



Grant Agreement No.: 632912
Coordination and support action
Call Identifier: FP7-2013-ICT-FI 1.9



Link and Evangelize the FI-PPP from Europe to the world for the benefit of FI research and innovation and to the European industry business

D2.2.1: Report on FI stakeholders' engagement and use of FI-PPP technology (v1.0)

Revision: v1.2

Work package	WP2
Task	Task 2.1, Task 2.2, Task 3.1, Task 3.2
Due date	31/05/2015
Submission date	02/07/2015
Deliverable lead	InterInnov
Version	1.2
Authors	J. Magen, G. Pastor, P-Y. Danet, E. Fernandez, J. Gonzalez, F. Alvarez, M. Calisti
Reviewers	L. Pucci, M. Calisti

Abstract	D2.2.1 reports on activities performed, during the 1st year of the project, within WP2 and WP3 with respect to identifying and engaging the relevant stakeholders and opportunities of using the FIWARE technology in Europe and at an international level. This is the first version of the deliverable.
Keywords	Report, Engagement, International and European Stakeholders

Document Revision History

Version	Date	Description of change	List of contributor(s)
v0.1	23.04.2015	Table of contents and section assignments	G. Pastor, J. Magen
v0.2	21.05.2015	Draft contributions on all chapters	J. Gonzalez, P-Y. Danet, M. Calisti, G. Pastor
v0.9	09.06.2015	Edited and finalized all chapters	J. Magen
v1.0	24.06.2015	Finalised contribution related to LatAm and final editing	E. Fernandez, F. Alvarez, J. Magen
V1.1	27.06.2015	Internal review	Laura Pucci
V1.2	30.06.2015	Internal review, document formatting and quality check	Monique Calisti

Disclaimer

The information, documentation and figures available in this deliverable, is written by the FI-Links project consortium under EC grant agreement FP7-ICT-632912 and does not necessarily reflect the views of the European Commission. The European Commission is not liable for any use that may be made of the information contained herein.

Copyright notice© 2014 - 2016 FI-Links Consortium

Project co-funded by the European Commission in the 7 th Framework Programme (2007-2013)		
Nature of the deliverable:		R
Dissemination Level		
PU	Public	✓
PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to bodies determined by the Fi-Links project	
CO	Confidential to Fi-Links project and Commission Services	



EXECUTIVE SUMMARY

The FI-LINKS Deliverable 2.2.1 is the first version of the report of the activities performed for engaging Future Internet stakeholders into roadmapping activities and “evangelization” and adoption of FIWARE, both at the European regions level and at the international level.

The objectives of the engagement activities were refined at the beginning of the project and detailed in Deliverable 2.1.1 “Plan for engaging FI stakeholders, v1.0”. FI-LINKS followed the initial plan, but also embraced arising opportunities whenever relevant to the promotion of FIWARE. Activities performed during Year 1 of the project include in particular:

- At the international level, continued contacts with several countries in Latin America including in particular Chile, but also Colombia and Uruguay where opportunities may arise in the near future. Other countries were also contacted through the interaction with the CONECTA2020 project, i.e. Costa Rica and Peru. FI-LINKS also supported on going FIWARE activities in Mexico and Brazil whenever relevant and required.
- FI-LINKS seized opportunities with USA and Canada, where originally only some exchanges on roadmapping activities were foreseen. Thanks to the involvement of US Ignite and University of Toronto experts in the FI-LINKS Advisory Board, and to some initiatives from the FI-LINKS partners, FIWARE has been promoted at selected events in the US, and is also currently considering liaising with GENI racks. In Canada, interaction has started in order to work on a joint foundation for smart cities platforms, using FIWARE and the Canadian SAVI platform. In the near future, opportunities are already scheduled to arise for start-ups and SMEs involved in the FIWARE Accelerator projects to reach the North American market, as well as for the Accelerators themselves to liaise with their counterparts – all this by supporting the FIWARE expansion and promotion at international level.
- FI-LINKS successfully established links with several African countries, in particular with some specific ones where there is a direct interest from the European industry representatives of FI-LINKS (namely Orange and also ATOS).
- Several contacts were created and meetings were held with Japanese representatives, however at this stage it is still challenging to consider Japan as a real opportunity for FIWARE. Besides some identified interests to validate the technology within the context of the EU-Japan FESTIVAL project, there is no commitment from Japanese research organizations to deploy a FIWARE node so far. This landscape may change with specific action points planned during the second year of the project.
- Some contacts took place with Korea (in particular via an expert in the FI-LINKS Advisory Board) and also with India and Singapore, but at this stage there is no concrete opportunity at hands yet.
- At the European level, the “FIWARE Regions” initiative, initiated by FI-LINKS, is now creating an increasing attention and interest from many European regions. Thanks to a specific process designed by FI-LINKS, in two global stages, a few regions have reached the end of stage 1 and will receive specific attention from FI-LINKS in the second year of the project in order to eventually reach the “FIWARE Region” label, see deliverable D3.1.1: Updated version of the ICT region taxonomy focusing on FI-PPP v1.0.

