 2017
Place	Aizu Wakamatsu, Japan
Attendees	

124	Interoperability in Internet of Things
Publication Type	Presentation
Authors	M. Paprzycki
Title Journal and Equivalent	21st International Conference on System Theory, Control and Computing (ICSTCC)
Number, Date	October, 2017
Place	Sinaia, Romania
Attendees	

125	Interoperability in Internet of Things
Publication Type	Presentation
Authors	M. Ganzha
Title Journal and Equivalent	IoT-SIU
Number, Date	February, 2018
Place	Bhimtal, India
Attendees	

126	Interoperability in Internet of Things
Publication Type	Presentation
Authors	M. Paprzycki
Title Journal and Equivalent	ICACCA 2017
Number, Date	September, 2017
Place	Dehradun, India
Attendees	

127	Towards People-centric IoT Ecosystems
Publication Type	Keynote
Authors	Giancarlo Fortino
Title Journal and Equivalent	IoT Workshop
Number, Date	14 December 2017
Place	Rende, Italy
Attendees	80

128	The future of Internet of Things
Publication Type	Keynote
Authors	Alessadnro Bassi
Title Journal and Equivalent	keynote
Number, Date	13 April 2018
Place	Peking, China
Attendees	100

129	Industry 4.0 Innovation as a Service
Publication Type	Fair presentation
Authors	Flavio Fuart, Daniel Vladušič, Gregor Pipan
Title Journal and Equivalent	B2B Industry 4.0
Number, Date	15 February 2018
Place	Ljubljana, Slovenia
Attendees	50

130	Towards Multi-Layer Interoperability of IoT Platforms: the INTER-IoT approach
Publication Type	Presentation
Authors	Giancarlo Fortino
Title Journal and Equivalent	
Number, Date	12 January 2017
Place	New Jersey Institute of Technology, Newark, NJ, USA

131	Towards Multi-Layer Interoperability of IoT Platforms: the INTER-IoT approach
Publication Type	Keynote
Authors	Giancarlo Fortino
Title Journal and Equivalent	9th International Conference on Internet and Distributed Computing Systems (IDCS) 2016
Number, Date	28 September 2016
Place	Wuhan, China

132	Enabling IoT Interoperability through Opportunistic Mobile Multi-Technology Gateways
Publication Type	Presentation
Authors	Giancarlo Fortino
Title Journal and Equivalent	Invited Talk hosted by Prof. W. Li
Number, Date	06 July 2016
Place	Wuhan, China

133	Towards Interoperable, Cognitive and Autonomic IoT Ecosystems: an Agent-based Approach
Publication Type	Presentation
Authors	Giancarlo Fortino
Title Journal and Equivalent	
Number, Date	8 May 2017
Place	Data Science Center (DSC/e) of Eindhoven University of Technology, Eindhoven, The Netherlands

134	Interoperability as challenge for (e/m)Health (in Polish)
Publication Type	Presentation
Authors	Katarzyna Wasielewska
Title Journal and Equivalent	Technologies in Medicine
Number, Date	31 March 2016
Place	Warszawa, Poland

2.2.1.6 Summary

Overall more than 130 contributions have been either published or accepted for publications. In this context, let us make the following observations. More than 2 papers a month were produced and placed in the pipeline. All academic partners (SRIPAS, TUE, UNICAL, UPV) have actively participated in the scientific dissemination. Non-academic partners have contributed to magazine-based dissemination of results. Joint papers between academic partners have been already prepared. Majority of journal publications have been placed in journals with ISI (Thomson Reuters) impact factor. Almost all conferences, where scientific results of the project have been published, have their publications in either Springer or IEEE. Therefore, it should be stressed, that the dissemination of scientific results follows precisely what has been outlined in the project proposal.

2.2.2 Organisation of Scientific Events

The consortium has organised or participated in organisation of scientific events summarised in the following table.

Type of Event	Event Name	Involved Members	Sponsor	Date	Place
Conference	Globe-IoT 2019 at IEEE WF-IoT 2019	UPV, UniCal	IEEE	15 April 2019	Limerick, Ireland
Conference	Globe-IoT 2018	UPV, UniCal	IEEE	17 April 2018	Orlando, FL, USA
Conference	INTER-IoT: Interoperability of IoT Systems	UPV, UniCal, Tue, Sripas	EAI	Nov 2017	Valencia, Spain

Special Session	INTER-IoT, to be held with IEEE ICNSC 2017	UniCal, UOV, TUe	IEEE	16-18 May 2017	Calabria, Italy
Workshop	Globe-IoT Workshop, to be held with IEEE CNCC 2017	UniCal, UPV, Rinicom, Sripas, TUe	IEEE	8 Jan 2017	Las Vegas, USA
Conference	9th International Conference on Internet and Distributed Computing Systems (IDCS) 2016	UniCal	Springer	28-30 Oct. 2016	Wuhan, China
Special Session	Collaborative WSN and IoT, to be jointly held with IEEE SMC 2016	UniCal	IEEE	9-12 Oct. 2016	Budapest, Hungary
Workshop	I4T Workshop, jointly held with IEEE IoTDI 2016	UniCal, UPV, Rinicom, TUe as chairs and all other partners in the Program Committee	IEEE	4th April 2016	Berlin, Germany
Book	Integration, Interconnection, Interaction among IoT Platforms	UniCal, UPV, Rinicom, Tue	Springer	2017	
Special Issue	IEEE Computing Now	UniCal, SRIPAS, UPV	IEEE	December 2016	
Special Issue	Concurrency and Computation: Practice and Experience, special issue on Internet of People	M. Li, L. Liu, Antonio Liotta	Wiley	May 2016	

Since the beginning of the project, academic members of the consortium have been actively pursuing what has been described in the proposal and in the impact creation plan (Deliverable 8.3). Specifically, a number of workshops have been organized and they all were successful in gathering participants from outside of the consortium. It should be stressed, that these workshops / conferences are organized with involvement of key partners: IEEE, EAI and Springer as the publisher. This assures high impact of these events as well as wide dissemination of presented results.

2.3 Industrial Dissemination

Since the beginning of the project, industrial dissemination was (and remains) one of our key goals. As a matter of fact, there was a number of industry focused presentations already delivered. Furthermore, we have participated in the SIDO 2017 and different editions of IoT Week, in which the consortium presented three demos related with INTER-IoT products. Our presentation attracted considerable interest, including representatives of IBM and W3C. Furthermore, while it is rather difficult to be certain that the Facebook-based dissemination is well-targeted towards business community, the situation changes when LinkedIn (our group) and Twitter (our account) are considered. Here, it is clear that messages that have been posted reach out to the business community (both these channels are, clearly, oriented towards professionals).
Nevertheless, the following observation has to be made. It is rather difficult to reach-out to the business community with no running software / prototype in hand. This is why only now, with the initial modules actually working, we are ready to stress industrial dissemination in three areas:

- IoT in general,
- e-health related IoT issues,
- IoT in logistics.

Several events were already identified in D8.3 and some of them have already been selected for attendance during the second half of the project in which potential for success of our ”products / results” in the business community could be achieved as was clearly visible during the IoT week. The project will perform different showcases to stakeholders during Y3 of the project in Torino and Valencia, location of the pilots.
Furthermore, we fully expect that majority of the collaboration from the Open Call will generate results that will be natural to communicate to the business audience. Here, it is worthy noting that, in the latter case, it will be our partners (from the Open Call) who will take part (hands-on) in the dissemination activities. The two large scale collaborations are tied to ECLIPSE, through the OM2M project and the recently open sensiNact project. Both aspects started with the presence of INTER-IoT in ECLIPSECON 2016, will provide a possibility of promoting INTER-IoT results, attending to ECLIPSECON 2017 together with the partners of the open call.
During the Advisory Board meetings it was suggested by the stakeholder members and the representant of capital investments present results to industrial community when demonstrations were ready. Henceforth, we are certain that it is now after first demos have been released when we have reached the point when we have product(s) to leverage to disseminate to outreach to our target business audiences.

2.3.1 Demo and Posters for Industrial Events

During the course of the project we prepared three demo, to be shown mainly at Industrial events, in order to explain what our products ware able to do in practical context.
For what concern the Application and Services layer, we show several isolated services interoperating between each other using Inter-IoT - NodeRED tool. Two trucks are moving around Valencia and a CEP (Fiware/Proton) service fires an event 10km before approaching the port. Then all the service composition wiring comes into play and all information is extracted and collapsed regarding the truck destination (consulting the Port Community System service, PCS) and previous port calls that the

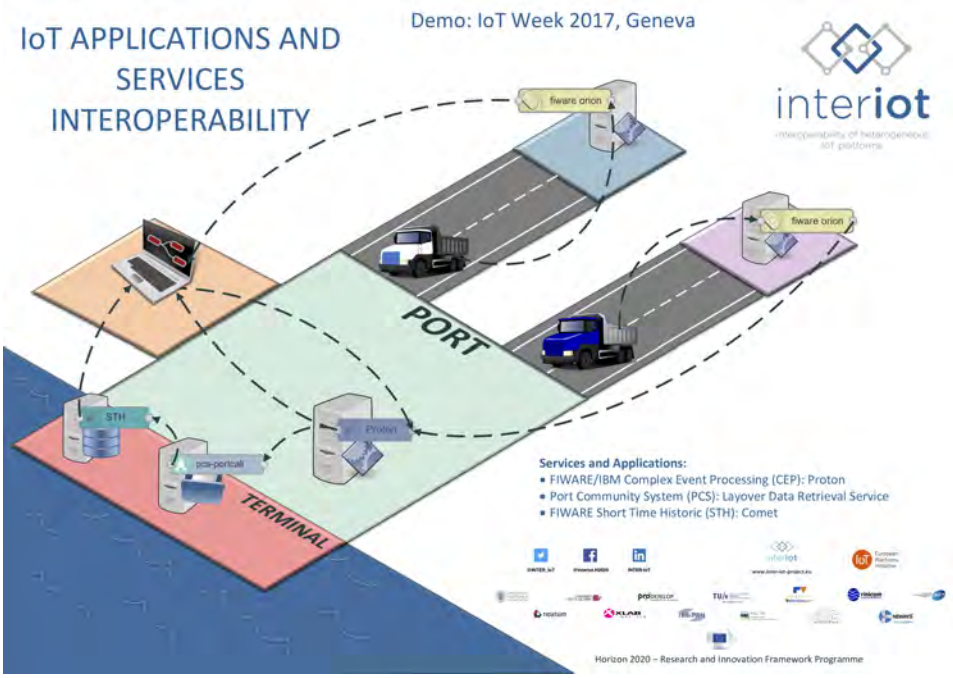


Figure 2.1: AS2AS Demo Poster

truck serviced (consulting the Short Time Historic service of Fiware, STH) and displayed in a GUI dashboard.
For what concern the Demo on the Middleware, we focus on the Integration of Universaal (UaaL) and Orion (FIWARE). The specific setup is the following: the Scale goes to Mobile phone (acting as a gateway, via bluetooth) and the phone sends the sensor information to UaaL (via Wifi). INTER-MW bridges the information of UaaL with Orion (FIWARE) then a GUI to visualize the measurements is subscribed to Orion to prove that the bridging works.
The aim of DS2DS demo was to present the functionality of semantic translation performed by IPSM component. The background story for the demonstration is as follows:

- There are 4 IoT artifacts/platforms that cooperate in e.g. a port environment. They have the following roles: P1 – produces sensor observations; P2 – analytical platform that should receive observations produced by P1; P3, P4 – business logic platforms that consume observations published by P2.
- The architecture of IPSM assumes existence of a central ontology (CO) specific for a deployment and based on GOIoTP. In this case central ontology is based on SOSA and geoSPARQL for geospatial data representation.
- Each platform uses a different ontology:

  P1 http://platform1.eu/sensors# extending SSN and wgs84_pos for geospatial data (e.g. OpenIoT)

  P2 http://platform2.eu/sensors# extending SAREF and wgs84_pos for geospatial data

  P3 P3 - http://platform3.eu/sensors# extending SSN and wgs84_pos for geospatial data (e.g. OPEN-IoT)

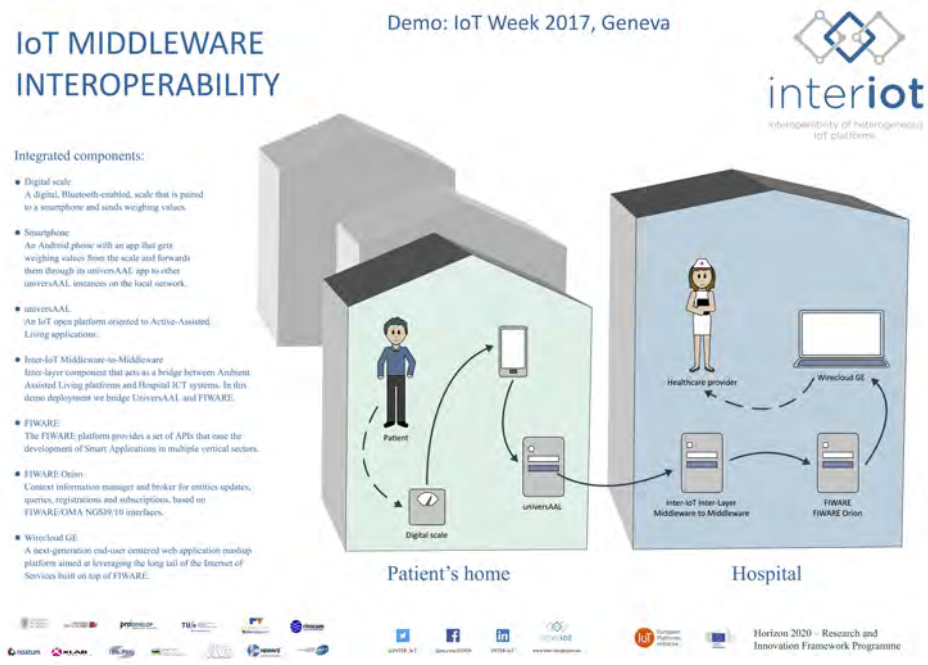


Figure 2.2: MW2MW Demo Poster

P4 P4 - http://platform4.eu/sensors# extending SSN and geoRSS for geospatial data (e.g. IoT-Lite)

The IPSM architecture is based on communication channels created between components. Each semantic translation channel uses two alignments (performs two translations) – from source ontology to central ontology, and from central ontology to target ontology. Considered translation channels:

1. Between P1 and P2
2. Between P2 and P4
3. Between P2 and P3

Each pair of messages is de facto the same message in terms of metadata, but the payload changes due to applied alignments.
The demonstration included two scenarios: (1) performing semantic translation between selected IoT artifacts and inspecting the results, (2) running continuous translation of messages generated by one of the IoT artifacts and measuring number of translation per second.

2.3.2 Meetings with Industries

A few industrial partners in the consortium engaged in the last few months discussions with relevant industries related to INTER-IoT. Typically, end-users may have environments that grew not organically, following different patterns, and now they have a situation where several different platforms are used, they are not interoperable, and the situation is not scalable any longer. These industries were looking for a long-term plan on improving the situation, but they would rather avoid the "big bang" solution of changing all systems at once. In context like these, the availability of INTER-IoT solutions

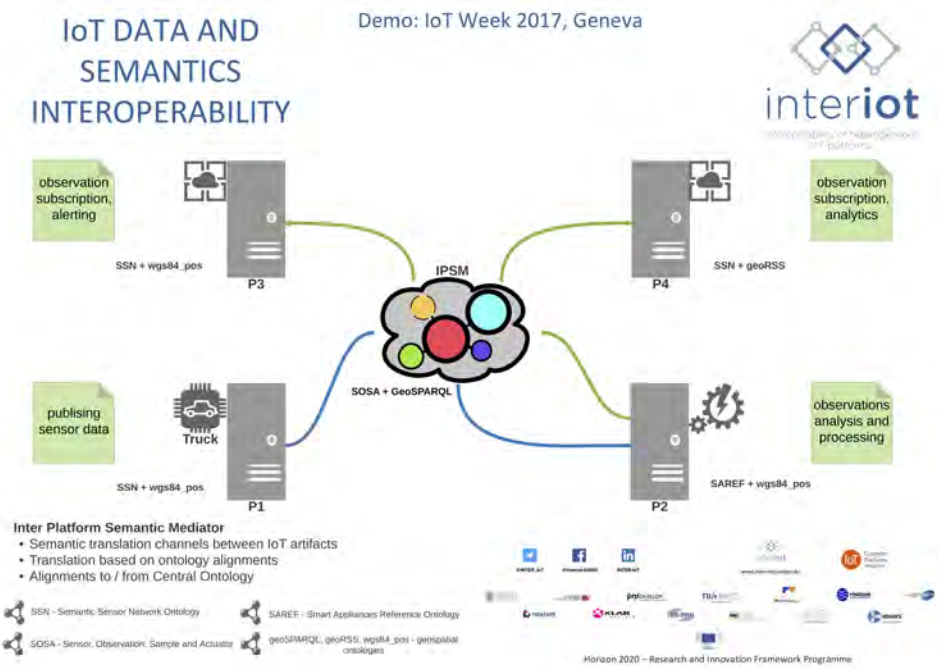


Figure 2.3: DS2DS Demo Poster

(such as INTER-Layer or INTER-FW) would be extremely beneficial. INTER-IoT solutions were presented during these private meetings, and generally a very high interest was shown by the potential customers.
While unfortunately it is not possible to list these meetings and the industries, as they were held under strict NDA conditions, we believe that at least some of these will develop in a successful relationship for a direct exploitation of the project results.

3 Report on Communication

3.1 Introduction

The Deliverable D8.3 set the foundation for the communication roadmap for the INTER-IoT project. It is quite common to see that often communication activities in publicly-funded EU project don't manage to reach any particular success. Looking at the issue from a purely marketing point of view, successful communication implies to have a target audience, a message that the target is keen on listening, and a media channel where this message can be delivered.
During the first half of the project the right instruments were put in place, so that communication efforts could be targeted to specific audiences. While INTER-IoT is a RIA project, and therefore has a strong focus on research, its success will be like a seed for further developments.
The figure 3.1 shows our communication targets on a map; this is fundamental in order to assess the best way to reach our audience.

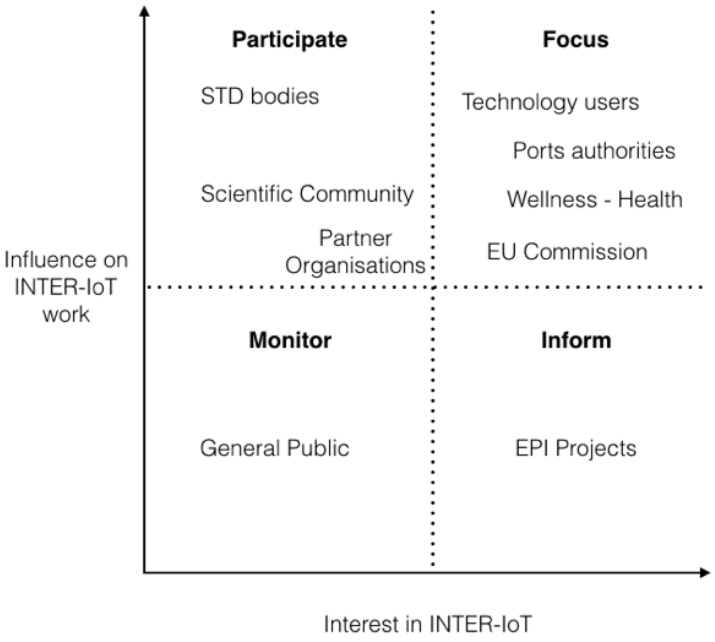


Figure 3.1: INTER-IoT Communication Targets

As planned, we will use different communication means according to the quadrant where a specific target audience is identified. While the web site and social media like Linkedin, Twitter and Facebook

have been used as a generic portal for communicating our result to a large audience, the analysis of a questionnaire that we submitted to our highly relevant targets showed hat seldom those means are used in order to take strategic decisions - or even information - on novel technologies.

3.2 Communication Questionnaire Results

During the first 18 months of the project we prepared a questionnaire to our most relevant stakeholders in order to understand what was the most efficient way to "reach out" to them. Typically, the stakeholders were selected from the ones identified in WP2 (Deliverable D2.1). Out of all stakeholders contacted, which represented a ”delphi” set, around half of them replied to the questionnaire. Hereafter the analysis of the answers which are relevant for the Communication Channels. It is important to notice that the answers were mainly given by people that can heavily influence the respective companies on new technologies (C-level executives, Directors, ...).

From which source do you get the most valuable information on Technology Products for your company?	The highest number of replies is from direct search on Internet (around 30%), then with direct communication with R&D partners (25%)
From which source you believe you don’t get any interesting information?	Apart from newsletters, which got the highest number of replies, the other replies vary from social media to emails to mainstream media.
Ideally, how often would you like to be informed about new technological developments that could have an impact on your current activities?	Here, we have an almost flat uniform distribution from once a day to once every six months
Did you participate as a delegate to some Fair / Event in the last 2 years? If so, which ones?	The highest number (by far more than 50%) of replies was none; Among the ones that went to some event, TOC Amsterdam is the most common reply
Do you plan to participate to some Fair / Event in the next year? If so, which ones?	Answers were similar to the previous questions, with a large number of replies saying "none" and the majority of the rest TOC Amsterdam
How often do you use social media for your business (Twitter, LinkedIn, Facebook, etc.)?	While the majority of answers were regularly (30%), the second biggest group was never (either because of no interest or because company does not support that activity).

3.3 Web site traffic

Website pages views have been analysed since its launch by using Google Analytics. Results are shown in the figures 3.2 and 3.3

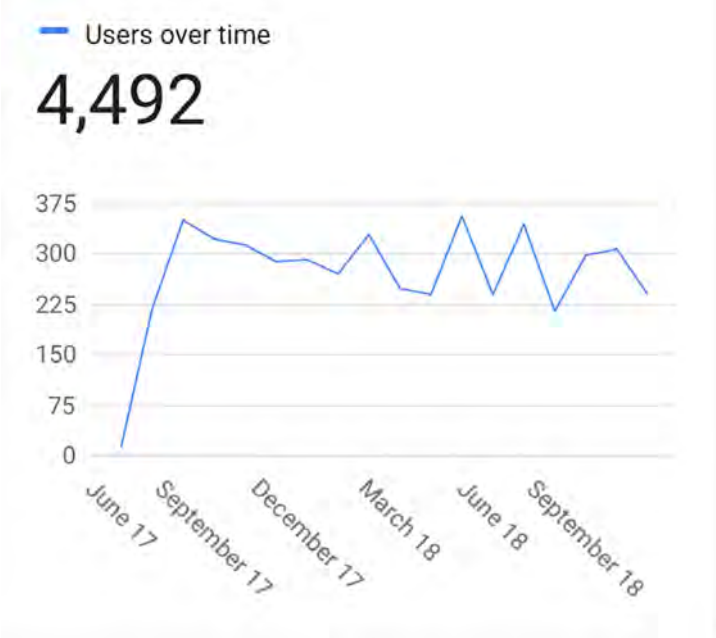


Figure 3.2: INTER-IoT WebSite Traffic

Figure 3.3: INTER-IoT WebSite Traffic

During the second period of the project, the number of visits to the web site has been very stable. The total number of user, just shy of 5000, is also very good. It's also important to see that while the average session duration well over a minute (a very long time for Internet standards), which means that the users did not come by mistake to our site.

