



A New Open Service Platform

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Objectives

- Present FIWARE
- Create your interest in FIWARE

FIWARE - An Open Service Platform

(advanced OpenStack-based Cloud + rich library of Generic Enablers)





Why an open service platform is required

- Avoid vendor lock-in:
 - Standard Southbound APIs for sensor providers
 - Standard Northbound APIs offered to applications
 - Portability across platform providers
 - Interoperability of apps on top of different providers



- True innovation
- More competition, leading to cost savings
- No single standard is enough
 - Modularity
 - Allow different business models
 - Integration with standard open data platform
 - Non-intrusive (smooth integration with legacies)







FIWARE - Major differential features





- Federation of infrastructures (private regions)
- Automated GE deployment



Data/Services Delivery



- Complete Context Management Platform
- Integration of Data and Media Content

IoT



- Easy plug&play of devices using multiple protocols
- Automated Measurements/Action ←→Context updates

Apps



- Visualization of data (operation dashboards)
- Publication of data sets/services

Web UI



- Easy incorporation of advanced 3D and AR features
- Visual representation of context information

Security



- Security Monitoring
- Built-in Identity/Access/Privacy Management

I2ND

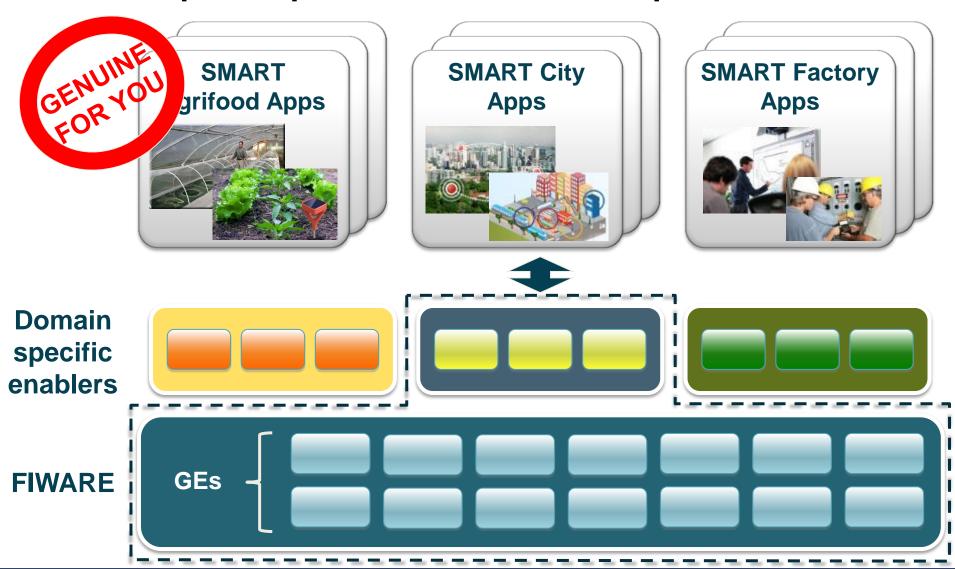


- Advanced networking (SDN) and middleware
- Interface to robots





Modularity; integration with legacies Domain-specific platforms = FIWARE + specific enablers







What is genuine in FIWARE?



- > Truly European, but operating globally
- > Open Source. Avoid vendor lock-in. You have the control
- > Going from clusters to ecosystems Cross-fertilization between sectors; avoid silos
- > FIWARE available to developers for free experimentation
- > Not only platform, tools,... this is powered by data!