All these activities have been performed under the single “FIWARE Mundus” brand, which was initiated by FIWARE but was not active until FI-LINKS decided to make it the common brand for the promotion and expansion of FIWARE in European regions and at the international level. Deliverable 4.3.1 “Report on dissemination and promotion activities, v1.0” provides details on all the dissemination and promotion activities related to FIWARE Mundus, which have been much complementary and supporting to the activities related to the engagement of the relevant stakeholders.

Thanks to those activities and achievements, a revised engagement plan for Year 2 of the project has been refined and is detailed in Deliverable D2.1.2 “Plan for engaging FI stakeholders, v2.0”. The process for



engaging European regions is further detailed in Deliverable D3.1.1 “Updated version of the ICT region taxonomy focusing on FI-PPP”.



TABLE OF CONTENTS

EXECUTIVE SUMMARY	3
TABLE OF CONTENTS	5
ABBREVIATIONS	6
1 INTRODUCTION	7
2 REPORT ON STAKEHOLDERS' ENGAGEMENT AND FIWARE OPPORTUNITIES AT INTERNATIONAL LEVEL	8
2.1 FIWARE adoption and cooperation opportunities around the world	8
2.1.1 FIWARE adoption and cooperation opportunities in Latin America	8
2.1.2 FIWARE adoption and cooperation opportunities in North America (USA, Canada).....	8
2.1.3 FIWARE adoption and cooperation opportunities in Africa	10
2.1.4 FIWARE adoption and cooperation opportunities in Japan	11
2.1.5 FIWARE adoption and cooperation opportunities in other countries	11
2.2 Opportunities for FIWARE accelerators	12
2.3 The role of the FI-LINKS Future Internet Advisory Board in identifying FIWARE opportunities at international level.....	12
3 REPORT ON STAKEHOLDERS' ENGAGEMENT AND FIWARE OPPORTUNITIES AT EUROPEAN REGIONS LEVEL	14
4 LESSONS LEARNT AND CONCLUSIONS	17



ABBREVIATIONS

AB	(FI-LINKS Future Internet) Advisory Board
DoW	Description of Work
EC	European Commission
EU	European Union
FI	Future Internet
FI-PPP	Future Internet Public-Private Partnership (of the European Union)
FP7	Framework Programme 7 of the European Union
GENI	Global Environment for Network Innovations
JRC	Joint Research Centre
LatAm	Latin America
S3	Smart Specialisation Strategy
SAVI	Smart Applications on Virtual Infrastructures
SME	Small and Medium Enterprise
WP	Work Package



1 INTRODUCTION

The first objectives of the “Future Internet engagement” activities of the FI-LINKS project were twofold:

- Identify and start engaging the relevant stakeholders and players at European regional level and in countries beyond Europe with the aim to evaluate the establishment of the appropriate interaction with those regions and countries in terms of sustainable adoption of the FIWARE technology;
- Support the Future Internet roadmapping activities performed by the FI-LINKS Work Package 1 (WP1) in close coordination with selected external Advisory Board members coming from different related areas of expertise.

During Year 1 of the project, the FI-LINKS consortium has successfully engaged in a number of actions both at the international level and at the European regional level, making it possible to progress significantly towards the objectives that were described in the Description of Work (DoW) and refined further at the beginning of the project in Deliverable 2.1.1 “Plan for engaging FI stakeholders, v1.0”.

This document provides detailed information on the activities that have been performed in Year 1 for engaging the most relevant stakeholders in order to achieve the above-mentioned objectives.

Section 2 focuses on the activities that have been performed at international level, while Section 3 describes all what has been done with European regions. Section 3 is complemented with a more detailed description of the process for engaging European regions that can be found in Deliverable D3.1.1 “Updated version of the ICT region taxonomy focusing on FI-PPP”.

Section 4 reports on the main lessons learnt and provide conclusions that constitute the basis for the revision of the engagement plan for Year 2, which is released in the accompanying deliverable D.2.1.2 “Plan for engaging FI stakeholders, v2.0”.



2 REPORT ON STAKEHOLDERS' ENGAGEMENT AND FIWARE OPPORTUNITIES AT INTERNATIONAL LEVEL

During Year 1 of the project, FI-LINKS investigated the opportunities of interaction with many countries; both highly developed countries as well as emerging countries. The choice of the countries to be investigated was done in conjunction with the EC and the interest shown by the key industry players involved in FIWARE.

