


# ¿Qué es el Futuro de Internet?

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# ¿Qué es la PPP Futuro de Internet?

La PPP futuro de Internet es un conjunto de proyectos, financiados parcialmente por la UE, cuyo objeto es:

- 
- Fomentar el desarrollo económico basado en las TIC
  - Conseguir que las TIC se empleen hacia objetivos relacionados con las necesidades de la sociedad
  - Lograr que la investigación se convierta en nuevas oportunidades económicas para los ciudadanos

Se llama PPP (Public Private Partnership) porque el proceso nació con vocación de tener una fuerte dirección desde la iniciativa privada...

# El mercado de Internet en el mundo

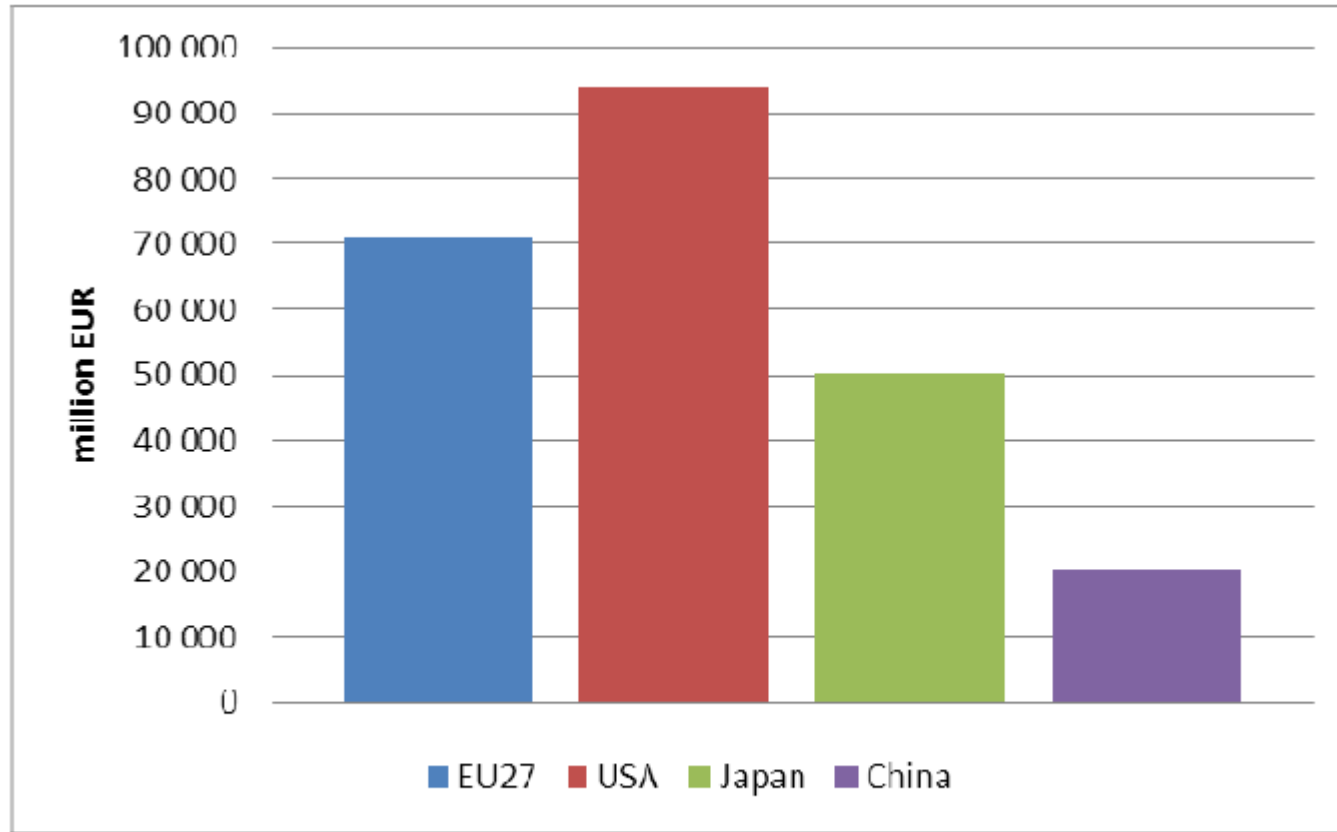


Table 4: Internet revenues – 2010. Source: IDATE

# En Europa, centrado en el acceso

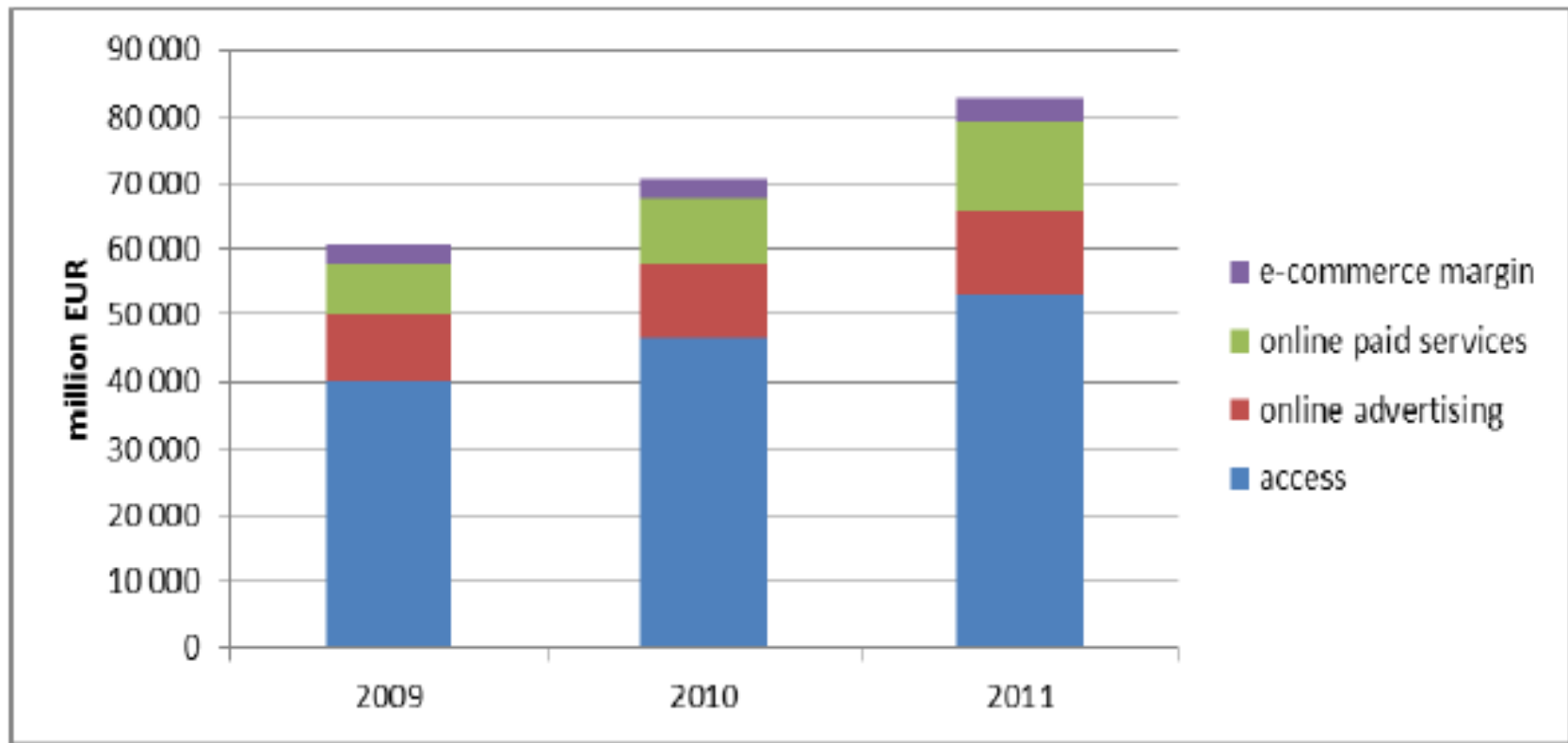
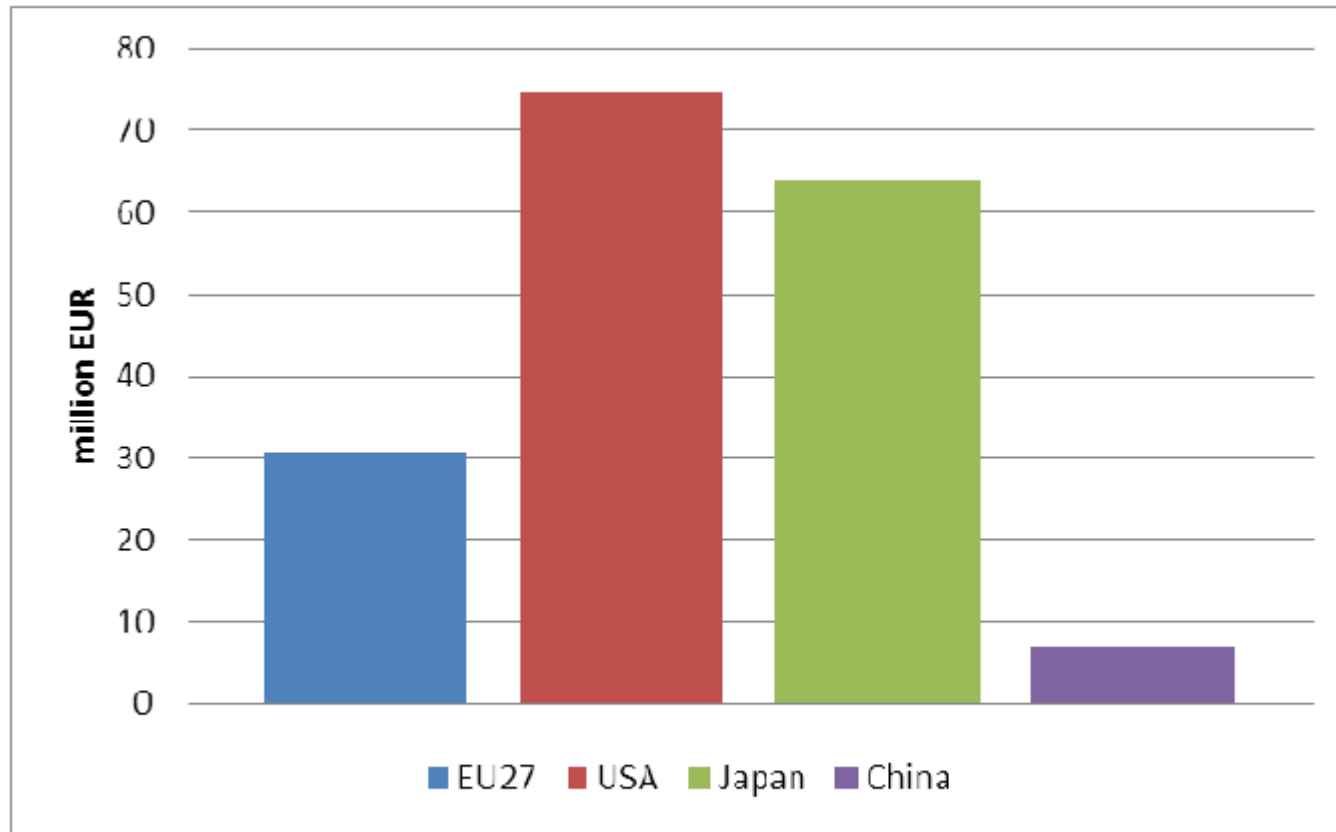