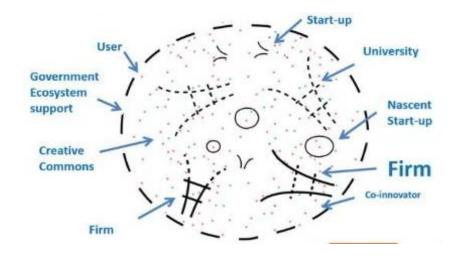






Ecosystem and platform: two tied concepts





Open Standard Platform



Sustainable Open Innovation Ecosystem









FIWARE Strategy: 2015-2016

Accelerate the technology

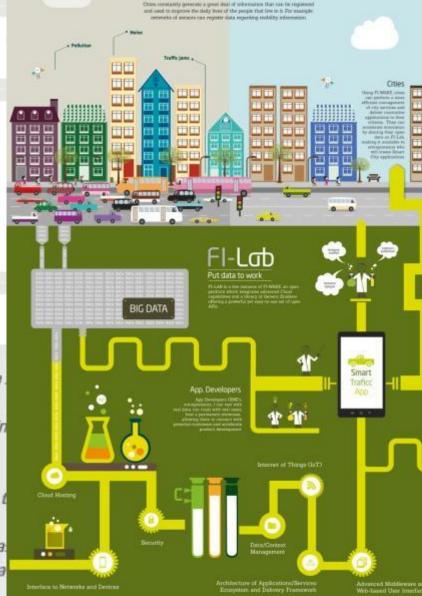
Smart Cities and vertical sectors

Internationalisation – FIWARE going global

• Industrial Commitment

FIWARE running Smart Cities FI-Lab for Smart Cities

- Cities opening data via FIWARE
 - Italy: Trento, Torino, Roma
 - Spain: Valencia, Sevilla, Málaga, Santander, Logroño Lleida, Vigo, Sabadell, ...
 - Finland: Espoo, Helsinki
 - Netherlands: Amsterdam
 - Portugal: Lisbon, Agueda
- Valencia using FIWARE solutions
- Smart City challenges
- Valencia City Council has announced that it has awarded the Valencia tender to Telefónica
- Valencia will be the first Spanish city to centralise all of its municipal in through a smart city technological solution.
- Solution is based on the European FI-WARE standard
- The base of the software will consist of 350 sensors that will manage to services of the city
- Traffic, street lighting, gardens, local police, pollution, cleaning and wa.
 and weather services will be constantly monitored and connected to a



Internationalisation



Success Stories? Get inspiration!



Building Streaming Media Applications with FI-WAR... 41 visualizaciones Hace 1 mes



Creating Interactive 3D Applications and Shared... 20 visualizaciones Hace 1 mes



The FI-Content use case project - Social and... 14 visualizaciones Hace 1 mes



Naevatec (Kurento Generic Enabler) - Interview with... 23 visualizaciones Hace 1 mes



Magic Box Interview with Javier Herrero at CeBIT.... 27 visualizaciones. Hace 1 mes.



Thorsten Sandfuchs (SAP) interview at CeBIT 2014 22 visualizaciones Hace 1 mes



FI-WARE Business Framework by Thorsten... 24 visualizaciones Hace 1 mes



Connecting to the Internet of Things (IoT) with FI 23 visualizaciones Hace 1 mes



Connecting to the Internet of Things (IoT) with FI 12 visualizaciones Hace 1 mes



FI-WARE and FI-Content in the EU Future Internet... 33 visualizaciones Hace 1 mes



Magic Box & FI-WARE, Javier Herrero at CeBIT.... 15 visualizaciones Hace 1 mes



CeBIT Future Talks 2014 15 visualizaciones Hace 1 mes



SmartTaxi: The Value for a Developer - FI-WARE in... 119 visualizaciones Hace 2 meses



FI-LAB: A guide to the most FI-OPS: access from exciting Future Internet... 133 visualizaciones Hace 2 meses

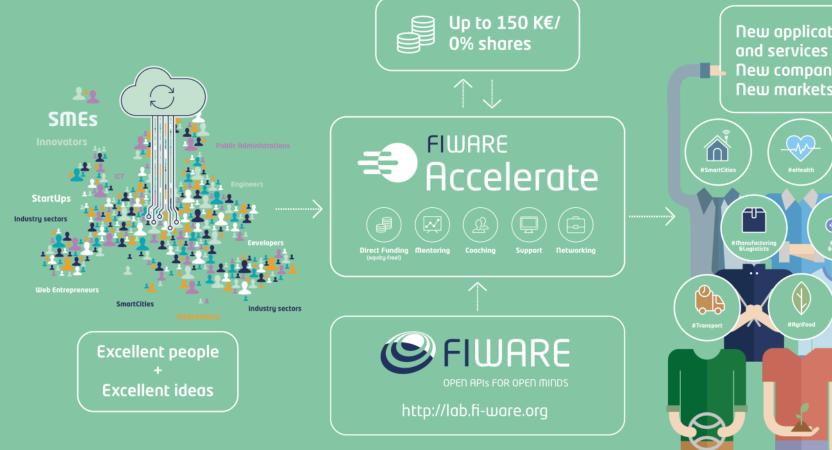


everywhere in Europe by... 20 visualizaciones Hace 2 meses



FIWARE ACCELERATION PROGRAMME

Supporting Web enterpreneurs and SMEs







SMEs and 300,000 Start-ups to be reached Submissions to the 9000 **Open Calls** Businesses to be 1300 accelerated Market ready or investment ready businesses







FIWARE.org

Join us!