3.4 Social Media presence

For what concerns standard social meda (such as Linkedin, Twitter, Facebook), the project set up from the very beginning the different accounts. While these channels do not seem to be the most appropriate to reach the stakeholders identified in the highest quadrant, we do feel that it's important to have a presence for both the general public and for the stakeholders that do follow these media. The table 3.2 summarises the current statistics regarding social media presence:

Social Media	Followers	Actions
Twitter	600+	100+
Linkedin	280+	100+
Facebook	500+	hundreds

Table 3.2: Social Media Presence

3.5 Liaison with other projects

Deliverable D8.3 considered in the communication action the liaison with different project, and a preliminary plan was drafted, however as the relationship with IoT-EPI is ongoing and since January 2017 H2020 IoT1 LSP projects started, the consortium decided to apply a specific strategy in order to manage this action and focus on answering the question with whom the INTER-IoT project plans to engage, when, where, and on which basis. Driven by this underlying question, this section draws current status of the projects external liaisons plan.
The liaison strategy is split into the following five phases over the project duration:
Phase 1: defined the external liaisons strategy and the initial set of Key Performance Indicators (KPI) for documenting the execution of the strategy. In addition, the first phase in external liaisons dealt with the identification and selection of candidate projects with which INTER-IoT plans to engage. The above criteria determine the frame based on which a selection of candidate projects is made.
Phase 2: the purpose consisted in reaching out to previously identified candidate projects. Contacts to partner projects were established and a joint planning in terms of common interests and the organizational aspects of a mutual exchange among involved projects was foreseen. The time frame for establishing contacts was kept as short as possible to allow shifting the focus at an as early as possible point in time to liaising with partner projects on a content-oriented basis.
Phases 3 and **4** were planned to start in parallel with phase 2. Phases 3 and 4 grouped liaising activities along the key set of focal points INTER-IoT will adopt and work upon in the respective time frame. These time frames were in-line with INTER-IoT's project plan, plus the envisioned focal points are aligned with the key project assets.
Phase 5 is more focused on pilots and evaluation of the results.
The following projects were selected initially during the first year of the external liaisons plan:

- IoT-EPI (http://www.iot-epi.eu) group of nine different projects with which INTER-IoT has been interacting. Special liaison with
  - SYMBIOTE (https://www.symbiote-h2020.eu/) as the developed architecture has similarities with INTER-IoT,
  - BIG-IoT (http://www.big-iot.eu) as the concept associated with API and security has been discussed in different meetings,

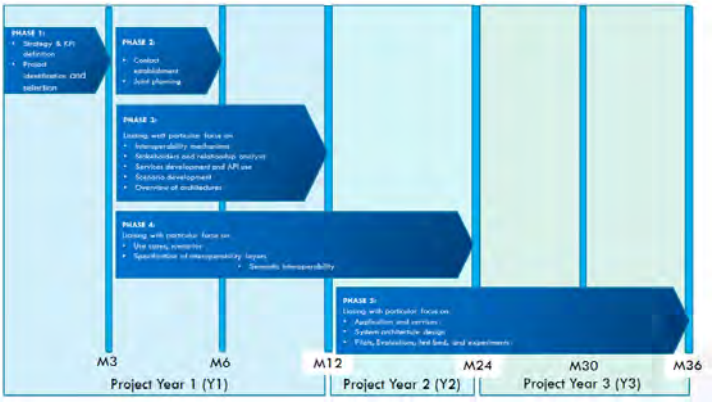


Figure 3.4: External Liaisons Strategy Structures in Phases

  - AGILE (http://www.agile-iot.eu) as the concept of gateway presents some similarities with INTER-IoT D2D layer.

- IoT-LSP (web site not available yet) cluster of the five IoT1 LSP projects, a meeting with the five projects was held during IoT Week in order to establish relationships between projects, till now specific interactions with:
  - ACTIVAGE (http://www.activageproject.eu) dealing with interoperability for Active and Healthy Aging (AHA), the link is with the interoperability layer and semantics between IoT platforms, as INTER-IoT MW2MW layer and IPSM meet the requirements.
  - IoF2020 (http://www.iot2020.eu) related with farming and food industries and the need for interoperability, the interaction is twofold related with the interoperability layer and the gateway.
- H2020 Transforming Transport (http://www.transformingtransport.eu/) require INTER-IoT API and INTER-LAYER components to access data in INTER-LogP environment. The pilot for Big Data will deployed over INTER-IoT pilot.
- H2020 F-INTEROP (http://www.f-interop.eu/) FIRE project related with the provision of remote interoperability, the IoT interoperability as a service can be offered in the platform.
- ITEA3 APPS (http://www.apps-project.eu/)intends at future surveillance systems by exploiting the benefits of different sensor modalities. PRO is approaching architectural components of INTER-LAYER with APPS components, and searching for synergies with INTER-LogP and the APPS pilots at Port of Rotterdam.
- BIG-CLOUT (http://big-clout.eu) the project uses interoperability between IoT platforms in smart cities environment and the use of the information for big data analytics. The projects selected for liaison have been analysed in terms of different criteria:
- C1: In which ways could INTER-IoT profit from liaising with the project in question?
  - C1.1: Could INTER-IoT's interoperability mechanisms profit?
  - C1.2: Could INTER-IoT's stakeholder and relationship analysis profit?

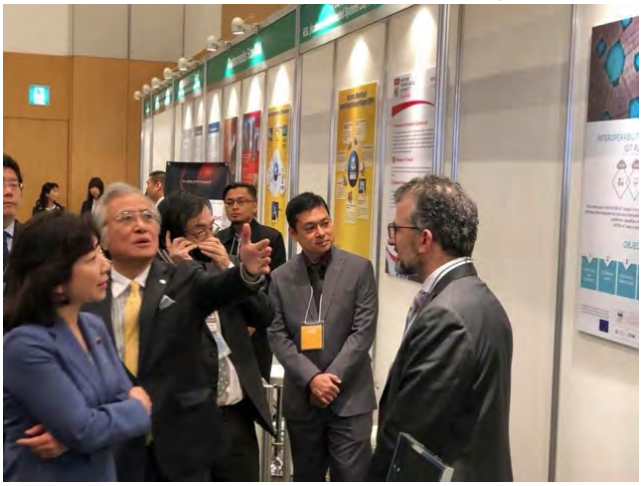
  - C1.3: Could INTER-IoT's INTER-FW and API profit?
  - C1.4: Could INTER-IoT's scenarios development profit?
  - C1.5: Could INTER-IoT's overview and/or the specification of solutions profit?
  - C1.6: Could INTER-IoT's definition of use cases profit?
  - C1.7: Could INTER-IoT's SMART objectives profit.
  - C1.8: Could INTER-IoT's system architecture design be influenced?
  - C1.9: Could INTER-IoT evaluations, its test-bed, and/or experiments profit?
  - C1.10: Are there any other than the previously mentioned areas in which INTER-IoT could profit from that project?
- C2: In which ways could the project in question profit from liaising with INTER-IoT?
  - C2.1: Could that project profit from INTER-IoT's interoperability mechanisms?
  - C2.2: Could that project profit from INTER-IoT's stakeholder and relationship analysis?
  - C2.3: Could that project profit from INTER-IoT's INTER-FW and API?
  - C2.4: Could that project profit from INTER-IoT's scenario development?
  - C2.5: Could that project profit from INTER-IoT's overview and/or the specification of solutions?
  - C2.6: Could that project profit from INTER-IoT's definition of use cases?
  - C2.7: Could that project profit from INTER-IoT's SMART objectives.
  - C2.8: Could that project profit from INTER-IoT's system architecture?
  - C2.9: Could that project profit from INTER-IoT evaluations, its test-bed, and/or experiments?
  - C2.10: Are there any other than those previously mentioned areas in which that project could profit from INTER-IoT?

	C1: In which ways could INTER-IoT profit from liaising with the project in question?										C2: In which ways could the project in question profit from liaising with INTER-IoT?									
	C1.1	C1.2	C1.3	C1.4	C1.5	C1.6	C1.7	C1.8	C1.9	C1.10	C2.1	C2.2	C2.3	C2.4	C2.5	C2.6	C2.7	C2.8	C2.9	C2.10
Symbiote	x	x		x	x	x	x	x	X	x	X	X	x	x	x	x	x	x	x	x
BigIoT		x	x	x	x	x	x	x	X	x		X	x	x	x	x	x	x	x	X
AGILE	x						x	x	X	x	X	X					x	x	x	X
ACTIVAGE		x		x	x	x	x			x	X	X	x	x	x	x	x	x	X	x
IoF2020		x		x	x	x	x			x	X	X	x	x	x	x	x	x	x	x
TT				x	x					x		X	x	x	x	x	x	x	x	X
F-INTEROP							x		x			X			x		x	x	X	
APPS											X	x	x	x		x		x	x	X
BIGCLOUT				x					x	x	x	x	x	x	x	x		x	x	x

Table 3.3: Projects that have liaisons with INTER-IoT

3.6 Public Events

1	TRONSHOW
Place	Tokyo, Japan
Date	13 December 2017
Partner Participating	ABC (Alessandro Bassi)
Event Type	The Global Trends of the IoT:INTER-IoT - consideration on interoperability issues and solutions
Description	TRONSHOW is a major Industrial event in Japan, featuring more than 5000 participants, with a large majority from Industry. The event was created around the TRON (The Real-time Operating system Nucleus) for embedded systems in 1984, which still has around 60% of the industrial market in Japan in one of its recent versions (t-kernel 2). More info at :http://www.tronshow.org/index-e.html
Notes	We also had a booth showing the results of the project. In particular, we explained the project to Ms Noda (the Japanese minister for Internal affairs and Communication)



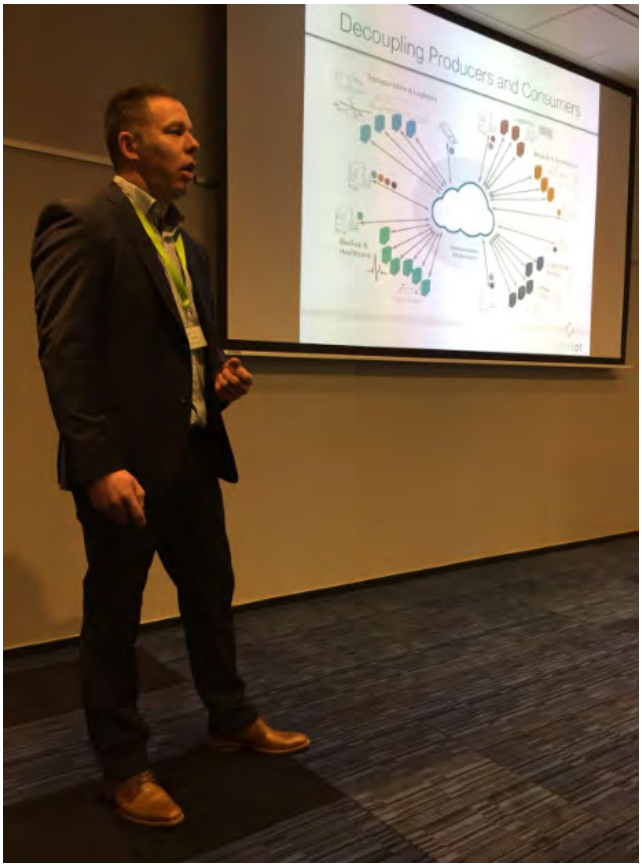
2	International Cargo Handling Coordination Association Congress
Place	Las Palmas (Spain)
Date	2-6 October 2017
Partner Participating	(Prodevelop)Christophe Joubert, Helmut Bellingrodt, Jose Abell/'an
Event Type	Delegates met in Las Palmas, Gran Canarias, Spain from 2-6 October 2017 to mark 65 years of ICHCA International working to improve the safety, efficiency and sustainability of the cargo handling industry worldwide.
Description	

Notes	The International Cargo Handling Coordination Association (ICHCA), founded in 1952, is an independent, not-for-profit organisation dedicated to improving the safety, security, sustainability, productivity and efficiency of cargo handling and goods movement by all modes and through all phases of national and international supply chains. h.URL: https://ichca.com/ichca-international-conference-2017

3	SAMUEXPO
Place	Pordenone, Italy
Date	1 February 2018
Partner Participating	ABC (Alessandro Bassi)
Event Type	SAMUEXPO is a very large fair (more than 12.000 participants from 29 countries). Within SAMUEXPO, FABBRICA 4.0, Digital revolution area, is one of the four main exhibition area, with large space for different workshops where the different perspectives of the fourth industrial revolution are analysed and discussed.
Description	We participated to a panel on Industry 4.0, discussing the current interoperability issues
Notes	The workshop was attended by around 80 people

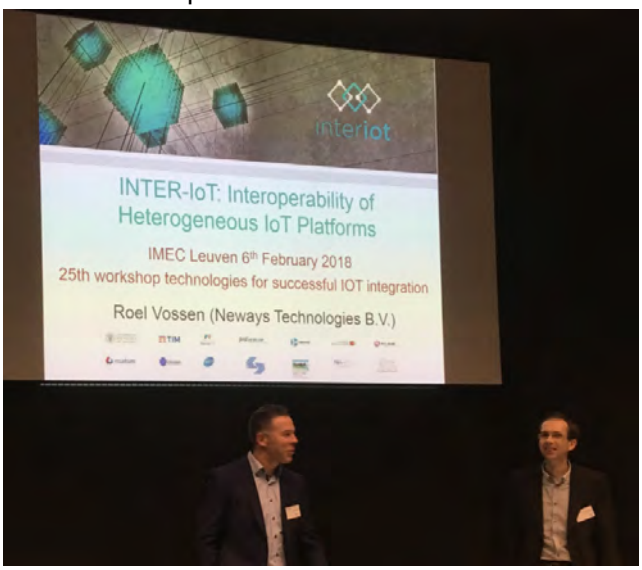
4	AAPAt's XXVI Latin American Congress
Place	Punta del Este (Uruguay)
Date	6, 7 and 8 of November 2017
Partner Participating	Prodevelop (Helmut Bellingrodt)
Event Type	Conference, Congress and Exhibition
Description	The 26th edition of the AAPA Latin American Congress of Ports strengthened its status as the premier port conference in Latin America by gathering over 350 participants from over 30 countries and four continents in Punta del Este, Uruguay. "Latin American Ports between Globalization and Protectionism" served as the theme for the summit.
Notes	The American Association of Port Authorities is the unified voice of the seaport industry in the Americas, representing more than 130 public port authorities in the U.S., Canada, the Caribbean and Latin America. For more than a century, AAPA membership has empowered port authorities and their maritime industry partners to serve global customers and create economic and social value for their communities. h.URL: http://www.aapa-ports.org/unifying/PastDetail.aspx?itemnumber=21879

5	Health Tech Event
Place	MECC Maastricht, the Netherlands
Date	31 January 2018
Partner Participating	NEWAYS (Roel Vossen)
Event Type	Technology is quickly transforming the world of health care. On January 31, 2018, the 7th edition of the Health Tech Event at MECC Maastricht, The Netherlands will bring together the brightest minds from within the field to inspire and enlighten you about the latest trends and developments in health technology. The conference will focus on robotics and related medical technology: topics ranging from social robots to robotised surgery and solutions to transfer cure and care from the hospital to the home.
Description	NEWAYS has given a lecture about the Inter-IOT project, its approach, results and what this could mean wrt the Health Sector in the near future
Notes	The lecture was attended by +/- 50 people, mostly from companies from the healthcare industries (machines, products, production and development; not health service related



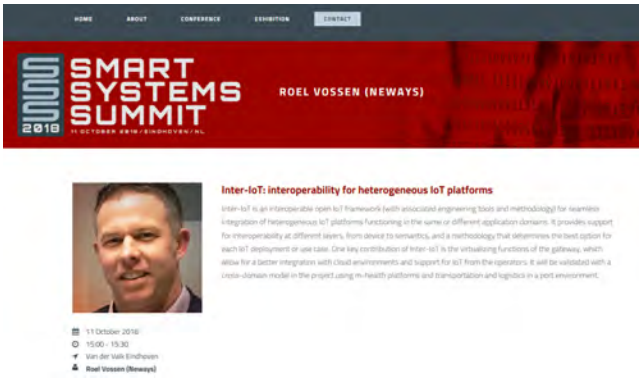
6	IMEC - Wireless Community
Place	IMEC; Leuven, Belgium
Date	6 February 2018
Partner Participating	NEWAYS (Roel Vossen)
Event Type	About Wireless Community 25th workshop: The huge variety in wireless technologies and data formats in IoT devices from multiple vendors can make the deployment, data acquisition and management of IoT networks a very challenging task. While vertical integration for specific applications domain is often supported by industry consortia, the horizontal integration of IoT use cases is far less easy. An interesting initiative is the OneM2M standardization that promotes interoperability between a wide range of applications and services such as in smart home, smart cities, smart industry etc. In this workshop we will bring you an overview of standardisation activities and new (software) methodologies for fast and easy integration of IoT applications, both at the mobile node side and in the cloud.
Description	NEWAYS has given a lecture about the Inter-IOT project, its approach, its architecture, its building blocks, inter-platform approach, pilots, results and what this could mean wrt the future of IOT integration and adaption

Notes	The lecture was attended by +/- 120 people, mostly from companies and research institutes with focus on wireless networks/IOT/products



7	Smart System Summit 2018 - Technologies for the IOT
Place	Eindhoven; the Netherlands
Date	11 October 2018
Partner Participating	NEWAYS (Roel Vossen)

Event Type	Technologies for the IOT conference: Exabytes of data, billions of sensors, millions of computers. A complex system, of which the performance and power trade-offs are determined by what's being sensed, processed or stored, and where in the chain it takes place. It additionally affects attributes that matter to us all, like security and privacy. This track elaborates on the latest IoT technologies and the balance to be found between the promises of IoT and what works for people and society.
Description	NEWAYS has given a lecture about the Inter-IOT project, its approach, its architecture, its building blocks, inter-platform approach, pilots, results and what this could mean wrt the future of IOT
Notes	The lecture was attended by +/- 600 people, mostly from companies and research institutes with focus General IOT Technologies and Automotive



8	The Future of Agriculture in Europe
Place	Brussels, Belgium
Date	27th June 2018
Partner Participating	Prodevelop (Amelia del Rey)
Event Type	Conference
Description	Smart AKIS Conference targets both policy officials and practitioners interested on the adoption of Smart Farming in Europe. Main results from the 30 months Network has been highlighted during the event, as well as testimonials from representatives from farmers, research, industry and advisors engaged in the innovation process put in place by the Network in 7 Innovation Hubs. The Conference has been also be the venue for presenting the Smart AKIS Recommendations and Policy Briefs resulting from the reflection process carried out with stakeholders following a bottom-up approach. Besides, the Conference has provided an overview on the current state of play and future trends of Smart Farming in European Agriculture. +100 participants
Notes	URL: https://www.smart-akis.com/index.php/2018/05/04/smart-akis-conference-registration-open/

9	VII Conference of the African and Spanish maritime and port women
Place	Las Palmas (Spain)
Date	24-28th September 2018
Partner Participating	Prodevelop (Amelia del Rey)
Event Type	Conference

Description	Prodevelop participated in the "VII Conference of the African and Spanish maritime and port women" which has taken place from 24-28th September 2018 in the Casa África headquarters in Las Palmas de Gran Canaria (Spain). The event was opened by the President of Spanish Ports (Ms Ornella Chacón), the President of the Port Authority of Las Palmas and the Port of Las Palmas Foundation (Mr Juan José Cardona), the Director for Institutional Cooperation and International Solidarity of the Regional Government of Las Palmas (Mr Carmelo Ramírez), the Director of Casa África (Mr Luis Padrón) and the President of RFPAOC (Ms Florentine Koidio). Approximately sixty women with relevant positions in their respective organizations from different African countries, as well as Spanish women representing various entities such as the University of Las Palmas de Gran Canaria, Spanish Ports or Port Maritim Customs of las Palmas, among others, participated in this conference. Amelia de Rey made a presentation about the Digitalization 4.0 in Ports. She highlighted the H2020 R&D projects carried out by the company within the framework of Smart Ports such as PIXEL and INTER-IoT. On the other hand, she pointed out the relevance of the use of the suite for port management commercialized by Prodevelop: Posidonia Suite, which is currently implemented in numerous Spanish ports and in some ports in Africa and Europe, helping them to increase their efficiency and be more competitive.
Notes	

10	Smart City World Congress 2018
Place	Barcelona (Spain)
Date	13th-15th November 2018
Partner Participating	Prodevelop: (Ismael Torres)
Event Type	Congress

Description	Prodevelop participated in the Smart City World Congress 2018 that took place in Barcelona (Spain). Our colleague Ismael Torres attended to the congress with a commercial networking purpose, presenting the results of the project INTER-IoT for its use on the Smart City domain.
Notes	URL: http://www.smartcityexpo.com/en/home

11	Fiware Summit 2018
Place	Oporto (Portugal)
Date	27th-28th November 2018
Partner Participating	Prodevelop (Miguel Montesinos)
Event Type	Congress
Description	As members of the FIWARE Foundation, Prodevelop participated at the FIWARE SUMMIT 2018 celebrates in Porto in Portugal. Our colleague Miguel Montesinos collaborated with the Open Source FIWARE Community sharing knowledge about the results obtained of the project INTER-IoT.
Notes	URL: https://www.fiware.org/event/fiware-global-summit-2018-porto/

12	MELECON 2016
Place	Limassol, Cyprus
Date	18-20 April 2016
Partner Participating	UPV (Regel Gonzalez Usach)
Event Type	18TH IEEE Mediterranean Electrotechnical Conference
Description	Melecon 2016 is an IEEE Region 8 flagship conference with a long standing history of excellence both in electrotechnology and in recent years in information and communication technologies as well. Melecon 2016 covers complementary thematic areas that hold great promise for the advancement of research and technological development in the solution of complex engineering systems.
Notes	Presentation of the papers ”Sensor Observation Service Contrained Application Protocol Proxy Design” and ”Hybrid Delay-Based Congestion Control for Multipath TCP”

13	APLOP Congress
Place	Lisbon, Portugal
Date	11-12 November 2017
Partner Participating	Prodevelop (Helmut Bellingrodt)
Event Type	Conference and Congress of members of the Portuguese Language Ports Association

Description	All port members attended and discussed about "Logistics Chain Integration", "Logistics Single Window", "Cargo Traceability for international trade, Automation and the future of Maritime Transport" and "Shipping trends".
Notes	http://www.aplop.org/menu/index.php?x=107 URL: http://congresso2017.aplop.org/

14	ENEA KeyEnergy
Place	Rimini, Italy
Date	9 November 2018
Partner Participating	ABC (Alessandro Bassi)
Event Type	"Key Energy, where energy meets the future" is the leading fair for renewable energies in the Mediterrean area
Description	Ecomondo and Key Energy offers today's biggest platform for the entire Mediterranean basin with 1250 exhibiting companies attracting over 116,000 attendees. Ecomondo has successfully anticipated business changes over time, from waste processing to dialoguing with industry on the development of an economic model based on green technologies. All sectors are efficiently represented, from waste to integrated water cycle, to air, bio-based industry and energy. The intended vision is that of the circular economy, which involves the formation of new interconnected industrial clusters as set out in the future investment plans of the European Commission. Key Energy is the leading fair for renewable energy in the Mediterranean Area. Focus on photovoltaic and storage, solution for energy efficiency in industry and residential, solutions for sustainable intermodal, connected mobility and sustainable cities.
Notes	Around 200 people attended the workshop

15	Yantai Cluster presentation
Place	Yantai, China
Date	15 April 2018
Partner Participating	ABC (Alessandro Bassi)
Event Type	Meeting with Industry
Description	Yantai is one of the fastest growing economic area in China. The newly opened Yantai Intelligent Manufacturing Industrial Park is committed to taking all necessary steps to acquire cutting-edge facilities. Its integrated intelligent manufacturing resources across the city will provide an intelligent manufacturing platform for companies and enable resource sharing. The park was initiated by local high-tech companies and is supported by Shandong University, Yantai University and Shandong Technology and Business University.

