

FI-PPP Business Opportunities for SMEs

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AGENDA

- Future Internet Public Private Partnership introduction
- Accelerator FI-C³ presentation
- Support Action I3H presentation
- Support Action FI-Link presentation
- FI-WARE, FI-Lab & FI-Ops: what's that?
 - XiFi presentation
- FI-WARE websites
- Open Specs and API: opportunities for SMEs
- Sum up for SMEs

Future Internet

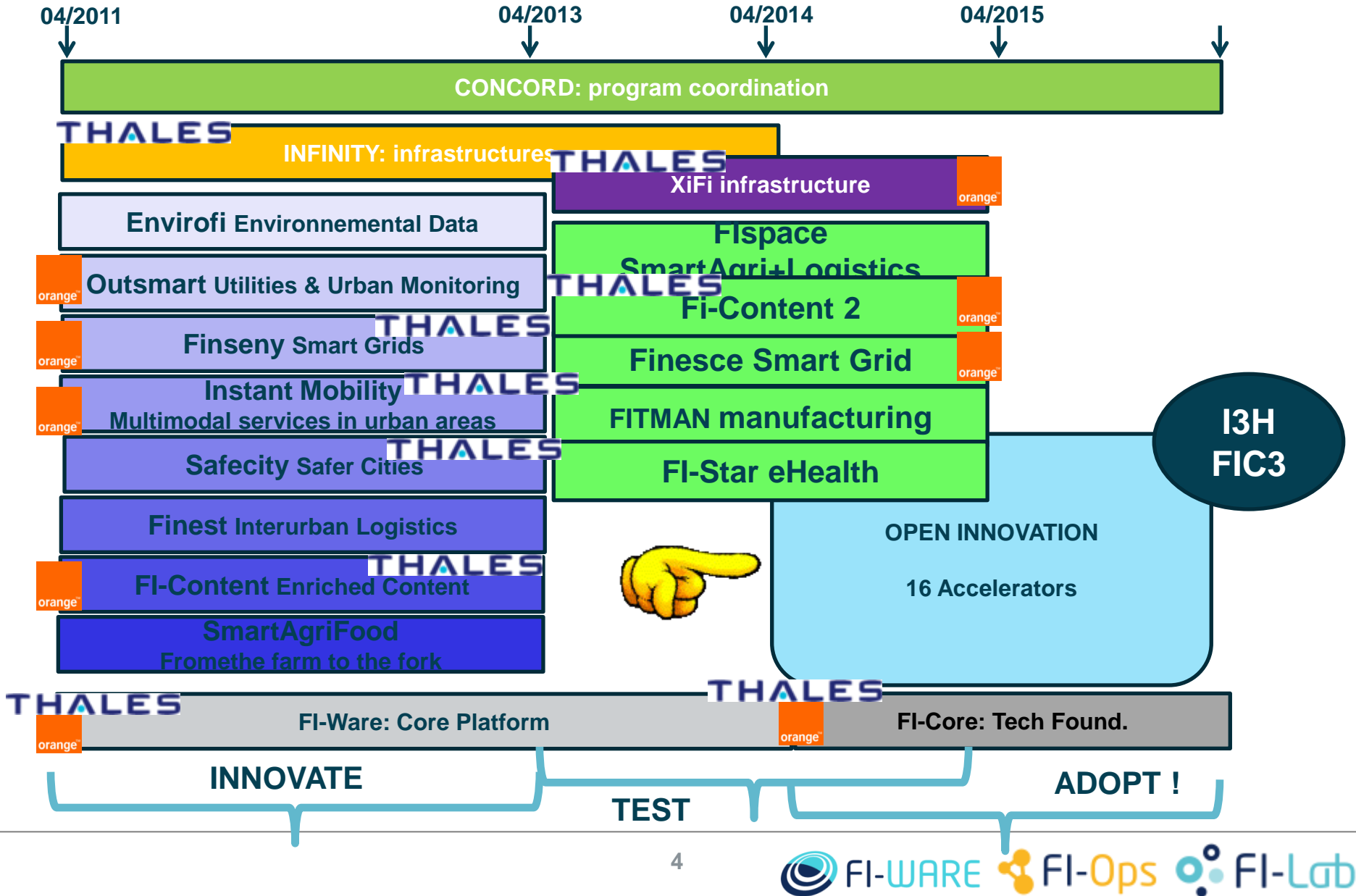
Public Private Partnership

Introduction

Future Internet Public Private Partnership introduction (1)

- European initiative to structure collaborative projects into a common program
- Industrial commitment to push research results to the market (pre-industrialisation)
- Together techno-push and market-pull:
 - Propose new technologies (European leadership)
 - Interactions with Use-Cases (fulfillment of market requirements)
 - Involvement of new partners (especially from vertical sectors)
- Large budget: 300 M€ with 100 M€ dedicated to SMEs

Future Internet Public Private Partnership introduction (2)



Future Internet Public Private Partnership introduction (3)

■ How SMEs will be involved

- Open Calls announcement mid September (ECFI conference)
- Open calls per accelerators are expected between mid September and November
- Sub-granting model (flexibility for SMEs)
 - › Selected SMEs will not become full partners of the consortium
 - › SMEs will have a supplier-like status
 - › No strong administrative issue
- Lightweight proposal: around 30 pages only
- Depending of accelerators
 - › SMEs could be involved from 3 to 15 months
 - › An Accelerator could have a funnel mechanism: decrease the number of SMEs each 3 months for example to focus on the more relevant projects
 - › Open calls could focus on technical topics or business topics
- **Recommendations:**
 - › Focus your effort on your own business!
 - › Integrate innovation in your products/services
 - › Do not miss to use Generic Enablers!

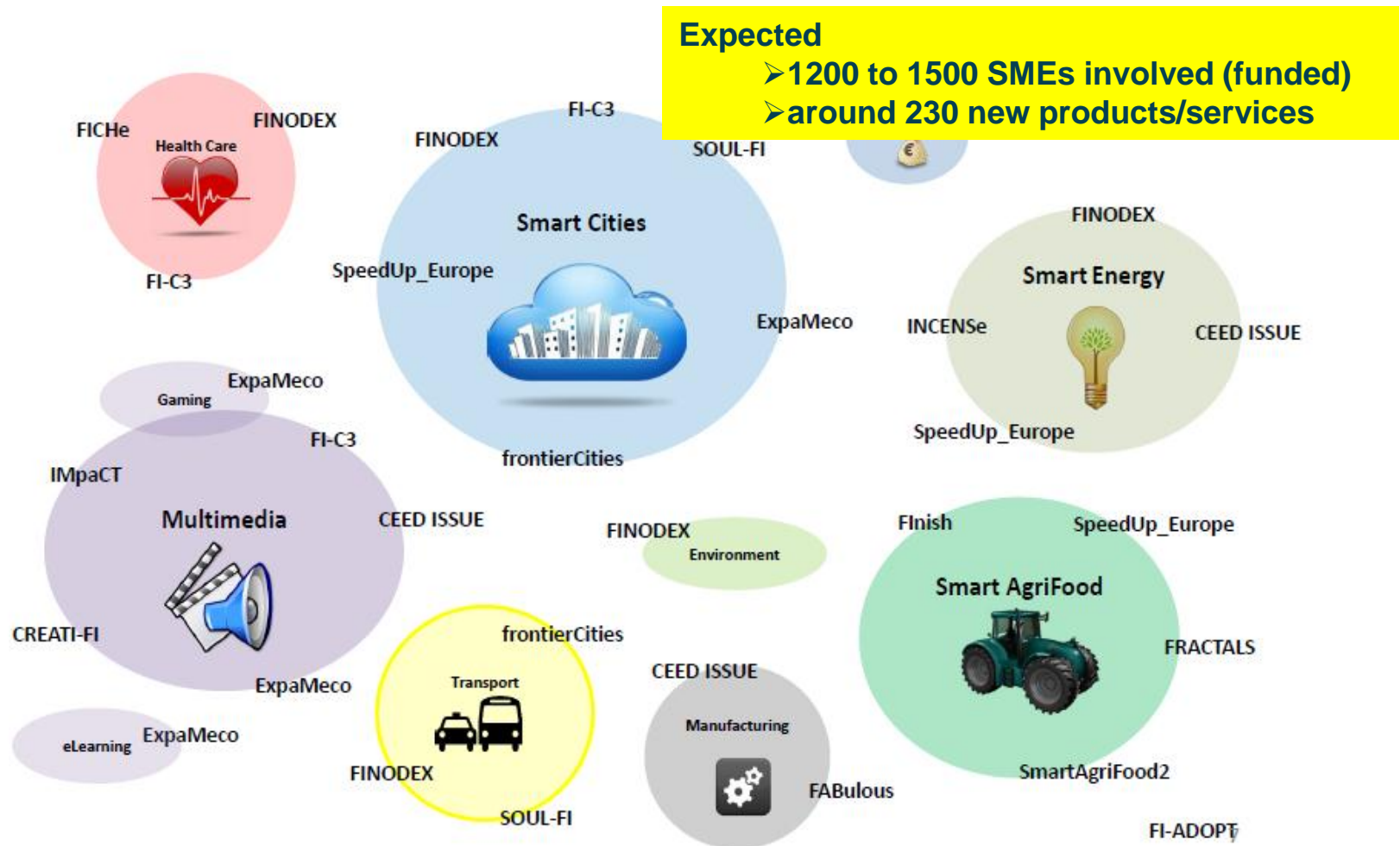
Future Internet Public Private Partnership introduction (4)