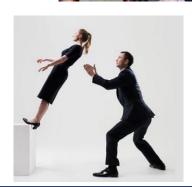


Back-up

Credibility

- ✓ About the FIWARE technology:
 - ✓ Every FIWARE GE is open source (therefore free)
 - ✓ Majority already commercialized by corresponding owner (companies) and they are not only Telefónica!
 → make it more explicit (blog posts, videos?)
- Testimonies about early adopters (entrepreneurs):
 - ✓ Interviews in FIWARE YouTube channel
 - ✓ Involvement in events (e.g., FoodLoop)
 - Animated presentations about applications
- ♦ Charging for support (Open Calls → Foundation?)
- Actions for A16:
 - Spread the word about nature of FIWARE GEs
 - Spread the word about testimonies
 - Select evangelists from entrepreneurs in 1st Open Call







FIWARE Lab and FIWARE Ops

- The FIWARE Lab has expanded to run over 14 nodes/regions across the whole Europe ... now in Mexico!
- Estimation is to provide up to 3000+ cores, 16Tb RAM, 750 Tb disk of computing capacity
- FIWARE Lab help-desk processes (support levels 1 and 2) defined
- First release of <u>FIWARE Ops suite of tools</u> available
- You can check the <u>FIWARE Lab status</u> online
- Organizations approaching us interested to launch and federate new nodes









Join us!

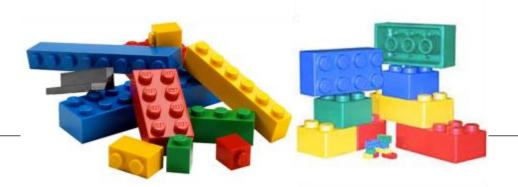
http://fiware.org

http://lab.fiware.org





Follow @Fiware on Twitter!





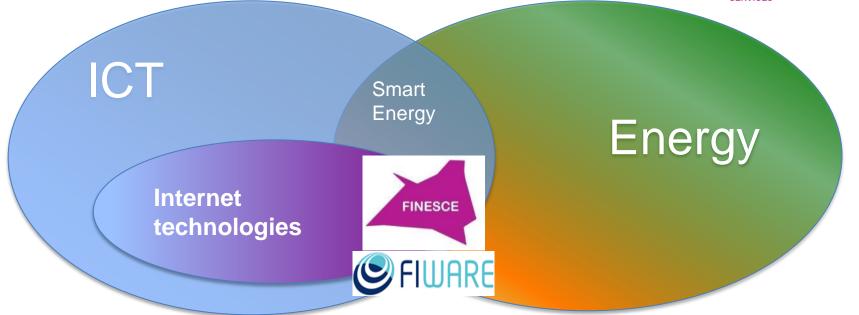


FIWARE for Smart Energy

Key partners: Ericsson, ESB, E.on., Alcatel-Lucent, Alstom







FIWARE of Energy: Enabling innovation based on internet interfaces in the energy sector

- Enable creation of innovative value added services based on availability of rich data on energy needs and consumption patterns
- Promote energy efficiency
- Sustainable Smart Cities
- Consumers as producers
- Electric vehicles (as consumers and storage)

Benefits of using the future internet and GE approach:

- Shorter time to market!
- Easy access for new partners
- Scalability of applications
- Lower costs for application development

But is FI-WARE a new



- An Innovative, open and cloudbased infrastructure for costeffective creation and delivery of Future Internet applications at services at high scale
 - Cloud storage, processing capabilities, service marketplace, big data, network resources, mobility, tools (SDK)...
 - Faster development (time-tomarket)
 - Lower costs (incl. flexibility, scalability)
- Solid technology (maturity)
- Incentives to enter, support