Table 9. Overall Internet revenues in Europe. Source: IDATE

# Muy por detras en las aplicaciones




*Table 8: Paid services & applications revenues per Internet user – 2010. Source: IDATE, video revenues not available for China*


# Las plataformas. Un dinamizador



Plataforma Apple  
Aprox. 4 b\$ de ingresos




Google  
Aprox 1,5b pero creciendo



Amazon EC2



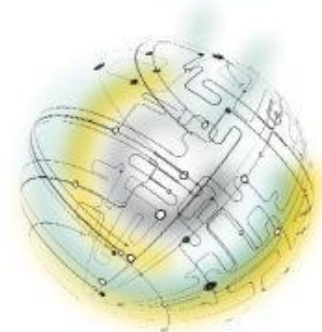
Microsoft Azure



... (Ahora Xively) otras



OPEN PLATFORMS FOR WEB-BASED APPLICATIONS AND SERVICES IN EUROPE, ENLARGING THE STAKEHOLDERS COMMUNITY



EXECUTIVE SUMMARY (FR)

A study prepared for the European Commission  
DG Communications Networks, Content & Technology



**Table 1: Estimates of the economic impact of the chosen four technology categories**

| Technology category                   | Application            | Estimate                  | Unit/measurement   | Region                 | Timespan      | Source                           |
|---------------------------------------|------------------------|---------------------------|--|------------------------|---------------|----------------------------------|
| Social networks                       | General                | 1.5% of GDP               | Reduction in unemployment rate through better job matching caused by more efficient information transmission                     | US                     |               | Mayer (2011)                     |
|                                       | Facebook               | €15.3bn                   | Value added (net of displacement of existing economic activity)  | EU-27                  | 2011          | Deloitte (2012)                  |
| Cloud computing                       | General                | 0.1 - 0.3% of GDP         | Contribution to GDP growth rate due to lower entry barriers for SMEs   | EU-25                  | after 5 years | Etro (2009)                      |
|                                       | General                | €23-€32bn                 | Estimated annual productivity gains (ie added value) resulting from cost savings through adoption of cloud computing by all SMEs | EU-27                  |               | Hatonen (2011)                   |
| M2M                                   | Smart buildings        | €187bn                    | Energy saved by improved building design   | Global                 | by 2020       | The Climate Group (2008)         |
|                                       | Smart Grids            | €61bn                     | Electricity saved by reduction in transmission and distribution losses   | Global                 | by 2020       | The Climate Group (2008)         |
|                                       | Smart motor system     | €54bn                     | Electricity saved due to optimised motors and industrial automatisation  | Global                 | by 2020       | The Climate Group (2008)         |
|                                       | Smart logistics        | €33bn                     | Fuel, electricity and heating energy saved due to optimisation of logistics networks   | EU-27                  | by 2020       | The Climate Group (2008)         |
|                                       | Personal location data | US\$700bn                 | Cumulative value to consumers and business end users due to, for instance, fuel and time saved                                   | Global                 | 2011-2020     | Mckinsey Global Institute (2011) |
| Data-driven organisational technology | General                | US\$452.5bn (4.3% of GDP) | Cumulative cost savings due to deployment of Internet business solutions   | US                     | 2001-2011     | Varian <i>et al</i> (2002)       |
|                                       | General                | US\$81.9bn (1.1% of GDP)  | Cumulative cost savings due to deployment of Internet business solutions   | UK, France and Germany | 2001-2011     | Varian <i>et al</i> (2002)       |
|                                       | E-government           | 0.5% of GDP               | Annual public sector productivity growth   | EU OECD economies      |               | Mckinsey Global Institute (2011) |



# El resultado: La PPP FoI



- La respuesta europea para lograr una plataforma de servicios
- Promover la aplicabilidad de internet a los negocios
- Soluciones abiertas, basadas en los conceptos de Open SW
- Patrocinada por las grandes empresas, realizando pruebas a gran escala con usuarios y con participación de las PYMES