Notes	Around 300 people attended the workshop

16	Globally Connected Logistics - IPCSA Annual Conference 2017
Place	Brussels (Belgium)
Date	23 of November 2017
Partner Participating	Prodevelop (Helmut Bellingrodt)
Event Type	Conference
Description	The International Port Community Systems Association (IPCSA) returned to its "roots" for it's 2017 Annual Conference, with the theme "Globally Connected Logistics" covering Digitalisation, Trade Facilitation and Effective Border Management.
Notes	IPCSA is the successor to the European Port Community Systems Association (ECPSA) which was launched in June 2011 by six founding members, all European-based Port Community System operators. IPCSA and its members play a vital role in global trade facilitation; the electronic communications platforms provided by Port Community Systems ensure smooth transport and logistics operations at hundreds of sea ports, airports and inland ports. h.URL: http://ipcsa.international/events/2017-11-23-globally-connected-logistics-ipcsa-annual-conference-2017-23rd-november-2017

17	PTIt's Container Terminal Automation Conference
Place	London (UK)
Date	14-15 of March 2018
Partner Participating	Prodevelop (Helmut Bellingrodt, Miguel Montesinos)
Event Type	Conference
Description	The PTI conference brought together the top futurists, analysts and engineers in AI Automation and uncovered the secrets of AI Automation, exploring the latest cutting-edge operations along the supply chain, address the human cost and how that can be leveraged, envision what lays in store for humanity and physical trade, and ensure optimum cybersecurity practices are discovered.
Notes	Port Technology International (PTI) is a magazine published four times a year, Port Technology is the only technical preview and review of advanced technologies for ports, harbours and terminals world-wide. Each edition features over 30 technical papers written by leading industry professionals, which reflect emerging trends and technical advances that enhance efficiency and increase productivity in ports and terminals. h.URL: https://www.porttechnology.org/conference

18	IV Congreso de Ciudades Inteligentes (CongresoCI)
Place	Madrid (Spain)
Date	30th and 31st May 2018
Partner Participating	Prodevelop (José Ferri (CO) and Ismael Torres Boigues)
Event Type	Congress
Description	The "IV Congreso Ciudades Inteligentes" goal is to boost the Exchange of knowledge and experiences about Smart Cities in Spain through the use of cutting-edge technologies and innovation as based tools for its development. The congress addresses the main city topics from a transversal and multidisciplinar and multi-sector perspective, highlighting the initiatives that are being developing in Spain.
Notes	PRODEVELOP has been the author of an accepted publication that appears in the proceedings of the congress and has attend to the congress. Paper reference: "Trabajando con datos IoT de múltiples orígenes y plataformas a través de una única interfaz: INTER-IOT para reducir el coste y la complejidad".Ismael Torres 1, Miguel Ángel Llorente 1, Miguel Montesinos 1 y Carlos E. Palau 2. (1 Prodevelop, 2 UPV) IV Congreso ciudades Inteligentes (pag 296-303). ISBN 9781980878469 +300 participants, the CCI is the largest Smart city forum in Spain. Web: https://www.congreso-ciudades-inteligentes.es/

19	Smart cities for smart citizens
Place	Valencia (Spain)
Date	7th and 8th June 2018

Partner Participating	Prodevelop (Miguel Montesinos (CTO) and Ismael Torres Boigues)
Event Type	Congress
Description	The vision of the Congress will be focus on technology as a mean and not an end. Instead of simply focusing on technological advancements, the perspective will focus on the effects of such advancements on citizens. In this sense, the role of public power and the commitment of companies in human development in these new cities will be analyzed. +200 participants, the CCI is the largest Smart city forum in in Spain.
Notes	+200 participants, the CCI is the largest Smart city forum in in Spain. URL: http://smartcitizenvalencia.com/

20	IoT Week
Place	Bilbao (Spain)
Date	4th- 7th June 2018
Partner Participating	Prodevelop (Miguel Ángel LLorente)
Event Type	Conference/ Meeting

Description

The Internet of Things weeks gathers a community of stakeholders engaged in developing new Internet of Things (IoT) technologies and solutions. Organized by the International Forum on the Internet of Things (IoT Forum) on a yearly basis, and IK4-TEKNIKER as the local host, it attracts both industry and academia, experts, researchers, companies developing IoT solutions for diverse domains, research centres, European research projects, start-ups, developers as well as standards development organizations and policy makers, such as the European Commission and international organizations. It is the place where IoT experts meet, discuss and identify emerging trends and technologies that will impact the future. During this week new territories of the Internet of Things (IoT) were explored, including:

- Emerging IOT Research and Development
- IoT and Big Data
- IoT and Smart Cities
- IoT and Artificial Intelligence
- IoT Security and Data Protection
- IoT Market and Business Model
- IoT for Sustainable Development
- Smart Farming and Food Security
- IoT and Advanced Manufacturing

Notes

Prodevelop participated as member of the INTER-IoT consortium and collaborated in the booth of the project. URL:https://iotweek.org/

21	ETP ALICE - Collaborative Innovation Day
Place	Athens; Greece
Date	6th November 2018
Partner Participating	UPV (Ignacio Lacalle)
Event Type	**NEW GLOBAL ROUTES: ONE BELT ONE ROAD INITIATIVE (OBOR) & TEN-T**: The main objective of this Collaborative Innovation Day was to share experiences and knowledge on the new OBOR routes, challenges and opportunities for European Companies and the potential impact for freight transport in Europe. Moreover, it was further discussed to what extent the new routes could have an impact in the way the Trans-European Transport Network (TEN-T) is planned and which kind of technical improvements and upgrades would be needed to maximize the benefit. The event included very prominent speakers from the European Commission (DG- MOVE), Hellenic Ministry of Infrastructure, Transport and Networks, relevant ports and companies, and focused on sharing experiences about new global routes for trade and freight transport and on challenges and opportunities for European companies.
Description	UPV has made a presentation about how IoT can be used for improving port logistics and the new OBOR initiative, focusing on wide scope application (e.g. environmental and operational challenges), but remarking the INTER-IoT's transport-related use-case: INTER-LogP.
Notes	The lecture was attended by ś 150 people, mostly from companies and research institutes with focus on transport and logistics

22	Re e regine di cuochi
Place	Stupinigi (Turin), Italy
Date	28-29 May 2016
Partner Participating	ASL TO5 (Margherita Gulino, Ilaria De Luca, Marina Mortara, Anna Costa)
Event Type	local event on nutrition and lifestyle for citizens ”Awareness day” organized to promote proper lifestyle
Description	Regine & Re di Cuochi, the first exhibition dedicated to the Italian cuisine and its protagonists
Notes	A multimedia and interactive exhibition path with photo, documentary and objects that each cook wanted to exhibit. The exhibition is a multisensory experience that allows you to get to know the great interpreters of contemporary Italian cuisine and to enter the creative processes and kitchens that characterize their own production.

23	IERC meeting
Place	Valencia, Spain
Date	4 June 2016
Partner Participating	All partners
Event Type	Meeting of the European Research Cluster on the Internet of Things
Description	The aim of European Research Cluster on the Internet of Things is to address the large potential for IoT-based capabilities in Europe and to coordinate the convergence of ongoing activities.
Notes	

24	Salute in Comune

Place	Piobesi Torinese (Turin), Italy
Date	25 June 2016
Partner Participating	ASL TO5 (Margherita Gulino, Ilaria De Luca, Marina Mortara, Anna Costa)
Event Type	local event on nutrition and lifestyle for citizens ”Awareness day” organized to promote proper lifestyle
Description	Salute in Comune, activity of awareness, prevention and health promotion
Notes	Valorization of awareness, prevention and health promotion, proposed in the city area to involve people of different age, culture, gender and interests.

25	Invited Talk
Place	Wuhan, China
Date	6 July 2016
Partner Participating	UNICAL (Giancarlo Fortino)
Event Type	Invited Talk
Description	Invited Talk hosted by Prof. W. Li
Notes	Title of the talk: "Enabling IoT Interoperability through Opportunistic Mobile Multi-Technology Gateways"

26	WOA 2016 (Workshop ”From Objects to Agents”)
Place	Catania, Italy
Date	29 July 2016
Partner Participating	UNICAL (Giancarlo Fortino)
Event Type	International Workshop
Description	WOA (Workshop ”From Objects to Agents”) is a per-year meeting of the Italian research group on Agent and Multi-agent Systems. Topic of 2016 edition was ”Multiagent Systems for Internet of Mobile Things”. More info at http://woa2016.dmi.unict.it/.
Notes	The paper "Simulation of Agent-oriented Internet of Things Systems.” was presented by G. Fortino. Complete paper reference: G. Fortino, W. Russo, and C. Savaglio, ”Simulation of Agent-oriented Internet of Things Systems.” Proc. 17th Workshop" From Objects to Agents. 2016.

27	Giornata del Benessere 360
Place	Carmagnola (Turin), Italy
Date	27 August 2016

Partner Participating	ASL TO5 (Margherita Gulino, Ilaria De Luca, Marina Mortara, Anna Costa)
Event Type	local event on nutrition and lifestyle for citizens
Description	Giornata del Benessere 360, Awareness day organized to promote proper lifestyle
Notes	

28	FedCSIS 2016
Place	Gdansk, Poland
Date	11-14 September 2016
Partner Participating	UNICAL (Claudio Savaglio)
Event Type	International Conference
Description	The FedCSIS Multiconference consists of Events (conferences, symposia, workshops, special sessions). The FedCSIS Events provide a platform for bringing together researchers, practitioners, and academia to present and discuss ideas, challenges and potential solutions on established or emerging topics related to research and practice in computer science and information systems. More info at https://fedcsis.org/
Notes	The paper ”Agent-oriented modeling and simulation of IoT networks” was presented by C. Savaglio. Complete paper reference: G. Fortino, W. Russo and C. Savaglio, "Agent-oriented modeling and simulation of IoT networks," 2016 Federated Conference on Computer Science and Information Systems (FedCSIS), Gdansk, 2016, pp. 1449-1452. URL: http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=7733442-&isnumber=7733200

29	Mini-symposium on Intelligent processes for the Internet of Things
Place	Eindhoven, The Netherlands
Date	12 September 2016
Partner Participating	TU/e (Antonio Liotta)
Event Type	workshop
Description	https://www.tue.nl/universiteit/faculteiten/electrical-engineering/onderzoek/centre-for-wireless-technology/nieuws/19-07-2016-phoenix-mini-symposium-intelligent-processes-for-the-internet-of-things-12-september-2016/
Notes	

30	QCMAN 2016
Place	Würzburg, Germany
Date	12-16 September 2016
Partner Participating	TU/e (Antonio Liotta)
Event Type	Workshop
Description	The 4th IEEE Workshop on QoE Centric Management aims at providing an international forum for researchers addressing these challenges. QCMan 2016 will combine original full paper presentations with a motivating keynote to thoroughly explore this challenging topic.
Notes	

31	AFT Regional Delegates Seminar
Place	Paris, France
Date	13 September 2016
Partner Participating	AFT (Moncef Semichi)
Event Type	Meeting and workshop
Description	AFT Regional delegates and other personnel in charge with institutional relations. Approximately 50 people attended, all representing AFT in different regions of France.
Notes	Each year, all AFT personnel who deal with public authorities and Transport sector professional organisations gather to inform all those present on the status of ongoing activities, while highlighting the most ”cutting-edge” activities. This was a good opportunity to present attendees with Inter-IoT video and describe the main objectives of the project. The feedback receives indicates there are high expectations from the transport industry from such projects as the competitiveness our project results could enhance is key in the Transport industry.

32	EUSPN 2016
Place	London, U.K.
Date	19-22 September 2016
Partner Participating	TU/e (Antonio Liotta)
Event Type	Conference
Description	The 7th International Conference on Emerging Ubiquitous Systems and Pervasive Networks (EUSPN-2016) is a leading international conference for researchers and industry practitioners to share their new ideas, original research results and practical development experiences from all Ubiquitous Systems and Pervasive Networks related areas. http://cs-conferences.acadiau.ca/euspn-16/
Notes	

33	New Models of Care
Place	London, England
Date	22 September 2016
Partner Participating	Rinicom (Sam Scott)
Event Type	workshop
Description	exploring new models of care in the NHS
Notes	

34	Invited Talk at Wuhan University
Place	Wuhan, China
Date	23 September 2016
Partner Participating	UNICAL (Giancarlo Fortino)
Event Type	Invited Talk
Description	Invited Talk hosted by hosted by Prof. Y. Zhang. The talk was titled: ”Towards Multi-Layer Interoperability of IoT Platforms: the INTER-IoT approach”
Notes	

35	Sagra del pane
Place	Piobesi Torinese (Turin), Italy
Date	25 September 2016
Partner Participating	ASL TO5 (Margherita Gulino, Ilaria De Luca, Marina Mortara, Anna Costa)
Event Type	local event for citizens
Description	Sagra del pane, Awareness day organized to promote proper lifestyle
Notes	

36	IDCS 2016
Place	Wuhan, China
Date	28 September 2016
Partner Participating	UNICAL (Giancarlo Fortino)
Event Type	Keynote speech

Description	The International Conference on Internet and Distributed Computing Systems focuses on emerging models, paradigms, technologies and novel applications related to Internet-based distributed systems, including Internet of Things, cyber-physical systems, wireless sensor networks, next-generation collaborative systems, extreme-scale networked systems, and cloud-based big dada systems. More info at: http://sle.whut.edu.cn/IDCS2016/
Notes	Keynote speech title: "Towards Multi-Layer Interoperability of IoT Platforms: the INTER-IoT approach"

37	Festa dello sport
Place	Nichelino (Turin), Italy
Date	2 October 2016
Partner Participating	ASL TO5 (Margherita Gulino, Ilaria De Luca, Marina Mortara, Anna Costa)
Event Type	local event on physical activity and lifestyle for citizens
Description	Festa dello sport, Awareness day organized to promote proper lifestyle and a correct physical activity
Notes	

38	IoT Solutions World Congress
Place	Barcelona, Spain
Date	3-5 October, 2016
Partner Participating	UPV (Jara Suárez de Puga García)
Event Type	Exhibitions, Conferences, Testbeds, and Other Activities.
Description	IoT Solutions World Congress Event is an international space to link the IoT domain with the industry. With more than 172 exhibitors companies, and a total over 8.000 attendants. The Congress is a reference encounter point dedicated to industrial solutions and real-world applications across different vertical markets. http://www.iotsworldcongress.com
Notes	A huge congress with several important technological companies, some of them leaders in the sector (IBM, HUAWEI, etc). There were interesting conferences about new trends in the IoT Market applied to real deployments and with an industrial point of view. The industrial application gives us a really tangible idea of the IoT solutions to increase the productivity in this area.

39	SMC 2016
Place	Budapest, Hungary
Date	9-12 October 2016
Partner Participating	TU/e (Antonio Liotta)
Event Type	International Conference
Description	The IEEE International Conference on Systems, Man, and Cybernetics (Collaborative Wireless Sensor Networks and Internet of Things) provides an international forum for researchers and practitioners to report up-to-the-minute innovation and development, summarize state-of-the-art, and exchange ideas and advances in all aspects of systems science and engineering, human machine systems, and cybernetics. http://smc2016.org/

Notes

40	Campagna Obesity day
Place	Chieri, Carmagnola, Moncalieri, Nichelino (Turin), Italy
Date	10 October 2016
Partner Participating	ASL TO5 (Margherita Gulino, Ilaria De Luca, Marina Mortara, Anna Costa)
Event Type	Obesity day, National Awareness day organized to promote proper lifestyle and a correct physical activity
Description	Participation to World Obesity Day 2016 promoting health, nutrition and physical activity
Notes	The Italian Association of Dietetics and Clinical Nutrition ADI promotes every year from 2001 on October 10, a national Obesity Day. The goal is to properly guide the attention of mass media, public opinion and those who work in health care system.

41	IoT EPI
Place	Vienna, Austria
Date	11-14 October 2016
Partner Participating	XLAB (Mariano Cecowski)
Event Type	Meetup and H2020 IoT projects networking
Description	
Notes	Attending the ”Business Models”, ”Community Management” and ”Communications” task forces. Attending the IoT EPI projects cluster collaboration workshops.

42	EclipseCon Europe & OSGi Community Event 2016
Place	Ludwigsburg, Germany
Date	25-27 October 2016
Partner Participating	UPV (Eneko Olivares)
Event Type	Conference
Description	EclipseCon Europe is the Eclipse Foundation’s primary European event desgned to create opportunities for the European Eclipse community to learn, explore, share and collaborate on the latest ideas and information about Eclipse and its member companies. The Community Event is the largest OSGi event of the year with multiple full tracks, BOFs and other OSGi activities taking place. It features talks on topics ranging from use cases and experiences with OSGi in enterprise, embedded, cloud and IoT environments, to specification updates and tutorials, meet-ups and other informal sessions.

Notes	Both EclipseCon and OSGi community event are key conferences for the development of Inter-IoT products since state-of-the-art solutions and technologies are presented, as well as interesting workshops to learn new technologies.

43	Trauma Innovation
Place	London, England
Date	27-28 October 2016
Partner Participating	Rinicom (Stuart Grant)
Event Type	conference
Description	Europe's Leading Forum for Military, Humanitarian and Emergency Medical Healthcare
Notes	

44	On The Move
Place	Rhodes, Greece
Date	27 October 2016
Partner Participating	UNICAL (Giancarlo Fortino)
Event Type	Keynote speech
Description	Uniquely federated event composed of three interrelated yet complementary scientific conferences that together attempt to span a relevant range of the advanced research on, and cutting-edge development and application of, information handling and systems in the wider current context of ubiquitous distributed computing.. More info at: http://otmconferences.org/index.php/
Notes	Keynote speech title: "Towards Multi-Layer Interoperability of IoT Platforms: the INTER-IoT approach"

45	BASE Conference
Place	Aizu Wakamatsu, Fukushima Prefecture, Japan
Date	31 October - 2 November, 2016
Partner Participating	SRIPAS (Marcin Paprzycki)
Event Type	Conference
Description	Delivery of invited talk at the University of Aizu entitled: Interoperability in the Internet of Things
Notes	

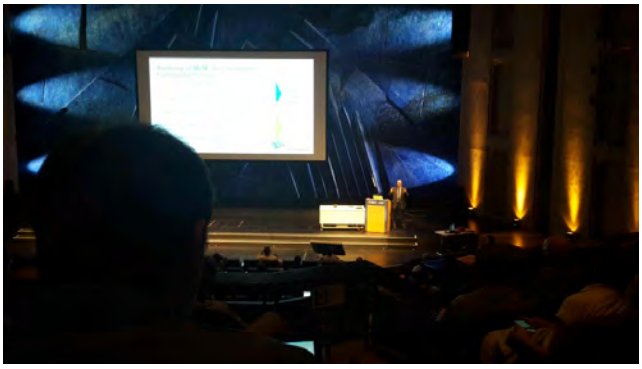


Figure 3.5: IoT World Congress

46	AFT Regional Delegates on Innovative projects
Place	Paris, France
Date	18 November 2016
Partner Participating	AFT (Moncef Semchi)
Event Type	Meeting
Description	Those AFT Regional delegates/coordinators (12) who are in charge of coordinating those innovative projects AFT is involved in that are financed by public bodies (EU, State, regions).
Notes	This meeting was an opportunity for us to provide attendees with an update on project implementation status. I was asked when piloting would take place. My answer was that it would probably start to be implemented in the second half of 2017. Concrete illustrations of project applications should provide a clearer sense of how INTER-IoT products can be useful to transport undertakings.

47	Salute in Comune
Place	Piobesi Torinese (Turin), Italy
Date	20 November 2016
Partner Participating	ASL TO5 (Margherita Gulino, Ilaria De Luca, Marina Mortara, Anna Costa)
Event Type	local event on nutrition and lifestyle for citizens ”Awareness day” organized to promote proper lifestyle
Description	Salute in Comune activity of awareness, prevention and health promotion
Notes	Valorization of awareness, prevention and health promotion, proposed in the city area to involve people of different age, culture, gender and interests.

48	Patient First
Place	London, England
Date	21-22 November 2016
Partner Participating	Rinicom (Soren Udby)
Event Type	conference
Description	Patient First, the UK’s largest patient safety event supports those operating within the UK NHS and independent healthcare sectors, aimed at giving practical advice needed to create action for change. With seven conference theatres hostingÊindustry leading content, social and networking events, and the largest sourcing floor in patient safety, in a sector actively looking for solutions, Patient First is unmissable for anyone involved in the improvement of patient care nationwide.
Notes	

49	(Invited Talk at University Reggio Calabria
Place	Reggio Calabria, Italy
Date	24 Novembre 2016
Partner Participating	UNICAL (Giancarlo Fortino)
Event Type	Invited Talk
Description	Invited Talk hosted by Dr. G.M. Sarnè
Notes	The talk was titled : ”Towards Multi-Layer Interoperability of IoT Platforms: the INTER-IoT approach”

50	IEEE World Forum on Internet of Things
Place	Reston, VA, U.S.A.

Date	12-14 December 2016
Partner Participating	UNICAL (Claudio Savaglio)
Event Type	International Forum
Description	The 2016 IEEE 3rd World Forum on Internet of Things (WF-IoT) – IoT: Smart Innovation for Vibrant Ecosystems is a unique event for industry leaders, academics and decision making government officials. This event is designed to examine key critical innovations across technologies which will alter the research and application space of the future. More info at http://wfiot2016.ieee-wf-iot.org/about/
Notes	The paper ”Towards interoperable, cognitive and autonomic IoT systems: An agent-based approach" was presented by C. Savaglio. Complete paper reference: C. Savaglio, G. Fortino and M. Zhou, ”Towards interoperable, cognitive and autonomic IoT systems: An agent-based approach” 2016 IEEE 3rd World Forum on Internet of Things (WF-IoT), Reston, VA, 2016, pp. 58-63. doi: 10.1109/WF-IoT.2016.7845459, URL: http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=7845459-&isnumber=7845389

51	DaMNet 2016
Place	Barcelona, Spain
Date	12 December 2016
Partner Participating	TU/e (Antonio Liotta)
Event Type	Workshop
Description	The 6th IEEE ICDM Workshop on Data Mining in Networks intends to facilitate the exchange of ideas between different research communities which share a common interest in extracting models and information from complex networks. The workshop focus will encompass data mining algorithms and applications for complex networks, such as communication networks, social networks, biological networks, citation networks, etc. http://damnet.reading.ac.uk/
Notes	

52	TRONSHOW
Place	Tokyo, Japan
Date	15 December 2016
Partner Participating	ABC (Alessandro Bassi)
Event Type	International Session: Collaboration between EU and Japan (invited keynote)

Description	TRONSHOW is a major Industrial event in Japan, featuring more than 5000 participants, with a large majority from Industry. The event was created around the TRON (The Real-time Operating system Nucleus) for embedded systems in 1984, which still has around 60% of the industrial market in Japan in one of its recent versions (t-kernel 2). More info at :http://www.tronshow.org/index-e.html
Notes	Talk very well perceived - after the talk, prof. Sakamura already asked for an update of the project results in the next edition of the Tronshow as it's very relevant to their audience. Possibility of organising a demo in the Exhibitors area if deemed interesting for the project.

53	11th EAI International Conference on Body Area Networks
Place	Turin, Italy
Date	15-16 December 2016
Partner Participating	UNICAL (Raffaele Gravina, Giancarlo Fortino)
Event Type	International Conference
Description	BodyNets 2016 aims to provide a world-leading and unique opportunity for bringing together researchers and practitioners from diverse disciplines to plan, analyze, design, build, deploy and experiment with/on Body Area Networks (BANs).
Notes	Complete paper reference: P. Pace, G. Aloi, R. Gravina, G. Fortino, G. Larini, M. Gulino, "Towards Interoperability of IoT-based Health Care platforms: the INTER-Health use case", In Proc. of the 11th International Conference on Body Area Networks (BodyNets 2016), Torino, Italy, Dec 2016

54	FIT 2016
Place	Islamabad, Pakistan
Date	19-21 December 2016
Partner Participating	TU/e (Antonio Liotta)

Event Type	Conference
Description	The 14th International Conference on Frontiers of Information Technology, ”Computer and Communication Networks and Cloud Computing” is annually organized with the principal aim to focus on modern trends pertaining to computer sciences, engineering, and other related areas. http://fit.edu.pk/
Notes	

55	Globe-IoT 2017: Towards Global Interoperability among IoT Systems
Place	Las Vegas, USA
Date	8-11 January 2017
Partner Participating	UNICAL (Giancarlo Fortino)
Event Type	International Workshop
Description	Workshop jointly held with IEEE CCNC 2017 aiming at investigating lack of interoperability in the IoT realm. More info at http://plasma.dimes.unical.it/events/Globe-IoT2017/
Notes	The paper ”A Survey of Open Body Sensor Networks: Applications and Challenges” was presented by G. Fortino. Complete paper reference: N. Yang, Z. Wang, R. Gravina, G. Fortino, "A Survey of Open Body Sensor Networks: Applications and Challenges", In Proc. of the 1st edition of Globe-IoT 2017: Towards Global Interoperability among IoT Systems, Las Vegas, USA, January 8-11, 2017

56	New Jersey Institute of Technology Invited Talk
Place	Newark, USA
Date	12 January 2017
Partner Participating	UNICAL (Giancarlo Fortino)
Event Type	Invited talk
Description	Invited talk hosted by Prof. M. Zhou
Notes	Title of the talk: "Towards Multi-Layer Interoperability of IoT Platforms: the INTER-IoT approach"

57	Les Rencontres de la Mobilité Intelligente 2017
Place	Paris, France
Date	25 January 2017
Partner Participating	AFT (Moncef Semchi)
Event Type	Trade show /exhibition
Description	This exhibition gathers each year sustainable transport systems and smart mobility stakeholders (industry, policy makers, academics/scientific, institutional and press). This year there were around d. 1500 visitors, 72 exhibitors, 12 start-ups
Notes	Though the presentation of Inter-IoT was orally implemented for lack of room for a screen presentation, all visitors who came to our booth seemed keen to learn more about the Inter-IoT products as they develop.

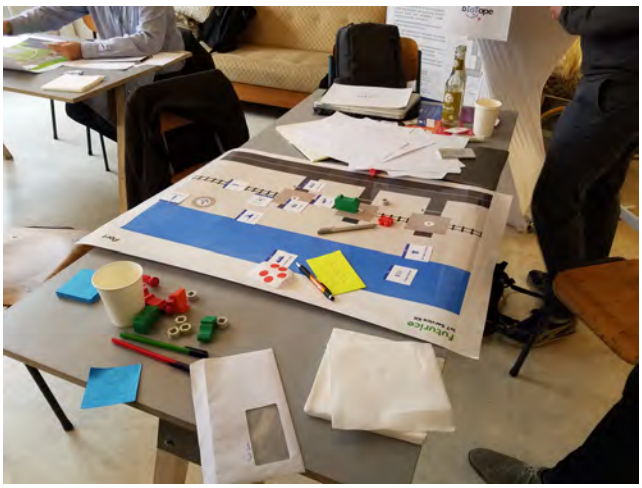
58	Intronika
Place	Celje, Slovenia
Date	27 January 2017
Partner Participating	XLAB (Matevž Markovič, Flavio Fuart)
Event Type	Industry fair
Description	Trade Exhibition INTRONIKA is specialized Exhibition for electronic industry, including specilaised services and Industry 4.0. It is a specialized B2B (business to business) exhibition covering Slovenia, Croatia and part of the Balkans region. 74 exhibitors form 9 countries presented their products, the number of visitors was around 2.500.
Notes	We investigated the opportunities for application of Inter-IoT technologies to solving problems arising from integration of IoT and legacy production processes.