Welcome to the FI-WARE Catalogue! Here you will find all the information, documentation and tools you need as a developer to start using a Generic Enabler Implementation

About the Catalogue



implementations of Generic Enginers (GE) that are part of the frights platform. Agent from the Generic Shatters. ou will also find tools and best practices which will have ou develop the applications of the Future internet

View the Enobler's

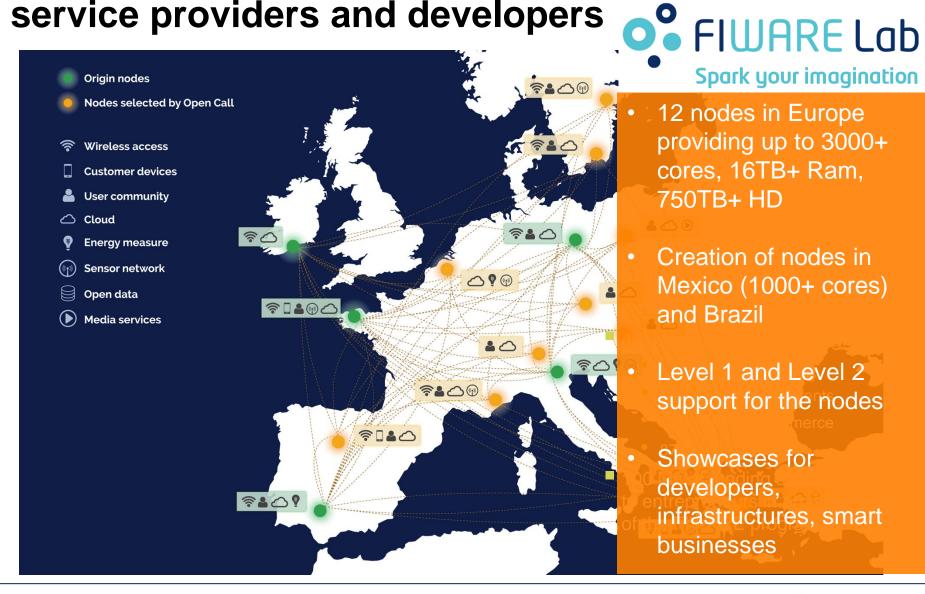


of Ganeric Enabler Implementations to see for yourself what the Priviality platform offers. View Senenic Bradier Implementations



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Extending the FIWARE Lab offering for service providers and developers