Phase 3: What has been retained

Start-up and SME Take-up	16 SME Accelerators <ul style="list-style-type: none">Avg. budget of Euro 6.3 millionTotal of Euro 100 million for SMEs & Web-entrepreneurs	<ul style="list-style-type: none">Organise and manage open callsAccelerate SMEs and WE (business knowledge - entrepreneurship)Monitor SMEs and WEsCoordinate across the 16 accelerators and with the programme
Technology Foundation Extension	FI-Core <ul style="list-style-type: none">Cost Euro 36 million, funding Euro 23 million	<ul style="list-style-type: none">Availability of the platform, education and training – FI-PPP UniversityTechnology & OSS ref implementationPlatform sustainability – <i>foundation</i>Take-up among Smart City & Campuseros
Support Actions	<ul style="list-style-type: none">FI-Business (1.6 MEuro)I3H (1.7 MEuro)FI-Links (1.5 MEuro)FImpact (1.6 MEuro)	<ul style="list-style-type: none">SME & Start-up ecosystem, support accelerators, BP and KPIsInnovation HubsRoadmapping & InternationalImpact Assessment... <i>strong programme support role</i>

Future Internet Public Private Partnership introduction (5)

Sectors covered by the Future Internet Accelerators



Future Internet Public Private Partnership introduction (6)

About Accelerators

- **CEED Issue:** Social Connected TV, Smart City Services, Virtual Factory, Smart Buildings
- **CREAtiFI:** Creative industry
- **Expameco:** Social Connected TV, Smart City Services, Pervasive Games, e-Learning and Content services
- **FABulous:** 3D Printing
- **FI-ADOPT:** Health & Well-Being, Learning, Social Integration
- **FI-C³:** Smart Territories, Media & Content, Care & Well-Being
- **FICHe:** eHealth

Future Internet Public Private Partnership introduction (7)

About Accelerators

- **Finish:** Food Intelligence
- **FINODEX:** Use of Open Data
- **FRACTALS:** Agriculture
- **Frontier Cities:** Smart Cities/Smart Mobility
- **IMPACT:** Mobile and Application Services (content based)

European cities/regions

FI Accelerators

Geographical Coverage:

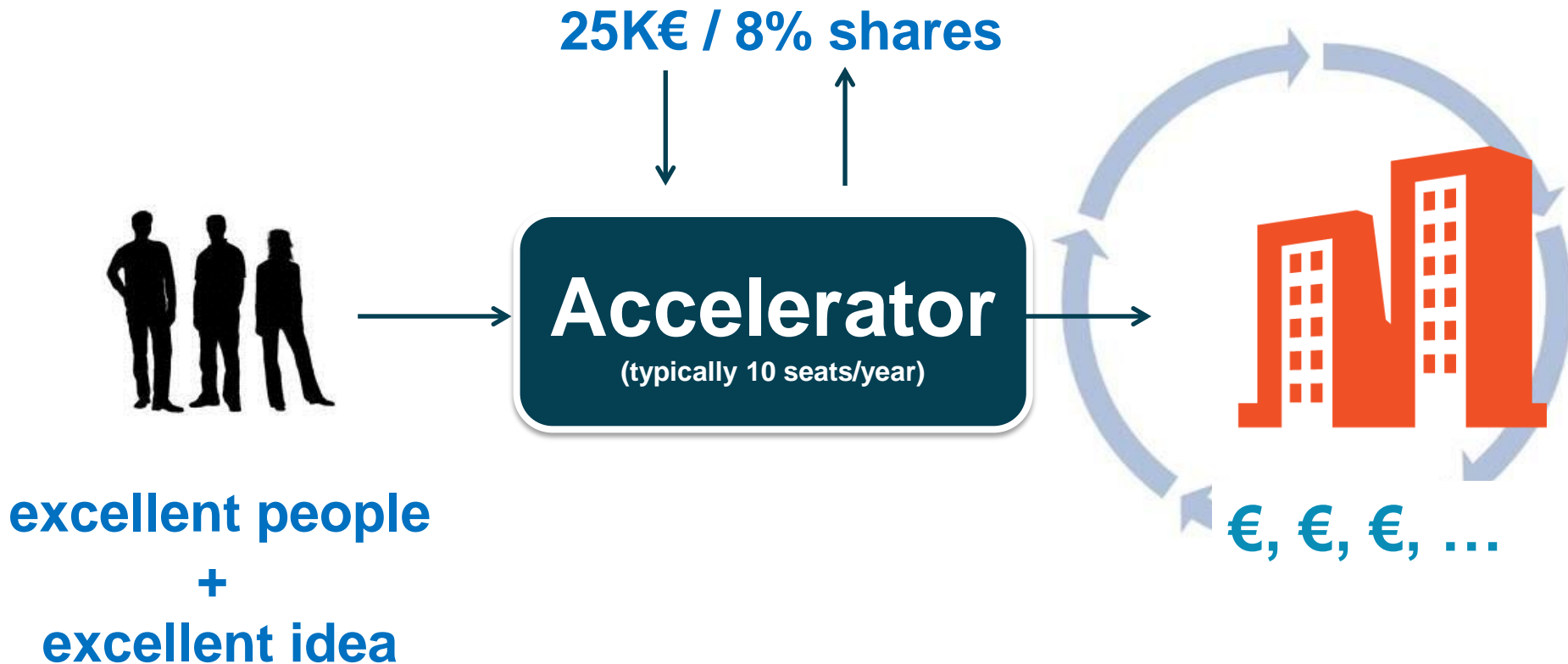
★ = Country

📍 = City

- 📍 Amsterdam
- 📍 Barcelone
- 📍 Bruxelles
- 📍 Birmingham
- 📍 Florence
- 📍 Rotterdam
- 📍 Valladolid
- 📍 Helsinki
- 📍 Trente
- 📍 Guildford
- 📍 Maribor
- 📍 Messine
- 📍 Stockholm
- 📍 Århus
- 📍 Berlin
- 📍 Vojvodina
- 📍 Oulu
- 📍 Murcie
- 📍 Málaga
- 📍 Paris
- 📍 Cracovie