59	E-World: Smart Energy
Place	Essen, Germany
Date	7-9 February, 2017
Partner Participating	SRIPAS (Maria Ganzha, Marcin Paprzycki)
Event Type	Conference and Fair
Description	Maria Ganzha delivered invited talk entitled: Towards semantic interoperability in the Internet of Things
Notes	

60	Mobile World Congress 2017
Place	Barcelona, Spain
Date	27 February – 2 March 2017
Partner Participating	UPV (Regel Gonzalez Usach)
Event Type	Industrial event
Description	The GSMA Mobile World Congress is the world's largest exhibition for the mobile industry and a conference featuring prominent executives representing mobile operators, device manufacturers, technology providers, vendors and content owners from across the world. The attendance to this event overpassed 100,000 people, and attendees represented more than 200 countries from across the globe.
Notes	Many developments in the field of IoT. Entrance of SORACOM IoT platform in Europe. Many people to whom I talk, ask for references of the Inter-IoT Project and were interested in it.

61	SITL – Semaine Internationale du Transport et de la Logistique
Place	Paris, France
Date	14-16 mars 2017
Partner Participating	AFT (Moncef Semchi)
Event Type	Exhibition
Description	SITL Paris brings together all the innovative products and services dedicated to the transport of goods, freight forwarding and the logistics chain. It is the most complete concentration of transport and logistics users from manufacturing, retail and distribution who are searching for new service suppliers. There are around 24 000 professionals, 500 exhibitors
Notes	The feedback received was overall positive. Visitors showed a particular interest for the INTER-IoT market analysis, the transport-related piloting, as well as all interoperability products.

62	IoT Meet and Greet; IoT Challenge
Place	Berlin, Germany
Date	16-17 March 2017
Partner Participating	UPV (Eneko Olivares)
Event Type	IoT EPI Meet&Greet and Hackathon
Description	IoT EPI organized a Meet&Greet for locals and interested companies to know about the 7 ICT30 funded projects, each project had a booth and presented a pitch. The following day it was organized a hackathon where people from the 2 CSA and the 7 RIA had to mentorize
Notes	I (Eneko/UPV/Inter-IoT) did the pitch and participated in the meet&greet booth, as well as mentorized 2 teams in the trust challenge of the hackathon (one of those 2 teams was the winner).



63	NAVIS WORLD 2017
Place	San Francisco, USA
Date	27-30th March 2017
Partner Participating	NOATUM (Ivan Deosdad)
Event Type	International event of one of the best TOS (Terminal Operating System) for ports.
Description	The event provide a forum for participants to learn best practices in business and operations management from an international group of terminal and supply chain industry professionals

Notes	We work about how to give to the TOS the information of all the platforms, the conclusion was that have to be done through the Inter-IoT platform o similar.

64	Aizu University Seminar
Place	Aizu Wakamatsu, Fukushima Prefecture, Japan
Date	30-31 March, 2017
Partner Participating	SRIPAS (Marcin Paprzycki, Maria Ganzha)
Event Type	seminar for university faculty
Description	Marcin Paprzycki delivered an invited talk at the University of Aizu entitled: Autonomous resource access in the Internet of Things; the following day Maria Ganzha delivered a second invited talk entitled: Towards Interoperability within Internet of Things ecosystems
Notes	

65	9th Asian Conference ACIIDS
Place	Kanazawa, Japan
Date	3-5 April, 2017
Partner Participating	SRIPAS (Marcin Paprzycki, Maria Ganzha)
Event Type	International Conference
Description	Maria Ganzha; delivery of talk entitled: Towards common vocabulary for IoT ecosystems – preliminary considerations. Marcin Paprzycki: delivery of talk entitled: Graphical interface for ontology mapping with application to access control
Notes	Publication in Springer

66	SIDO
Place	Lyon, France
Date	5-6 April, 2017
Partner Participating	UPV (Jara Suárez de Puga García)
Event Type	Exhibitions and Conferences
Description	Sido Event is an international showroom dedicated to the Internet of Things, with free access for all professionals. Is compose by 2 days of conferences with more than 200 speakers, workshops and uses showrooms with more than 250 exhibitors and 100 startups, solutions, networking and technology to help company conceive tomorrow's uses and reinvent their business models. http://www.sido-event.com/en/

Notes	A really nice environment to exchange impressions and ideas about the IoT technologies and solutions of today's word. With numerous interesting conferences in which Inter-IoT participated together with some other project from the IoT-EPI explaining the Use Cases driven by the project.

67	Container Terminal Automation Conference 2017
Place	London, UK
Date	19-20 April 2017
Partner Participating	NOATUM (Ivan Deosdad)
Event Type	International event for port sector.
Description	The Container Terminal Automation Conference 2017 brought together thought leaders in the automation and training sectors of the port industry to discuss best practices with regards to cutting-edge automation solutions. The event looked at the need for terminal automation to remain efficient, safe and productive. The format was "Question Time" inspired, allowing attendees to directly ask questions and steer the sessions in a topical direction. The key themes included; Simulation, E-Learning, Gamification, Process Automation, Automated Decision Making and Robotisation.
Notes	A networking was made and Inter-IoT was exposed as a solution for interconnect the different platforms.

68	INTEGRA2 Port conference
Place	Tarragona, Spain
Date	20th April 2017
Partner Participating	Prodevelop (Miguel Montesinos, José Ferri)
Event Type	Conference
Description	Conference about: IT solutions for Port Management in Spain (around 20 Port authorities present).
Notes	

69	Web Camp
Place	Ljubljana, Slovenija
Date	22 April 2017
Partner Participating	XLAB (Flavio Fuart, Tomaž Martinčič, Laura Pipan Petan, Marta Štimec
Event Type	Conference / meetup
Description	Webcamp Ljubljana is an international event aimed at the web developers community. This year the focus was on IoT.
Notes	XLAB was one of the sponsors of the event and had a booth where company activities were presented. Among others, we presented Inter-IoT activities.

70	EESTEC SPRING CONGRESS
Place	Ljubljana, Slovenija
Date	22-30 April 2017
Partner Participating	Flavio Fuart, Matic Cankar, Lara Tasev
Event Type	Electrical Engineering Students' European Association Congress
Description	The biggest and most important annual gathering of youth leaders from all EESTEC Local Committees and International Bodies
Notes	XLAB was one of the sponsors of the event and presented its activities, including Inter-IoT to future industry leaders.

71	IoT Seminar Series
Place	Eindhoven, Netherlands
Date	8 May 2017

Partner Participating	UNICAL (Giancarlo Fortino)
Event Type	Invited talk
Description	Invited talk hosted by Prof. W. van der Aalst and Prof. Antonio Liotta
Notes	Talk title: 'Towards Interoperable, Cognitive and Autonomic IoT Ecosystems: an Agent-based Approach". Event organised in the Data Science Center (DSC/e) of Eindhoven University of Technology, Netherland.

72	IEEE International Conference on Networking, Sensing and Control
Place	Calabria, Italy
Date	16-18 May 2017
Partner Participating	UNICAL (Giancarlo Fortino), TU/e (Antonio Liotta)
Event Type	International Conference
Description	http://icnsc2017.dimes.unical.it/INTER-IoT.html
Notes	This conference will provide a remarkable opportunity for the academic and industrial communities to address new challenges and share solutions, and discuss future research directions. More info at: http://icnsc2017.dimes.unical.it/

73	Salute in Comune
Place	Piobesi Torinese (Turin), Italy
Date	20 May 2017
Partner Participating	ASL TO5 (Margherita Gulino, Ilaria De Luca, Marina Mortara, Anna Costa)
Event Type	local event on nutrition and lifestyle for citizens "Awareness day" organized to promote proper lifestyle
Description	Salute in Comune activity of awareness, prevention and health promotion
Notes	Valorization of awareness, prevention and health promotion, proposed in the city area to involve people of different age, culture, gender and interests.

74	Lions Ten
Place	Santena and Poirino (Turin), Italy
Date	21 May 2017
Partner Participating	ASL TO5 (Margherita Gulino, Ilaria De Luca, Marina Mortara, Anna Costa)
Event Type	local event on physical activity and lifestyle for citizens
Description	non competitive race

Notes

75	UK Digital Health Club
Place	London, Eng;and
Date	25-28 May 2017
Partner Participating	Rinicom (Sam Scott)
Event Type	conference
Description	The programme is a collaboration between the three London Academic Health Science Networks (AHSNs); Imperial College Health Partners, UCLPartners and the Health Innovation Network, plus the Mayor of London and Academic Health Science Centres (AHSCs).Ê It draws upon leading NHS experts with world-class insight to pioneer the development, commercialisation and adoption of digital technologies in health and social care to improve health outcomes.

Notes

76	LOS PUERTOS DEL FUTURO: SMART PORTS
Place	Avilés, Spain
Date	25th May 2017
Partner Participating	Prodevelop (Christophe Joubert, José Abellán)
Event Type	Conference
Description	Conference about: IT solutions for Port Management in Spain (around 20 Port authorities present). The last 25th May Prodevelop participated at the conference ”The Port of the future: Smart Ports” organized by the Port Authority of Avilés and the Transport and Logistic Management Master of the Oviedo University. The conference was started by Mr. José Llorca Ortega, President of the Ports of the State (Spain), Mr. Santiago Rodríguez Vega, President of the Port Authority of Avilés and Mr.José Manuel Montes Peón, Director of the Master of Transport and Logistic Management of the Oviedo University. Prodevelop had the opportunity of making a presentation about the trends in R&D in the Maritim Sector for Smart Ports in an international context for an audience of more than 120 attendees. This presentation agglutinated projects like Port of Cork (DOCKINGASSIST), Port of Rotterdam (APPS), Port of Valencia (INTER-IoT) and DICE

Notes

- URL: http://www.puertoaviles.es/es/puertoyciudad/actividades.asp
- Document:http://www.puertoaviles.es/upload/descargas/01.%20-Christophe%20Joubert_Tendencias_de_IDi_en_los%-20puertos_Los_Smart_Port.pdf
- News in Prodevelop's website: https://www.prodevelop.es/es/noticia/17/05/29/tendencias-idi-puertos-smart-port

77	Giornata di prevenzione della salute
Place	Castelnuovo Don Bosco (Asti), Italy
Date	4 June 2017
Partner Participating	ASL TO5 (Margherita Gulino, Ilaria De Luca, Marina Mortara, Anna Costa)
Event Type	local event on nutrition and lifestyle for citizens "Awareness day" organized to promote proper lifestyle
Description	Giornata della prevenzione della salute, activity of awareness, prevention and health promotion
Notes	Valorization of awareness, prevention and health promotion, proposed in the city area to involve people of different age, culture, gender and interests.

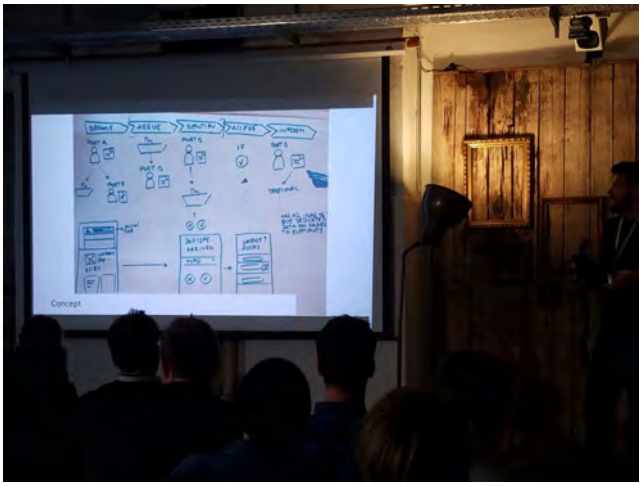


Figure 3.6: IoT Challenge

Figure 3.7: Los Puertos del Futuro

78	IoT Week
Place	Geneva, Switzerland
Date	6-9 June 2017
Partner Participating	UPV (Carlos Palau, Eneko Olivares, Jara Suárez de Puga); XLAB (Flavio Fuart, Matevž Markovič); SRIPAS (Katarzyna Wasielewska-Michniewska)
Event Type	Conference

Description	IoT Week & Global IoT Summit (GIoTS) collocated. The IoT Week is the leading conference on IoT research and emerging technologies. It is organized under the umbrella of the IoT Forum to promote international dialogue and cooperation for IoT innovation, as well as to discuss technical, societal and market issues related to the Internet of Things. The GIoTS is piloted and will be independently managed by the IEEE Subcommittee on the Internet of Things. It will select top level peer-reviewed IoT-related scientific articles encompassing the latest research results.
Notes	Inter-IoT had a booth with 3 demos deployed showing interoperability in middleware, application&service and semantics level. Carlos was chairman of the session IoT, Smart Living & Ageing Well. There were also private IoT-EPI meetings. We also attended the IoT EPI meetup where projects were presented to the local startup community.

79	Global IoT Summit
Place	Geneva, Switzerland
Date	6-9 June 2017
Partner Participating	UNICAL (Pasquale Pace)

Event Type	International Conference
Description	Giobal IoT Summit 2017 attracts experts from industry and research in current and emerging technologies such as 5G-based IoT, software-defined IoT, IoT-centric Cloud Computing, including the Social Internet of Things - http://www.globaliotsummit.org/
Notes	Complete paper reference: G. Aloi, Á. Fides-Valero, G. Fortino, R. Gravina, G. Ibáñez Sánchez, P. Pace, C. E. Palau, V. T. Salcedo, D. Yacchirema, "IoT platforms Interoperability for Active and Assisted Living Healthcare services support", In Proc. Of Global IoT Summit (2017) - Geneva-Switzerland, June 2017.

80	WOA 2017 (Workshop "From Objects to Agents")
Place	Reggio Calabria, Italy
Date	15-17 June 2017

Partner Participating	UNICAL (Claudio Savaglio)
Event Type	International Workshop
Description	WOA (Workshop ”From Objects to Agents) is a per-year meeting of the Italian research group on Agent and Multi-agent Systems. Topic of 2017 edition was ”Agents in Online Social Networks”. More info at http://woa2017.unirc.it/
Notes	Presented paper: G.Fortino, W. Russo, C. Savaglio, M. Viroli, M. Zhou, ”Modeling Opportunistic IoT Services in Open IoT Ecosystems”, to be published in Proc. 18th Workshop" From Objects to Agents. 2017.

81 Health+Care

Place	London, England
Date	27-29 June 2017
Partner Participating	Rinicom (Sam Scott)
Event Type	Exhibition
Description	Europe’s largest integrated care conference - exploring ideas and solutions to support the NHS and social care as it faces its worst ever crisis. The programme will focus on the crucial ’how’ of delivering complex transformation, with examples from areas demonstrating the most rapid progress in implementing STPs, digital transformation and other priorities.
Notes	

82 TOC Europe

Place	Amsterdam, the Netherlands
Date	27-29 June 2017
Partner Participating	NOATUM (Ignacio Huet, Ivan Deosdad)
Event Type	International event.
Description	The free exhibition is a global showcase of excellence in port technology and terminal operations; with 170+ exhibitors, product launches, equipment demonstrations & more.
Notes	

Figure 3.8: INTER-IoT IoT week contribution

Figure 3.9: INTER-IoT IoT week contribution

Figure 3.10: INTER-IoT IoT week contribution

4 Exploitation and Commercialisation strategy report

4.1 Introduction

During the duration of the project, the INTER-IoT Consortium has followed the roadmap of the INTER-IoT Exploitation Plan included in D8.3 (M4) towards the non-commercial and commercial use and operation of the INTER-IoT exploitable services and products. See figure 4.1. The elaboration of the individual and exploitation strategy started on M7 and ended at M18. Along this period (M6-18), the Task 8.4 Exploitation, has taken into account the inputs from tasks and results obtained in work packages WP2 and WP8.

4.2 Report on activities

The elaboration of the individual and exploitation strategy plans started in M7 and lasted the whole duration of the project. This report includes all the activities carried out from M7 till the end of the project, addressing all the phases of the roadmap as the following figure shows.
The first phase, called ”Phase I: Initial INTER-IoT Business Model definition” started on M7 and ended on M12. This phase started with the definition and consolidation of the Exploitation Team (ET) composed of 14 members, each member from each partner was carried out.

	Partner	Name	e-mail
P01	UPVLC	Carlos Palau	cpalau@dcom.upv.es
P02	Sabien	Antonio Martinez Millana	anmarmil@itaca.upv.es

P03	UniCal	Gianluca Aloi	gianluca.aloi@unical.it
P04	PRO	Amelia del Rey	adelrey@prodevelop.es
P05	TU/e	Decebel Mocanu	decebelmocanu@gmail.com
P06	VPF	Alexandre Sánchez Pérez	asanchez@fundacion.valenciaport.com
P07	RINI	Eric Carlson	eric@rinicom.com
P08	AFT	Moncef Semchi	moncef.semchi@aft-dev.com
P09	NOATUM	Francisco Blanquer Jaraiz	fblanquer@noatum.com
P10	XLAB	Joao Pita Costa	joao.pitacosta@xlab.si
P11	SRIPAS	Marcin Paprzycki	paprzyck@ibspan.waw.pl
P12	ASL TO5	Anna Costa	dott.annacosta@libero.it
P13	ABC	Alessandro Bassi	alessandro@bassiconsulting.eu
P14	NEWAYS	Remco van den Berg	remco.van.den.berg@newayselectronics.com

The Exploitation Team reviewed D8.3 and INTER-IoT business models (joint and individual) elaborated in WP2 and included in D2.2 (M6). The selected business scenarios (transport and logistics and m-Health) were considered as the baseline for exploitation. On M6, the INTER-IoT consortium also participated at the EPI IoT celebrated in Valencia (on 24th- 23rd June). Some INTER-IoT partners assisted and participated in the TF-4 Business Model workshop with the presentation of the INTER-Layer BM at Workshop in Valencia (24th- 23rd June). The INTER-IoT project received feedback from other projects as well as from IoT experts with previous expertise in IoT business models.
The ET participated in TF4-Business Models online conferences and webinars during this period as TF Community Building, TF Business Models and Data Business Models. Besides, on M12 the EU Commission asked for the review of the D8.3 (M4) in terms of strengthening the industrial Dissemination Strategy and the standardization and Open Source strategies of the project. The joint and individual exploitation templates attached in D8.3 were also enforced following the LLava Matrix Framework and Lean Innovation Process (that has been proposed and used in T8.3: Business and Marketing Operations). This methodology has helped the ET to have a common and particular vision of INTER-IoT business models on the selected business scenarios with the identification of customer segments, common needs, value promise, set of exploitable products, value network, competitors and alternatives, revenue models, SWOT analyses and IPR issues. It is also important to point out, that the communication and dissemination activities reported during this period are direct connected with the Exploitation Plan in order to create impact and have been reported in previous sections.
The INTER-IoT consortium had also engagement with business and investment community. More specifically, RINI arranged representation of TALIS Capital (one of the venture firms specialising in investment into IoT sector) on INTER-IoT Advisory Board. This cooperation is proved to be quite useful as through TALIS Capital network, RINI (and INTER-IoT project in general) is receiving the continuous updates on the latest technological advances in IoT sector. Furthermore, TALIS Capital will be directly engaged in the later stages of the project by reviewing and optimising the developed business model and advising on potential exploitation paths.
The INTER-IoT consortium had also engaged with the business and investment community. TALIS Capital, a venture capital firm specialising in investment into IoT sector, SaaS, and security, is now a member of INTER-IoT Advisory Board. They invest around the world while maintaining their focus on the UK and Europe. TALIS specialise in bringing state of the art technology together with conventional businesses to produce reliable revenues for their clients. This cooperation has proved to be quite useful for the project. Through TALIS Capital's network, the INTER-IoT project is receiving continuous updates on the latest technological advances in IoT sector. Furthermore, TALIS Capital will be directly engaged in the later stages of the project, reviewing and optimising the developed business model

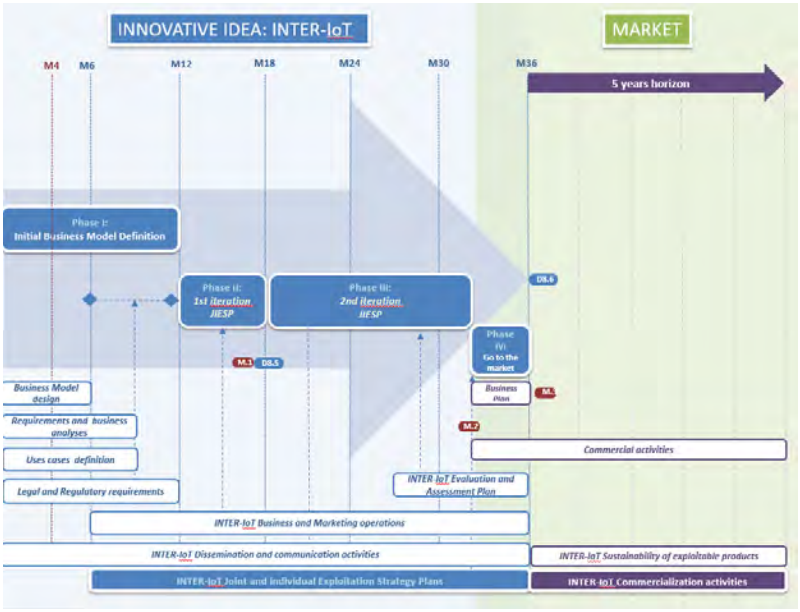


Figure 4.1: INTER-IoT exploitation plan

	Tasks	WHO?	M13	M14	M15	M16	M17	M18
1	Definition of Exploitation Team	PRO						
2	Review and analyse D8.3	ALL						
3	Review business model D2.2	ALL						
4	Read D2.3	ALL						
5	Read D2.4	ALL	x					
6	Read D2.5	ALL	x					
7	Telco reporting T8.1, T8.2, T8.3	ABC, RINI, SRIPAS						
8	Preparation of first Exploitation workshop	ALL		x				
9	Workshop	Exploitation Team		x				
10	Fill in the template for joint and particular EP	Exploitation Team			PHASE II		x	x
11	First iteration on Joint and Particular EP	ALL						x
12	Contributions to D8.5 Report on Impact Creation							D8.5

Figure 4.3: INTER-IoT Phase 2 detailed exploitation plan

and advising on potential exploitation paths.
The second phase called ”Phase II: First iteration of the joint and individual Exploitation Plans (M12-M18)” started on M12 and finished by the time of this report on M18. The first iteration of the joint and individual Exploitation Plans started in M14 during the workshop held by the ET in Slovenia and was finished in M16. During M13 the ET prepared a workshop to be held on M14 to conduct the activities to start the first iteration of the Joint and individual Exploitation Plans. The workshop was celebrated in Slovenia and the ET presented the results of the WP2 in order to have a clear picture of the initial business models (joint and individuals) as starting point for Exploitation Plan. Therefore, during this workshop, the collaborative INTER-IoT business model and scenarios defined in WP2 were discuss and the ET requested also to rank the business scenarios according to risk, cost, opportunities etc. from the perspective of INTER-IoT as a project. In addition, to start with the execution of the first iteration of the joint and individual Exploitation Plans, the partners were asked to present the first iteration of the joint and individual Exploitations Strategy Plans on M16 as internal milestone MS1 by filling the templates attached in D8.3. Regarding Joint Exploitation Plans, the ET asked the INTER-IoT partners to identify and describe the joint exploitation opportunities the envision at this stage of the project, its role in the project and their vision about long-term sustainability of INTER-IoT Platform for commercialization. The ET proposed the following types of business models for a joint exploitation plan:

- B2C/ B2B based on OS plus Professional consultancy services
- B2B not OS: License
- Specific B2B. Collaborations BM between concrete partners

Further discussion about open source strategy were carried out analysing the possible OS licenses to be adopted. Finally, the INTER-IoT consortium agreed in the selection of the license Apache 2.0. Regarding the Individual Exploitation Plans, the ET asked to the partners to explain in depth their business selected scenarios from their own organizations perspective and to identify opportunities for exploitation to be explored until M32. On M15, during the 5Th Plenary Meeting celebrated in Valencia. The ET joined in parallel sessions to work together on the exploitation vision of the project, and the interaction between the Community Product, promised in the DoW, and the Commercial Product that will address the further exploitation challenges beyond the duration of the project. These activities culminated in a Joint Exploitation Plan based on an open source strategy that has been included in D8.7 (M18) and it is shown in the figure 4.4.
Taking into account the aforementioned Joint Exploitation Plan based on open software, the partners presented their first iteration of their Joint and individual Exploitations Plans on M16 and the ET agglutinated them to be included in D8.7. The ET has also monitored the market and reviewed the initial INTER-IoT exploitable products defined in WP2, according to the achievements of exploitation activities during project’s lifecycle as an iterative process (Lava Matrix Methodology). In order to define the INTER-IoT Value Proposition, the Exploitation Team (ET) asked to all partners of the consortium to fill in several templates related to the products and components they are implementing in the context of INTER-IoT, the technologies they are bringing in, the services they are offering, similar initiatives and advantages over them, etc. In the following sections, we present in detail these contributions.
In parallel to this phase, the INTER-IoT has worked on an open call described in section 4.3. The execution of the selected projects will start approximately by M17 and will finish in M34 and will contemplate the building of particular business models and market strategies by the selected third parties.

