

How to simplify smart energy application development with FIWARE technology

...and get funded by the European Commission

FINESCE Open Day

Portlaoise, 22.09.2014



FIWARE Introduction

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OPEN APIs FOR OPEN MINDS

<http://www.youtube.com/watch?v=PkrAxS0HBok>

Where to start: The FIWARE Catalogue

(www.fiware.org)

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FI-WARE Catalogue



Welcome to the FI-WARE Catalogue. Start using a Generic Enabler.

About the Catalogue



The FI-WARE Catalogue is the central place for finding and using the Generic Enablers of the FI-WARE platform. Apart from this you will also find tools and best practices to help you develop the applications of the FI-WARE platform.

Generic Enablers

Home / Generic Enablers

Browse by Chapter

Data/Context Management

BigData Analysis - Cosmos

Monitoring and control of the BigData Analysis GE



DATA/CONTEXT MANAGEMENT

Complex Event Processing (CEP) - IBM Pro



Complex Event Processing GE

DATA/CONTEXT MANAGEMENT

Compressed Domain Video Analysis - Co



Provides a set of tools for analyzing video streams in the compressed domain

DATA/CONTEXT MANAGEMENT

Location - LOCS



Location management of mobile devices via A-GPS, CID and WiFi

DATA/CONTEXT MANAGEMENT

BigData Analysis - Cosmos

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Overview Creating Instances Documentation Downloads Instances Terms and conditions



Chapter: Data/Context Management

Version: 2013-10-24

Updated: 2013-10-24

Rating: 5 (1 vote)

Average: 5 (1 vote)

Contact Person: Francisco Romero Bueno

frb@tid.es

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What you get

Cosmos is an implementation of the BigData GE, and it is based on Hadoop ecosystem. Current version of Cosmos allows users to:

- Upload big data files to HDFS by means of a SFTP injection server.
- Upload big data files to HDFS by means of HttpFS (in addition to standard WebHDFS).
- Upload and run MapReduce jobs from the Master node.

There is also a module in charge of receiving context data from Orion (Context Broker GE Implementation) and storing it in HDFS.

Why to get it

Big Data processing is the technology used to process huge amounts of previously stored data in order to get relevant insights in scenarios where latency is not a highly relevant parameter. These insights take the form of newly generated data, which will be at disposal of applications using the requirements, Cosmos.

Open speci

The Open Specification

BigData Analysis - Cosmos

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Experiments/Trials within the FI-PPP

Projects being part of the FI-PPP program can use the Cosmos product under the conditions established in the FI-PPP Collaboration Agreement that they should have signed as beneficiaries of the program.

FI-LAB (Open Innovation Lab)

Development, testing and experimentation of applications using:

- experimental instances deployed on the FI-WARE Open Innovation Lab facilities (see section "Experimental Instances" under the "Instances" tab linked to this entry)
 - versions of the software downloaded from resources under the "downloads" tab linked to this entry
- is subject to the terms and conditions established in the "FI-WARE Open Innovation Lab: Use Terms and Conditions". Any other use is not permitted.

External Availability

Software associated to the Cosmos product is provided as open source under Apache License, Version 2.0. Please check the specific terms and conditions linked to this open source license at <http://opensource.org/licenses/Apache-2.0>. Please note that software derived as a result of modifying the source code of the Cosmos product software in order to fix a bug or incorporate enhancements is considered a derivative work of the product. Software that merely uses or aggregates (i.e. links to) an otherwise unmodified version of existing software is not considered a derivative work.