Acceleration: A modern way to build technology companies

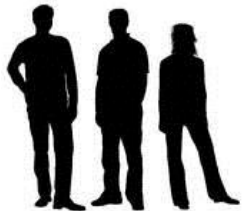


The Future Internet Accelerators

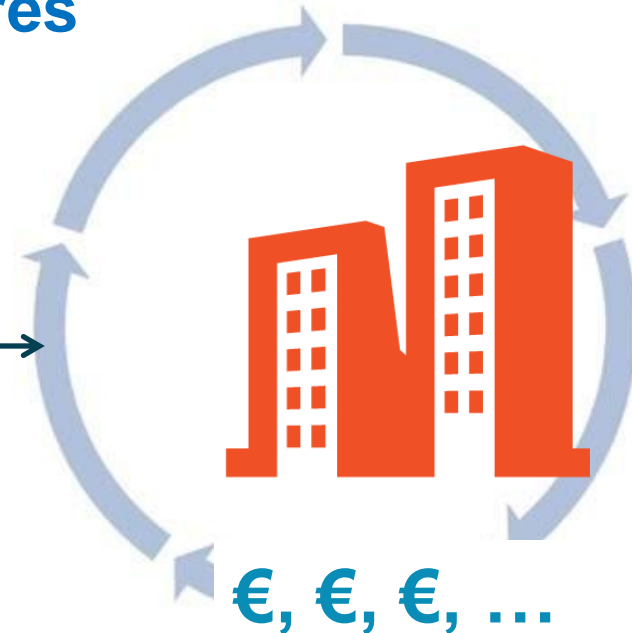
- Potentially hundreds new FI-Ware based products and services
- Potentially hundreds of new companies
- Larger markets (based on standard technology)

Up to 150K€ / 0% shares

sme



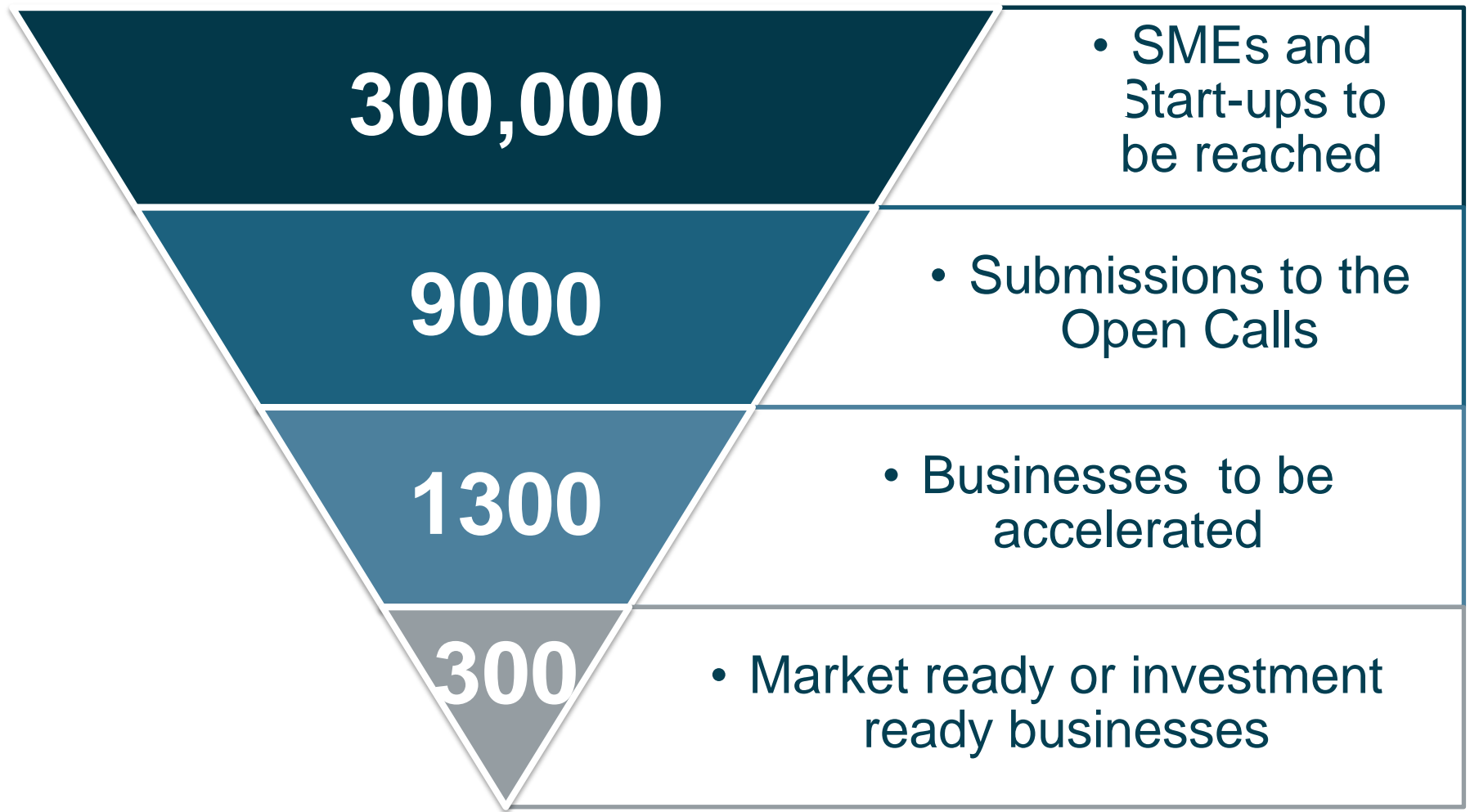
FI Accelerator
(about 1000 seats in 2014)



excellent people
+
excellent idea



Future Internet Accelerator



Accelerator

FI-C³ presentation

Future Internet Public Private Partnership introduction (8)

- Direct links to scenarios elaborated in phase 1
 - [Envirofi](#) (environmental data)
 - › [Biodiversity](#)
 - › [Air Pollutants, Allergens and meteorological conditions](#)
 - › [Marine Environmental Assets](#)
 - [FI-Content](#) (games, UGC, Social Connected TV)
 - › [Social Connected TV](#)
 - › [Smart City Services Platform](#)
 - › [Pervasive Games](#)
 - [Finest](#) (Logistics)
 - [Finseny](#) (Smart Grid)
 - › [Distribution Network Scenario](#)
 - › [Microgrid Scenario](#)
 - › [Smart Buildings Scenario](#)
 - › [Electric Mobility Scenario](#)
 - › [Electronic MarketPlace for Energy](#)

Future Internet Public Private Partnership introduction (9)

- Direct links to scenarios elaborated in phase 1
 - [Instant Mobility](#) (Smart Mobility in Urban Areas)
 - › [Use Case Scenarios](#)
 - [Outsmart](#) (Smart Utilities for Smart Cities)
 - [Safecity](#) (Safety in Smart Cities)
 - › [Madrid safety scenario](#)
 - › [Bucharest safety scenario](#)
 - › [Athens public safety scenario](#)
 - › [Stockholm public safety scenario](#)
 - › [Helsinki public safety scenario](#)
 - › [Obidos public safety scenario](#)
 - › [Specific enablers public safety](#)

Support Action

I3H presentation

Future Internet Public Private Partnership introduction (11)