2.1 FIWARE adoption and cooperation opportunities around the world

2.1.1 FIWARE adoption and cooperation opportunities in Latin America

FI-LINKS initiated a number of actions with players from Central and South America, complementing the work already started in the FIWARE first and then FI-CORE projects along with the EC.

Telefonica visited Chile in October 2014, in particular for kicking off the activities in the new R&D center in Chile promoted by the Chilean government, which will focus on Smart Cities, Smart Mining industry (one of the fundamental economic pillars in Chile) and Smart Agriculture. A team from the FI-Core project together with UPM carried out several training actions in cooperation with UDD - Universidad del Desarrollo de Chile. In May 2015, an inaugural event with representatives of the Chilean government was held.

Telefónica leveraged on its footprint and commercial arm to present FIWARE in many other countries. In Brazil, activities to promote FIWARE as a reference technology for Smart Cities were carried out in conjunction with the Brazilian network of municipalities taking advantage of the presence of the FIWARE team at the Campus Party event that was held from February 3rd to February 8th, 2015.

In Mexico, activities were carried out to promote FIWARE functionalities as a transversal platform. In Guanajuato city, a UNESCO world heritage site, a new Smart City tender is issued that will incorporate requirements to integrate FIWARE as a solution to combine efficiency in city management, as well as heritage protection.

In Europe, a meeting was organized by FI-LINKS on the 21st November 2014 (in Barcelona) in conjunction with the CONECTA2020 INCO project to meet with Technology Platform representatives from Mexico, Costa Rica, Brazil, Uruguay, Colombia and Peru, once again showing interests into FIWARE. Some interesting leads could come in the near future, e.g. from Peru and Uruguay, in the latter case possibly in connection with the Mexican node being set up.

FIWARE was also presented to the representatives of the World Bank in Telefónica headquarters in April 2015, in order to evaluate its potential as a platform for Smart solutions in developing Latin American countries. In March 2015 another meeting was held in Washington with the World Bank Group ICT responsible people for different areas such as LatAm and SouthAsia, offering new opportunities to explore future collaborations. For example, Smart Water distribution in big cities in Colombia is affected by leaks of more than 50%, and municipalities are looking for solution integrating Smart Pipes.

2.1.2 FIWARE adoption and cooperation opportunities in North America (USA, Canada)

Perhaps the most somehow unexpected opportunities for FIWARE adoption come from North America. FI-LINKS seized opportunities with USA and Canada, where originally only some exchanges on roadmapping activities were foreseen. Thanks to the involvement of US Ignite and University of Toronto experts in the FI-LINKS Advisory Board, to initiatives from some of the FI-LINKS partners, and support from the EC and from the FI-PPP Chairman Ilkka Lakaniemi, FIWARE started to be promoted at events in the US, and is also now considering liaising with GENI racks; while in Canada interaction started in order to work on a joint



foundation for smart cities platforms, using FIWARE and the Canadian SAVI platform. In the near future, opportunities may arise for start-ups and SMEs involved in the FIWARE Accelerator projects to reach the North American market, as well as for the accelerators themselves to liaise with their counterparts – all of this supporting FIWARE expansion and promotion at international level.

This was triggered mostly during the FI-LINKS Advisory Board meeting co-located at the FUSECO Forum in Berlin in November 2014, where the decision was made in cooperation with the FI-PPP XIFI project to participate in meetings in Canada and USA to foster FIWARE adoption and sharing of best practices with those countries. FI-LINKS started to prepare with the XIFI project a FIWARE participation in the US Ignite Applications Summit in Washington, D.C., from 24 to 27 March 2015; and a meeting with relevant Canadian representatives in Toronto on 23 March 2015.

Discussions in Berlin with the US and Canadian experts from the Advisory Board showed that there might be some interest in both countries, and that they were ready to support. In the US, US Ignite, which is focusing on the development of FI applications and services, was interested in the FIWARE platform, mostly in the smart cities domain as well as for some specific areas of interest in the US such as public safety or transport; in Canada, FIWARE was considered to be possibly used as one of the foundations of a smart city service offer, along with the Canadian SAVI platform.

A FIWARE delegation composed of representatives from FI-LINKS and XIFI and from the EC, under the common brand name “FIWARE Mundus”, attended the US Ignite Applications Summit on 24-27 March in Washington D.C. FI-LINKS managed to have a speaking slot for Peter Fatelnig from the EC to present FIWARE at the Summit, and organised and managed a FIWARE booth at the related exhibition. Reports were posted on the FIWARE Basecamp workspace and appear in the FIWARE News and blog, as well as on the XIFI web site (all details and links are reported in Deliverable 4.3.1 “Report on dissemination and promotion activities, v1.0”). In addition, several meetings were held, first in Toronto with representatives from several Canadian organisations, and then in Washington D.C. with US Ignite, NSF, NIST and GENI. A meeting was also held at the World Bank, and another meeting was held with a private company, G2 Inc., interested in selling services around the deployment of FIWARE.