# Un programa con impacto

## FACTS:

**2x € 300 million**

INVESTMENT BY THE EUROPEAN COMMISSION &  
PROGRAMME PARTICIPANTS

**158**

PARTNER  
ORGANIZATIONS  
AND COMPANIES

**68%**

INDUSTRY SHARE  
IN THE PROGRAMME

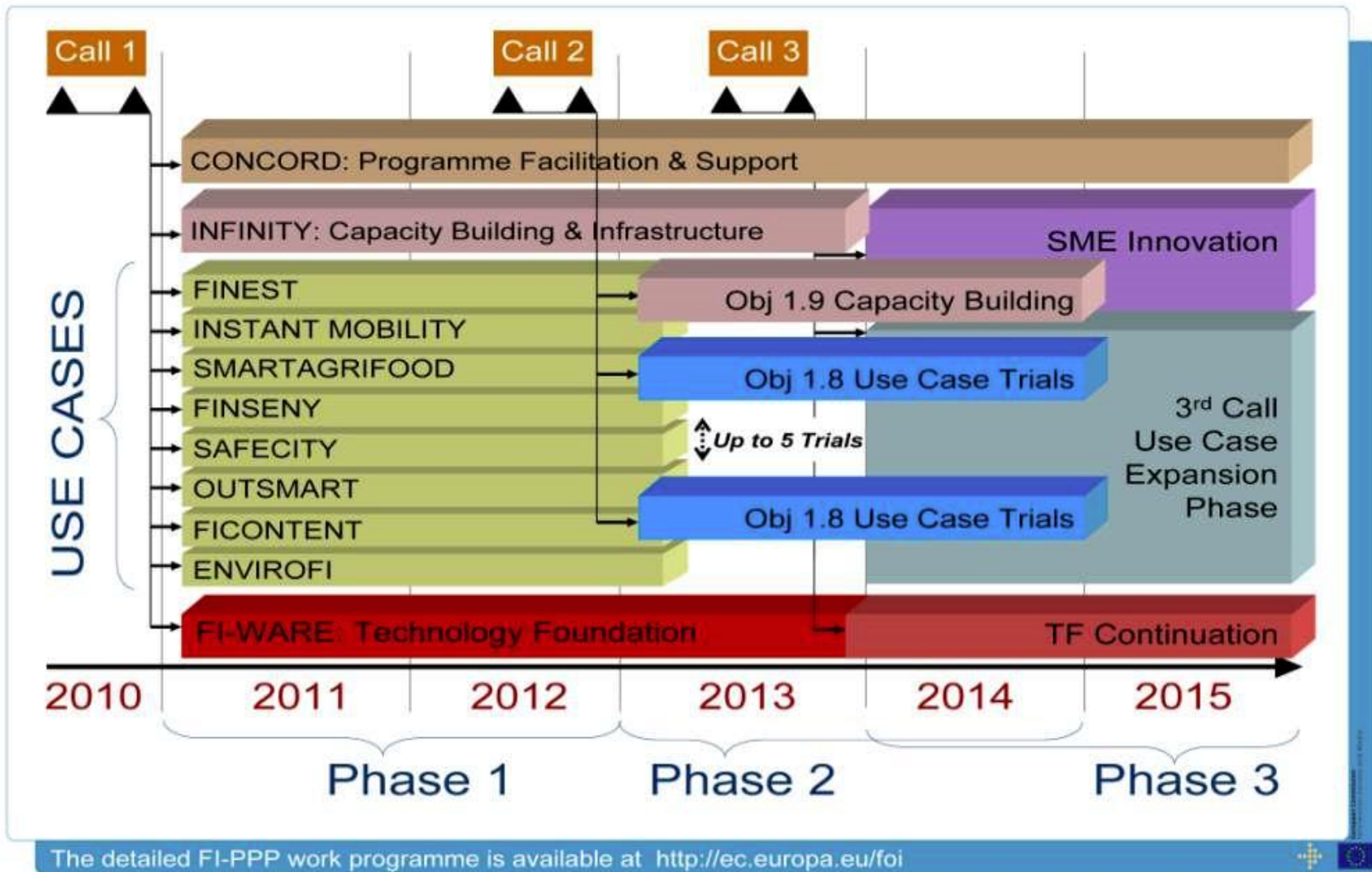
**18**

ACADEMIC  
INSTITUTIONS

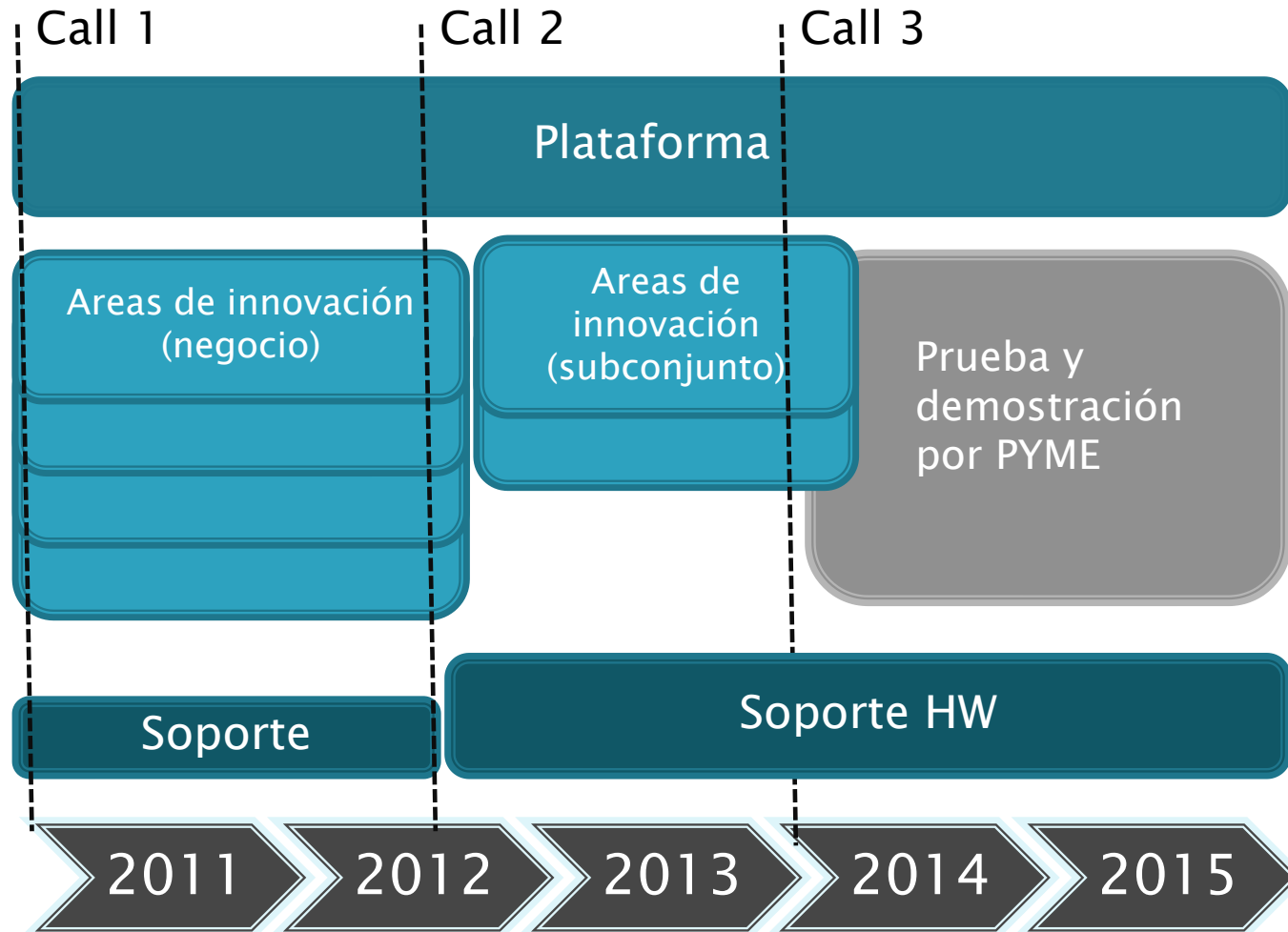
**23**

COUNTRIES REPRESENTED  
(2 FROM OUTSIDE EUROPE)

# Las fases de la PPP



# Las fases de la PPP



# La primera fase

ENVIROFI



fi-ware



Mercado y módulos  
específicos



Plataforma

# La segunda fase.



Logos included in the box:

- FINESCE
- fi\*star
- Flspace Business Collaboration
- FI content
- FITMAN

Central logo: **fi-ware**

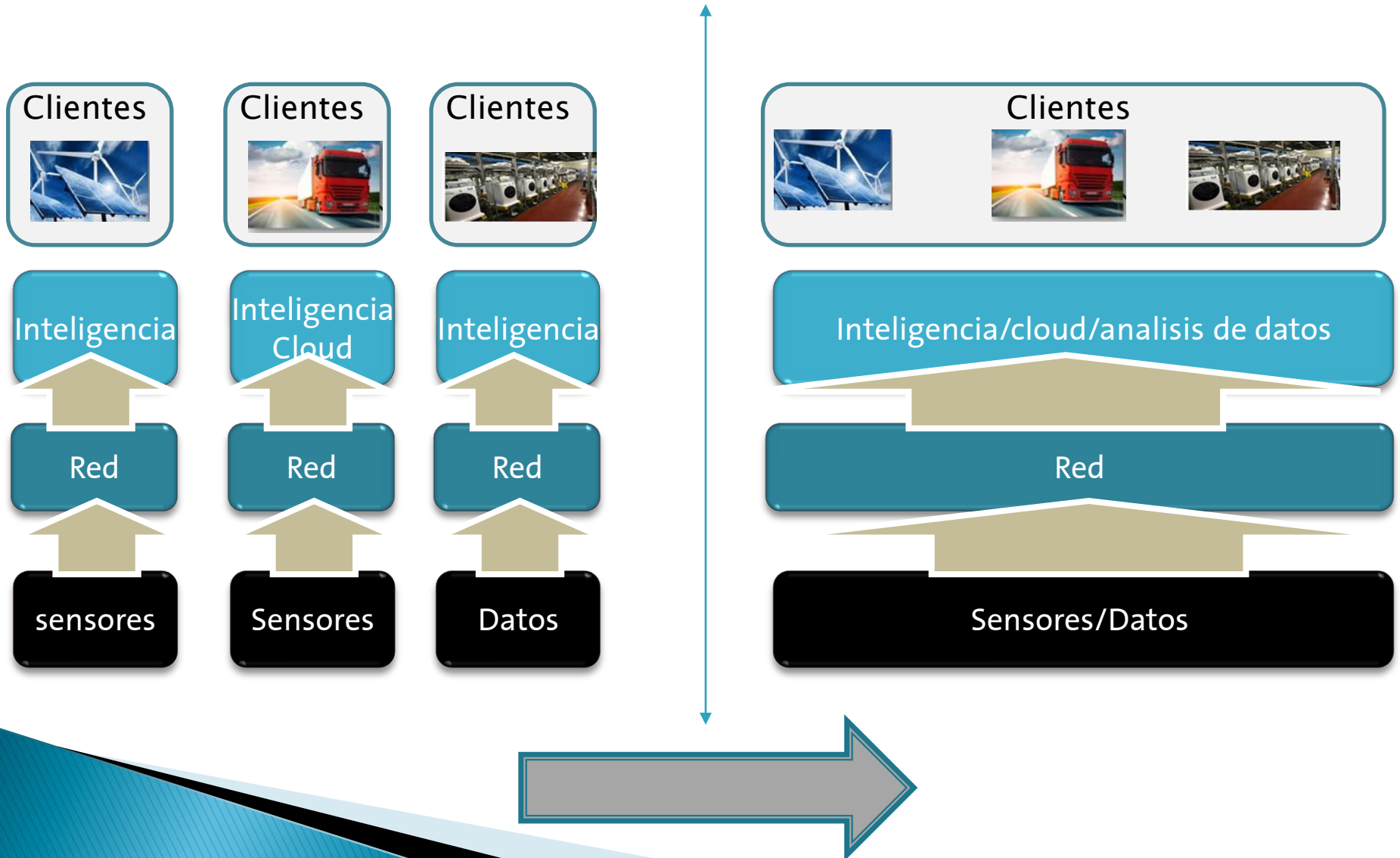


# La plataforma FI-WAT



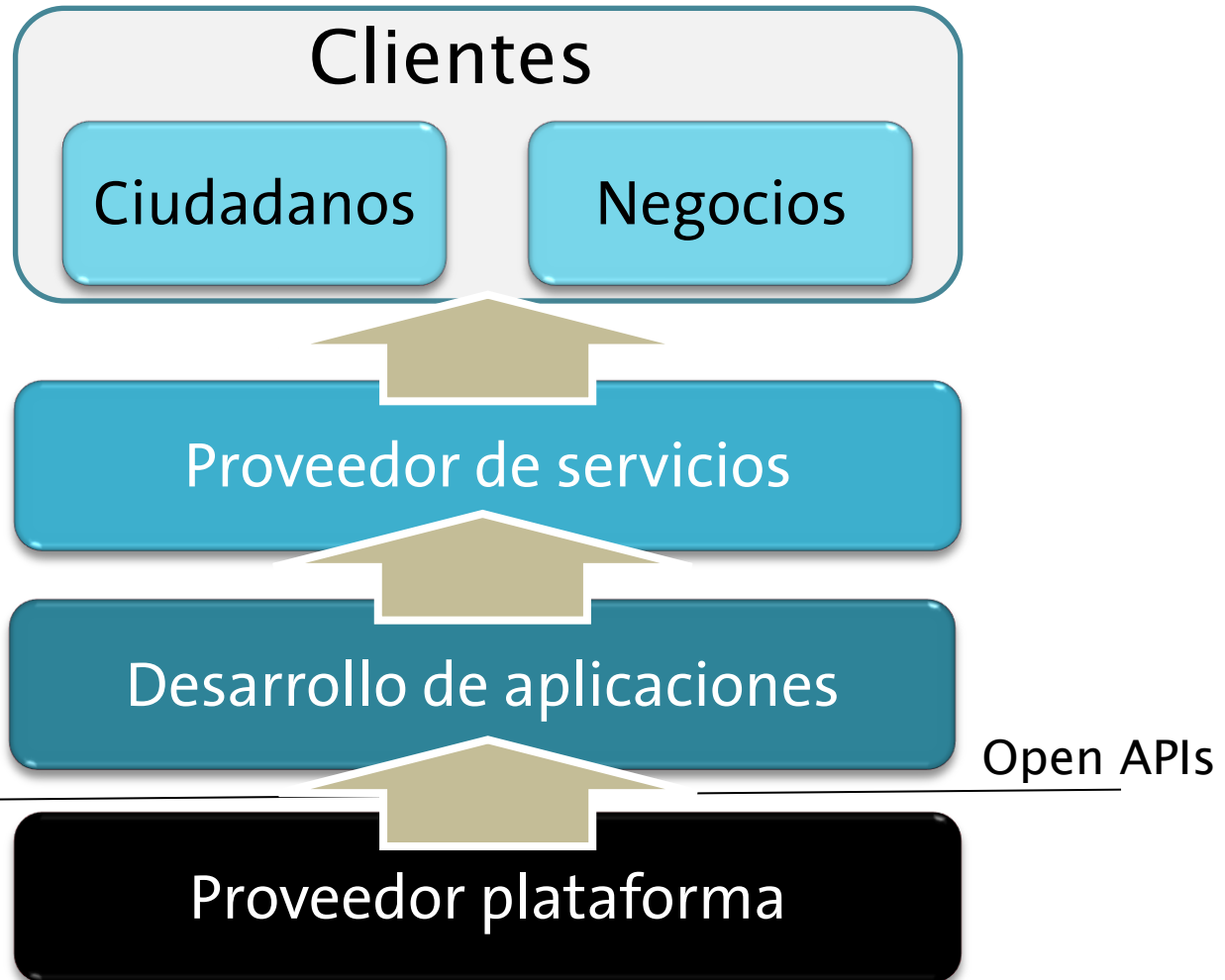