- Main messages



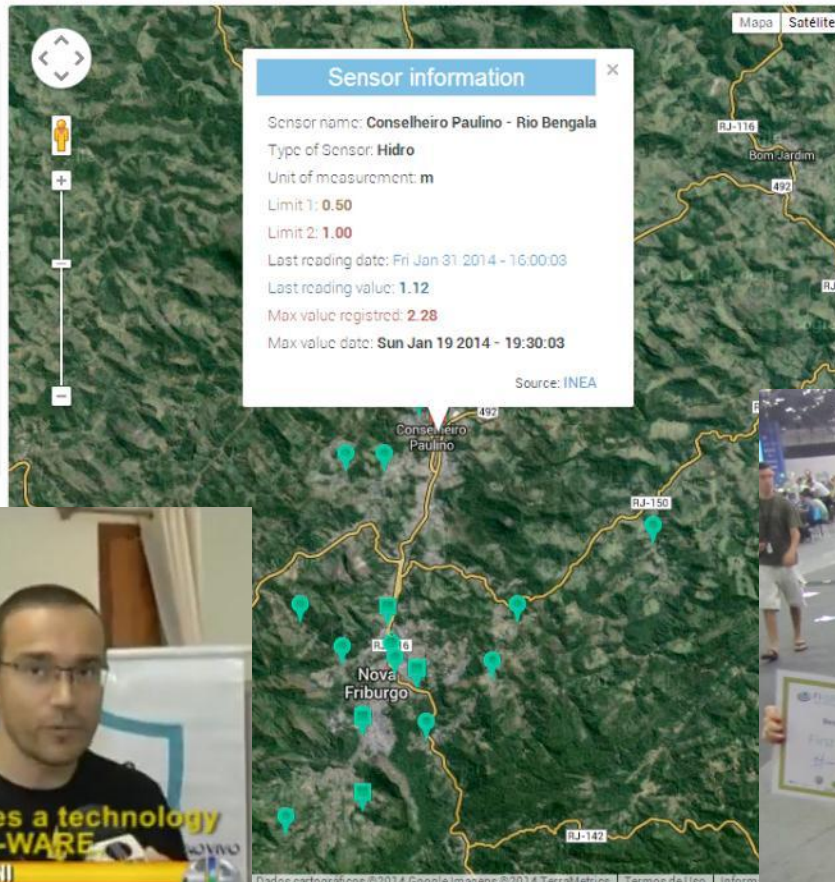
**Together
let's do business**

Some example? FI-Guardian



/ marcos-marconi / FI-GUARDIAN ▾

Fi-Guadian Sensor Map



FI-Guardian Video Player



Orion Entity Inspector

Entity Type
Rain Sensors

Sensor Location
FI-Guardian - Rio Bengalas

Get Info

Fi-Guardian Sensor Graph



Smart Cities Challenge



Categories

Category
Natural Disasters

Subcategory
- All -

Get Info



Testimonials

FI-WARE on youtube



Smart App Zity



SociWare



FoodLoop



SmarTaxi



FI-Guardian



Traffic Monitor



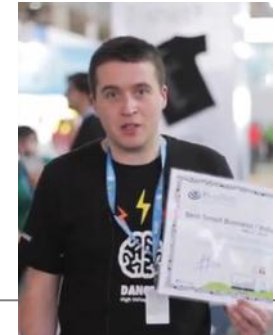
Red.es



Magic Box



Hotel automation



Fonesense

Support Action

FI-Link presentation



What's that ?

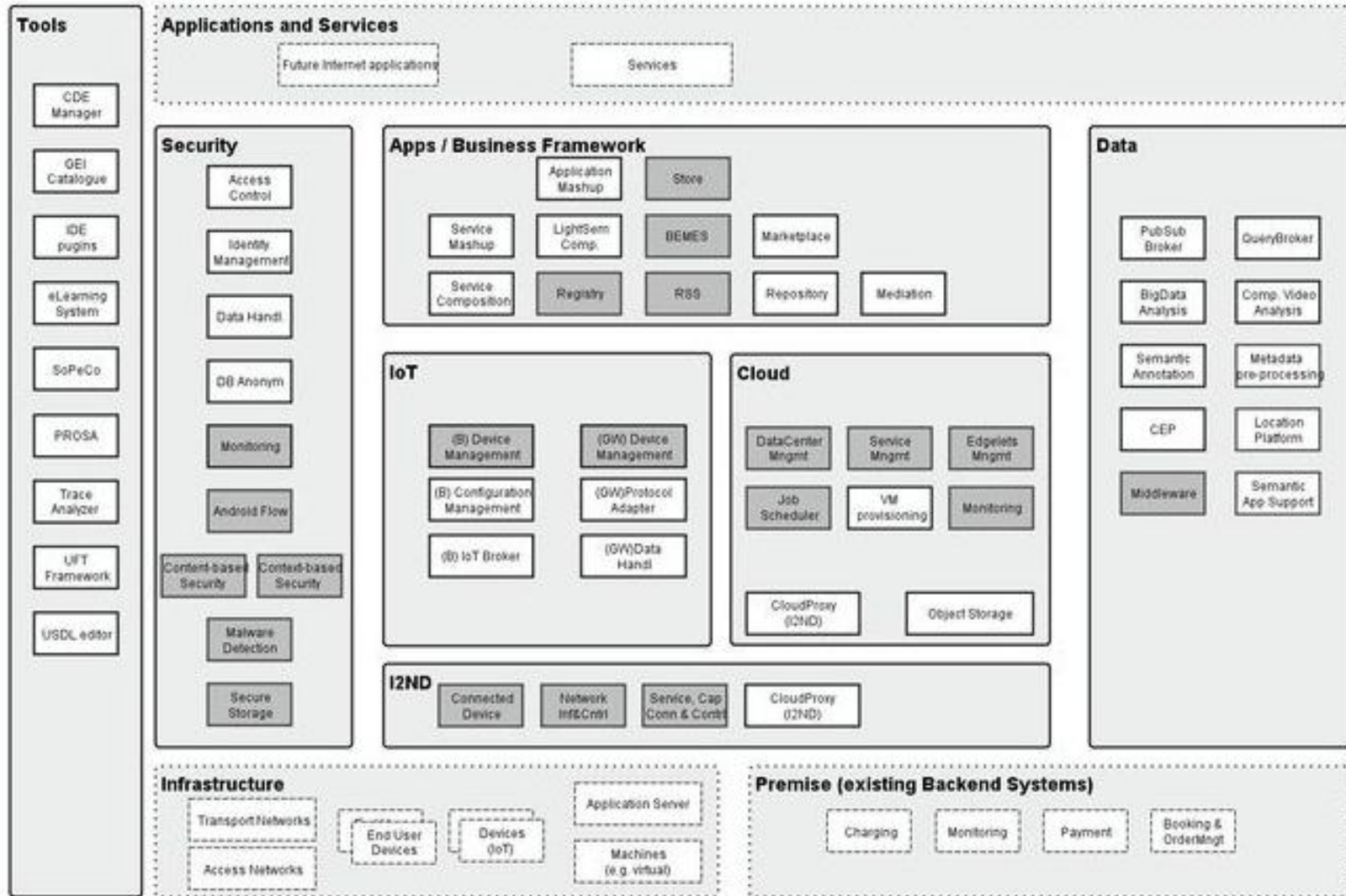
FI-WARE, FI-Lab, FI-Ops: what's that? (1)

- They are 3 brands (product lines)
- FI-WARE:
 - Provide Generic Enablers
 - Something you can use in different ways for your « own » platform
 - Common part to break the silos
- FI-Lab
 - A sandbox to test and use Generic Enablers
 - Cloud facilities distributed through Europe (5+12 data centers)
 - What you get: free Virtual Machines (5) + 10Gb + **real data from Smart Cities**
- FI-Ops: for platform providers
 - Tools to deploy and federate the data centers using FI-WARE framework

XIFI presentation

FI-WARE, FI-Lab, FI-Ops: what's that? (2)

FI-WARE: architecture overview



FI-WARE Generic Enablers

Cloud Enablers

Object Storage
Edgelet Management
Monitoring
PaaS Management
Software Deployment and Configuration
IaaS Data Center Resource Management DCRM
Cloud Proxy Job Scheduler
IaaS Service Management SM

Apps Enablers

Repository
Marketplace
Store
Light Semantic Composition
Revenue Sharing System Business Calculator
Service Composition Service Mashup
Application Mashup Mediator
Business Modeler
Registry

I2ND Enablers

Network Information and Control NetIC
Service Capability Connectivity and Control S3C
Connected Devices Interfacing CDI
Cloud Edge CE

Data /Context Enablers

Semantic Annotation
Big Data Analysis
Meta-Data Preprocessing
Complex Event Processing CEP
Publish Subscribe Broker
Compressed Domain Video Analysis
Advanced Communication Middleware
Media Enhanced Query Broker
Location Platform
Semantic Application Support

IoT Enablers

Gateway Data Handling
Backend Device Management
Gateway Protocol Adapter
Gateway Device Management
Backend Configuration Management
Backend IoT Broker