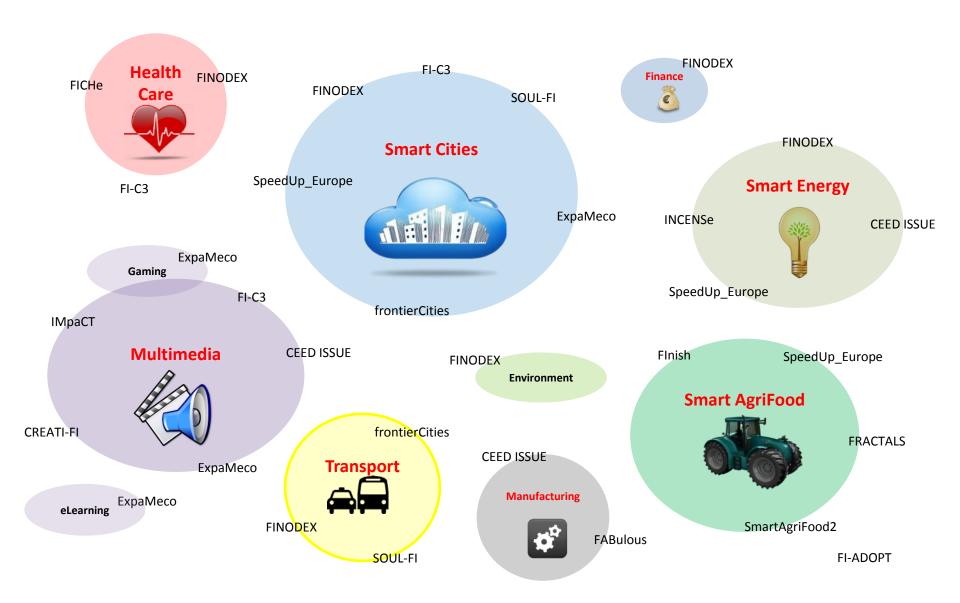




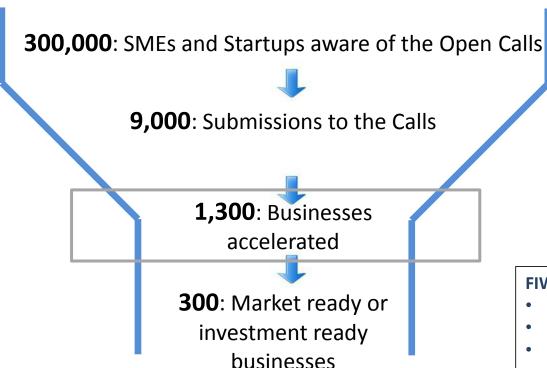
Where are the FIWARE accelerators?



Sectors covered by the accelerators



FIWARE Accelerator



FIWARE Accelerator partners:

- **20** Accelerators + investors
- 48 Innovation agencies + technology transfer
- **16** FI Research centres
- 18 Innovation consultants
- **9** FI Technology providers

An Invitation to join the FIWARE Accelerator

This is "your opportunity" to:

- Join the largest development community in Europe: FIWARE
- Enter into a pan-European and Global Innovation Ecosystem
 Mentors, VC, Accelerators, customers ...
- Develop more innovative products based on a multi-vendor open platform
- Grow your company
 Open new markets and international business opportunities

FIWARE enters the Take-up Phase

From Research to the Market

Technology Focus

Innovation Focus

- FI-WARE technology foundation
- 8 Use-Cases from different domains
- Infrastructure repository XIPI

Development

Phase 1

- 60 Generic Enablers
- •>100 Specific Enablers

Large Scale Trials - Phase2

- FI-Lab and Hackathons
- FI-Lab extension Europewide (17)
- 5 Large Scale Trials in different domains and domains specific platforms

- 16 FI-Accelerators
- More than 1000 SMEs & web entrepreneurs develop apps & svs
- Sustainability
- Market Visibility

Market Take-up – Phase 3





FIWARE as a lever

Where this will lead you?

FIWARE Accelerator

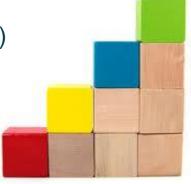
FIWARE Accelerator

- A European and Global Innovation ecosystem
- Thousands of companies
- Thousands of applications
- Benefit from FIWARE
- More innovation, new markets

SMEs, startups FIWARE

FIWARE Generic Enablers (GEs)

- A FIWARE Generic Enabler (GE):
 - set of general-purpose platform functions available through APIs
 - Building with other GEs a <u>FIWARE Reference Architecture</u>
- FIWARE GE Specifications are open (public and royalty-free)
- FIWARE GE implementation (FIWARE GEi):
 - Platform product that implements a given GE Open Spec
 - There might be multiple compliant GEis of each GE Open Spec
- One open source reference implementation of each FIWARE GE (FIWARE GEri):
 - Well-known open source license
 - Publicly available <u>Technical Roadmap</u> updated in every release
- Available FIWARE GEis, GEris and incubated enablers are published on the <u>FIWARE Catalogue</u>





Why FI-WARE

Driver	What is needed?		What does FI-WARE bring?
Technology	Open specs, driven by implementation (open source reference implemenation)	\rightarrow \rightarrow	Open community around open specifications reference implementations (see [1], [2])
	Sustainable investment over time		100+ M€ of investment (2011-2016)
Experimental environment	Ability to experiment with real data (e.g., real-time and historic open data from cities)	\rightarrow \rightarrow	15 cities (7 in Spain) already working on setting up a connection to FI-Lab (see [3])
	Free Cloud capacity enabling entrepreneurs to test and host a permanent showcase of their applications.		3000+ cores, 16Tb RAM and 750+ Tb HD will be the free computing capacity provided by the Fl-Lab Cloud distributed across 16 nodes in Europe
Investment in creation of the ecosystem	Engagement of technology providers, entrepreneurs, data providers, customers	\rightarrow \rightarrow	52 partners, 13 countries (just FI-WARE)
	Funding for first entrepreneurs joining the ecosystem.	\rightarrow	100 M€ to fund entrepreneurs in 2014-2016. Additional
	Invesment in promotion and dissemination activities		opportunities in H2020.
			6,2+ M€ devoted to dissemination
Global footprint	Helping entrepreneurs and technology providers to create opportunities not just in Europe but other regions (Latam, Asia and, why not, USA)	\rightarrow	New FI-Lab nodes in Mexico and Brazil. Conversations between EC and public authorities in Mexico and Brazil to federate respective startup support programs