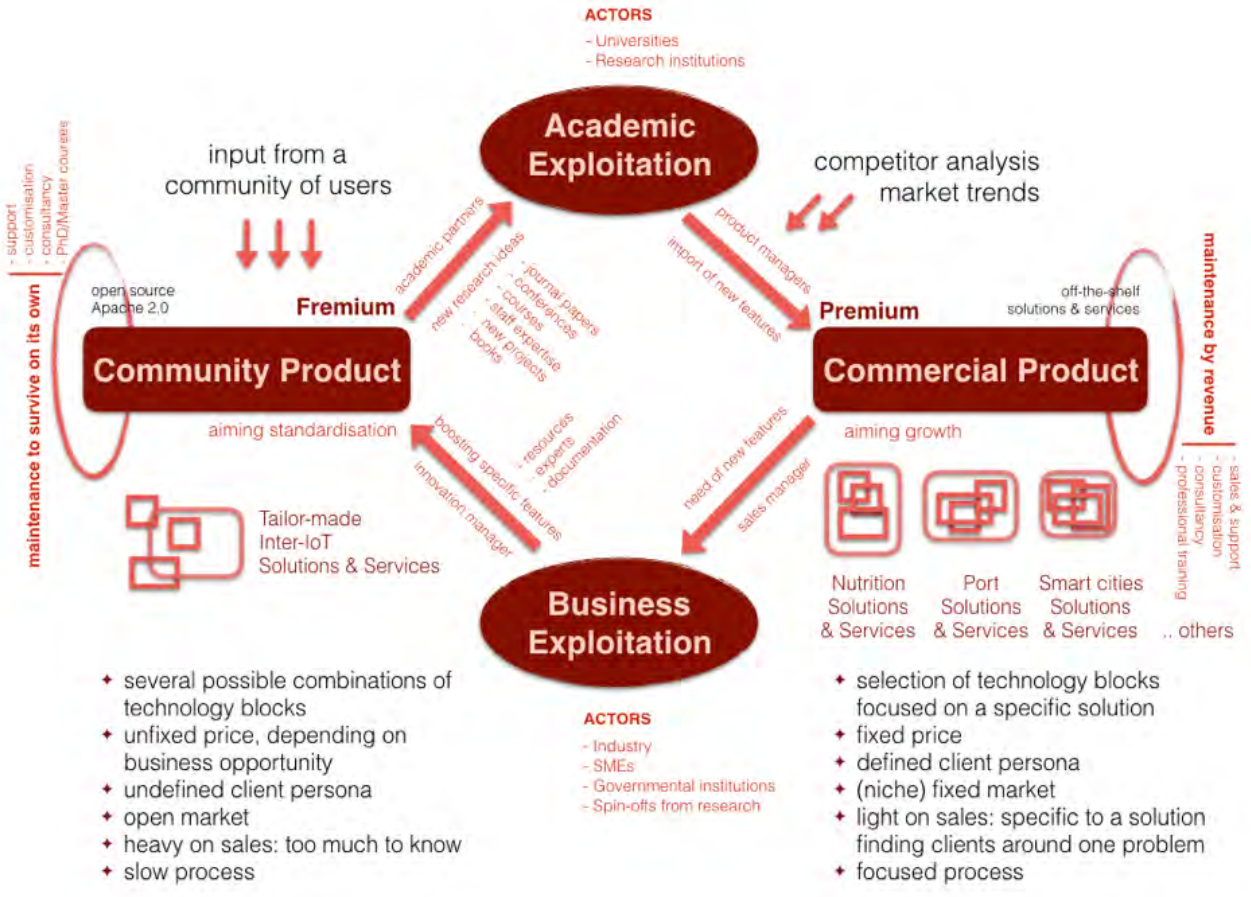


Figure 4.4: Joint Exploitation Plan based on OS

4.3 Open Call

The main objective of the open call has been the testing of the INTER-IoT proposed components and methodology by proposing new scenarios, platforms and components to achieve interoperability between IoT platforms. The proposals will help to validate INTER-IoT proposal and components in scenarios deployed in different application domains. Allowing the evolution of the INTER-IoT products or parts of them (i.e. INTER-LAYER, INTER-FW and INTER-METH) as a whole to match the needs of proposers, but at the same time evolve their products in order to add new interoperability features. The development of INTER-IoT has allowed more stakeholders and developers to interact with different IoT platforms in a domain agnostic ecosystem. The Open Call has addressed the needs of use cases and scenarios in which different IoT platforms are involved, and mainly in those in which more than one application domain is addressed.
The successful applicants, who have been awarded funding were required to sign a collaboration agreement with UPV, INTER-IoT Project Coordinator, in order to be able to receive the funds and become third party of the project. The consortium selected twelve contributions and the interaction with them was organized in a way in which adequate technical support was provided.
The third parties went through a three steps evaluation process in order to assess their contributions. The three evaluations were linked with the three funds distributions: pre-financing, mid-term payment and final/balance of the payment. The evaluations were held:

- Pre-financing evaluation was held in May 2017 for the small contributions and in July 2017 for the large contributions. The small contributions held the review remotely using videoconferencing facilities and the large contributions attending the plenary meeting of the project in Eindhoven.
- Mid-term evaluation was held in Valencia in February 2018, with a workshop organized by UPV in order to assess the work provided by the third parties, and try to find synergies between the third parties for potential collaborations and further exploitation. A successful link was established between NEMERGENT (Spanish SME) and U. Twente (RTO in the Netherlands) in order to deploy a joint pilot.
- Final evaluation was held in Valencia in October 2018 with the demonstration and final results of the third parties.

Regarding the impact of the open call collaboration the following table explore the success stories and the future potential impact.

4.3.1 Small Contributions

27	INTER-HINC: Interoperability through Harmonizing IoT, Network Functions and Clouds
Entity	TU Wien - Vienna University of Technology

Abstract On-demand IoT applications require various resources from Internet of Things (IoT), Network Function Virtualization (NFV), and cloud systems. Such resources must be interoperable for the application use. In this project, we propose to address IoT interoperability together with its NFV and cloud counterparts in a context of resource slices, which can be provisioned and customized, on the demand, for different applications. Our approach "resource slice interoperability" not only leverages existing layered interoperability solutions but also builds cross-layered interoperability and cross system interoperability solutions for a system of IoT, NFV and cloud resources. A framework called INTER-HINC (Interoperability through Harmonizing IoT, Network Functions and Clouds) will be developed and validated with scenarios in the domain healthcare.

Impact

The main impact of the project is related with INTER-LAYER and its components D2D and N2N, addressing partially MW2MW and the connectivity with cloud environments. The main activities have been associated with: **(i)** Use-Case Definition. **(ii)** INTER-HINC architecture design and preliminary integration with INTER-IoT. Specifically, a conceptual architecture of Resource Slice Interoperability Hub (rsiHub) and its key elements. rsiHub presents a broad-view on our conceptual Resource Slice Interoperability, covering also important aspects of interoperability, such as recommendation of Interoperability bridges at runtime. **(iii)** Definition of information, interaction and integration models; programming APIs, testing services and Factory Acceptance Test.
The impact associated with the contribution has been mainly scientific. During this reporting period, TU Wien has also disseminated ideas of INTER-HINC to various places, including scientific papers:

- Hong-Linh Truong, "Managing and Testing Ensembles of IoT, Network functions, and Clouds", Center for Cyber-Physical Systems and Internet of Things, University of Southern California, 21 Sep, 2017
- Hong-Linh Truong, "Modeling and Testing Uncertainties in Application-oriented Slices of IoT, Network functions, and Clouds", Ericsson R & D, 13 June, 2017, Bangalore, India
- Hong-Linh Truong, Lingfan Gao, Michael Hammerer: Service architectures and dynamic solutions for interoperability of IoT, network functions and cloud resources. ECSA (Companion) 2018: 2:1-2:4
- Hong Linh Truong: Towards a Resource Slice Interoperability Hub for IoT. IC2E 2018: 310-316
- Hong Linh Truong, Nanjangud C. Narendra, Kwei-Jay Lin: Notes on ensembles of IoT, network functions and clouds for service-oriented computing and applications. Service Oriented Computing and Applications 12(1): 1-10 (2018)
- Phu H. Nguyen, Phu H. Phung, Hong Linh Truong: A security policy enforcement framework for controlling IoT tenant applications in the edge. IOT 2018: 4:1-4:8
- Hong-Linh Truong, Enabling Edge Analytics of IoT Data: the Case of LoRaWAN, The 2018 Global IoT Summit (GIoTS), 4-7 June 2018 in Bilbao, Spain

Scientific demonstrations and tutorials:

- Hong-Linh Truong, Lingfan Gao, Michael Hammerer: Service architectures and dynamic solutions for interoperability of IoT, network functions and cloud resources. European Conference on Software Architecture 2018, Video: https://storage.cloud.google.com/rdsea-public/rsihub-demo_ecsa_final.mp4
- Hong-Linh Truong, Dynamic IoT data, protocol, and middleware interoperability with resource slice concepts and tools: tutorial. ACM IOT 2018: 48:1-48:4. Link to tutorial: https://github.com/rdsea/iot2018tutorial

The developments associated with this contribution have provided a relevant improvement in INTER-IoT fast deployment. Currently the scientific leader from TUWIEN has moved accepting a professorship in Aalto University and UPV and his research team will evolve the contribution to link it with 5G architecture.

39	SOFOS: A software-defined end-to-end IoT gateway with virtualization capabilities
Entity	INFOLYSIS P.C.
Abstract	SOFOS aims at advancing the existing INTER-IoT framework with SDN/NFV functionalities towards a Software-defined end-to-end IoT infrastructure with service chaining support. The main objective of the proposed SDN/NFV-enabled framework is to enhance the interoperability of the INTER-IoT framework in order to facilitate the unified management of a large number of diverse smart objects that currently operate utilizing a variety of different IoT protocols. Interoperability is expected to boost the global IoT market value by 2022 at approx. $14.4 trillion and therefore SOFOS market expectations are attractive. SOFOS will impact the industry and the research community to innovate, experiment and demonstrate the advantages of the integrated software-based interoperable IoT networking leading to novel services and technological benefits in the industry.
Impact	Impact of SOFOS collaboration will enhance SDN capabilities in INTER-IoT, especially with the use of Open Day Light controller and use of NFV as support within the project. SOFOS has acted as gateway between the IoT and 5G communities in which INFOLYSIS has a strong representation. INFOLYSiS has analyzed and demonstrated:

- The business analysis and business model of SOFOS solution, including the business canvas component.
- The financial and cost benefit analysis of SOFOS solution, including reasonable assumptions and analysis constraints under different financial conditions and metrics
- The SOFOS platform architecture and integration to INTER-IoT platform: (i) Presentation and analysis of enabling technologies; (ii) SOFOS integration setup and architecture; (iii) Integration environment; (iv) Test setup for integration; (v) SOFOS integration to INTER-IoT platform.
- Integration of the SOFOS components in the INTER-IoT GW and link with N2N INTER-IoT component.

INFOLYSIS as an SME is going to include the INTER-IoT/SOFOS component in their portfolio. The contribution is going to be included in the testbed of 5GENESIS a H2020 ICT17 5G Phase2 project in the area of Athens through the company and in a pilot in Limassol through UPV research team contribution.
The contribution has also enhanced opendaylight controller use case in the area of IoT. A demonstrator for QoS management developed by INFOLYSIS, TU/e and UPV is ongoing and will be presented in different showcases.

42	INTER-HARE platform: Integration of multiband IoT technologies
Entity	Universitat Pompeu Fabra

Abstract The continuous emergence of new technologies based on the IoT paradigm has resulted in a heterogeneous ecosystem. The proposed INTER-HARE platform will create synergies between LPLANs and LPWANs, by building and testing an IoT platform easily scalable (both in coverage range and devices) and flexible (both in the considered use cases and the frequency bands from employed devices). Interoperability is provided by a hierarchical two-tier network, where dual-band devices simultaneously interact with end devices and the INTER-IoT gateway. INTER-HARE platform will allow in the mid-long term the deployment of advanced services based on sensor networks, from a wide range of everyday life applications, at reasonable costs, and low time-to-market.

Impact The impact of the third party contribution has enhanced the connectivity possibilities and consequently the interoperability at Device level, including the INTER-HARE gateway. The collaboration will enhance INTER-LogP pilot however will provide means for the extendibility of the project results in different application domains.
INTER-HARE project is advancing as expected and the main contributions of the collaboration are:

- Analysis of the existing INTER-IoT system, and definition of the INTER-HARE requirements.
- Design and development of INTER-HARE system, including the conceptual design of the INTER-HARE architecture and communication protocols and selection and validation of hardware components.
- Definition of test setups for the FAT (Factory Acceptance Tests), providing a very detailed document that will provide a very good background for the SAT process.
- First stages of the technical development (both in terms of internal communication within the INTERHARE network and integration with the already existing INTER-IoT system). The development is directly linked with the INTER-GW component.
- Definition of the use case to develop the pilot, testing and evaluation.

Regarding dissemination the UPF team participated in two brokerage events in which they presented the results of the collaboration and discussed the relevance of IoT interoperability associated to INTER-HARE:

- Smart City Expo World Congress 2017 - (14-16 November 2017, Barcelona).
- IoT Solutions World Congress 2017 - (3-5 October 2017, Barcelona).

The main outcome and impact is the possibility of including a bundle in the INTER-IoT GW covering non-licensed bands. The bundle is offered as open source in the new releases. Additionally UPF performed a test in the port community addressing the reefer use case.
UPF is planning to use INTER-IoT GW developments in further projects developed by the research team.

43 Mission Critical operations based on IoT analytics (MiCrOBIoTA)
Entity Nemergent Solutions S.R.L.

Abstract Mission Critical (MC) communications are evolving towards open mobile broadband standards. While considerable progress is done by the 3GPP concerning MCPTT, MC-Video and MC-Data, the adoption of IoT for MC operations has not received the required consideration. In order to overcome the lack of standards, MiCrOBIoTA will use the INTER-IoT INTER-FW layer to gather information from heterogeneous IoT platforms in a converged way. MiCrOBIoTA will also contribute (i) to the definition of an INTER-Domain scenario where MC operations involve joint monitoring of port logistics (INTER-LogP) and on-body health-related sensors (INTER-Health); (ii) to the definition of the common semantics and ontology. The applicant will gain the expertise to perform advanced data analytics from heterogeneous IoT platforms, while INTER-IoT will validate its outcomes in a realistic use case.

Impact The main impact of the third party is associated with the validation of INTER-IoT with a novel application and service related with emergency management. The collaboration between the consortium and the third party has lead to a validation of the INTER-IoT API and associated layers. MiCrOBIoTa main contributions provided are related with:

- Review of the state of the art concerning the inclusion of IoT sources into the world of emergency management.
- Discussions with partner companies, such as RKL INTEGRAL and ETELM SAS, related to the digitalisation process of companies' protection plans and the potential inclusion of IoT sources in them. Design of the overall MC-IoT system and associated documentation.
- Extensions to the Nemergent Control Room system: modifications to the back-end and front-end components, extensions to the connectors and design of new message formats.
- Extensions to the Nemergent MCPTT system: integration of talk group membership management and INTER-IoT players.
- Deployment and adaptation of an MQTT server as input to the MC-IoT system.
- Specification of EDXL language format used in the MC-IoT system (in a future potential integration with other open caller's outcomes).
- Implementation at the Nemergent backend and front end so as initial tailored configuration at the Nemergent MCPTT system.

Nemergent has performed different dissemination actions:

- PSCE conference 2017 (28-29 November 2017) in Madrid Spain. Where presented the Nemergent activities (including cite to INTER-IoT project) and discussed the applicability of IoT to Public Safety.
- MILIPOL Paris 2017 event (Paris, 21-24 November 2017), where discussed the applicability of IoT to Public Safety and other sectors.
- At local scope, "Jornadas de Gerencia de Riesgos y Emergencias" (18-19 May 2017).
- Attending EENA Conference 2018, MWC 18 and CCW 18 events, in which Public Safety IoT topics were discussed (including participation in debates).

Additionally NEMERGENT improved the impact of their contribution as they started a collaboration with U. TWENTE in order to include the SAREF4HEALTH ontology in a simultaneous demonstration whose outcome was very successful.
NEMERGENT included the developments of the collaboration as third party in its portfolio as no integration of IoT platforms had been performed till then. A direct impact and benefit of the contribution has been the participation of the company in H2020 ICT-19 proposal to integrate 5G IoT and MC (Mission-critical) inside the Nemergent Control Room.

49	SENSHOOK
Entity	IRIDEON S.L.
Abstract	Many companies want to develop IoT products, however lack the necessary financial and human resources using existing methods. To address this need, IRIDEON has developed Senscape, a disruptive, standards based platform which enables fast time-to-market development of IoT sensorserver applications and information services. To date, we have focused on the development of IoT devices using our own hardware and embedded operating system - SENSOS. Now, we wish to contribute to the INTER-IoT project with a new open tool called SENSHOOK, to enable full interoperability of our Senscapeő IoT platform with other IoT platforms and services, and fully exploit the unique selling points of our existing technology. This will allow us to address a wider range of customers and applications, and to grow our revenue and the company, via more customer projects, via licensing of Senscapeő, and exploitation of SENSHOOK as an open-source tool compliant with the INTER-IoT framework.
Impact	The collaboration will interact with INTER-IoT in the middleware layer and in the gateway, allowing to extend the products to new protocols and components. Senshook will interact with the pilot use case in the port area adding value with the Senscape product. • Adapts one of the major international standards for the control and reading of smart transducers: IEEE1451, and makes it compatible with existing lightweight data communication protocols and data formats used in IoT applications. • Quick and easy integration of all Senscapeő hardware devices, supporting Senscapeő unique and advanced features. • Full interoperability with 3rd party IoT platforms and services. • Sensor-centric approach, in which each sensor or actuator can be discoverable, accessible, and usable via TEDs described in the standard, and sensor data can be automatic and correctly transformed before being processed and analyzed for an upper application layer. • Developers do not need be 100% aware of the particular characteristics/specifications of each sensor, which will reduce analysis errors, and simplify the publication and sharing of results. Regarding industrial dissemination participation in events to disseminate Senscape + SENSHOOK: Healthio Congress 2017, Open EUREKA Innovation Week 2017, Barcelona INNOVA 2017, Construmat 2017, BizBarcelona 2017, IoT Solutions World Congress 2017 and Smart City Expo World Congress 2017. IRIDEON adapts one of the major international standards for the control and reading of smart transducers: IEEE1451, and makes it compatible with existing lightweight data communication protocols and data formats used in IoT applications. The company has provided the OSGi bundle as open source component in the INTER-IoT GW and has included the developed collaboration in its product portfolio.

52	ACHILLES: Access Control and autHenticatIon deLegation for interoperabLE IoT applicationS
Entity	Athens University of Economics and Business – Research Center (AUEB)

Abstract Access control and authentication in the IoT is a challenging problem. Things cannot perform complex operations and they cannot be trusted with sensitive data. ACHILLES allows the delegation of authentication and access control decisions to trusted entities, which can be implemented either as a service by a third party, or as an enhancement to an existing user management system. It requires only a secret key per Thing and it uses lightweight operations to provide secure communication channels and endpoint authentication. It can be easily incorporated into new services, it facilitates service interoperability, and it creates new business opportunities. ACHILLES will enhance the INTER-IoT platform by providing a protocol module that allows gateway/Thing authentication, as well as, extensions to the INTER-FW that allow secure access to protected CoAP resources.

Impact The collaboration has provided an access control mechanism based in a proprietary server to the different components of INTER-IoT. The connectors with ACHILLES are offered open source and included in INTER-IoT releases. The benefit and impact for INTER-IoT is the possibility of enlarging the ecosystem with a relevant new service. The main impacts associated with ACHILLES and AUEB research team are:

- Development of an open protocol to allow existing user management systems to be used for access control, by all layers of the INTER-IoT platform. Policies will be built and managed in these systems and Things and gateways will be oblivious to them.
- Definition of the exploitation plan and business models to facilitate interoperability, innovation, and B2B services, by allowing the use of (pointers to) policies (e.g., https://companyA/customers) without needing to have access to the policy implementation details (e.g., who the customers of Company A are).
- Security management framework, by enabling access control policy modifications without communicating with the Things (or gateways). Service providers will be able to modify security policies even after Things and gateways have been deployed.
- Tools for things gateway mutual authentication and appropriate APIs for the INTER-FW, which will allow end-users to create and access protected resources.
- Integration in the gateway with the definition of the interfaces and the structure of the software artifact. Main premise is that things and gateways will only have to follow a simple communication protocol and will not have access to any information related to end-users.

Regarding scientific impact the team has contributed with:

- Paper "Authentication and authorization for interoperable IoT architecture" in Proc. 1st International Workshop on Emerging Technologies for Authorization and Authentication (Co-Located with ESORICS 2018).
- A MSc and a Dpl. Thesis both associated with the contribution.

The research team is further extending the collaboration with INTER-IoT in H2020 IoT3 SOFIW project.

53	Interoperable Situation-Aware IoT-Based Early Warning System
Entity	University of Twente
Abstract	
Impact	This collaboration proposal offers to INTER-IoT an Early Warning System (EWS) on top of an IoT platform (e.g. FIWARE), which interoperates with other EWSs, emergency systems and emergency services, applied and validated in INTER-DOMAIN use cases. In accordance with the INTER-IoT challenges, the contribution intend to support the achievement of semantic and syntactic interoperability among IoT platforms, i.e. enable data to be understandable for both sender and receiver platforms. In particular, we focus on coordinating emergency services based on IoT devices, alerting the involved parties (e.g. emergency command control, first responders and employees) when an accident occurs. The main objective is to improve the semantic interoperability of the INTER-IoT platform with emergency services through the IoT-based EWS, enabling data exchange among heterogeneous IoT platforms by developing emergency application services that require IoT ontology translations.

The innovation capacity of this solution is leveraged by stressing the role of the OASIS Emergency Data Exchange Language (EDXL) for emergency services, applied in cross-domain scenarios in logistics/transportation (INTER-LogP) and healthcare (INTER-Health). The contribution may add standards, ontologies and data models for the description of decision rules to detect emergency situations, amongst others: - IoT: W3C SSN, SAREF, OGC SWE (SensorThings and I3WSN) - Emergency: OASIS EDXL (CAP, SitRep, TEP, HAVE, DE, RM) - e/m-Health: HL7, OpenEHR, ISO EN13606 - Logistics: OTN, LogiCO (LogiTrans). Finally, through this collaboration the INTER-IoT consortium will be able to use the decision rules to support the design and implementation of the global IoT ontology (GOIoTP).
The collaboration has provided a relevant impact in different areas:

- Exploitation of ontologies and standards that can be applied within INTER-DOMAIN use cases. Ontologies include SSN, SAREF, LogiCO, EDXL, incident management ontology.
- Configuration of SAREF - SSN translation and deploy in IPSM – this activity is in progress. Samples generated and initial tests performed over IPSM (INTER-IoT test environment).
- Description of decision rules for emergency services, framing the situations identified for each use case.
- Definition of 5 use cases conceived and described in D2.1.
- Design EWS and integration plan: architecture, components and initial tests performed (e.g. MyDriving application).
- Integration of components of the EWS and integration with INTER-IoT components (IPSM and INTER-MW).
- Business model, exploitation plan and economic evaluation. Business model extended with cost estimative of the IoT EWS and the responsible (stakeholders) for each component.

The research group has participated in different scientific dissemination activities:

- João Moreira, Laura Daniele, Luis Ferreira Pires, Marten van Sinderen, Katarzyna Wasielewska, Pawel Szmeja, Wiesław Pawłowski, Maria Ganzha, Marcin Paprzycki "Towards IoT platforms'"

integration: Semantic Translations between W3C SSN and ETSI SAREF", Semantics. Workshop Semantic Interoperability and Standardization in the IoT (SIS-IoT), Amsterdam, 2017.

- Jo| ao Moreira, Luís Ferreira Pires, Marten van Sinderen, Roel Wieringa, "Semantic Model-Driven Development of Interoperable IoT-based Emergency Services: the INTER-IoTcase study", CTIT, Enschede, 2017.
- João Moreira, Luís Ferreira Pires, Marten van Sinderen, Roel Wieringa, Prince Singh and Patrícia Dockhorn Costa , "Improving the semantic interoperability of IoT Early Warning Systems: the Port of Valencia use case", I-ESA 2018: "Enterprise Interoperability VIII (2018)", 2018

This collaboration has had the highest impact in terms of activity performed and link with international forums, currently the team is participating in the inclusion of SAREF4HEALTH ontology in SAREF together with ETSI. Additionally the third party has published several papers, and a PhD thesis has been a result of their work. The third party teamed with NEMERGENT in order to provide a joint demonstration extending the ones developed by the two third parties.