Security Enablers

Privacy
Database Anonymizer
Identity Management
Privacy Enhanced Identity Management
Context-based Security and Compliance
Content-based Security
Data Handling
Android Flow Monitoring
Access Control
Malware Detection Service
Security Monitoring

PART 3

FI-WARE Websites

FI-WARE websites (1)

- Everything is on www.fi-ware.org
- But we will have a quick tour of:
 - catalogue.fi-ware.org a kind of executive summary per Generic Enabler
 - edu.fi-ware.org the e-Learning platform to discover Generic Enablers Features
 - wiki.fi-ware.org the place to find many more details
- And then, you will be able to create your account on FI-Lab to play and test Generic Enablers
 - lab.fi-ware.org

FI-WARE websites (2)

- Everything is on www.fi-ware.org

FI-WARE
OPEN APIS FOR OPEN MINDS

HOME ABOUT ▾ BLOG **CATALOGUE** **FI-LAB** **DEVELOPERS** CONTACT

€200,000 in prizes for social apps

FI-WARE

EDUCATION SOCIAL INCLUSION
CITIZENSHIP CROWDSOURCING
HEALTH

Participate until April 24th

Present your idea for the **Smart Society Challenge** #Fiware800k

Campus Party™

Search

FEATURED VIDEO

FI-WARE AND ENTREPRENEURSHIP

FOLLOW US ON TWITTER

Tweets [Follow](#)

Carlos Ralli Ucendo 14 Apr
@carlosralli
On my way to Santander to talk on @Fiware at Jornadas Atlánticas event.
Retweeted by FI-WARE

Expand

FI-WARE 23h
@Fiware
MIDEOS| FI-WARE, FI-Lab and

FI-WARE is an innovative, open cloud-based infrastructure for cost-effective creation and delivery of Future Internet applications and services, at a scale not seen before. FI-WARE API specifications are public and royalty-free, driven by the development of an open source reference implementation which accelerates the availability of commercial products and services based on FI-WARE technologies.

FI-WARE websites (3)

- catalogue.fi-ware.org a kind of executive summary per Generic Enabler



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



View the Enablers



Tools



FI-WARE websites (4)

- catalogue.fi-ware.org a kind of executive summary per Generic Enabler

Access Control - THA Implementation

[Home](#) / [Generic Enablers](#) / [Access Control - THA Implementation](#)

[Overview](#)

[Creating Instances](#)

[Documentation](#)

[Downloads](#)

[Instances](#)

[Terms and conditions](#)

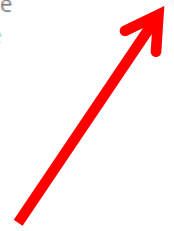


What you get

The API allows to manage authorization policies, and based on those policies, provides authorization decisions for requests to REST APIs of other GEs/services in FI-WARE. The API of the Access Control GE itself follows the REST architecture style, and uses the XACML (eXtensible Access Control Markup Language) standard for the policy syntax and evaluation, as well as for the authorization decision request/response format.

Provide Feedback

Provide feedback



FI-WARE websites (5)

- edu.fi-ware.org the e-Learning platform to discover Generic Enablers Features

You are not logged in. (Login)

FI-WARE

Open APIs for Open Minds

Home Available Courses My Courses My Dates My Activities News

Welcome

Welcome to the FI-WARE eLearning platform, where you can find training courses, lessons and many other contents regarding FI-WARE technology.

Feel free to start browsing our offering from the [categories](#) listed below, or from the *Available Courses* section (main menu bar), click on them and access the lessons.

Few quick steps and you can easily get access to all the public coursed published in this platform.

- 1 Select a Category**
 - Cloud Hosting (2)
 - Data/Context Management
 - Internet of Things (IoT) Services Enablement (1)**
 - Applications and Services Ecosystem and Delivery
- 2 Select a Course**
 - FI Application Project Management**
 - This course introduce the... and usage of the FI Applicatio... FI-CoDE, to create and m... based FI application projects,

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

FI-WARE websites (6)

- edu.fi-ware.org : you can find detailed courses per Generic Enabler

The screenshot displays the FI-WARE website interface. At the top left is the FI-WARE logo with the tagline "Open APIs for Open Minds". To the right, a text notification states "You are currently using guest access (Login)" above an image of a computer monitor. A teal navigation bar contains the following links: Home, Available Courses, My Courses, My Dates, My Activities, and News. Below the navigation bar, the breadcrumb path reads "Home ► ...tData - GE location within the FiWare architecture".

The main content area features a "News forum" section with three entries:

- Gateway Data Handling GE - Esper4FastData - GE location within the FiWare architecture**
Gateway Data Handling GE - Esper4FastData - GE location within the FiWare architecture
- Gateway Data Handling GE - Esper4FastData - Introduction to CEP concepts**
Gateway Data Handling GE - Esper4FastData - Introduction to CEP concepts
- Gateway Data Handling GE - Esper4FastData - Quickstart**
Gateway Data Handling GE - Esper4FastData - Quickstart

On the left side, a "Navigation" sidebar lists the following structure:

- Home
 - Site pages
 - Current course
 - ...tData - GE location within the FiWare architecture**
 - Participants
 - General
 - ...tData - GE location within the FiWare architecture
 - ...GE - Esper4FastData - Introduction to CEP concepts

FI-WARE websites (7)

- wiki.fi-ware.org the place to find much more details

The screenshot shows the 'How to get started with FI-WARE' page on the FI-WARE wiki. The page is titled 'How to get started with FI-WARE' and contains a list of links. Red arrows point from the text 'Key points !' on the right to several items in the list: 'FI-WARE Architecture', 'Summary of FI-WARE Open Specifications', 'Summary of FI-WARE API Open Specifications', and 'Materializing the FI-WARE Vision'. The page also features a navigation menu on the left, a search box, and a sidebar with 'Key points !' and 'FI-WARE Testbed' sections.

193.49.124.107

page discussion view source history

Welcome

(Redirected from ...)

This wiki comp...

How to get started with FI-WARE

- Quick FI-WARE tour
- Overall FI-WARE Vision
- FI-WARE Architecture
- FI-WARE Glossary
- Summary of FI-WARE Open Specifications
- Summary of FI-WARE API Open Specifications
- Materializing the FI-WARE Vision
- FI-WARE Technical Roadmap
- Developer Community and Tools
- FI-WARE Agile Development Methodology
- Releases and Sprints numbering, with mapping to calendar dates
- FI-WARE FAQ
- The FI-WARE partners

FI-WARE Collaboration & Dissemination

- Communication, Collaboration and Dissemination

FI-WARE Testbed

- Testbed Design
- Testbed V1 Integration Plan (FI-PPP restricted access)
- Testbed V1 Integration Report (FI-PPP restricted access)
- Testbed V2 Integration Plan (FI-PPP restricted access)

Key points !

FI-LAB or FI-WARE technologies, lab-help@lists.fi-ware.eu

organization, etc., don't hesitate to [.fi-ware.eu](mailto:lab-help@lists.fi-ware.eu)

questions on the following FAQ page:

each event ;)

navigation

- Main page
- Quick Tour
- Our Vision
- Architecture
- Open Specs APIs
- Roadmap
- Implementations

search

Go Search

toolbox

- What links here
- Related changes
- Special pages
- Printable version
- Permanent link

create a book

- Add wiki page
- Books help

FI-WARE websites (7)

FI-WARE Architecture

Following is a description of the Reference Architecture linked to the Enablers (GEs) being supported in each chapter is provided, including the Enabler (GE) exposed to application developers or it uses to connect.