The main results from those very fruitful discussions are listed below:

- FIWARE-based deployed applications in smart cities will participate in an event organised by NIST and US Ignite on 1-2 June 2015, again in Washington D.C. (<https://www.us-ignite.org/globalcityteamsexpo/>). According to the discussions the consortium had with the NIST representatives, this is a great opportunity for the FIWARE architecture to become part of the next NIST framework document, and thus be recognized by the US innovation community in relation with the NIST-led Global Cities Team Challenge (GCTC). Announcements of FIWARE participation is starting to be advertised through the project's channels, the FIWARE portal and social media and also in liaison with the EC Washington Office. Besides FI-LINKS, representatives from SpeedUpEurope and three of their teams as well as representatives from City of Valencia will attend the meeting. They will show smart cities applications developed using FIWARE. Once again the FIWARE Mundus brand will be used as the common denominator in the joint stand at the Exposition and in the speeches.
- FIWARE could be set up on GENI racks, which would then be enhanced and offered to US applications developers. This could be realized by European organisations already working both with GENI and with FIWARE. Contacts have been established between FI-LINKS/FIWARE and iMinds to investigate further, as iMinds is hosting a GENI rack and is also a FIWARE node (they are involved in the XIFI project and also in several FIWARE accelerators).
- FIWARE could be set up on a Canadian platform called “SAVI”, which would then be enhanced and offered to Canadian applications developers. A first instance could be demonstrated in the “Smart City Platforms Summit” in Toronto planned on 13-15 October 2015 (<http://smartcity360.org/2015/toronto/>). The SAVI team has offered to cooperate in setting up FIWARE on top of its own SAVI platform. Contacts have been established with them in order to initiate that work.
- Bilateral US-Europe teams are being set up to work on common activities including potential common workshops, with support from EC and NSF. This was triggered by US Ignite, which organised an



“international meeting” on 27 March with representatives from USA (NSF, NIST, GENI, US Ignite), Europe (FIWARE), Canada (SAVI), and Japan (NICT, MIC). There was an agreement to work together towards common actions and potentially prepare a paper describing common priorities, and then engage the relevant stakeholders, maybe with one or more workshop(s) at the Smart City Platforms event in Toronto in October 2015. Teams have been set up to work on specific cooperation opportunities involving at least one representative from USA, Europe and Japan.

- The World Bank considered that they could help “sell” FIWARE to their “customers” in countries such as India and Colombia, particularly in relation with smart cities. A “FIWARE Package” could be built up by their ICT Team with support from FIWARE Mundus.

In addition, contact was made with the EU Delegation to the United States in Washington D.C., which unfortunately could not be involved in the US Ignite Applications Summit, but which has already agreed to support the FIWARE effort in the GCTC Festival on 1st June 2015.

Another opportunity with Canada came up recently in May 2015 as one of the FI-LINKS partners was invited to provide potential contribution to a Symposium entitled: “Innovation Collaboration with Europe, A Transatlantic Symposium” organised by FP7 project ERA-Can+ (www.era-can.net) in Toronto on the June 25. After relaying the information through the FIWARE Basecamp workspace, four of the FIWARE accelerators showed interest: EuropeanPioneers, SpeedUpEurope, SOUL-FI and Smart AgriFood. Finally three representatives from FIWARE accelerators (EuropeanPioneers, SpeedUpEurope, and SOUL-FI) have been invited to attend the symposium, which will be held in Toronto on 25 June 2015.

2.1.3 FIWARE adoption and cooperation opportunities in Africa

Further to Orange interest to potentially deploy FIWARE in Africa, FI-LINKS started to prepare the submission of a proposal for a session in the “IST-Africa 2015” conference planned in May 2015 and was subsequently invited to give a presentation.

The IST-Africa 2015 conference was attended by 284 participants from 38 countries and was organised around 6 sessions: “Research priorities”, “eHealth”, “eLearning”, “eGovernment”, “eAgriculture”, and “ICT supporting Innovation” where FI-LINKS was invited to give the FIWARE Mundus presentation.

The “ICT supporting innovation” session was attended by more or less 50 participants. Most of them seemed to be genuinely interested in FIWARE. There were a lot of requests to have a translation enabler in order to help people to develop once for several languages (dialects). Today IoT networks are not very much developed in Africa but this is expected to come soon; however there are several open data repositories available already and FIWARE could be a good platform to manage such data. Such initiatives have already started in countries like Rwanda.