[2] - http://catalogue.fi-ware.org

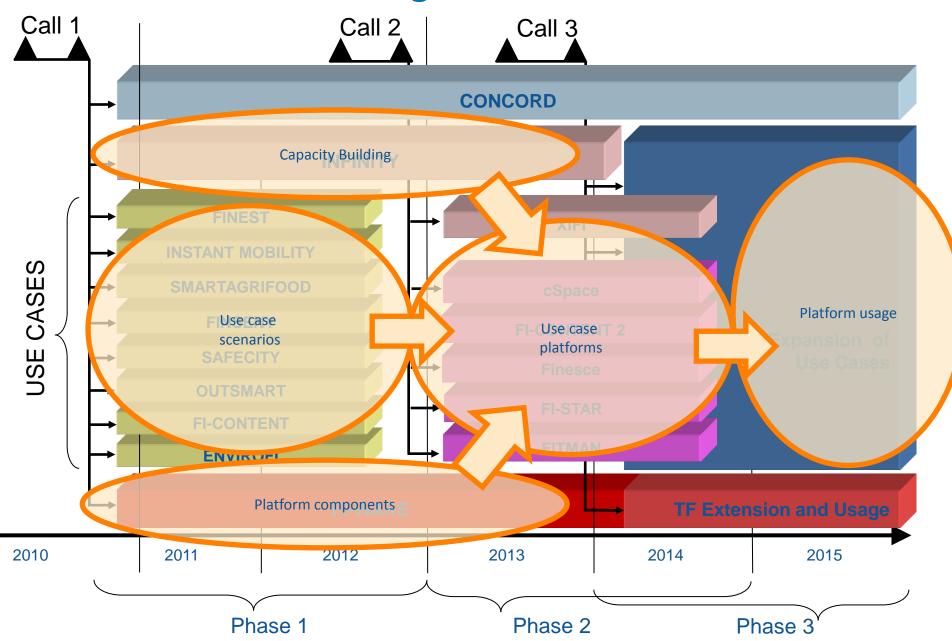
[3] - http://lab.fi-ware.org







FI-PPP Programme Architecture



Collaboration opportunities

What we offer

- Technology base
 - > Extensive and extendable
 - Targeted at initial set of key sectors (Smart Cities, Smart energy, Smart Agrifood, Manufacturing, Transport)
 - With
 - > Open specifications
 - > Reference implementations in open source
 - Clear Terms & Conditions
 - > Support for app developers
- Ecosystem
 - Cities
 - > Technology providers
 - System integrators
 - > Application developers
 - Accelerators and VCs