- Cloud Hosting
- Data/Context Management
- Internet of Things (IoT) Services Enablement
- Applications/Services Ecosystem and Delivery Framework
- Security
- Interface to Networks and Devices (I2ND)

Security Chapter

- Security-Monitoring: Mulval Attack Path Engine Open API Specification
- Security-Monitoring: Mulval Attack Path Engine Web Application Open API Specification
- Security-Monitoring: Scored Attack Paths Open API Specification
- Security-Monitoring: Remediation Open API Specification
- Security-Monitoring: Service Level SIEM Open API Specification
- Security-Monitoring: IoT Fuzzer Open API Specification
- Security-Monitoring: Android Vulnerability Assessment Open API Specification
- Identity Management Open API Specification
- Privacy Open RESTful API Specification
- Data Handling Open RESTful API Specification
- Access Control Authorization Open RESTful API Specification
- Context-based Security & Compliance Open RESTful API Specification
- DBAnonymizer Open RESTful API Specification
- Secure Storage Service Open API Specification
- Content Based Security Open RESTful API Specification
- Malware Detection Service Open API Specification
- Android Flow Monitoring Open API Specification

API

Cloud Hosting Chapter

- FIWARE.OpenSpecification.Cloud.DCRM
- FIWARE.OpenSpecification.Cloud.SM
- FIWARE.OpenSpecification.Cloud.SelfServiceInterfaces
- FIWARE.OpenSpecification.Cloud.CloudEdge
- FIWARE.OpenSpecification.Cloud.ObjectStorage
- FIWARE.OpenSpecification.Cloud.SDC
- FIWARE.OpenSpecification.Cloud.PaaS
- FIWARE.OpenSpecification.Cloud.Monitoring
- FIWARE.OpenSpecification.Cloud.JobScheduler
- FIWARE.OpenSpecification.Cloud.Edgelets

Open Specs

Data/Context Management Chapter

- FIWARE.OpenSpecification.Data.BigData
- FIWARE.OpenSpecification.Data.PubSub
- FIWARE.OpenSpecification.Data.CEP
- FIWARE.OpenSpecification.Data.Location
- FIWARE.OpenSpecification.Data.MetadataPreprocessing
- FIWARE.OpenSpecification.Data.CompressedDomainVideoAnalysis
- FIWARE.OpenSpecification.Data.QueryBroker
- FIWARE.OpenSpecification.Data.SemanticAnnotation
- FIWARE.OpenSpecification.Data.SemanticSupport
- FIWARE.OpenSpecification.Data.Middleware

Materializing the FI-WARE Vision

- Materializing Cloud Hosting in FI-WARE
- Materializing Data/Context Management in FI-WARE
- Materializing Internet of Things (IoT) Services Enablement in FI-WARE
- Materializing Applications/Services Ecosystem and Delivery Framework in FI-WARE
- Materializing Security in FI-WARE
- Materializing the Interface to Networks and Devices (I2ND) in FI-WARE
- Materializing Advanced User Interfaces in FI-WARE
- Materializing Common base technologies in FI-WARE
- Materializing FI-WARE Cross-Chapter functions

From description to concrete softwares

Open Specs and API: Opportunities for SMEs

Open Specs and API: opportunities for SMEs

■ Open Specs: **FREE**

- Documentation is available
- You can understand the main features of a Generic Enabler: (can be re-use for multiple verticals and associated service platforms)
- Your comments are more than welcome!
- Become part of the community and share with us, and with your ecosystem

■ API: **FREE**

- For your developers to plug your own software on top of Generic Enablers
- To develop your own instances of Generic Enablers and be compliant & interoperable
- Open or create your platform/services to/for other verticals
- Again, your comments and contributions are more than welcome!

■ **Licence models (for concrete software)**

- 70% are now in Open Source => you can contribute !

API example: OMA-NGSI (1)

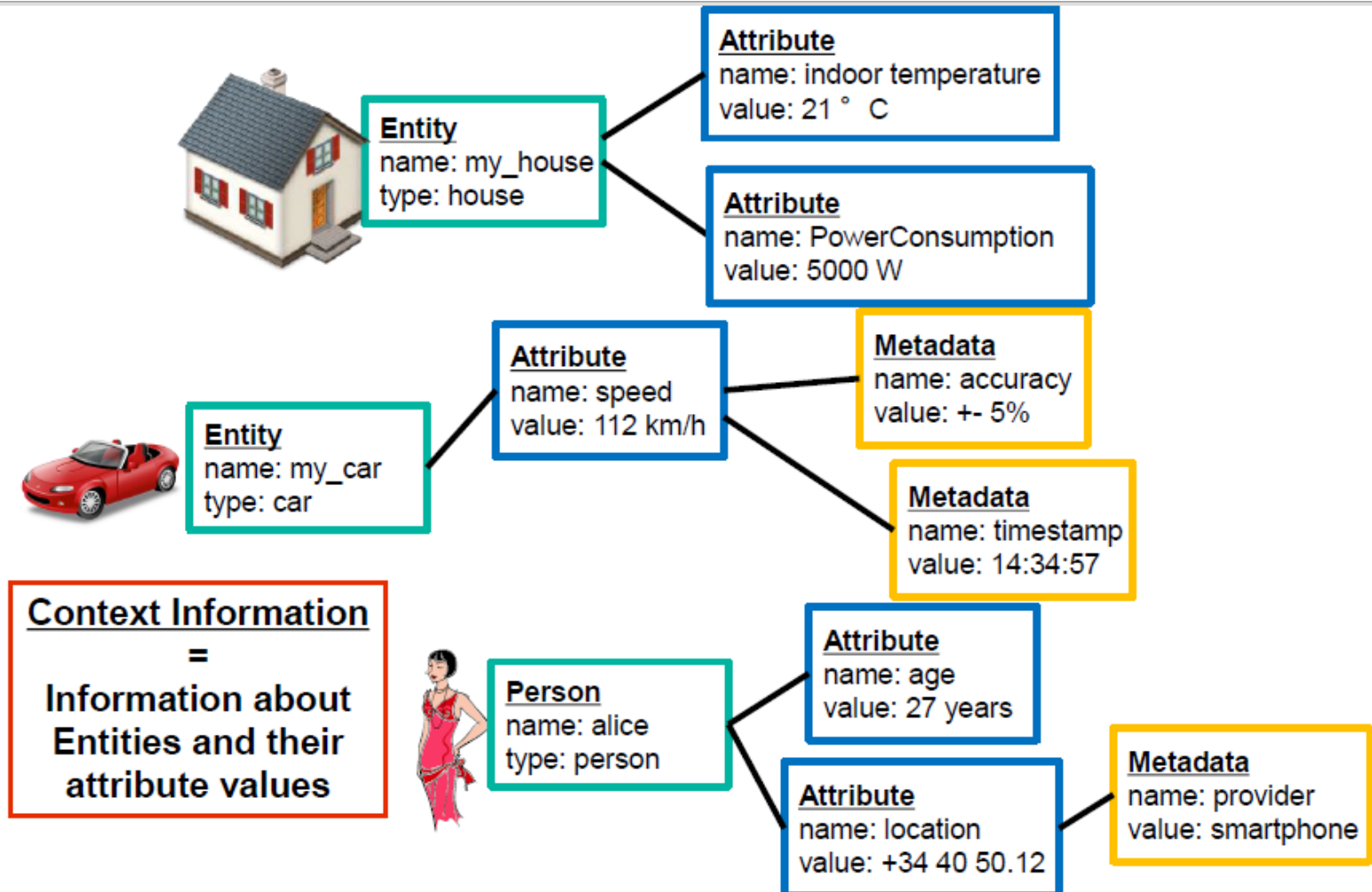
- OMA NGSI 9 & 10: API for 11 Generic Enablers

- Data & Context Management:
 - Context Broker
 - Complex Event Processing
 - Big Data
 - Location Platform

- Internet of Things
 - Backend Device Management
 - Backend Configuration Manager
 - Backend Template Handler
 - Backend IoT Broker
 - Gateway Data Handling
 - Gateway Device Management
 - Gateway Protocol Adapter

API example: OMA-NGSI (2)

■ OMA NGSI 9 & 10 Data Model



API example: OMA-NGSI (3)

■ OMA NGSI 9 & 10 Operations

OMA NGSI 10: Interface for exchanging information about entities and their attribute values