66	A Semantic Middleware for the information synchronization of the IoT devices
Entity	Institute of Industrial Technologies and Automation - National Research Council (ITIA-CNR)
Abstract	This project proposes the development of a new component, called Semantic Middleware, to be added within the set of middleware modules supported by the INTER-IoT platform. The new component aims to provide near real-time synchronization between all the enabled devices of the IoT platform. Many solutions available in literature enable the data synchronization, but do not support the information synchronization and this lack limits the semantic interoperability of the involved devices. In order to contribute to bridge this gap, Semantic Middleware allows to express all the exchanged information (included the synchronization requests) under the form of semantic model. This capability can also be realized leveraging various modules of the INTER-IoT platform.

Impact

Impact of the collaboration is related with Data and Semantics interoperability component. The contribution provides a semantic middleware that will make use of the global ontology and the developed IPSM. The main impacts of the contribution are:

- Implementation of the "SM Bridge" which handles the connection of SM with all the underlying platforms, with the MW2MW services and with the INTER-FW.
- As SM is agnostic to the metamodel of the IoT platform ontology, SM uses the GOIoTP defined in INTER-IoT, paired with an application ontology specific of the analyzed scenario. A link between application ontology and GOIoTP has been implemented.
- Definition of the use case related with the pallet position.
- Definition of initial business model and exploitation

The third party has published a scientific publication in Proceedings of NGCT 2018, together with SRIPAS team.
The third party has tested IPSM and the integration of CasAware which is an Ambient Assisted Living platform, which aims at improving level of comfort and well-being of inhabitants, while optimizing energy consumption. It will be used in the different projects of the third party in Italy and at European level. The participation has had an impact in testing by a third party of the performance of semantic alignments.

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SecurIoTy - security for the IoT

Entity

AvailabilityPlus GmbH

Abstract

Security is paramount for the safe and reliable operation of IoT connected devices. Currently there is consensus that in order for IoT to become widespread, security issues have to be resolved. There is less consensus on how to best implement security in IoT. In our proposal SecurIoTy, we give a practical approach to address IoT security dimension such as confidentiality, integrity and availability for data in transit and at rest. SecurIoTy integrates as a cross-layer into INTER-IoT and connects with all layers of INTER-IoT. SecurIoTy will solve data privacy and protection issues as well as security concerns in the healthcare market and other verticals, thus reducing a major barrier for the successful proliferation of Internet of things.

Impact The impact of the collaboration is related with confidentiality and privacy issues related with IoT and INTER-IoT. The collaboration will contribute to the cross-layer component and will provide support to the different products derived from INTER-LAYER and INTER-FW. The impact of the contribution is aligned with:

- Software requirements specification, the Use cases, Test cases, Data model and Software architecture.
- Adaptation of test cases from INTER-IoT requirements.
- Set up of automated and semi-automated tests for the software. Alignment of the test cases with requirements from INTER-IoT.
- Extension of the GUI design to interface design to reflect requirements from INTER-IoT. Integration scenarios of SecurIoTy and INTER-IoT are: a) authentication, b) sensor hub, c) reporting, storing/retrieving, logging and documentation, provided this,
- SecurIoTy has accessed to the respective services of INTER-IoT. Given the current architecture of INTER-IoT.
- SecurIoTy will be useful for gathering data from sensors and storing the reports in SecurIoTy.
- SecurIoTy will be used as a building block to store/retrieve data. As a result, AvailabilityPlus has set up interfaces to connect and integrate with the Node-red architecture.
- AvailabilityPlus has set up server infrastructure in hardware and software including multiple storage sites at multiple physical locations and a security gateway to expose services through the internet. The security gateway supports these protocols: http, https, WebDAV.

Main impact of the contribution is the provision at all levels of INTER-LAYER of a secure distributed storage facilities. The exploitation and business plan provides the inclusion of the components in INTER-IoT release, however the server technology is not open source but proprietary.

74 E3Tcity Smart City Platform and Devices Integration

Entity E3CITY S.L.

Abstract This project is aimed to integrate E3Tcity vertical platform with the Middleware Layer of INTER-IoT Inter Layer Platform. This development will provide INTER-IoT with a whole device/cloud/app vertical solution to be applied in the Smart Port pilot. E3Tcity Smart City platform allows control and monitoring of different types of installation, which include lighting, irrigation, HVAC, energy measurement, sensing, and generally any system to be controlled remotely. The platform is currently being deployed in more than 20 towns in Spain, with services spanning from public lighting control to mobility control solutions such as traffic, parking, crowd, traffic lights, irrigation and water quality, and heating, ventilation and air conditioning control.

Impact The impact of the collaboration in INTER-IoT is related with the extension of the gateway and the provision of a new application from smart city domain, allowing to extend the results of INTER-IoT to new domains:

- E3Tcity has developed a driver for INTER-IoT gateway that will allow the device to communicate with e3tcity controllers.
- E3Tcity has developed a bridge for platform to platform integration with INTER-IoT MW2MW layer. Integration will be tested in InterLogP pilot.
- Deployment of lights, nodes and PIRs.
- Testing of the different components.
- Integration in the smart lighting pilot.

The company has promoted the collaboration with INTER-IoT in different events related with smart cities.
The company now in a larger group named DATAKORUM is using INTER-IoT as part of the portfolio in different smart cities development, mainly to integrate with smart cities solutions.

4.3.2 Large Contributions

25 Collaboration INTER-OM2M
Entity Vrije Universiteit Brussel
Abstract Both oneM2M and INTER-IoT address interoperability issues for the IoT. This project will compare the development, deployment and exploitation of a demonstrator, featuring widely used application protocols (HTTP, MQTT, CoAP), over different radio (BLE, LoRA, IEEE 802.15.4) and power line communication (PLC), including security mechanisms, in the oneM2M and INTER-IoT framework. The interoperability test between the oneM2M and the INTER-IoT platform will also be realized and evaluated. Thanks to the embedding of this project in several national projects involving many Dutch and Belgian companies and 4 ICT network organizations, some supported by major national telecom operators, the results of this project will have immediate industrial impact.

Impact The collaboration as requested in the open call may bring a new standard platform like OneM2M to the INTER-IoT ecosystem. The implementation has been tested in the port transportation pilot. Main impacts regarding INTER-IoT components:

- Integration and storing of the measurements of the trackers in the university oneM2M framework.
- Provision of a user-friendly interface to interact and retrieve data from the university oneM2M framework.
- Bridge including syntactic and semantic translator.

The research team has performed different dissemination actions:

- Standardization activity: ETSI OneM2M week that took place in October 2017 in Sophia Antipolis.
- Article in journal: S.Thielemans, D. Di Zenobio, A. Touhafi, P. Lataire and K. Steenhaut, "DC Grids for Smart LED-Based Lighting", Energies, vol 10, no 10, pp 1-26, 2017.
- Workshop presentation: Wireless Community IoT Integration, Leuven (Belgium) 6 Feb 2018. Joint presentation between INTER-IoT consortium (Roel Vossen – NEWAYS) and VUB team.
- Standardization activity: ETSI OneM2M week that took place in October 2018 in Sophia Antipolis.

Cross dissemination: presentation to Flemish companies at PROXIMUS during Horizontal-IoT TETRA project. The project has contributed to ECLIPSE OM2M project linking it with INTER-IoT, further contributions are expected in the coming years. The participation of the contribution in the ETSI OneM2M events has provided visibility of INTER-IoT in this venue, further collaborations and contributions are expected in the coming meetings.

71 Integrating sensiNact platform with Inter-IoT Framework

Entity CEA

Abstract CEA has developed the IoT platform sensiNact within various collaborative European projects such as BUTLER, ClouT and SocIoTal and now under further development and deployment in several other European projects such as BigClouT, FESTIVAL, OrganiCity, Wise-IoT, IoF2020 and ACTIVAGE. Our motivation to participate to Inter-IoT project is two-fold: i) to take benefit of Inter-IoT interoperability methodology and tools and include them into the sensiNact platform, ii) provide to Inter-IoT the opportunity to validate their framework with the integration of sensiNact platform and thus access to all compatible data sets from sensiNact from different domains such as smart cities, smart farming, smart ski resort, smart building, smart living and well-ageing, etc.

Impact The collaboration as requested in the open call may bring a new standard platform like sensiNact to the INTER-IoT ecosystem. The implementation will be tested in the INTER-DOMAIN pilot, considering that the platform is more focused in smart cities environment and has a direct link with ECLIPSE since February 2017 allowing INTER-IoT to have an extended impact in ECLIPSE, as the bridge has been included in the developments. The main impacts:

- Including sensiNact as a native platform of INTER-IoT and integrate it into the INTER-IoT framework.
- The integration has been validated with data and sensors from the port but also from other projects developed by CEA.
- CEA and its partners are currently building a working group about open smart urban environments within the Eclipse Foundation, which is a well-known and active community of developers.
- Integration of FESTIVAL, BigClout data with INTER-IoT.
- Development of the bridge that now is available in the INTER-IoT release.
- Extension of the bridge to be used in H2020 IoT1 ACTIVAGE.

The impact of the collaboration has been extended to other projects, and the bridge is being use in other projects in which CEA is participating and integrating sensiNact with universAAL and FIWARE among others.

4.4 Advisory Board

The INTER-IoT Advisory Board includes by now 7 members in total, three from relevant stakeholders (two large port authorities and one from a Health National System), two academic (one from a University and another from a research center), one from capital risk entity and another from a large industry related with IoT:

- José García de la Guia (Port Authority of Valencia), SPAIN. Position: CIO.
- Prof. MengChu Zhou (New Jersey Institute of Technology - NJIT), USA. Position: Full Professor of Information Technologies.
- Frank Molendijk (Port Authority of Rotterdam), THE NETHERLANDS. Position: CIO
- Francesco Giuliani (IRCCS Casa Sollievo della Sofferenza), ITALY. Position: Research Director.
- Matus Maar (Talis Capital), UK. Position: Partner and Director.
- Dr. Andrzej Jankowsk (INTEL), POLAND. Position: Internet of Things Ecosystem Manager in Intel Corporation for Central Europe region.
- Dr. Mihael Mohor (Institute Jozef Stefan - IJS), SLOVENIA. Position: Research Director

Individual interaction with the members has been held in different parallel meetings, and two teleconferences have been held with the members of the advisory board:

- 13th December 2016, in which the main architecture and situation of the project was presented. First inputs from the AB were received and used mainly to fix priorities in product development.
- 17th May 2017, in which an update of the architecture components and developments were presented. The core of the presentation was devoted to product identification, business models and ecosystem building through the open call results.

The Advisory Board members had a busy agenda and was very difficult to have all of them in a single place in the same day so the approach after the second telco was to held individual interactions with the different members and with more than two if possible. Some of this interactions have been teleconferences and other meetings in specific events, for example:

- Mr. José García de la Guía, the CIO of Valencia Port Authority we scheduled a meeting each three months in order to receive feedback, and a total of five meetings have been scheduled.
- Prof. MengChu Zhou from NJIT attended a conference in Calabria and UniCal had periodic interactions with him regarding the content of the project.
- During IoT Week in Bilbao Dr. Francesco Giuliani attended the event and several interactions were held with him in order to present the results and the potentialities of using it in the health application domain.
- Matus Maar attended in February 2018 the plenary meeting of INTER-IoT held in Eindhoven and a workshop about business models and exploitation was held. Additionally RINICOM had periodic interviews with him regarding.
- Mr. Frank Molendijk (Port of Rotterdam) and Mr. José García de la Guía attended to an ALICE event associated with ports.

The previous interactions are some examples, and in addition several bilateral and multilateral teleconference have taken place with the seven members of the AB. As the consortium will continue the activity in INTER-IoT project components, a new closing teleconference is scheduled early January before the project technical review.

4.4.1 Contributions from the AB

This is the final report of the INTER-IoT Advisory Board interaction. The AB members have had access to content of the project and during the different discussions they have provided some comments of the work done and recommendations associated with the future of INTER-IoT.

4.4.1.1 Comments

From the point of view of the AB members the overarching goal of INTER-IoT is highly relevant and the feeling with activity performed by the partners in terms of technical work, dissemination and impact generation is highly positive. Some comments are:

- The INTER-IoT project has produced a relevant set of publications, and the final idea of compiling the activity in a single book is promising and will help to disseminate project results in a broader sense. The recommendation about the book was issued by the AB in the previous period.

- Publications are a highlight, and they have to be provided as much as possible in open access. The AB is aware of embargo periods of some editorials but it is advisable.
- Participations in events like IoT Week in Geneva and also in Bilbao so as other industrial dissemination events can help to reach new markets. The proposed last showcase in E-World fair in Essen in which several application domains will be present.
- Interaction with other projects like IoT-LSP as shown with ACTIVAGE is a very relevant result as the work in interoperability will have further continuity. Additionally from the information provided to the AB, work on INTER-IoT components will continue in several projects, products and initiatives run by the different partners of the project, including several third parties.
- During the second period the consortium has succeeded in going deep in the technical results but improving the TRL in terms of focusing more on the pilots.
- Link with initiatives like FIWARE have been achieved in the framework of the FIWARE Summit, also with UniversAAL through the UniversAAL IoT Foundation.
- Link with ECLIPSE has been achieved through the two large contributions from the open call: VuB with ECLIPSE OM2M and CEA with sensiNact.
- Outcomes of the third parties have been rather successful, and the information provided indicates that all the involved SMEs are going to include INTER-IoT in their portfolio and the RTOs and Universities are going to profit from the achieved results.
- The proposal of developing a "lesson learnt" document associated with INTER-IoT so as a "best practices" guide is relevant to support the different stakeholders in the use and introduction of INTER-IoT.
- The layered interoperability mechanisms proposed by INTER-IoT, is attractive from a business perspective as a solution that will be application domain agnostic, or potentially extended inter-domain by "peering" among similar providers with aligned incentives to extend reach of the solution. This can be an additional selling-point for the relevant INTER-IoT solutions.
- The clarifications on that INTER-IoT not solving universally every interoperability issue has been removed from many dissemination documents, so this simplistic approach has been avoided and a more detailed description of the different products and the specific benefits can be provided.
- Identification of products have clarified the business models, the final version of D8.7 provided a very good understanding on how the consortium can make money with the outcomes of the project.
- PRIME-IoT product from RINICOM and different initiatives by XLAB and PRO are highly promising in the new business models and exploitation of the results.
- Last release of INTER-FW incorporates new authentication methods and improve security aspects as reported by the consortium in different conversations, however a comment is issued in the recommendations. The contribution from the third parties have improved these aspects.
- Business models, mainly those associated with open source are more convincing at the end of the project.

- Although contribution to standards have not been too much by the project, the collaboration in AIOTI, IoT-EPI, IoT-LSP, participation in 5G-PPP and also the contribution form U. Twente and VuB to ETSI are relevant aspects of the project.
- Link between SDN and IoT and BigData and IoT are major contributions that may come out from the project. Currently SDN interaction with IoT in INTER-IoT is a mean to achieve flow distribution between gateways and achieve QoS that has been included in 5G-PPP Phase 2 project 5GENESIS. The same regarding contributions from INTER-IoT to big data projects like Transforming Transport.
- Methodology provides a good support for using INTER-IoT, the tool can provide help and guidance.

4.4.1.2 Recommendations

Although the project finishes on December 2018, there are several aspects that could support the adoption of INTER-IoT in the following years:

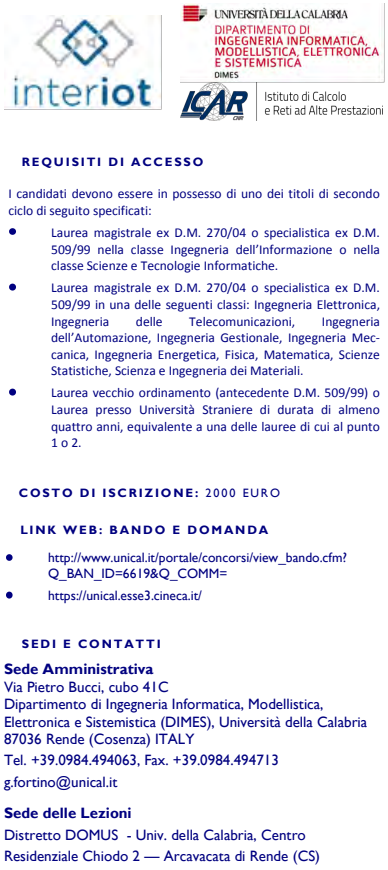
- A strong introduction message about the relevance and benefits of INTER-IoT will help to set the stage and can function as guide for the stakeholders to understand the different content developed in the project. Mainly what is useful for each application domain.
- In particular some of the mechanisms developed in INTER-IoT will raise privacy issues. The presentations and clarifications at the meeting show that these issues have been addressed and considered by the consortium. A recommendation will be to team up with consortiums or entities using INTER-IoT components that have strong requirements on privacy and security like ACTIVAGE consortium and CHARIoT.
- The consortium need to continue exploring collaboration with different open source initiatives in order to improve the open source policy and business models.
- The consortium needs to stress contributions in SDOs, mainly those related with architecture and ontologies, mainly there is an increasing interest and SAREF and SAREF extensions.
- Methodology can look complex a good guide and explanation probably supported by videos and documentations can help to understand the use of INTER-METH.

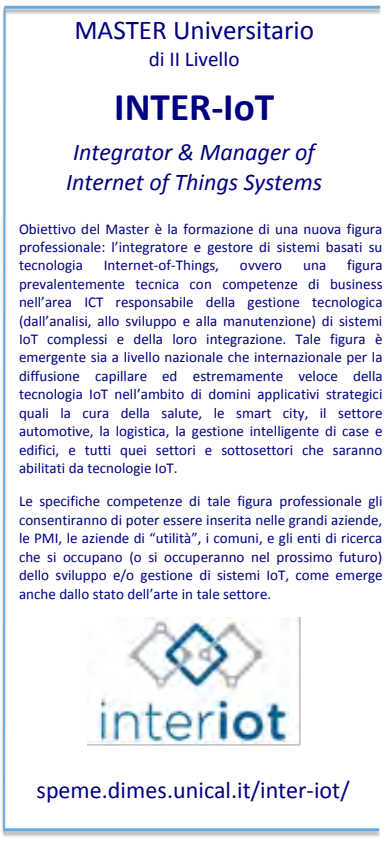
Finally, the Advisory Board has provided a valuable list of smaller, but technically detailed comments and hints on the activity during the execution of the project. It can be concluded that the INTER-IoT project already has addressed those Advisory Board recommendations during the lifetime of the project.

4.5 Master in IoT

The University of Calabria has launched a Master in IoT. THe full title is "Inter-Iot: Integrator and Manager of Internet-of-Things Systems". Its aim is to train highly professional figures on IoT, ICT and Industry 4.0. Coordinated by Prof. Giancarlo Fortino, the Master aims to train a new professional figure: the integrator and manager of systems based on Internet-of-Things technology, a predominantly technical figure with business skills in the responsible ICT area technological management (from analysis, development and maintenance) of complex IoT systems and their integration. This

figure is emerging both nationally and internationally for the widespread and extremely fast diffusion of IoT technology in strategic application domains such as health care, smart cities, the automotive sector, logistics, smart home management and buildings, and all those sectors and sub-sectors that will be enabled by IoT technologies. The educational activities will take place in the classrooms / laboratories of the University of Calabria, at the headquarters of the DOMUS District, as well as in some laboratories of the companies supporting the Master. The total number of hours, including individual study hours, is equal to 1500 hours.





4.6 Open Source Communities

During the Exploitation workshop in Ljubljana the ET presented the following information:

4.6.1 The Open source licenses selected by the IoT-EPI Projects.

4.6.2 IoT Platform Licenses

Project	License
FIWARE	GPL/AGPL
OpenIoT	LGPL 3.0
Eclipse OM2M	EPL
UniversAAL	Apache 2.0

Sofia2	Apache 2.0

Matrix about different open source licenses and a reason for using them.
Specific list of Compatible Software Licenses that we can use in an Apache 2.0 license Project
Forbidden licenses (Cannot be included within Apache products)
Weak copyleft (can be used in binary form if the inclusion is appropriately labelled)
Taking into account the aforementioned information the INTER-IOT consortium discussed about that finally then decided to go for the Apache license because it better suits our exploitation activities.
Some OS individual activities have been carried out during this period as follow:

- SABIEN: During the testing of the universAAL Bridge for Inter-MW a couple of issues were identified in the original code base of universAAL, both related to the Android version of its middleware:
  - First, the content of the messages of universAAL Android middleware could be, under some circumstances, using some specific ontologies, not as complete as it could be expected. An issue was created in universAAL's Github repository for the Android version (https://github.com/universAAL/nativeandroid/issues/6) and it was fixed in due time. This fix will be included in the next release of universAAL.
  - The other, smaller issue has to do with opening universAAL's Android middleware source code in recent versions of Android Studio. Because the source had not been updated in a while, there have been some updates to Android Studio and Android itself that require minor setup updates in the universAAL source code. An issue has not been created in universAAL's Github for this, but it has been properly notified.
- XLAB-PRODEVELOP: Both will provide more OS in INTER FW (as SDK/Eclipse plugins).
- UPV is participating at the Eclipse initiative sensiNact for the applications of interoperability to smart cities

During the second iteration of Exploitation Plan (second Phase of the project) the INTER-IoT consortium plans to increase the activities in OS communities, once the code is mature enough to be provided to them.