At this stage, further interest was expressed mainly from four African countries:

- **Mauritius** (*National Computer Board*) is already working with Mauritius Telecom on the FIWARE case.
- **Tunisia** (*Ministère de l'Enseignement Supérieur et de la recherche Scientifique*) is willing to evaluate the interest of the local ecosystem for such a platform in Tunisia. A meeting with the Ministry could be organised quickly if the feedback from the local ecosystem is fine. Orange has set up a “research lab” in Tunisia for two years with 130 people, who are ready to help.
- **Senegal** (*Ministère de l'Enseignement Supérieur et de la Recherche*) sees FIWARE as an accelerator in particular in the area of innovation transfer to the market. They are ready to organise a meeting with the Minister himself in the summer of 2015 in order to proceed further.
- **Ghana** (Accra Polytechnic) has planned to come back to FI-LINKS after an internal presentation.

In parallel, Orange set up internal discussions with Mauritius Telecom (Mauritius), Sonatel (Senegal) and Orange Tunisia (Tunisia) in order to involve them in the possible deployment of FIWARE. These three



institutions are convinced that an Open Innovation approach using such platform can be a success, as they have already experimented with the Emerginov platform¹, which has a similar approach with telco enablers. Moreover, the developers' ecosystems there already exist.

2.1.4 FIWARE adoption and cooperation opportunities in Japan

Throughout its first year, the activities of FI-LINKS with regard to Japan can be summed up basically in the exchange of best practices related to the vision on Future Internet in international cooperation opportunities. The main activities were aimed at gathering information about strategic initiatives that are being undertaken in Japan; as well as contributing to the FIWARE Mundus objective of promoting the assets of the programme beyond Europe.

There are three main activities to outline:

- FI-LINKS supported the EC in organizing the session entitled 'Social ICT Experiment Pilots' within the 5th EU-Japan Symposium in ICT Research and Innovation² held on 17 October 2014 at Brussels. In such session, a FIWARE overview was given, emphasizing the usage of big data and the benefits on smart cities. As a result, there were some interesting prospects into setting up a common 'study group', including - but not limited to - possibilities to use the Japanese open testbed JOSE (Japan-wide Orchestrated Smart/Sensor Environment)³. FI-LINKS also introduced the overall vision and main pillars of the FIWARE Programme at the JEUISTE Project Innovation Workshop held in Brussels on 13 October 2014. JEUISTE (Japan-EU Partnership in Innovation, Science and Technology)⁴ is a BILAT project engaged in several activities to reinforce Europe-Japan cooperation in different areas of interest. The presentation 'FIWARE and ICT-enabled smart communities'⁵ was aligned to the general topic around the importance of smart cities and the technical enablers beneath. It is also worth noting that the information obtained from the vision presented by the Japanese member, Mr. Nozomu Nishinaga, of the FI-LINKS Advisory Board. His report, though certainly inclined to a network-driven perspective, helped to reinforce the position of the IoT platform JOSE as a main driver for experimentation in Japan, and its possibilities to become a FIWARE entry point. This conclusion will be further evaluated and discussed in the FI-LINKS' deliverable D2.1.2 'Plan for engaging FI stakeholders v2'.

2.1.5 FIWARE adoption and cooperation opportunities in other countries

Some contacts have taken place with **Korea** (via the FI-LINKS Advisory Board) and other countries during events attended by some of the FI-LINKS partners, although at this stage no specific opportunity for FIWARE has been identified. In parallel an agreement was signed between Telefonica and Korea Telecom, which may be worth following up⁶.

FI-LINKS attended in December 2014 the Swiss FIWARE Acceleration Camp organised by the ZHAW ICCLab (blog.zhaw.ch/icclab). During the discussions with the audience, specific questions were raised about the possibility to join the FIWARE Lab federation by setting up nodes internationally, respectively in

¹ Cf. <http://www.orange.com/en/news/2012/novembre/Emerginov-an-innovative-solution-for-mobile-services-development-in-Africa>

² 5th EU-Japan Symposium in ICT Research and Innovation. <http://www.ict-fire.eu/events/past-events/5th-eu-japan-symposium-in-ict-research-and-innovation.html>

³ JOSE: Large-scale open test-bed, National Institute of Information and Communications Technology. <http://www.nict.go.jp/en/nrh/nwgn/jose.html>

⁴ FP7 EU-Japan JEUISTE Project. <http://www.jeupiste.eu/>

⁵ Cf. http://wiki.fi-links.eu/images/2/22/FIWARE_EU-Japan_Workshop.pptx.

⁶ Cf. <http://www.fiware.org/news/> and <http://bit.ly/1JCcRkI>.