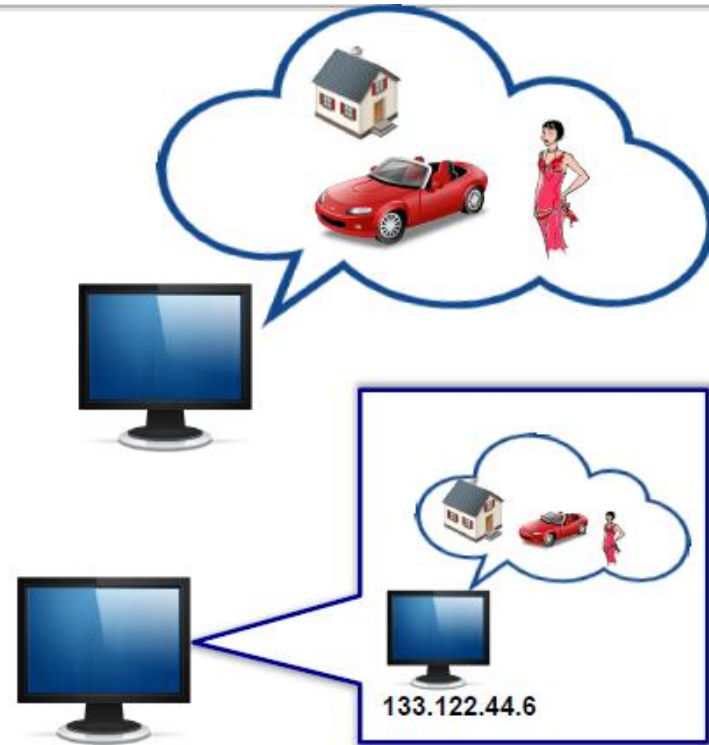
NGSI 10 Operations:

- queryContext
- subscribeContext + notifyContext
- updateContext

OMA NGSI 9: Interface for exchanging information about the availability of information about entities and their attribute values

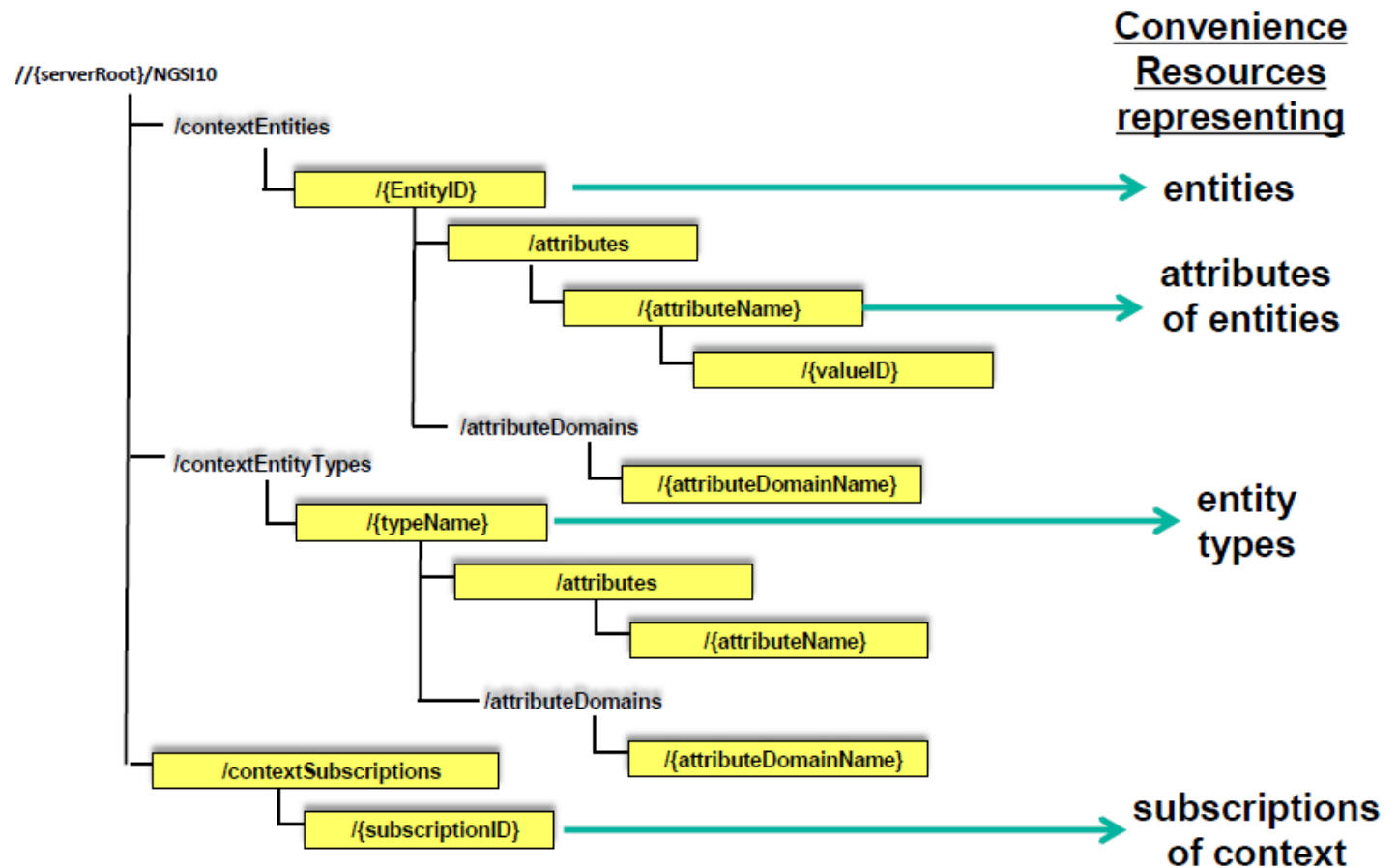
NGSI 9 Operations:

- discoverContextAvailability
- subscribeContextAvailability + notifyContextAvailability
- registerContext



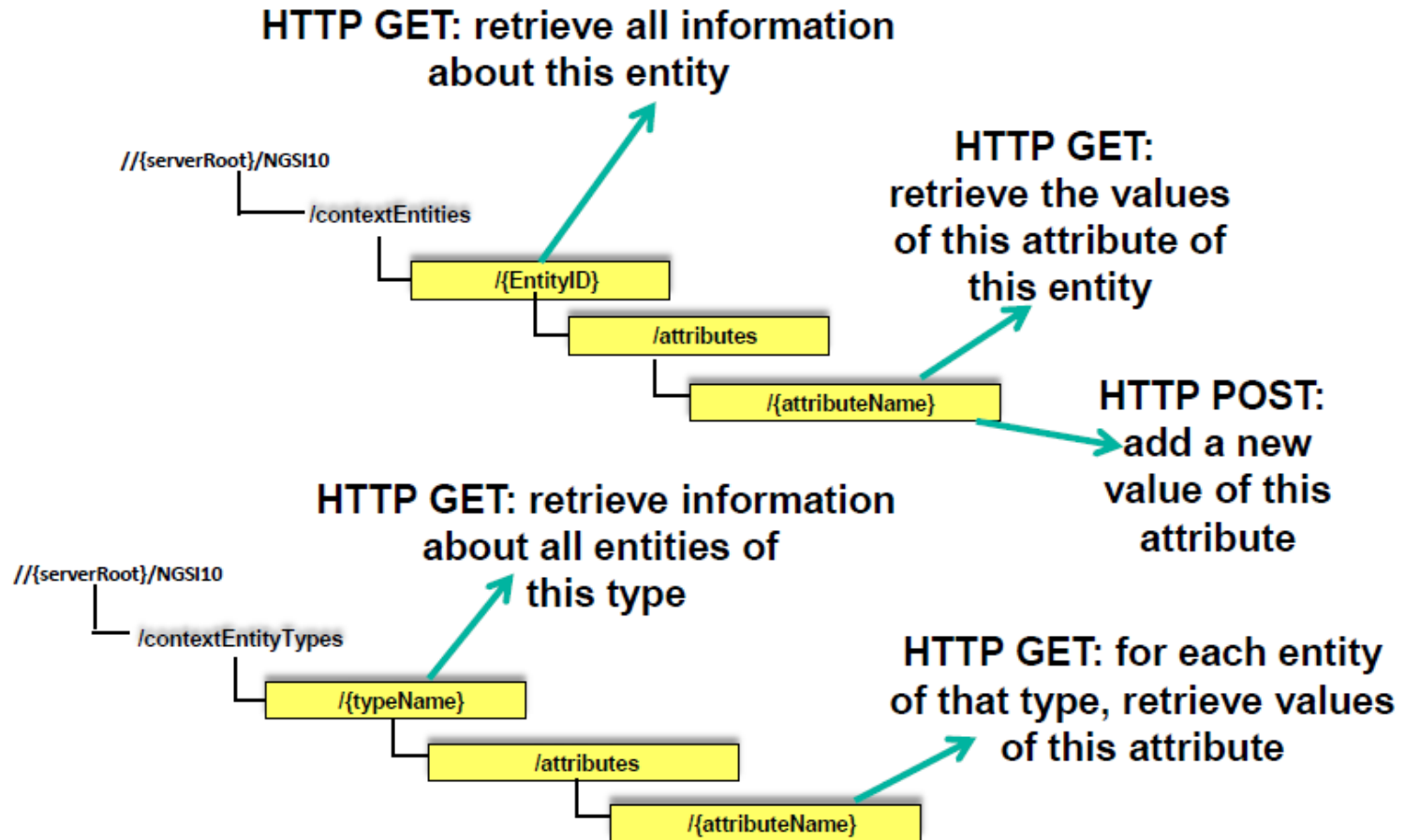
API example: OMA-NGSI (4)