Getting Started: Rolling out your FIWARE Apps

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1. DEVELOP YOUR IDEA

2. SELECT ENABLERS

3. ACCES FI-LAB /BUILD INSTANCE

4. DEPLOY YOUR CLOUD VMs

5. DEVELOP YOUR APP

6. INTEGRATION & TESTING



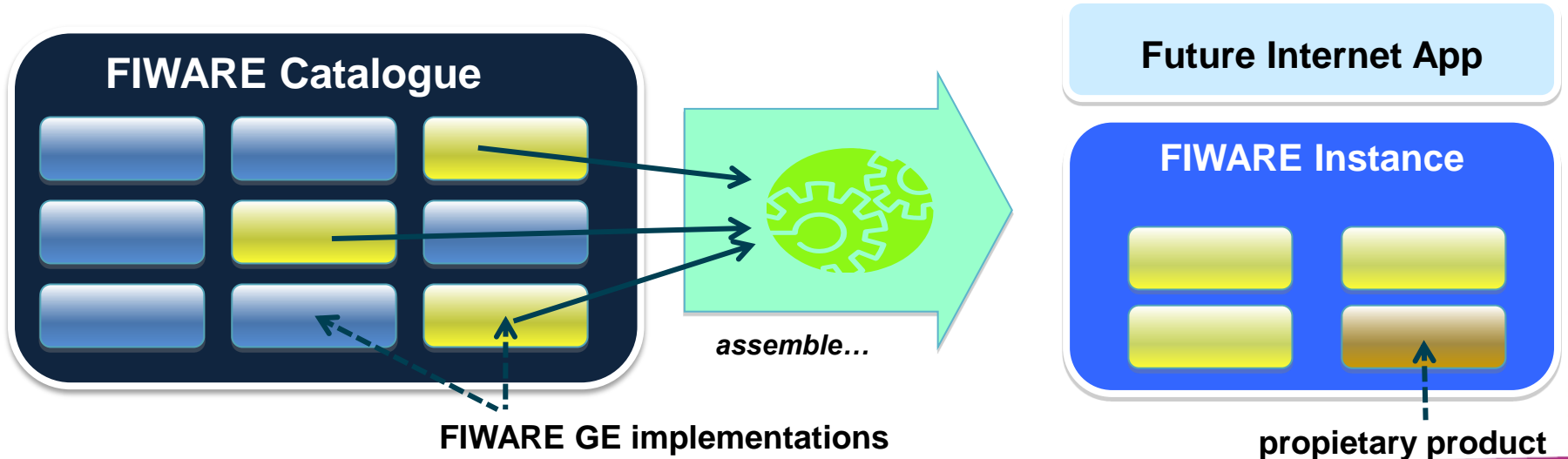
A key concept: FI-WARE Instances

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Future Internet Applications run on top of “FIWARE Instances” that are built by “FIWARE Instance Providers” upon:

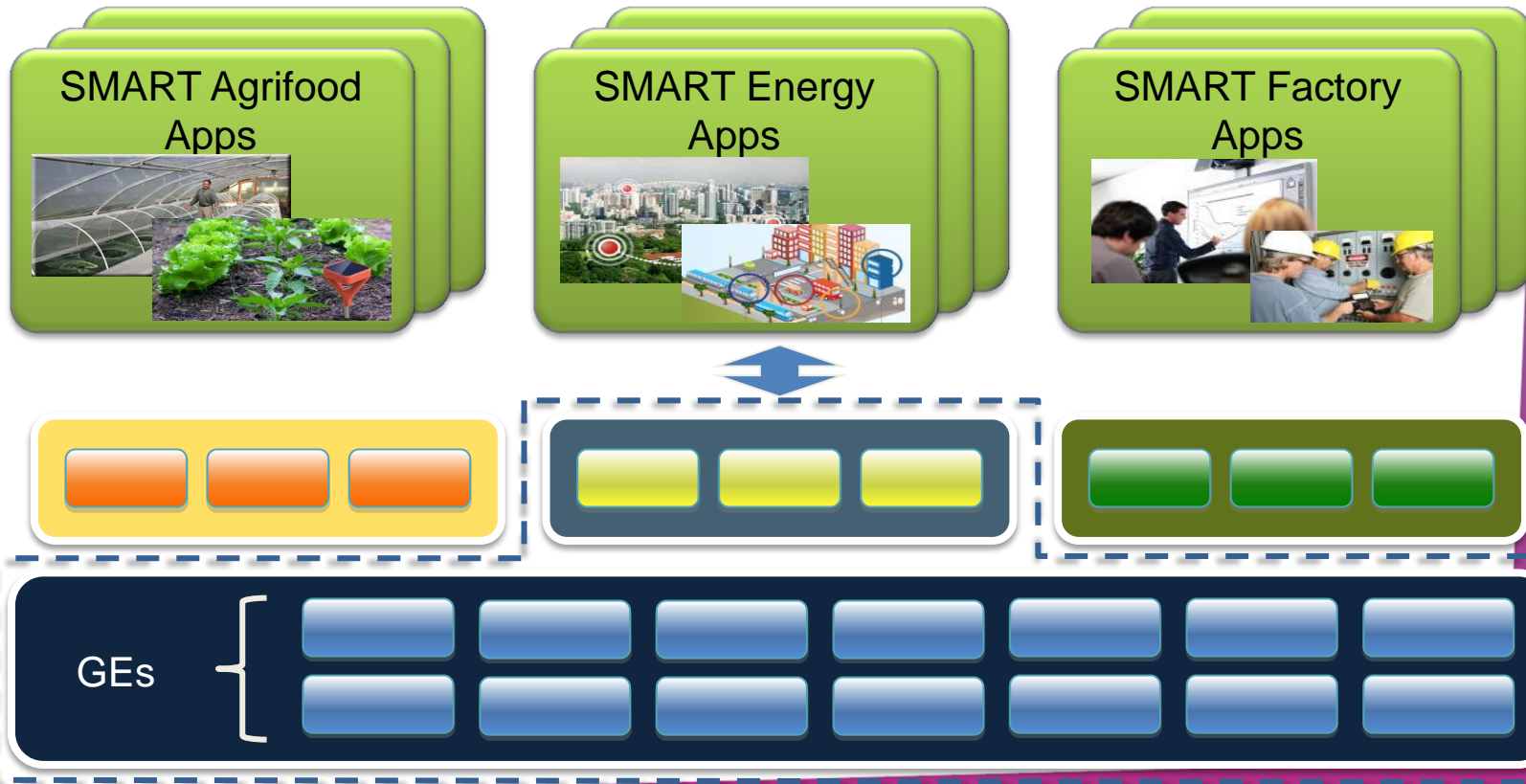
- selection of FIWARE GEIs (products) from the FIWARE Catalogue
- assembly of selected FIWARE GEIs with proprietary added-value products



Domain-specific platforms = FIWARE instance + specific enablers

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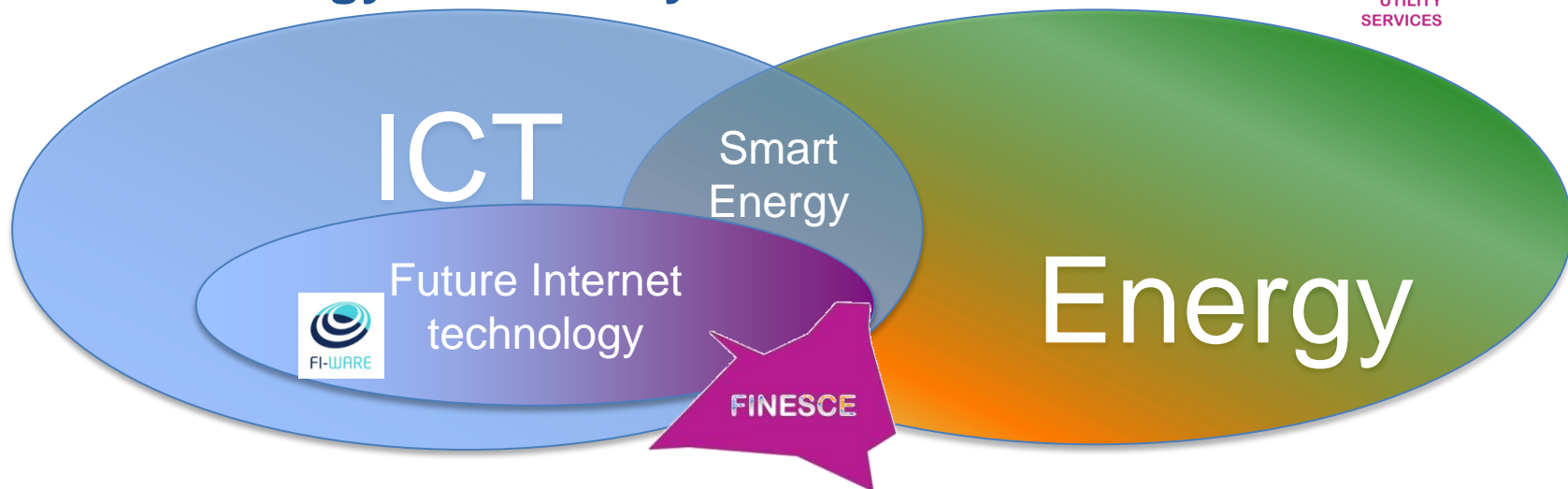