4.7 Standardization Activities

The standardization activity will profit from previous and current presence of project partners in key standardization organizations. Therefore, it is also planned to target industrial alliances in order to promote INTER-IoT results. Clearly, in the first phase of the project, when no technological results are ready to be standardised, the partners just followed the main standardisation activities and trends, in order to be ready to act as soon as results will be considered worth the effort to be standardised. Hereafter, the different partners interests are summarised:

- **UPV**
  - IETF WGs related with IoT (6LoWPAN, ROLL and CORE)
  - ITU-T SG20 (lead group on IoT) and SG21 (IoT related issues with interoperability).
- **UNICAL**

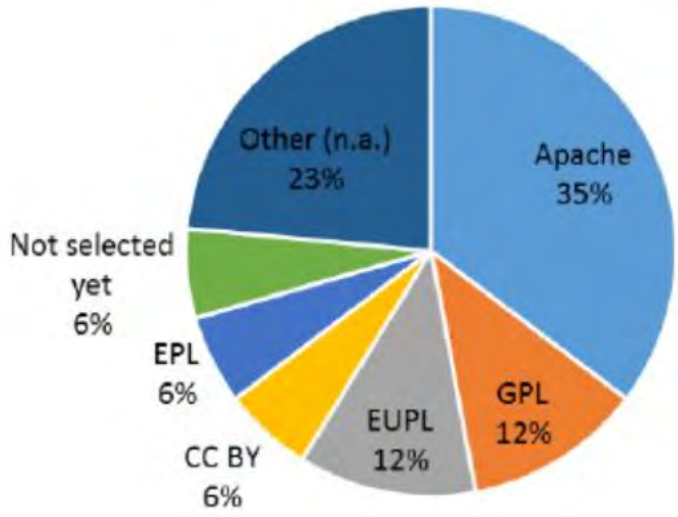


Figure 4.5: Open Source Licenses

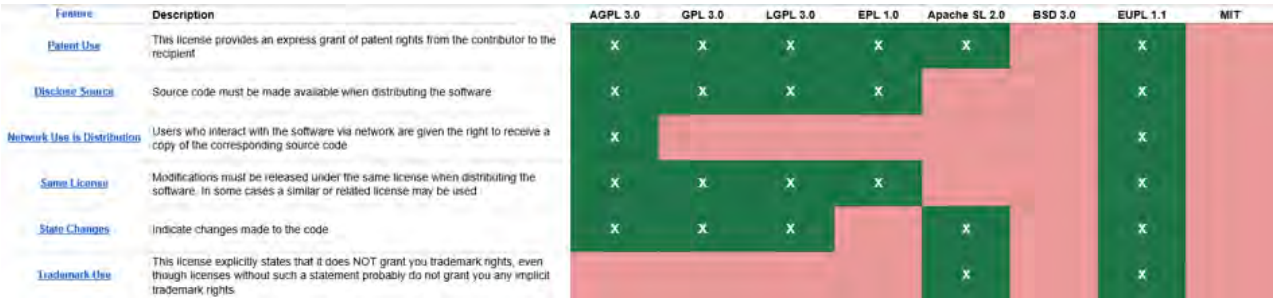


Figure 4.6: IoT Platform Licenses

  - IEEE
  - ETSI
  - ITU
  - IETF
  - W3C
  - 0neM2M
- **VPF**
  - AIOTI
- **PRO**
  - AIOTI
- **TUE**

  - IETF 6tisch WG.
  - MBAND (IEEE802.15.6 or IEEE802.15.4j)
- **XLAB**
  - AIOTI
- **SRIPAS**
  - OpenEHR initiative
  - AIOTI
- **ABC**
  - IETF (WG ROLL, CORE)
  - ETSI
  - ITU-T (SG20)
  - AIOTI WG3

Specific list of Compatible Sw Licenses that we can use in an Apache 2.0 license project
Apache License 2.0
Apache Software License 1.1. Including variants:
PHP License 3.01
MX4J License
BSD (without advertising clause). Including variants:
BSD 2-clause
BSD 3-clause
DOM4J License
PostgreSQL License
Eclipse Distribution License 1.0
MIT/X11
ISC
ICU
University of Illinois/NCSA
W3C Software License
W3C Community Contributor License Agreement - if at least 45 days after publication
X.Net
zlib/libpng
FSF autoconf license
DejaVu Fonts (Bitstream Vera/Arev licenses)
Academic Free License 3.0
Service+Component+Architecture+Specifications
OOXML XSD ECMA License
Microsoft Public License (MsPL)
Creative Commons Copyright-Only Dedication
Python Software Foundation License
Adobe Postcript(R) AFM files
Boost Software License Version 1.0

Figure 4.7: List of compatible licenses

Forbidden licenses (Cannot be included within Apache products)
Binary Code License (BCL)
Special exceptions to the GNU GPL (e.g. GNU Classpath)
GNU GPL 1, 2, 3
GNU LGPL 2, 2.1, 3
GNU Affero GPL 3
NPL 1.0/NPL 1.1
QPL
Sleepycat License
Code Project Open License (CPOL)
BSD-4-Clause/BSD-4-Clause (University of California-Specific)
Field of use restrictions:
Microsoft Limited Public License
Amazon Software License (ASL)
JSON License
Non-commercial licenses:
Creative Commons Non-Commercial variants

Figure 4.8: List of forbidden licenses

Weak copyleft (can be used in binary form if the inclusion is appropriately labeled)
Software under the following licenses may be included in binary form within an Apache product if the inclusion is appropriately labeled (see below)
Common Development and Distribution Licenses: CDDL 1.0 and CDDL 1.1
Common Public License: CPL 1.0
Eclipse Public License: EPL 1.0
IBM Public License: IPL 1.0
Mozilla Public Licenses: MPL 1.0, MPL 1.1, and MPL 2.0
Sun Public License: SPL 1.0
Open Software License 3.0
Erlang Public License
UnRAR License (only for unarchiving)
SIL Open Font License
Ubuntu Font License Version 1.0
IPA Font License Agreement v1.0
Creative Commons Attribution (CC-BY) 2.5, 3.0, and 4.0

Figure 4.9: List of weak copyleft licenses

A List of Contacted Institutions

Name of structure	Type of Structure	Last Name	First Name	Function	Contact Phone	Contact Mail	Date
AUTF	Association	Rose	Christian	Délégué Général	Yes	Yes	5/2/2018
AUTF	Association	Thouzery	Virginie	Responsable Communication	No	Yes	5/2/2018
Cluster Maritme	Association	Cadiou	Geraldine	Responsable Communication	Yes	Yes	5/2/2018
Novalog	Association	Verny	Jerome	Expert Supply Chain	No	Yes	5/2/2018
Cluster Logistique PACA	Association	Bardin	Isabelle	Délégué Général	Yes	Yes	5/2/2018
Atec ITS	Association	Py	Mathieu	Chargé de projet	Yes	Yes	5/3/2018
Atec ITS	Association	Farny	Guillaume	Délégué Général	No	Yes	5/3/2018
GNTC	Association	Barbé	Aurelien	Délégué Général	Yes	Yes	5/3/2018
Cluster Cara	Association	Kamanda	Celia	Assisante de direction	Yes	Yes	5/3/2018
Pole d'intelligence logistique	Association	Michaux	Cecile	Délégué Général	Yes	Yes	5/3/2018
Institut du Commerce	Association	Hua	Xavier	Délégué Général	Yes	Yes	5/4/2018
Port de Marseille Fos	Port Authority	Caumeil	Bernard	Chef du département SI	Yes	Yes	5/4/2018
Euralogistic	Port Authority	Nowak	Elvina	Chargé de projet	Yes	Yes	5/4/2018

Port de Gennevilliers	Port Authority			Département Communication	No	Yes	5/4/2018
Plateforme multimodale delta 3	Multimodal Platform			Assisante de direction	Yes	Yes	5/4/2018
Port de Dunkerque	Port Authority	Vereecque	Regis	Responsable Etudes Marketing	Yes	Yes	5/7/2018
Région Grand Est AFT	Association	Bouvier	Sophie	Déléguée Régionale Alsace	Yes	Yes	5/7/2018
Région Grand Est AFT	Association	Ledoux	Catherine	Déléguée Régionale Lorraine	Yes	Yes	5/7/2018
Région Grand Est AFT	Association	Sempe	Pierre	Délégué Régional Champagne Ardenne	Yes	Yes	5/7/2018
Région Nouvelle Aquitaine	Association	Rio	Lydia	Déléguée Régionale Aquitaine	Yes	Yes	5/7/2018
Région Nouvelle Aquitaine	Association	Martin	Olivier	Délégue Régional Poitou-Charentes	Yes	Yes	5/9/2018
Région Nouvelle Aquitaine	Association	Huguen	Thomas	Délégué Régional Limousin	Yes	Yes	5/9/2018
Région Bourgogne Franche Comté	Association	Brosse	Isabelle	Déléguée Régionale Franche Comté Bourgogne	Yes	Yes	5/9/2018
Région Aura	Association	Jacquot	Béatrice	Déléguée Régionale Rhône-Alpes	Yes	Yes	5/9/2018
Région Aura	Association	Jacquot	Pierre-Luc	Délégué Régional Rhône-Alpes	Yes	Yes	5/11/2018
Région Aura	Association	Rougeol	Cécile	Déléguée Régionale Auvergne	Yes	Yes	5/11/2018
Région Centre Val de Loire	Association	Deville	Flora	Déléguée Régionale Centre Val de Loire	Yes	Yes	5/11/2018
Région Ile de France	Association	Paris	Jean-Marc	Délégué Régional Ile de France	Yes	Yes	5/11/2018

Région Occitanie	Association	Boy	Christine	Déléguée Régionale Occitanie	Yes	Yes	5/14/2018
Région Paca	Association	Gouy	Caroline	Déléguée Régionale PACA	Yes	Yes	5/14/2018
Région Hauts de France	Association	Ghadfa	Saou	Délégué Régional Nord Pas de Calais	Yes	Yes	5/14/2018
Région Hauts de France	Association	Guichard	Barbara	Déléguée Régionale Picardie	Yes	Yes	5/14/2018
Région Normandier	Association	Monnois	Jean Michel	Délégué Régional Normandie	Yes	Yes	5/14/2018
Région Bretagne	Association	Godefroy	Eric	Délégué Régional Bretagne	Yes	Yes	5/15/2018
Région Pays de la Loire	Association	Labrusse	Jehan Paul	Délégué Régional Pays de la Loire	Yes	Yes	5/15/2018
Plateforme multimodale delta 3	Association	Perrin	Xavier	Directeur du Développement	No	Yes	5/15/2018
Castorama France	Association	Bocci	Silvio	Manager Import	No	Yes	5/15/2018
Region Normandie	Association	Leveque	Gregory	CDP Numérique	No	Yes	5/15/2018
Port de Dunkerque	Association	Cotonnec	Gwenaelle	CDP	No	Yes	5/16/2018
Agur Dunkerque	Association	Vereecke	Jean François		No	Yes	5/16/2018
Dreal Bretagne	Association	Lauzier	Pascal	Chargé d'analyses stats	Yes	Yes	5/16/2018
Dreal Bretagne	Association	Dubois	Marie	Cheffe de Division connaissance prospective evaluation	No	Yes	5/16/2018
Dreal Bretagne	Association	Dupont	Alexandre	Chef de service infrastructures sécurité transport	No	Yes	5/17/2018
Dreal Grand EST	Association	Boidevézi	Nicolas		No	Yes	5/17/2018
Dreal Grand EST	Association	Lombard	David		No	Yes	5/17/2018
FNTR	Association	Grumiaux	Thierry		No	Yes	5/17/2018
ORT PACA	Association	Aubert	Emilie		No	Yes	5/17/2018

DREAL Hauts de France	Public Body	Giora	Pierre Maxime	Référent en prospective des transports	Yes	Yes	5/18/2018
DREAL Normandie	Public Body	Mounier	Sebastien	Référent en prospective des transports	Yes	Yes	5/18/2018
DREAL Val de Loire	Public Body	Guillemaut	Fabien	Responsable de l'unité déplacements	Yes	Yes	5/18/2018
DREAL Pays de la Loire	Public Body	Guimera	Sylvie	Responsable de Service Intermodalité	Yes	Yes	5/18/2018
Dreal Bourgogne Franche Comté	Public Body	Corbet	Jacques		No	Yes	5/22/2018
Service des transpot auvergne rhone alpes	Public Body				No	Yes	5/22/2018
ORT Corse	Public Body	Battesti	Bruno		Yes	Yes	5/22/2018
Terminal Conteneur Dunkerque	Container Terminal	Brunot	Yoann		Yes	Yes	5/22/2018
Terminal Conteneur Dunkerque	Container Terminal	Vernier	Thomas	Directeur Général	No	Yes	5/22/2018
Prefet Hauts de France	Public Body	Valère	Xavier Yves	Chef de mission développement des territoires	Yes	Yes	5/23/2018
Fondation Sefacil	Association	Alix	Yann	DG	No	Yes	5/23/2018
directeur isel	Public Body	Derrey	Thierry	Directeur	Yes	Yes	5/23/2018
Les Mines Paristech	Public Body	Ballot	Eric		No	Yes	5/23/2018
4S Network	Association	Perraudin	Xavier	Président	No	Yes	5/23/2018
4S Network	Association	Leroux	Christian	Directeur Général	Yes	Yes	5/24/2018
Vendée Numérique	Public Body	Milcent	Sebastien	Responsable commercialisation et communication	Yes	Yes	5/24/2018
ASLOG	Association				Yes	Yes	5/24/2018
Cluster CARA	Association	Terasse	Maude	Chargée de projet	Yes	Yes	5/24/2018
UMEP	Association	Fréret	Nathalie	Déléguée Générale Adjointe	Yes	Yes	5/25/2018

danser	Logistics Provider	Douvier	Clarisse		Yes	Yes	5/25/2018
logiseine	Logistics Provider				Yes	Yes	5/25/2018
Log's	Logistics Provider	Salembier	David	Directeur Innovation et méthodes	Yes	Yes	5/25/2018
Idea Groupe	Logistics Provider	Cardineau	Samuel	Responsable informatique	Yes	Yes	5/28/2018
Bils Deroo	Logistics Provider	Denimal	François	DSI	Yes	Yes	5/28/2018
Le Roy Logistique	Logistics Provider	Marie	Isabelle	DSI	Yes	Yes	5/28/2018
Alloga	Logistics Provider	Jean Christophe Fournier		DSI	Yes	Yes	5/28/2018
Ziegler	Logistics Provider				Yes	Yes	5/29/2018
Zamenhof	Logistics Provider	Fizanne	sébastien	DSI	Yes	Yes	5/29/2018
Transalliance	Logistics Provider				Yes	No	5/29/2018
Dachser	Logistics Provider				Yes	Yes	5/29/2018
Star Service	Logistics Provider				Yes	No	5/29/2018
STG	Logistics Provider				Yes	Yes	5/30/2018
Ceva Logistics	Logistics Provider	Bordage Oliveiro	Pauline	Recrutement and training	Yes	Yes	5/30/2018
Groupe Bovis	Logistics Provider				Yes	Yes	5/30/2018
Groupe Blondel Transport	Logistics Provider				Yes	Yes	5/30/2018
Groupe Blondel Logistique	Logistics Provider				Yes	Yes	5/30/2018
Groupe Blondel Aéronautique	Logistics Provider				Yes	Yes	5/31/2018
GT Logistics	Logistics Provider	Norais		acceuil	Yes	Yes	5/31/2018
Aplpha direct services	Logistics Provider				Yes	Yes	5/31/2018
Mutual Logistics	Logistics Provider				Yes	Yes	5/31/2018
Transports Caillot	Logistics Provider	Latour	Jerome	DSI	Yes	Yes	6/5/2018

Schenker France	Logistics Provider	Patron	Jacques	DSI	Yes	Yes	6/5/2018
Dispeo	Logistics Provider	Devaux	Eneric		Yes	Yes	6/5/2018
Distrilog	Logistics Provider				Yes	Yes	6/5/2018
Distridirect	Logistics Provider				Yes	Yes	6/6/2018
Distritec	Logistics Provider				Yes	Yes	6/6/2018
Dimotrans Groupe	Logistics Provider	Pallé		DSI	Yes	Yes	6/6/2018
Groupe Alainé	Logistics Provider	Alaine	Franck	Directeur Général	Yes	Yes	6/6/2018
Seafrigo Group	Logistics Provider				Yes	Yes	6/6/2018
Groupe Legendre	Logistics Provider	Roche	Thierry	Chef de Projet Informatique	Yes	Yes	6/7/2018
Portmann	Logistics Provider	Gruhn	Luc	Responsable informatique	Yes	Yes	6/7/2018
Lahaye Global Logistics	Logistics Provider	Lefebvre	Justin	Administrateur système et réseaux	Yes	Yes	6/7/2018
C Log	Logistics Provider	Arnold	Frederic	Responsable informatique	Yes	Yes	6/7/2018
Veolog	Logistics Provider	Labatut	Pierre	DSI	Yes	Yes	6/8/2018
XP Log	Logistics Provider				Yes	Yes	6/8/2018
Logtex	Logistics Provider	mathoulin	Xavier	Responsable SI	Yes	Yes	6/8/2018
Movianto	Logistics Provider	Delamotte	Christophe	Responsable informatique	Yes	Yes	6/8/2018
Vir Transport	Logistics Provider	Service	Informatique		Yes	Yes	6/8/2018
Skipper Groupe	Logistics Provider	Foster		Responsable informatique	Yes	Yes	6/8/2018
Bert	Logistics Provider				Yes	Yes	6/11/2018
Houtch Transports	Logistics Provider	Guerrier	Maxence	Responsable informatique	Yes	Yes	6/11/2018
ALT	Logistics Provider				No	Yes	6/11/2018
De Rijke	Logistics Provider				No	Yes	6/11/2018
Duhamel Logistique	Logistics Provider	Nollet	Nathalie	Assitante commerciale	Yes	Yes	6/12/2018

Urban Logistique	Logistics Provider				Yes	Yes	6/12/2018
Bansard International	Logistics Provider		Baillin	DSI	Yes	Yes	6/12/2018
KS Services	Logistics Provider				Yes	Yes	6/12/2018
Panalpina France	Logistics Provider				Yes	Yes	6/12/2018
Groupe SPI	Logistics Provider	Ginet	Franck	DSI	Yes	Yes	6/13/2018
Bretagne Services logistiques	Logistics Provider	Balbino	Stéphane	DSI	Yes	No	6/13/2018
Sotradel	Logistics Provider	Belin	Laurent	DSI	Yes	Yes	6/13/2018
Egetra	Logistics Provider				No	Yes	6/13/2018
Groupe Combronde	Logistics Provider	Roddier	Philippe	DSI	Yes	Yes	6/14/2018
GSA Logistics	Logistics Provider	Tep	Sam	Informaticien	Yes	Yes	6/14/2018
Denjean Logistique	Logistics Provider	Départment	Informatique		Yes	Yes	6/14/2018
Grenoble Logsitique Distribution	Logistics Provider	Mandavit	Franck	Responsable informatique	Yes	Yes	6/14/2018
Manu Logistique	Logistics Provider	Roy	Xavier	DSI	Yes	Yes	6/14/2018
Optilog	Logistics Provider	Croizet		Responsable informatique	Yes	Yes	6/15/2018
Groupe Mauffrey	Logistics Provider				No	Yes	6/15/2018
Conhexa	Logistics Provider	Tempez	Philippe	Responsable Technique et Informatique	Yes	Yes	6/15/2018
Dartess	Logistics Provider	Prigent	Aude		No	Yes	6/15/2018
Codimas Logistique	Logistics Provider				No	Yes	6/18/2018
Groupe le Calvez	Logistics Provider				No	Yes	6/18/2018
Philea Solutions	Logistics Provider				No	Yes	6/18/2018
L4 Logistics	Logistics Provider				No	Yes	6/18/2018
Axelis	Logistics Provider				No	Yes	6/18/2018
Speed Distribution Logistique	Logistics Provider				No	Yes	6/19/2018

DSV Solutions France	Logistics Provider	Vallejo	Anais	Responsable Marketing et communication	Yes	Yes	6/19/2018
Kloosterboer	Logistics Provider	Delattre	Guillaume	IT and Development manager	Yes	Yes	6/19/2018
Logvad	Logistics Provider			acceuil	Yes	Yes	6/19/2018
Boeuix Logistique	Logistics Provider				No	Yes	6/19/2018
Boeuix Transport	Logistics Provider				No	Yes	6/20/2018
Interlog	Logistics Provider	Daian	Adenan	Responsable informatique	Yes	Yes	6/20/2018
ATR	Logistics Provider	Provost	Florain	Responsable informatique	Yes	Yes	6/20/2018
Docsourcing	Logistics Provider	Departement Logistiqe		Acceuil	Yes	Yes	6/20/2018
Norfrigo	Logistics Provider	Vanappleghem	charles	Directeur de site	Yes	Yes	6/21/2018
Normandie Logistique	Logistics Provider	Desprez	Rebecca	Gestionnaire RH/Paie/Communication	Yes	Yes	6/21/2018
Condi Services	Logistics Provider	Dufourmont	Nicolas	Responsable informatique	Yes	Yes	6/21/2018
Mobiltron	Logistics Provider	Meril	Christian	Responsable IT	Yes	Yes	6/22/2018
Groupe Chatel	Logistics Provider	Chatel	Jean Claude	Président	Yes	Yes	6/22/2018
GPC Logistics	Logistics Provider	Naegelin	Katia	Assisante de direction	Yes	Yes	6/22/2018
(Officiel Transporteurs / Bulletin Transport et de la Logistique / L?antenne)	Specialized Mass Media	Demangeon	Erick	Pigiste	No	Yes	6/22/2018
Stratégies Logistiques	Specialized Mass Media	Solard	Gilles	Rédacteur en Chef	No	Yes	6/25/2018
Voxlog	Specialized Mass Media	Gazzola	Isabelle	Directrice des publications	No	Yes	6/25/2018
Voxlog	Specialized Mass Media	Matzeu de Vialar	Laurène	Journalise	No	Yes	6/25/2018
SC Magazine	Specialized Mass Media	Polge	Cathy	Directrice Générale	No	Yes	6/25/2018
Officiel des Transporteurs	Specialized Mass Media	Le Goff	Sylvia	Redactrice en chef	No	Yes	6/25/2018

Officiel des Transporteurs	Specialized Mass Media	Ily	Gwenaelle	Redactrice en chef	No	Yes	6/26/2018
Transports AAC Globe Express	Transport Provider			Service informatique	Yes	Yes	6/26/2018
Transports Ageneau Groupe	Transport Provider			Service informatique	Yes	Yes	6/26/2018
Transports Agriliance	Transport Provider			Responsable recrutement et formation logiciel	Yes	Yes	6/26/2018
Transports Altéad	Transport Provider				Yes	Yes	6/27/2018
Transports Altrans	Transport Provider				Yes	Yes	6/27/2018
Transports Ambroise Bouvier	Transport Provider				Yes	Yes	6/27/2018
Transports Antoine & Cie	Transport Provider				Yes	Yes	6/27/2018
Transports Bailly - Courouble	Transport Provider			Developpeur informatique	Yes	Yes	6/27/2018
Transports Balguerie	Transport Provider			Service informatique boîte mail général	Yes	Yes	6/27/2018
Transports Bansard International	Transport Provider			Service informatique	Yes	Yes	6/27/2018
Transports Barbero	Transport Provider			Mail général rédirigé vers personne habilitée	Yes	Yes	6/27/2018
Transports Becker	Transport Provider			Service informatique	Yes	Yes	6/27/2018
Groupe Bernard Le Torch (Racheté par groupe Malherbe)	Transport Provider			Responsable informatique et projet	Yes	Yes	6/28/2018
Groupe Bert	Transport Provider			Responsable informatique	Yes	Yes	6/28/2018
Groupe Berto	Transport Provider			Secrétariat service informatique	Yes	Yes	6/28/2018
Transports Blanquart	Transport Provider			Service informatique	Yes	Yes	6/28/2018
Groupe BMV	Transport Provider	Pereira	Antonio	Responsable service informatique	Yes	Yes	6/28/2018

Transports Bonnard	Transport Provider			Service informatique	Yes	Yes	6/28/2018
Transports Bovis	Transport Provider			Responsable informatique	Yes	Yes	6/28/2018
Transports Brangeon	Transport Provider			Mail général rédirigé vers personne habilitée	Yes	Yes	6/29/2018
Transports Breger & Cie	Transport Provider	Bordeau	Damien	Référent informatique	Yes	Yes	6/29/2018
Transports Brun Invest	Transport Provider			Mail général rédirigé vers personne habilitée	Yes	Yes	6/29/2018
Transports BTL	Transport Provider	Rides		Directeur administratif	Yes	Yes	6/29/2018
Transports Caillé	Transport Provider	Nicoli		Mail général rédirigé vers personne habilitée	Yes	Yes	6/29/2018
Transports Capelle	Transport Provider			Mail général rédirigé vers personne habilitée	Yes	Yes	6/29/2018
Transports Cat	Transport Provider				Yes	No	7/2/2018
Transports Catroux	Transport Provider	Elmaleh	Jacques	Responsable informatique	Yes	Yes	7/2/2018
Transports Cayon	Transport Provider	Olivier	Chanay	Responsable informatique	Yes	Yes	7/2/2018
CGVL	Transport Provider	Mathilde	Rollet	Directrice des ressources humaines	Yes	Yes	7/2/2018
Transports chabas	Transport Provider	Jean-Claude	Vian	Responsable informatique	Yes	Yes	7/3/2018
Transports chavalan et Duc	Transport Provider	Daniel	Saavedra	Responsable informatique	Yes	Yes	7/3/2018
Andre Chenue	Transport Provider			Accueil general redirigé au service informatique	Yes	Yes	7/3/2018
Chipier	Transport Provider				No	No	7/4/2018

Clasquin	Transport Provider			Accueil general redirigé au service informatique	Yes	Yes	7/4/2018
Colis Prive	Transport Provider				No	No	7/4/2018
Groupe Coquelle	Transport Provider	Henne	Dominique	accueil general redirigé au service informatique	Yes	Yes	7/4/2018
cordier	Transport Provider	Rognen	Charly	Responsable service informatique	Yes	Yes	7/5/2018
DDS	Transport Provider			Mail général rédirigé vers personne habilitée	Yes	Yes	7/5/2018
Transports de Savoie	Transport Provider	Richard	Hugo	Responsable informatique	Yes	Yes	7/5/2018
Transports Delaunay	Transport Provider			Mail général rédirigé vers personne habilitée	Yes	Yes	7/5/2018
Transports Denoual	Transport Provider			Service informatique	Yes	Yes	7/6/2018
Transports Depaeuw	Transport Provider			Mail général rédirigé vers personne habilitée	Yes	Yes	7/6/2018
Transports Deret	Transport Provider			Mail général rédirigé vers personne habilitée	Yes	Yes	7/6/2018
Transports Desert	Transport Provider				No	No	7/6/2018
Transports Dorchies	Transport Provider			Mail général rédirigé vers personne habilitée	Yes	Òui	7/6/2018
Transports Donaud	Transport Provider				No	No	7/9/2018
Doumen	Transport Provider			Secrétariat	Yes	Yes	7/9/2018
DSV Road	Transport Provider				No	No	7/9/2018
Transports Henri Ducros	Transport Provider			Service informatique	Yes	Yes	7/9/2018

Transports Ducournau	Transport Provider	Coutier	Alexandre	Responsable support informatique	Yes	Yes	7/9/2018
Dumont et Cie	Transport Provider				No	No	7/10/2018
Groupe Dupessey	Transport Provider	Dupessey	Carole	Secrétariat service informatique	Yes	Yes	7/10/2018
Etoile routiere pays de la loire	Transport Provider	Moyano	Valentin	Responsable informatique	Yes	Yes	7/10/2018
Eutranspharma	Transport Provider				No	No	7/10/2018
Express Marée	Transport Provider			Service informatique	Yes	Yes	7/11/2018
Fatton	Transport Provider			Responsable informatique/ Responsable formation	Yes	Yes	7/11/2018
Fauveder & Compagnie	Transport Provider	Fauchaux	S	Directeur général	Yes	Yes	7/11/2018
Fret industrie	Transport Provider				No	No	7/11/2018
Frevial	Transport Provider				No	No	7/11/2018
Transports Gandon	Transport Provider			Mail général rédirigé vers personne habilitée	Yes	Yes	7/12/2018
Groupe TMG	Transport Provider			Mail général rédirigé vers personne habilitée	Yes	Yes	7/12/2018
Groupe Charles Andre	Transport Provider			Mail général rédirigé vers personne habilitée	Yes	Yes	7/13/2018
Gelin	Transport Provider			Mail général rédirigé vers personne habilitée	Yes	Yes	7/13/2018
Groupe Ghestem/ rachetée par Sté Mauffrey	Transport Provider	Albert	Stephane	Responsable service informatique	Yes	Yes	7/16/2018
Transports Giacomin	Transport Provider			Service informatique	Yes	Yes	7/16/2018
girard Agediss	Transport Provider			service informatique	Yes	Yes	7/16/2018