# La plataforma horizontal





# Arquitectura abierta



# Con una estructura modular

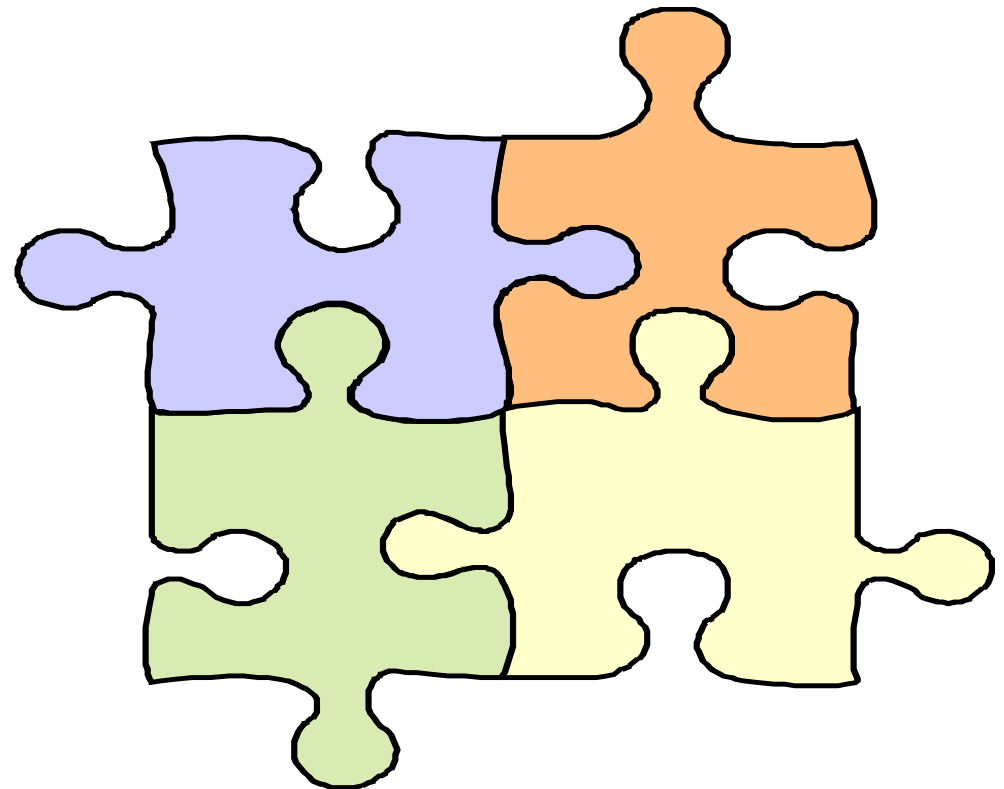
Cada elemento de la plataforma (FI-WARE) da lugar a unos "Generic Enablers"