FINESCE key message:

Smart Energy enabled by FIWARE GEs

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Future Internet offers services for:

- (volatile) distributed energy producers
- (flexible) consumers and prosumers
- electric vehicles (as consumers and storage)

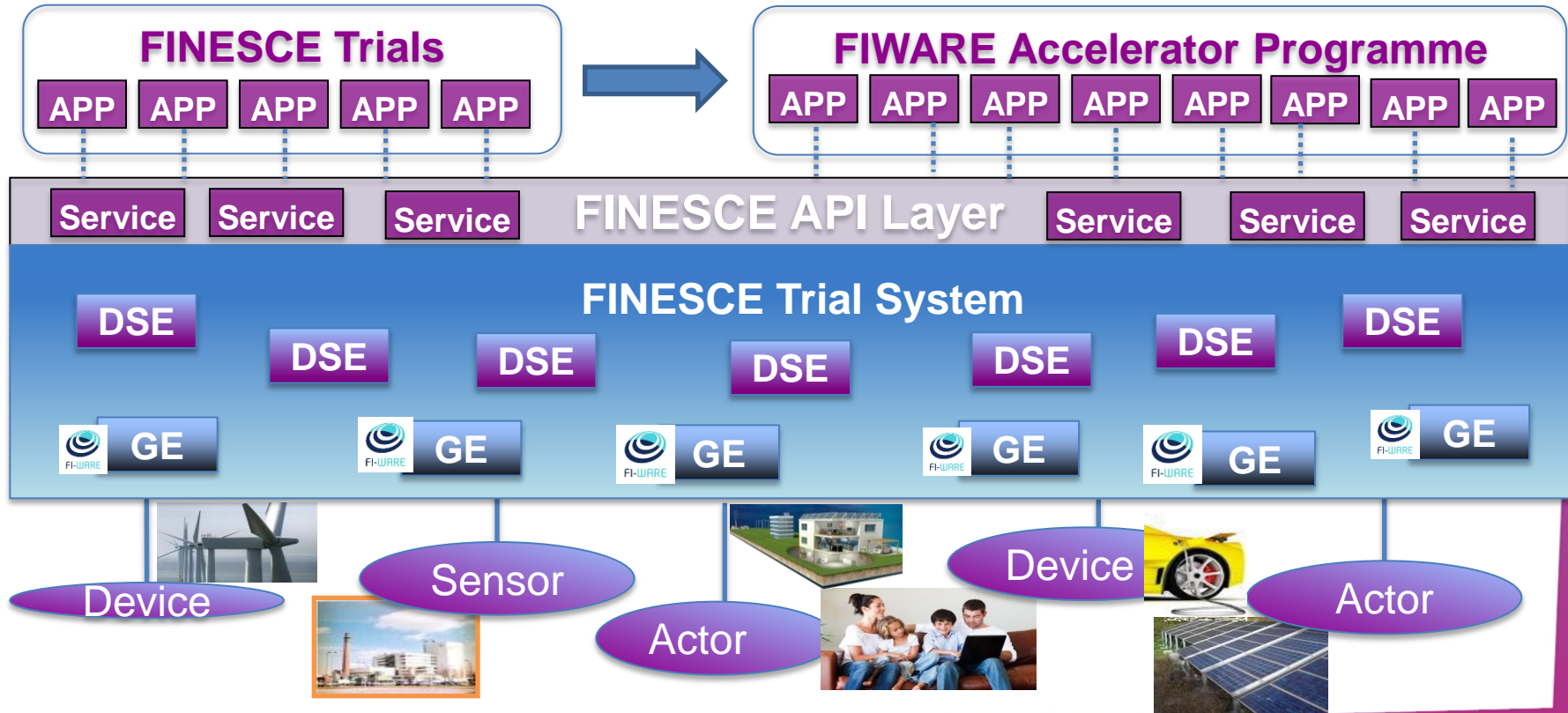
Benefits of using FIWARE Technology:

- **lower costs for application development**
- **easy access for new partners**
- **scalability of applications**
- **shorter time to market**

FINESCE API Layer Offers Services to Apps

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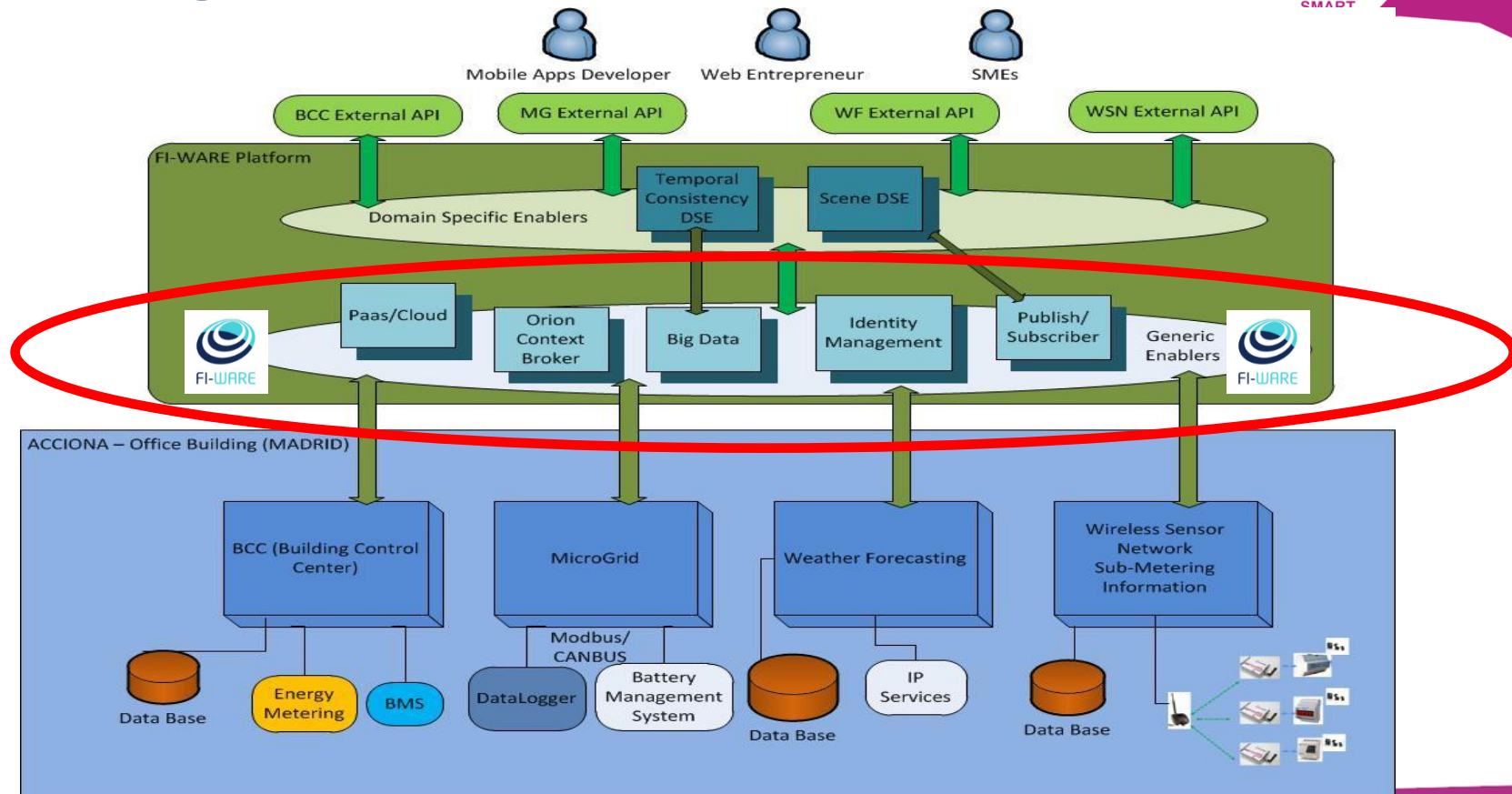
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GE Integration – Madrid trial