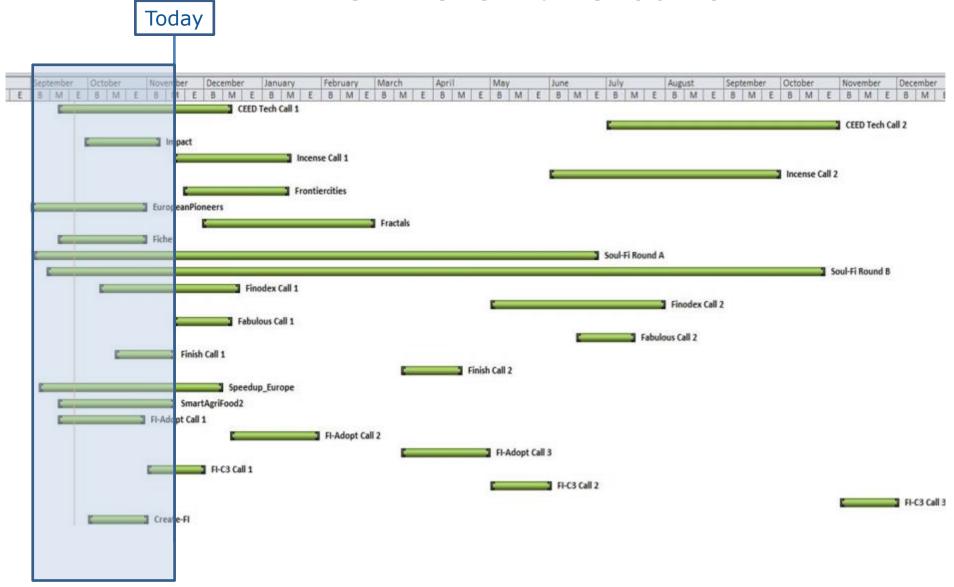
What we are looking for

- To grow/improve technology base
 - > Extension with new building blocks
 - > Increased usage in key sectors
 - With
 - > Increased adoption of specifications
 - Improved quality of reference implementations
 - Clear T&Cs
 - > Support for app developers
- To grow ecosystem
 - More cities and user industries
 - > More technology providers
 - > More system integrators
 - > More application developers
 - More accelerators and VCs.





Timeline of the calls





FINESCE Partners and Trial Sites



Ltp

TSSG

intune









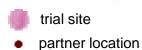




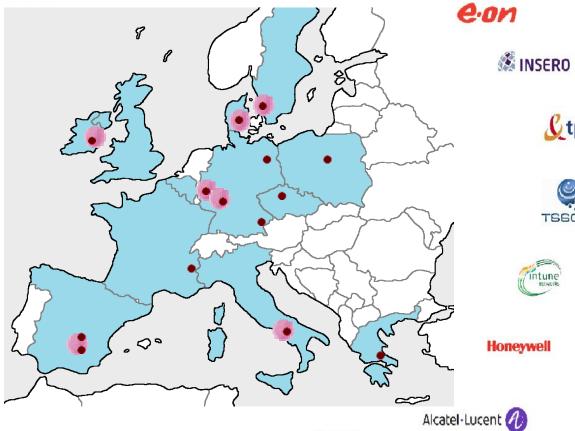
















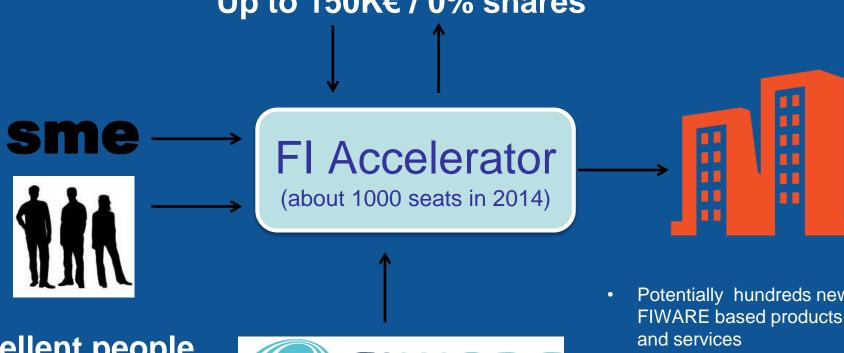






Acceleration: A modern way to build technology companies





excellent people excellent idea



- Potentially hundreds new FIWARE based products
- Potentially hundreds of new companies
- Ready to global from day 1





Why FIWARE?

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tone Enables 700s Forum

Sagnificance FI-WARE



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The SHAMPE Catalogue is the demain reposition; for implementation of Seneric Endowns (SE) that are pain of the Provided partition. Agent from the Seneric Shadout, you will also find took and best practices Americ Shadout, you will also the provided and best practices Americ Shadout.

View the Enobler's



No registration is necessary, simply spin broading the list of Generic Bracker implementations to see for yourself what the Frewell platform offers.

Was Seneric Bracker implementations.

Tools



Finally offers succentrate tools for devoluting applications for the following internet. Whether it be custom sophistic progress software testing sures or guidelines and seep process, once or you will find what you need.

See the Tools.

Going from clusters to ecosystems Cross-fertilization between sectors; avoid silos



- Leading to a more powerful platform offering (based on common functionalities; develop once and reuse as much as you can)
- Then, translating the sectorial knowledge into domain-specific platforms



Not only platform, tools...this is powered by data!