Las especificaciones son abiertas y Royalty Free

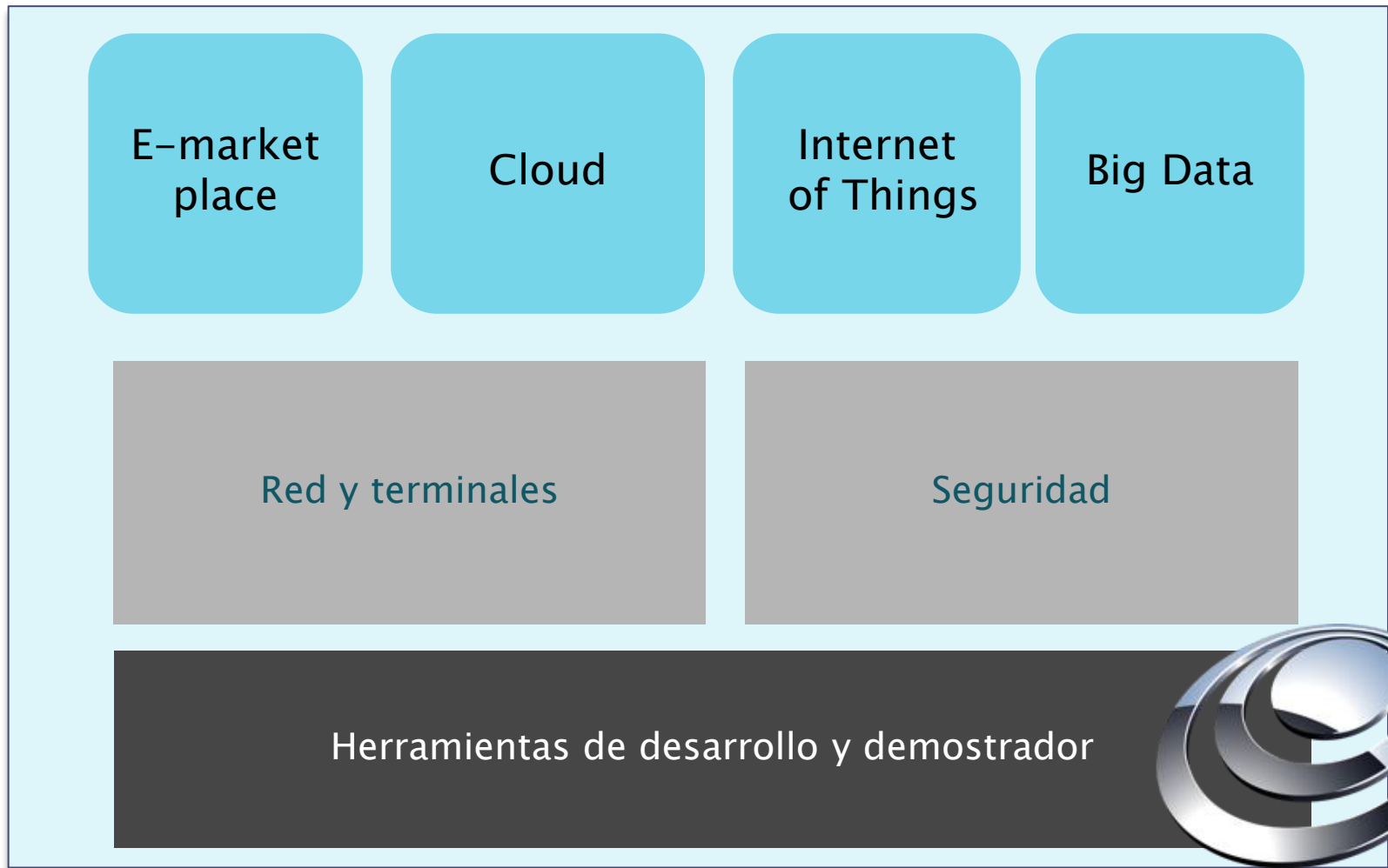


fi-ware

Puede haber multiples implementaciones



# Los elementos de la plataforma (FI-WARE)








fi-ware

# Diferente de lo existente



fi-ware



|   |  |
|---|--|
|    | <b>Sistema abierto.<br/>Mercado mas amplio</b>           |
|    | Soporte de los operadores de red.<br>Mas elementos cloud |
|    | Soporte red.<br>Servicios de IoT                         |
|   | Capacidad de procesado<br>Soporte de red                 |
|  | Soporte de red<br>Servicios de IoT                       |

# E-Market place



fi-ware



Herramientas de provisión  
composición y despliegue de  
servicios

Service Composition and mash up

Business modeler

Marketplace  
(payment, charging,...)