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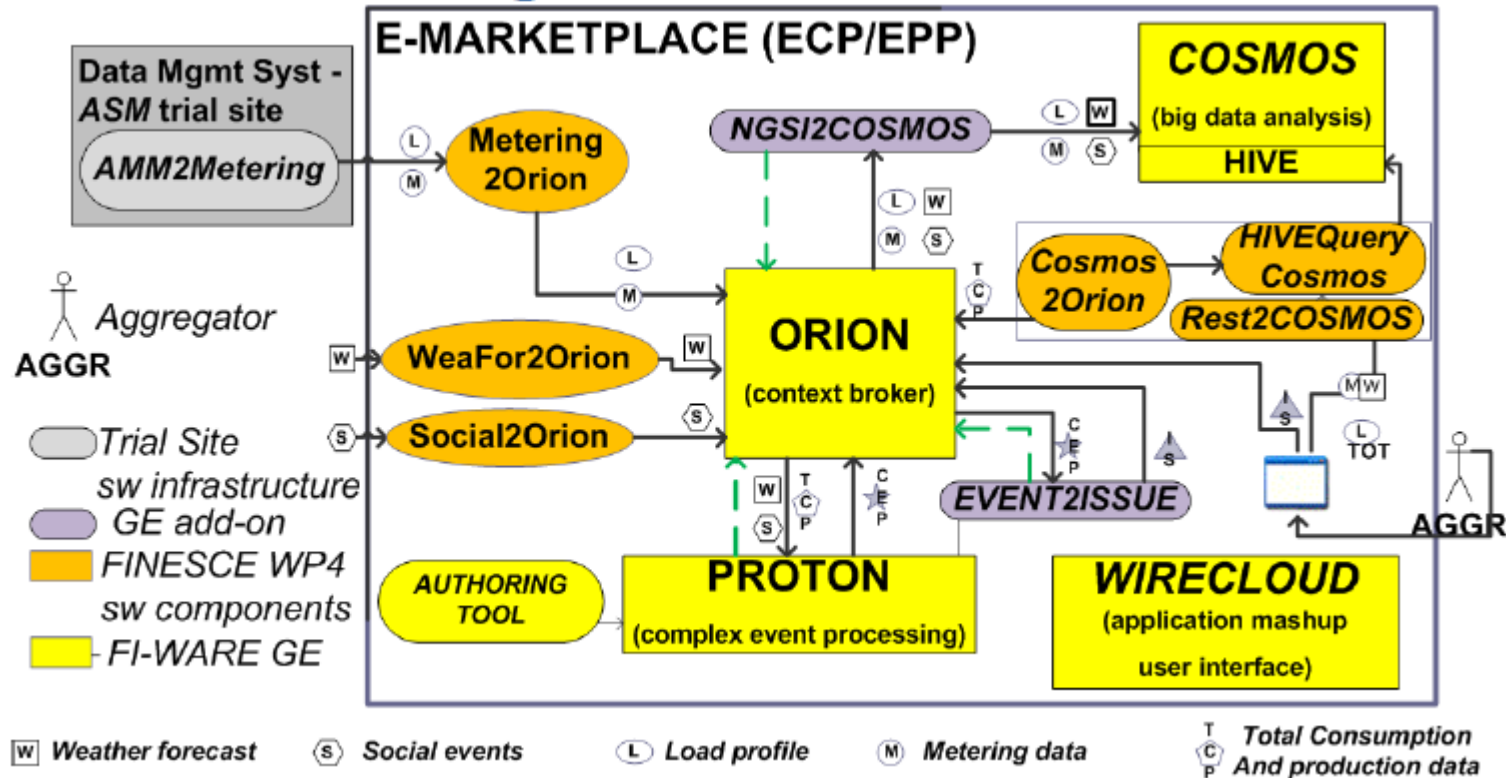
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GE Integration Terni Trial