Gondrand Frères	Transport Provider			Mail général rédirigé vers personne habilitée	Yes	Yes	7/16/2018
Greenmodal	Transport Provider			M général rédirigé vers personne habilitée	Yes	Yes	7/17/2018
Greilsammer	Transport Provider			Mail général rédirigé vers personne habilitée	Yes	Yes	7/17/2018
Transports Grimonprez	Transport Provider	Marand	F	Responsable informatique	Yes	Yes	7/17/2018
Transports Groussard	Transport Provider			Mail général rédirigé vers personne habilitée	Yes	Yes	7/17/2018
GTS Prim@ever	Transport Provider				No	No	7/17/2018
Transports Guidez	Transport Provider				No	No	7/17/2018
Transports Guisnel	Transport Provider			Mail général rédirigé vers personne habilitée	Yes	Yes	7/18/2018
Transports Heintz	Transport Provider	Ihissier		Responsable informatique	Yes	Yes	7/18/2018
Transports Hemmerlin	Transport Provider			Mail général rédirigé vers personne habilitée	Yes	Yes	7/18/2018
Hinterland	Transport Provider	Boinet		Directeur général	Yes	Yes	7/18/2018
Homebox	Transport Provider				No	No	7/18/2018
IMX France	Transport Provider				No	No	7/18/2018
Inter Legumes rachetée par Primever	Transport Provider	Decarnelle	Thierry	Directeur DSI	Yes	Yes	7/18/2018
ITM Logistique Alimentaire International	Transport Provider	Montuelle	Michel	Responsable informatique	Yes	Yes	7/19/2018

Jacquemmoz & fils	Transport Provider			Mail général rédirigé vers personne habilitée	Yes	Yes	7/19/2018
Jammet	Transport Provider			Mail général rédirigé vers personne habilitée	Yes	Yes	7/19/2018
JF Hillebrand	Transport Provider				No	No	7/19/2018
JH Mesguen	Transport Provider				Yes	Yes	7/19/2018
Jimenez Fva	Transport Provider	Guerville	Loic	Responsable informatique	Yes	Yes	7/19/2018
JLG Services	Transport Provider			Mail général rédirigé vers personne habilitée	Yes	Yes	7/19/2018
Jolival France	Transport Provider				No	No	7/19/2018
Jourdan	Transport Provider			Service informatique	Yes	Yes	7/20/2018
Kleyling	Transport Provider	Couty	Laurent	Responsable informatique	Yes	Yes	7/20/2018
Kilnzing Freres & Cie	Transport Provider	Thierry	Killian	Responsable informatique	Yes	Yes	7/20/2018
Lambert & Valette / groupe Heppner	Transport Provider	Gonot	Christophe	Responsable informatique	Yes	Yes	7/20/2018
Lannutti France	Transport Provider	Domenico	Galo	Responsable informatique	No	No	7/20/2018
Groupe Le Calvez	Transport Provider	Michel	Arnaud	Responsable informatique	Yes	Yes	7/20/2018
Lemarechal Celestin filiale AREVA	Transport Provider				No	No	7/20/2018
Leray	Transport Provider				No	No	7/25/2018
Location Courcelle	Transport Provider	Guillois	Michael	Responsable service informatique	Yes	Yes	7/25/2018
Logfret	Transport Provider	Boisselier		Responsable informatique	Yes	Yes	7/25/2018
Logisteo	Transport Provider				No	No	7/25/2018

Logivia	Transport Provider			Mail général rédirigé vers personne habilitée	Yes	Yes	7/26/2018
Logtex	Transport Provider	Mathoulin	Xavier	Responsable informatique	Yes	Yes	7/26/2018
Lorcy	Transport Provider				No	No	7/26/2018
La Palette Rouge LPR	Transport Provider			Mail général rédirigé vers personne habilitée	Yes	Yes	7/26/2018
LTR Vialon	Transport Provider			Mail service informatique	Yes	Yes	7/26/2018
M&M Militzer & Munch	Transport Provider	Debel	Vincent	Responsable informatique	Yes	Yes	7/26/2018
Malgogne	Transport Provider				No	No	7/26/2018
Groupe Malherbe	Transport Provider				No	No	7/27/2018
Martelet Regis	Transport Provider			Mail DSI	Yes	Yes	7/27/2018
Martin Brower France	Transport Provider	Herbault		Responsable informatique	Yes	Yes	7/27/2018
Mauffrey	Transport Provider			Mail général rédirigé vers personne habilitée	Yes	Yes	8/24/2018
Mazet Messagerie	Transport Provider	Caillot	Stevina	Responsable service achat et informatique	Yes	Yes	8/24/2018
Meca	Transport Provider				No	No	8/27/2018
Mendy	Transport Provider				No	No	8/27/2018
Mesples	Transport Provider				No	No	8/27/2018
MGE Transports Auxiliaires	Transport Provider			Mail général rédirigé vers personne habilitée	Yes	Yes	8/27/2018
Mondial Relay	Transport Provider				No	No	8/27/2018
Groupe Mousset	Transport Provider			Mail général rédirigé vers personne habilitée	Yes	Yes	8/28/2018

MRCI	Transport Provider	Limousin	Christiane	Assistante service finormatique	Yes	Yes	8/28/2018
MTA	Transport Provider				No	No	8/28/2018
Groupe Multi Transports	Transport Provider			Mail général rédirigé vers personne habilitée	Yes	Yes	8/28/2018
Groupe Napoly	Transport Provider			Mail général rédirigé vers personne habilitée	Yes	Yes	8/28/2018
Naviland Cargo	Transport Provider				No	No	8/29/2018
Nippon Express France	Transport Provider	Aaron	Dove	Responsable informatique	Yes	Yes	8/29/2018
NL Normandie Logistique	Transport Provider	Modard	Jean louis	Responsable informatique	Yes	Yes	8/29/2018
Normatrans	Transport Provider	Chaignot	D	Responsable informatique	Yes	Yes	8/29/2018
Noyon	Transport Provider			Mail général rédirigé vers personne habilitée	Yes	Yes	8/29/2018
NRJ	Transport Provider				No	No	8/30/2018
Groupe Olano	Transport Provider				No	No	8/30/2018
Orain	Transport Provider			Mail général rédirigé vers personne habilitée	Yes	Yes	8/30/2018
Panalog	Transport Provider				No	No	8/30/2018
Panalpina France	Transport Provider	Lechat	Blandine	Repsonsable informatique	Yes	Yes	8/31/2018
Groupe Papalino	Transport Provider				No	No	8/31/2018
Papin	Transport Provider	Romagny	Emmanuelle	Responsable informatique	Yes	Yes	8/31/2018
Pedretti	Transport Provider				No	No	8/31/2018
Perguilhem	Transport Provider	Nicoloso	Sebastien	Responsable informatique	Yes	Yes	9/3/2018
Perrier	Transport Provider	Desroches	Patrick	Responsable informatique	Yes	Yes	9/3/2018

Groupe PHM Group	Transport Provider				No	No	9/3/2018
Picoty Centre Energies Services	Transport Provider	Naudin	I	Directeur	Yes	Yes	9/3/2018
Groupe Portmann	Transport Provider	Gruhn	Luc	Responsable informatique	Yes	Yes	9/4/2018
Postic Alain	Transport Provider				No	No	9/4/2018
Groupe Premat Investissements	Transport Provider	Neraudau	Loic	Responsable informatique	Yes	Yes	9/4/2018
Prevost	Transport Provider			Mail général rédirigé vers personne habilitée	Yes	Yes	9/5/2018
Prevote Gestion	Transport Provider	Deprez	Didier	Repsonsable informatique	Yes	Yes	9/5/2018
Prim@ever Rousillon	Transport Provider				Yes	Yes	9/5/2018
Prostock	Transport Provider				No	No	9/5/2018
Publidispatch filiale de STACI	Transport Provider			Mail général rédirigé vers personne habilitée	Yes	Yes	9/5/2018
Quil	Transport Provider				No	No	9/7/2018
R Blanchet	Transport Provider	Dessain		Responsable informatique	Yes	Yes	9/7/2018
Rabouin	Transport Provider				No	No	9/7/2018
Groupe Rave	Transport Provider	Facompre	Ludovic	Responsable informatique	Yes	Yes	9/7/2018
RDV	Transport Provider	Dense	Valentin	Repsonsable informatique	Yes	Yes	9/7/2018
Renard	Transport Provider				No	No	9/10/2018
Renaud Roger & CIE	Transport Provider				No	No	9/10/2018
Rhenus Logistics	Transport Provider	Prudhomme	Alain	Responsable informatique	Yes	Yes	9/10/2018
Rives Dicostanzo	Transport Provider			Mail général rédirigé vers personne habilitée	Yes	Yes	9/10/2018

Riviere	Transport Provider			Mail général rédirigé vers personne habilitée	Yes	Yes	9/10/2018
Robert Bruno (vendue)	Transport Provider				No	No	9/11/2018
RoccaBor	Transport Provider	Bor	Frederic	Responsable technicien informatique	Yes	Yes	9/11/2018
Rodiere P	Transport Provider				No	No	9/11/2018
Rogersids	Transport Provider				No	No	9/11/2018
Rouxel Beton	Transport Provider	Dejan	Frederic	Responsable informatique	Yes	Yes	9/11/2018
Safe	Transport Provider				No	No	9/12/2018
Samat	Transport Provider	Garayt	François	Responsable informatique	Yes	Yes	9/12/2018
Sarrazain	Transport Provider	Regnard	Fabien	Directeur financier du groupe	Yes	Yes	9/12/2018
Sarrion	Transport Provider				No	No	9/12/2018
Satfer France	Transport Provider			Service informatique	Yes	Yes	9/12/2018
SATM	Transport Provider				No	No	9/12/2018
Satar	Transport Provider				No	No	9/12/2018
Schenker France	Transport Provider	Paille	Jean-Christophe	Responsable informatique	Yes	Yes	9/12/2018
Seche	Transport Provider	Cavrot	Philippe	Responsable informatique	Yes	Yes	9/13/2018
Seli	Transport Provider			Service informatique	Yes	Yes	9/13/2018
Groupe Chevalier SETC	Transport Provider				No	No	9/13/2018
Groupe Simon	Transport Provider				No	No	9/13/2018
Sitra France	Transport Provider				No	No	9/13/2018
SITS (groupe portmann)	Transport Provider	Gruhn	Luc	Repsonsable informatique	No	No	9/13/2018
Snat Fournaire	Transport Provider				Yes	Yes	9/14/2018

Sobotram	Transport Provider	Patrick	Desroches	Responsable informatique	Yes	Yes	9/14/2018
SOFDI	Transport Provider			Mail général rédirigé vers personne habilitée	Yes	Yes	9/14/2018
Sosersid	Transport Provider				Yes	Yes	9/14/2018
Sostmeier	Transport Provider	Neumayer	Thierry	Responsable informatique	Yes	Yes	9/14/2018
Sotradel	Transport Provider	Belin	Laurent	Responsable informatique	Yes	Yes	9/14/2018
Sovenax	Transport Provider				No	No	9/14/2018
Staf	Transport Provider	Benkhellat	O	Repsonsable informatique	Yes	Yes	9/17/2018
Star's Service	Transport Provider				No	No	9/17/2018
Stef	Transport Provider				No	No	9/17/2018
STG Gautier	Transport Provider				No	No	9/17/2018
STG & Nagel Logistique	Transport Provider				No	No	9/18/2018
STVA France	Transport Provider	Hassouna	Yasmina	Secretariat du directeur informatique	Yes	Yes	9/18/2018
Tab Rail Road	Transport Provider				No	No	9/18/2018
TBH	Transport Provider				No	No	9/18/2018
TCP Developpement	Transport Provider	Chevrier	Laurent	Responsable informatique	Yes	Yes	9/18/2018
TCS	Transport Provider	Bernard	Pouderous	Responsable informatique	Yes	Yes	9/18/2018
Tendron	Transport Provider				No	No	9/18/2018
TER	Transport Provider				No	No	9/18/2018
TFMO	Transport Provider	Bonnier	Michael	Responsable informatique	Yes	Yes	9/18/2018
TLC Courcelle	Transport Provider			Mail général rédirigé vers personne habilitée	Yes	Yes	9/18/2018
TLR TRPT Lucien Robinet	Transport Provider				No	No	9/19/2018

TNT Express National	Transport Provider				No	No	9/19/2018
Top Chrono	Transport Provider			Mail général rédirigé vers personne habilitée	Yes	Yes	9/19/2018
Trafilog	Transport Provider	Vaast	Jeremy	Responsable informatique	Yes	Yes	9/19/2018
Trans Europe Express	Transport Provider	Bletterie	Véronique	Secrétariat de la Direction	Yes	Yes	9/20/2018
Trans Inter Sud-Ouest De Fret	Transport Provider		Marie-Pierre	Responsable informatique	Yes	Yes	9/20/2018
Trans'hit International	Transport Provider			Mail général rédirigé vers personne habilitée	Yes	Yes	9/20/2018
Groupe Transalliance	Transport Provider				No	No	9/20/2018
Transenvironnement	Transport Provider			Mail général rédirigé vers personne habilitée	Yes	Yes	9/20/2018
Transit Fruits	Transport Provider	Rorato	Thierry	Responsable informatique	Yes	Yes	9/21/2018
Tratel	Transport Provider	Behaghel	Y	Repsonsable informatique	Yes	Yes	9/21/2018
TSA	Transport Provider				No	No	9/21/2018
UPS France	Transport Provider				No	No	9/21/2018
Vectorys	Transport Provider			Mail général rédirigé vers personne habilitée	Yes	Yes	9/21/2018
Veynat	Transport Provider				No	No	9/24/2018
Vigneron	Transport Provider				No	No	9/24/2018
VIR	Transport Provider				No	No	9/24/2018
Walon France	Transport Provider				No	No	9/24/2018
Woehl& Cie	Transport Provider				No	No	10/9/2018
XPO Logistics Europe	Transport Provider				No	No	10/9/2018

Zamenhof + filiales	Transport Provider			Mail général rédirigé vers personne habilitée	Yes	Yes	10/9/2018
Ziegler France	Transport Provider				No	No	10/9/2018
Aberle	Service and supplier companies	Molinari	Luc	Directeur	No	Yes	10/9/2018
Accteos	Management and Execution Softwares	Montreuil	Margaux	Chargée de Marketing et communication	No	Yes	10/9/2018
Agora du Supply Chain	Association	Weil	Anne	Directrice Marketing et Communication	No	Yes	10/10/2018
Amber Road	Management and Execution Softwares	Battini	Pierre	Directeur Commercial	No	Yes	10/10/2018
anaplan	Management and Execution Softwares	Bentahar	Maya	Field Marketing Assistant	No	Yes	10/10/2018
Antiote	Management and Execution Softwares	Kermann	Eric	PDG	No	Yes	10/10/2018
A-sis	Management and Execution Softwares	Raynaud	Evelyne	Directeur Business et Développement Produits	No	Yes	10/11/2018
atkan	Service and supplier companies	Saied	Cedric	President	No	Yes	10/11/2018
AZAP	Management and Execution Softwares	Grattepain	Fabuien	Directeur Commercial	No	Yes	10/11/2018
B2WISE France	Management and Execution Softwares	Levesque	Véronique	Responsable Commerciale	No	Yes	10/11/2018
B2PR	Management and Execution Softwares	Recors	Laurent	Directeur Associé	No	Yes	10/11/2018
Buyco	Management and Execution Softwares	Fichefeux	Benoit	Chief Sales and Operations Officer	No	Yes	10/11/2018
Cargonexx	Management and Execution Softwares	Grarstorff	Kirsten	Partner Manager France	No	Yes	10/12/2018

Citwell	Service and supplier companies	Fiette	Maria	Business developper	No	Yes	10/12/2018
Clear Logistics	Management and Execution Softwares	Noto	Thomas	Directeur Business Developpment	No	Yes	10/12/2018
Colibri	Management and Execution Softwares	Kharab	Mehdi	Expert Produit	No	Yes	10/12/2018
Connectwave	Data Capture and Transmission systems	Haouji	Celine	Responsable Communication	No	Yes	10/15/2018
Connectwave	Data Capture and Transmission systems	Sarnyai	Sebastien	Responsable commercial	No	Yes	10/15/2018
Datalogic	Data Capture and Transmission systems	Colson	Mathilde	Responsable Marketing et communication	No	Yes	10/15/2018
DC Brain	Management and Execution Softwares	de la Selle	Tristan	Business developper	No	Yes	10/15/2018
DDS Logistics	Management and Execution Softwares	Guiheneuc	Olivier	Ingénieur Commercial TMS	No	Yes	10/15/2018
Demand Driven Technologies	Management and Execution Softwares	Mitchler	Brad	VP Channels and Product Management	No	Yes	10/16/2018
Deveryware	Management and Execution Softwares	Lemesle	Patrick	Directeur Business Unit	No	Yes	10/16/2018
DSIA	Management and Execution Softwares	Bernard	Olivier	Business Developpment Directeur France	No	Yes	10/16/2018
Dynasis	Management and Execution Softwares	Bourgon	Léane	Operationnal Marketing Specialist	No	Yes	10/16/2018
Ercogener	Data Capture and Transmission systems	de Nicolay	Ludovis	Directeur Commercial et Marketing	No	Yes	10/16/2018
e-SCM	Management and Execution Softwares	Bourg	Patrick	Directeur des Opérations	No	Yes	10/17/2018
Etyo	Service and supplier companies	Chapuzet	Nicolas	Business Developpment Manager	No	Yes	10/17/2018

Eurodécision	Management and Execution Softwares	Frebault	Catherine	Responsable Marketing et communication	No	Yes	10/17/2018
Everoad	Service and supplier companies	Corcos	Laura	Office and Happiness Manager	No	Yes	10/17/2018
Fapics	Service and supplier companies	Carbonnaux	Emilie	Chargée de Mission	No	Yes	10/17/2018
FFLY4U	Management and Execution Softwares	Pages	Olivier	CEO	No	Yes	10/18/2018
Fives syleps	Management and Execution Softwares	Gallard	Pierre	Business Developper	No	Yes	10/18/2018
Fretlink	Management and Execution Softwares	Roux	Pierre	CCO	No	Yes	10/18/2018
Futurmaster	Management and Execution Softwares	darnaud	Cindy	Marketing Operations Manager	No	Yes	10/18/2018
Gedmouv - Gedtrans	Management and Execution Softwares	Rohard	Thomas	Sales Manager	No	Yes	10/19/2018
Generix Group	Management and Execution Softwares	badoc	Isabelle	Product Marketing Manager	No	Yes	10/19/2018
Geoconcept	Management and Execution Softwares	Mandon	Jeremy	Sales Manager	No	Yes	10/19/2018
GFI Informatique	Management and Execution Softwares	Barrat	Pierre	Sales Manager	No	Yes	10/22/2018
GRN Logistic - SS Shäfer	Management and Execution Softwares	Bertrand	Hugues	IT Manager	No	Yes	10/22/2018
IER Bolloré	Management and Execution Softwares	Marsan	Sandra	Chargée Marketing	No	Yes	10/22/2018
inconso	Management and Execution Softwares	Rivelli	Ottavio	President	No	Yes	10/22/2018
Ineo-sense	Data Capture and Transmission systems	Guuilbaud	Olivier	President	No	Yes	10/22/2018

Infflux	Management and Execution Softwares	Mandziara	Jean-Pierre	Sales Manager	No	Yes	10/22/2018
Infor	Management and Execution Softwares	Briat	Johanna	Marketing Manager	No	Yes	10/23/2018
Inotec	Data Capture and Transmission systems	Pagnon	Bernard	Sales Manager	No	Yes	10/23/2018
Intersystems	Management and Execution Softwares	bira	Robert	Market Development Manager	No	Yes	10/23/2018
ISLI Kedge	Service and supplier companies	Lamoureux	Claire	Chargée de promotion	No	Yes	10/23/2018
Join2ship	Management and Execution Softwares	Sehili	Karine	IT Manager	No	Yes	10/23/2018
JRI	Management and Execution Softwares	Lagnes	Philippe	Supply Chain Manager	No	Yes	10/23/2018
KLS Group	Management and Execution Softwares	Garcia	Gilbert	CEO	No	Yes	10/23/2018
KPMG	Service and supplier companies	Josse	Laurent	Director	No	Yes	10/23/2018
Llamasoft	Management and Execution Softwares	Philippart	Christophe	VP	No	Yes	10/23/2018
Logistics Operations	Service and supplier companies	Ruelle	Sylvain	Director	No	Yes	10/24/2018
Magic Pallett	Management and Execution Softwares	Robert	Pierre-Edouard	President	No	Yes	10/24/2018
Mapotempo	Management and Execution Softwares	Bouly	Manon	Chargée de Webmarketing	No	Yes	10/24/2018
Alis International	Management and Execution Softwares	cohen	Alain	VP	No	Yes	10/24/2018
Ocean Insights	Management and Execution Softwares	Crickx	Floriane	Sales Manager	No	Yes	10/24/2018

Opentext	Management and Execution Softwares	Jimenez	Anaïs	Marketing	No	Yes	10/24/2018
Oracle France	Management and Execution Softwares	Denuit	Laurent	Business Developpment Leader	No	Yes	10/26/2018
Orchestr8	Management and Execution Softwares	Sediva	Lucie	Marketing Manager	No	Yes	10/26/2018
Ortec SAS	Management and Execution Softwares	Garbe	Julien	Business Manager	No	Yes	10/26/2018
Ovrsea	Service and supplier companies	Mattei	Mathieu	CFO	No	Yes	10/26/2018
Predictive Layer	Management and Execution Softwares	Mason	John	Strategic Advisor	No	Yes	10/26/2018
PTV Group	Management and Execution Softwares	Gomes	Marie-Pierre	Marketing Operations Manager	No	Yes	10/26/2018
Puissance I	Management and Execution Softwares	Cano	Clélia	Assistante service finormatique	No	Yes	10/26/2018
SAP	Management and Execution Softwares	Chaumont Salmon	Michaelle	Marketing Manager	No	Yes	10/29/2018
SATO France	Data Capture and Transmission systems	Taton	Cecile	Chargée de Marketing et communication	No	Yes	10/29/2018
Savoye	Robotics, mechanisation and automation solutions	Zielinski	Frédéric	Sales Manager	No	Yes	10/29/2018
Scallog	Robotics, mechanisation and automation solutions	Philonenko	Catherine	Marketing and Communication Manager	No	Yes	10/30/2018
Sedapta-osys	Management and Execution Softwares	Durand	Marina	Assitante commerciale	No	Yes	10/30/2018
SGS Transparency - ONE	Management and Execution Softwares	Marcom	Natasha	Global Marketing	No	Yes	10/30/2018

Shippeo	Management and Execution Softwares	Bonniot	Celine	Senior Marketing Manager	No	Yes	10/30/2018
Shiptfy	Management and Execution Softwares	Codron	Romain	Innovation Manager	No	Yes	10/31/2018
Siemense Digital Logistics	Management and Execution Softwares	Bellemin	Maxime	VP Digital Logistics	No	Yes	10/31/2018
Smart reassort.com	Management and Execution Softwares	Tour	Melanie	Assistante	No	Yes	10/31/2018
Stimio	Data Capture and Transmission systems	Kerkar	Maurad	Commercial Manager	No	Yes	10/31/2018
stock-it	Management and Execution Softwares	Lermachand	Stéphane	Director	No	Yes	10/31/2018
Toshiba Tec France - Imaging Systems	Data Capture and Transmission systems	Belissard	Nicolas	Manager Business Developpment	No	Yes	12/19/2018
Transporeon Group	Management and Execution Softwares	Carreau	Valérie	Country Manager	No	Yes	12/19/2018
Upply	Management and Execution Softwares	Badie	Valentin	Marketing Manager	No	Yes	12/19/2018
Urbantz	Management and Execution Softwares	Goncalves	Lionel	VP Sales & Marketing	No	Yes	12/19/2018
vekia	Management and Execution Softwares	Calliati	Edouard	Responsable Marketing et communication	No	Yes	12/19/2018
visible.digital	Management and Execution Softwares	Poulain	Christophe	CVP Sales and Operations	No	Yes	12/19/2018
Wakeo	Management and Execution Softwares	Cote	Julien	CEO	No	Yes	12/19/2018
Winddle	Management and Execution Softwares	Jevakhoff	Emilia	CEO	No	Yes	12/19/2018

Bibliography