- OMA NGSI 10 RESTful interface: resource structure



API example: OMA-NGSI (5)

■ OMA NGSI convenience interactions examples



FI-PPP Liaison 2014

First step to enter the game

Challenge for SMEs interested in experimenting with FI-WARE technology NOW!

- Selection of 2 SMEs for developing a demonstration project in the area of Future Internet (selection by September 3, 2014).

The following competences and experience are required:

- Competence in middleware technology and/or Internet of Things.
- Competence in FI-WARE is a plus.
- Competence in information system integration.

The SME will take part in the FI-PPP Liaison activity from September 10th until December 31st 2014. The allocated maximum budget amounts to EUR 25.000 per company. This shall cover all costs related to the project, including travel costs.

How to answer the FI-PPP liaison call?

Responses shall include the following information in a maximum of 3 pages:

- Confirmation that the respondent is an SME as defined by the European Commission
- CV of the person people (technical and coordinator) that will be working in the project
- Relevant competences and experience of the SME
- Expectations and ambition goal for the SME participation in the project
- Contact person of the SME.

Contact: thierry.nagellen@orange.com

<http://www.f6s.com/parisfi-wareeitictlabchallenge#/about>

Sum up for SMEs

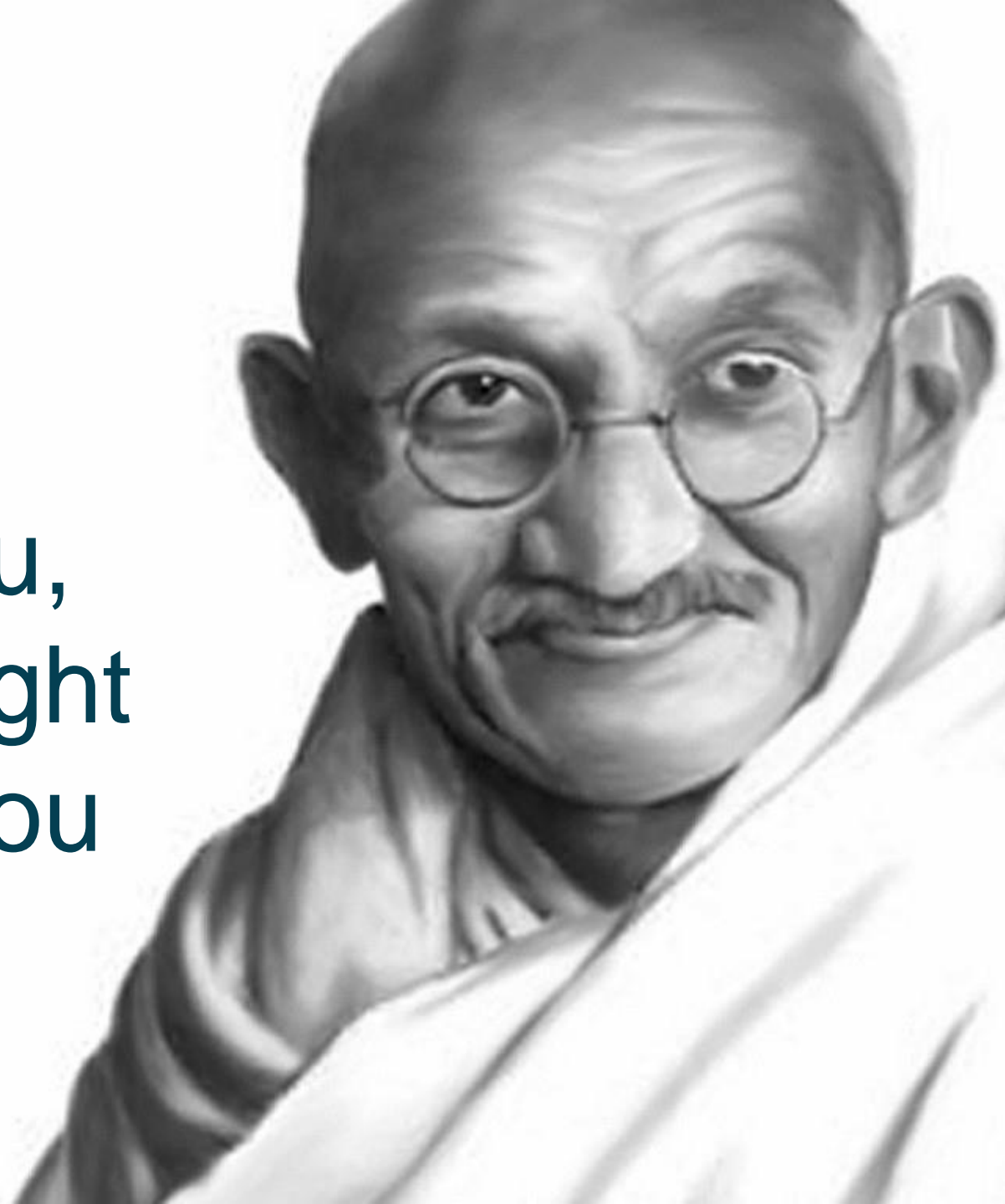
Sum up for SMEs

- Be ready for **September 2014 (announcement of calls mid-September)**
 - Discover FI-WARE Generic Enablers
 - Use FI-Lab to play with new technologies
- Be engaged in 2015
 - Bring your « commercial » ideas
 - Be funded to do innovation
 - Build your new products/services
- Find additional funding with **Accelerators** support
 - Bootstrap your own new business
 - Think Big to become **Bigger** (international business)

Sum up for SMEs: key links

- <http://fi-ware.org>
- <http://www.ecfi.eu/munich2014/>
- <https://twitter.com/NeelieKroesEU>

First they
ignore you,
then they
laugh at you,
then they fight
you, then you
win.



You need support?

To better understand GEs

To understand how to answer the Open Calls

Feel free to contact us!

Orange

thierry.nagellen@orange.com

Thales

pascal.bisson@thalesgroup.com

Some videos to understand our challenges

[Campus Party 2013 in London](#)

[FI-WARE Challenges](#)

[Smart City Expo 2013](#)

[Campus Party Brazil 2014](#)

Thanks !

<http://fi-ppp.eu>

<http://fi-ware.org>

<http://lab.fi-ware.org>



Follow @Fiware on Twitter !