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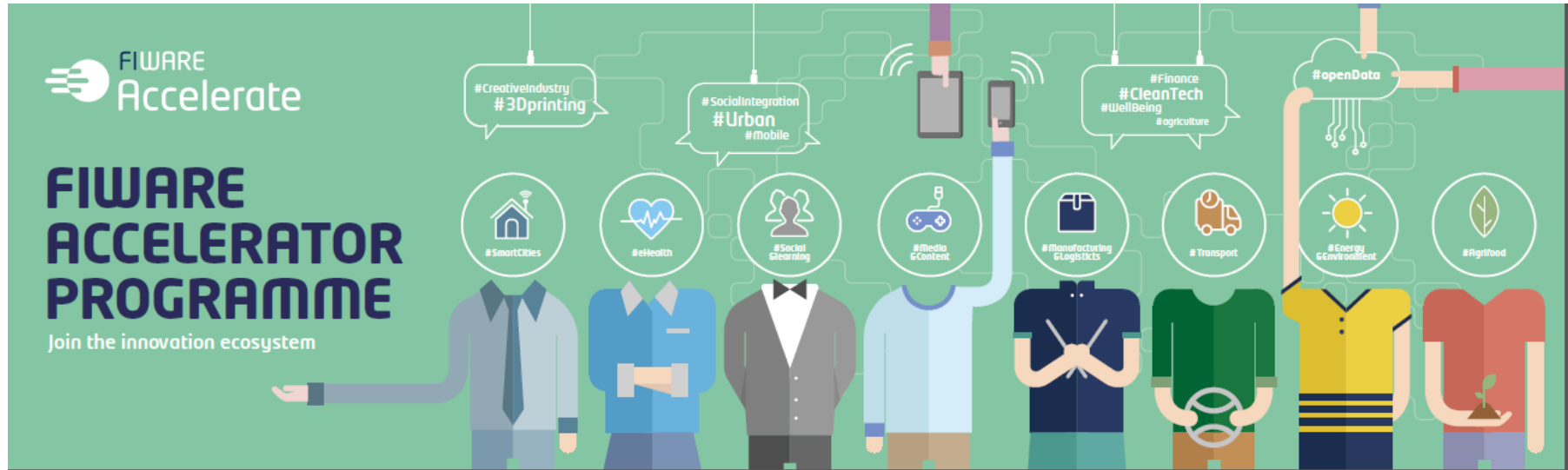
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FIWARE Accelerator Programme

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

Thank you for your attention!