India and Singapore. As a follow up, specific information about how to join the federation were sent and some emails discussions/clarifications followed. Once again at this stage no specific opportunity has been identified.

A presentation of FIWARE Mundus was also given in China in conjunction with a workshop organised by the FP7 CHOICE project (<http://euchina-ict.eu/>). No specific opportunity for FIWARE arose however at this occasion. However, lately, thanks to a FIWARE intervention by Nuria de Lama (Atos) as a key representative of the FIWARE community at the Open Innovation 2.0 in Espoo (Finland) some specific interest emerged for a potential follow up in Shanghai. This lead is currently under discussion between FI-LINKS partners, lead is with Martel that has several other connections in China, and Mr. Huwaei Kong; a conference call is planned to take place on the 3rd July and a face-to-face meeting might take place by mid-July 2015.

There might be some opportunities with India or Colombia via the World Bank but this needs to be confirmed and there is also a need to check interest from the FIWARE stakeholders.

2.2 Opportunities for FIWARE accelerators

FI-LINKS recently advertised the potential participation of FIWARE representatives in events happening in the USA and Canada, namely the Global City Team Challenge Festival on 1-2 June 2015 in Washington D.C. and the "Innovation Collaboration with Europe, A Transatlantic Symposium" on 25 June 2015 in Toronto. This attracted interest from some of the FIWARE accelerators, either for expanding their own activities (the Toronto symposium) or for providing opportunities to their project teams of start-ups and SMEs (the Washington event).

These events are quite complementary to the hackathons organised by FIWARE at international level (Brazil, Mexico), which are focusing on attracting and incentivising web entrepreneurs to develop applications using FIWARE, and the local events organised by the FIWARE accelerators, which are more specifically dedicated to mobilizing their local communities of developers in Europe.

2.3 The role of the FI-LINKS Future Internet Advisory Board in identifying FIWARE opportunities at international level

FI-LINKS first listed a number of potential international experts who could be involved in either roadmapping activities and/or be engaged for future cooperation with FIWARE. This led to achieving milestone M2.1 "International relevant FI stakeholders identified" and supported the good progress of WP1 M1.1 milestone "Worldwide Task Force established". A few of those experts were selected and invited to join the FI-LINKS Future Internet Advisory Board to support the roadmapping (WP1) and international cooperation (WP2) activities. Their contracts were finalized and were signed in time for their participation in the first FI-LINKS Future Internet Advisory Board meeting that was held on 12 November 2014 in Berlin. The experts were Glenn Ricart from US Ignite; Alberto Leon-Garcia from University of Toronto, Canada; Heeyoung Jung from ETRI, South Korea; and Nozomu Nishinaga from NICT, Japan. Considering the progress with Chile, Daniel Contesse from UDD was also invited to provide views on how to best engage Chile with FIWARE.

FI-LINKS also managed to have the most of those international experts invited as speakers in the FUSECO Forum on the 13 November where they presented the status of Future Internet activities in their countries.

Each expert provided FI-LINKS with a status of Future Internet activities in their countries as well as ideas related to the future priorities, and presented further those ideas during the Advisory Board meeting. In addition they also provided feedback after the meeting on FIWARE further to their participation in the FUSECO Forum.

Discussions with the US and Canadian experts showed that there might be some interest in both countries. This was the main trigger in the activities that have since happened with North America.

The Chilean expert provided a very good feedback on the situation in Chile and the opportunities and



challenges for FIWARE across Latin America. In addition the new R&D centre focused on FIWARE will bring new opportunities and new sectors for the FIWARE applicability. His very interesting note was communicated back to FIWARE.



3 REPORT ON STAKEHOLDERS' ENGAGEMENT AND FIWARE OPPORTUNITIES AT EUROPEAN REGIONS LEVEL

During Year 1 of the project, FI-LINKS investigated the opportunities of interaction with many European regions. The choice of the countries to be investigated was done thanks to criteria defined by FI-LINKS explained in Deliverable D3.1.1 "Updated version of the ICT region taxonomy focusing on FI-PPP". Support was also provided to many of the FIWARE accelerators for their local events and to help and promote contacts with their regional public authorities (this is further detailed in Deliverable 4.3.1 "Report on dissemination and promotion activities, v1.0").

Thanks to the criteria used for the selection, as specified in D3.1.1, FI-LINKS identified 17 regions as "priority regions" to be investigated further:

- Czech Republic: South Moravia
- Denmark: Copenhagen
- Finland: Uusima (Helsinki)
- France: Brittany, PACA, Ile De France
- Germany: Berlin, Baden-Wurttemberg
- Ireland: South East Ireland
- Italy: Lombardy, Emilia-Romagna
- Poland: Greater Poland (Poznan)
- Portugal: Norte (Porto)
- Spain: Canaria Islands, Catalonia, Basque
- Sweden: Stockholm

During Year 1, additional regions were investigated because they showed interest in the FIWARE Regions initiatives, when they learnt about it thanks to their involvement in the I3H "innovation hubs" and the interaction between the FI-LINKS and the I3H projects. Those regions are:

- Estonia: Tallin
- France: Picardie
- Italy: Aosta Valley
- Luxembourg: Luxembourg
- Spain: Navarra, Andalusia

Initial meetings were organised with the regions, which showed concrete follow-up interest, and which were able to assemble the relevant organisations, as this was a condition that FI-LINKS set in order to attend the meeting. The main purpose of the first meetings was to present FIWARE (whenever needed) and to explain the objectives of FI-LINKS / FIWARE Mundus in the European regional context. FI-LINKS approach to label the region as a "FIWARE Region" was presented aiming to provide the regional authorities and the relevant organisations involved in the mobilisation of the ecosystem with incentives to join this initiative and make the effort necessary to reach the label⁷. This process seems to have been successful to a certain extent as there are several regions which have reached the end of stage 1 and others which are contacting us to get more information on how to become a FIWARE Region.

The status at the end of Year 1 is as follows (in alphabetical order):

- Baden-Wurttemberg (Germany): There were several interactions with representatives from Baden-Wurttemberg but no meeting has been organised yet.

⁷ The process for a region to become a FIWARE Region is split in two main stages and seven steps, which are explained in Deliverable D3.1.1 "Updated version of the ICT region taxonomy focusing on FI-PPP".



- Basque Region (Spain): a first informal meeting with the region was held during an event organised by the Fabulous FIWARE accelerator in November 2014. The region is interested to set up a FIWARE node for smart manufacturing and is willing to apply on a specific call. They are investigating a common platform with Navarra region in order to share the cost.
- Berlin (Germany): a first meeting was organised during the FUSECO event with BMBF and Fraunhofer. Berlin has also been selected as an innovation hub in the I3H call. **The Berlin Region has successfully performed the actions related to Steps 1 and 2 of the FIWARE Regions process.**
- Brittany (France): meeting with regional representatives in November 2014, collection of the relevant stakeholders (23 contacts) achieved, next step is to organise a regional event with all these people in order to define a common work plan and find the relevant funding tool. **The Brittany Region has successfully performed the actions related to Steps 1 to 3 of the FIWARE Regions process.**
- Canary Islands (Spain): some contacts were initiated but no meeting has happened so far.
- Catalonia (Spain): after some interesting initial contacts the representative from Catalonia apparently moved to another position and there has been no further response.
- Copenhagen Region (Denmark): a representative from the regional authority was contacted but there has been no response yet.
- Emilia-Romagna (Italy): A first meeting was held, but political elections led to some changes at regional level. As the new council is now operational, a meeting could be organised soon.
- Greater Poland (Poland): PSNC is motivated to find ways to keep the FIWARE node sustainable, and Orange Poland is also interested to join. Greater Poland applied to the I3H call 1 and has been selected as an “innovation hub”. Despite many interactions for a number of reasons (including political elections) it has not been possible yet to organise a meeting with the regional authorities and the relevant organisations.
- Helsinki (Finland): a meeting was organised on 3-4 February 2015. **The Helsinki Region has successfully performed the actions related to Steps 1 to 3 of the FIWARE Regions process.**
- Paris Ile-de-France (France): Some difficulties to find the key people, a good interest from clusters (Cap Digital and Systematic) but no answer from the regional authority.
- Lombardy (Italy): the representative at the FI-LINKS Advisory Board showed interest, but has failed so far to mobilize the relevant stakeholders. The Lombardy region interested to liaise with Trentino where a FIWARE Platform already exists in order to share the cost.
- Luxemburg (Luxemburg): a meeting was held in March 2015, and the regional representatives then acted very quickly. **The Luxemburg Region has successfully performed the actions related to Stages 1 and 2 of the FIWARE Regions process.**
- Malaga Region (Spain): contact was set up at the I3H bootcamp in January 2015, several interactions happened afterwards but no meeting is foreseen with the regional authorities at this stage.
- Norte (Portugal): FI-LINKS participated in an event, and a specific meeting with the regional authorities were organised on 3-4 February 2015. However the Norte region has not yet successfully completed step 1 of the FIWARE Regions process yet.
- PACA (France): after a first meeting with regional stakeholders in November 2014, a first list of relevant stakeholders was established. The next step will be to organise a regional event in order to define a common work plan and to find the relevant funding tool. **The PACA region has successfully performed the actions related to Steps 1 to 3 of the FIWARE Regions process.**
- Picardie (France): one of the regional players applied successfully at the I3H call was selected as one of the FIWARE innovation hubs. A first meeting was held on 20 May 2015, showing much interest from the relevant stakeholders which are already known and working together. However there is a



reorganisation of the French regions which is happening in 2016 and Picardie will be merged with another region (Nord Pas-de-Calais); there is a need to inform the other region as they will need to build a common plan in the near future.

- South East Ireland (Ireland): A meeting was organised with the regional stakeholders in December 2014, showing a very strong motivation to find solution and funding to make the local FIWARE node sustainable (Waterford). However the region ecosystem is too weak; they consider the possibility to merge with Dublin region which seems to be more adequate. No more news has been received since.
- South Moravia (Czech Republic): contact was initiated at ECFI2 in September 2014 but no news since.
- Stockholm Region (Sweden): a representative from the regional authority was contacted but there has been no response yet.



4 LESSONS LEARNT AND CONCLUSIONS

Engagement activities at the European and international level during Year 1 of the FI-LINKS project were extremely rich in terms of interactions with many key stakeholders. This helped the project tuning its activities and even sometimes redefining the priorities that were initially considered. The following shall be taken into account for the remaining duration of the project and for other FIWARE related activities that could be performed by other projects than FI-LINKS:

- Presenting the engagement of European regions with FIWARE as a predefined process leading to an identified “FIWARE Region” label has definitely been a trigger to encourage regions to join the process and try and reach the “next level”.
- The willingness of the regional authorities and the leadership of one or more individuals to engage the relevant organisations at regional level into the process of becoming a “FIWARE Region” are a necessary condition for progress but not always a sufficient condition, as e.g. we can conclude from the case of Lombardy.
- The “top-down” approach followed by FI-LINKS to select the most relevant regions to be contacted required to be complemented by a “bottom-up” approach based on the willingness of the regions to be involved (thanks to the growing visibility of the “FIWARE Regions” label) and the interaction with the “innovation hubs” selected by the I3H project via open calls.
- Presenting all international activities under a single “FIWARE Mundus” brand is helping the visibility and recognition of FIWARE and the activities related to engagement at international level. The brand can be used by several projects as long as good coordination happens, as was the case in Year 1 of FI-LINKS with strong interactions with FIWARE/FI-CORE, the FIWARE Press Office, several Accelerators like I3H, SpeedupEurope, etc., the FI-PPP Chairperson and the EC.
- The interest from industry players to promote FIWARE at the international level in given geographical areas is one of the keys to opening local markets (e.g. Telefonica in Latin America, Orange in Africa). However we shall not neglect other opportunities that may be of interest to FIWARE in general (e.g. interaction FIWARE/GENI and FIWARE/SAVI, or with the World Bank) and to the start-ups and SMEs involved in the FIWARE accelerators (e.g. in North America with FI-LINKS/FIWARE Mundus or through the hackathons organised by FI-WARE/FI-CORE).
- The feedback from selected international experts from the FI-LINKS Advisory Board was essential in developing engagement activities e.g. with Canada and USA, and in getting information on how to proceed more efficiently e.g. in Chile.
- Participation in selected events especially at international level (e.g. US Ignite Applications Summit, IST Africa) is necessary in order to establish contacts and proceed further.

These “lessons learnt” lead to the following conclusions and potential next steps that will be further detailed in Deliverable D2.1.2 “Plan for engaging FI stakeholders, v2.0”:

- FI-LINKS shall better define the incentives and the added value for a region to become a “FIWARE Region”; and we shall provide additional support to the regions which have progressed towards step 3 of the process, so that we can lead them to the end of the process and the “FIWARE Region” label during Year 2 of the project.
- FI-LINKS shall continue to work with the I3H project and investigate whether other innovation hubs, especially those which have just been selected as an outcome of I3H Call 2, are interested in the FIWARE Regions initiative. The first action was to participate in the I3H Bootcamp held in Vienna on 26-27 May 2015.
- FI-LINKS shall further investigate the interest from European industry players to promote FIWARE at international level in given geographical areas, but also keep our ears open to potential opportunities which may prove interesting not only to the industry players but also to the FIWARE accelerators and



their project teams, i.e. mostly start-ups and SMEs. In this sense a stronger interaction with A16 and more especially the accelerators involved in the A16 projects could be relevant.

- FI-LINKS shall keep monitoring potential events of interest at both the European and international levels (by close collaboration of WP2 and WP3 with WP4 that directly coordinates with the FIWARE Press Office and the various Accelerators' Communication representatives).
- The consortium shall continue, whenever relevant, soliciting the feedback from the experts involved in the next stages of the FI-LINKS Advisory Board for supporting potential engagement activities in their countries (when beyond Europe) or their region (when in Europe).