Registry and repository

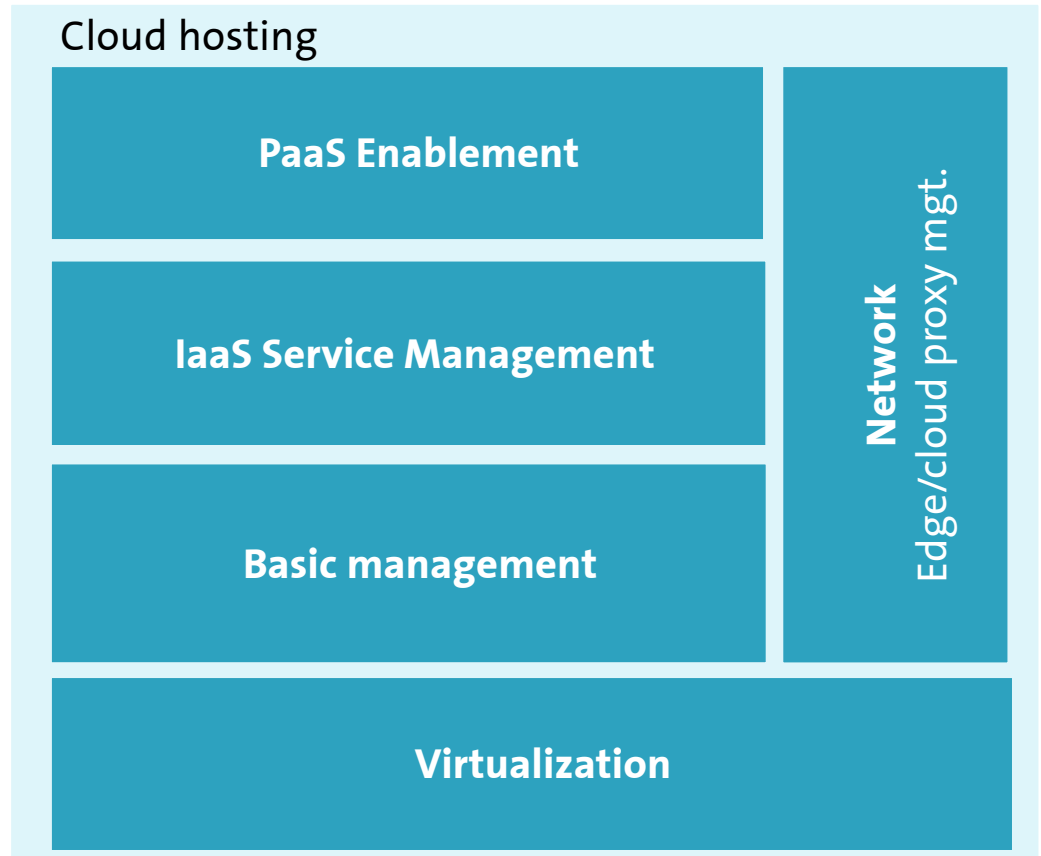
# Cloud Hosting



fi-ware



Recursos de red y almacenamiento virtual



# Internet of Things



fi-ware



Herramientas para el manejo de sensores y actuadores

IoT process automation

IoT resource management

IoT Data handling

IoT Communications



# Data and context management



fi-ware



Herramientas de Big Data y análisis

Context management

High level intelligent  
Services

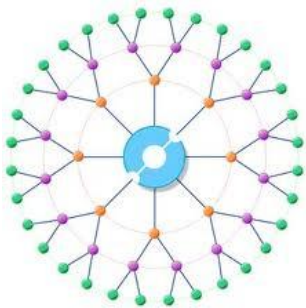
Event management  
Analysis infrastructure

Data Storage and core services

# Interface to the network and devices



fi-ware



Acceso a la red y a los terminales

I2ND

Interface to connected devices

Interface to  
Network services

Interface to open  
networking entities

Interface to Cloud proxies

# Security privacy and Trust



fi-ware

Módulos de seguridad.  
Security by design



Security privacy and trust

Context based  
and compliance

Optional security  
services

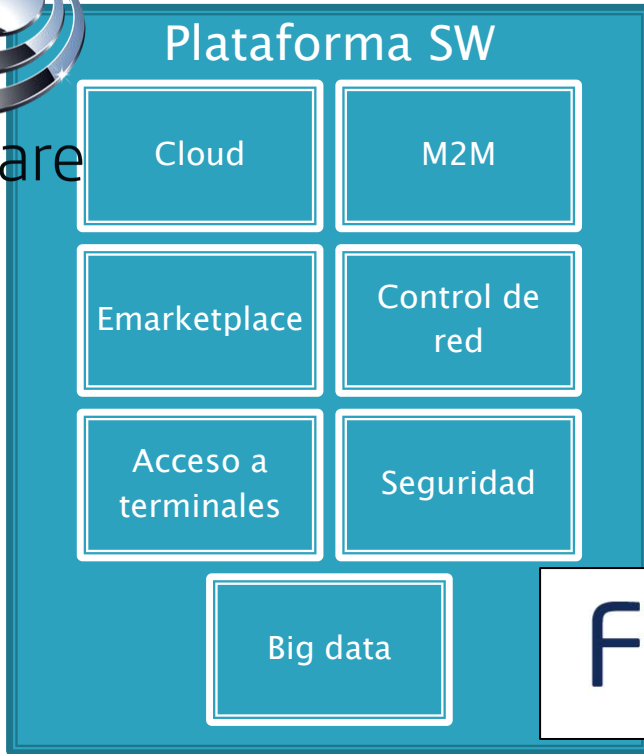
Generic Security  
Enablers

Security monitoring

# ¿Que tenemos?



fi-ware

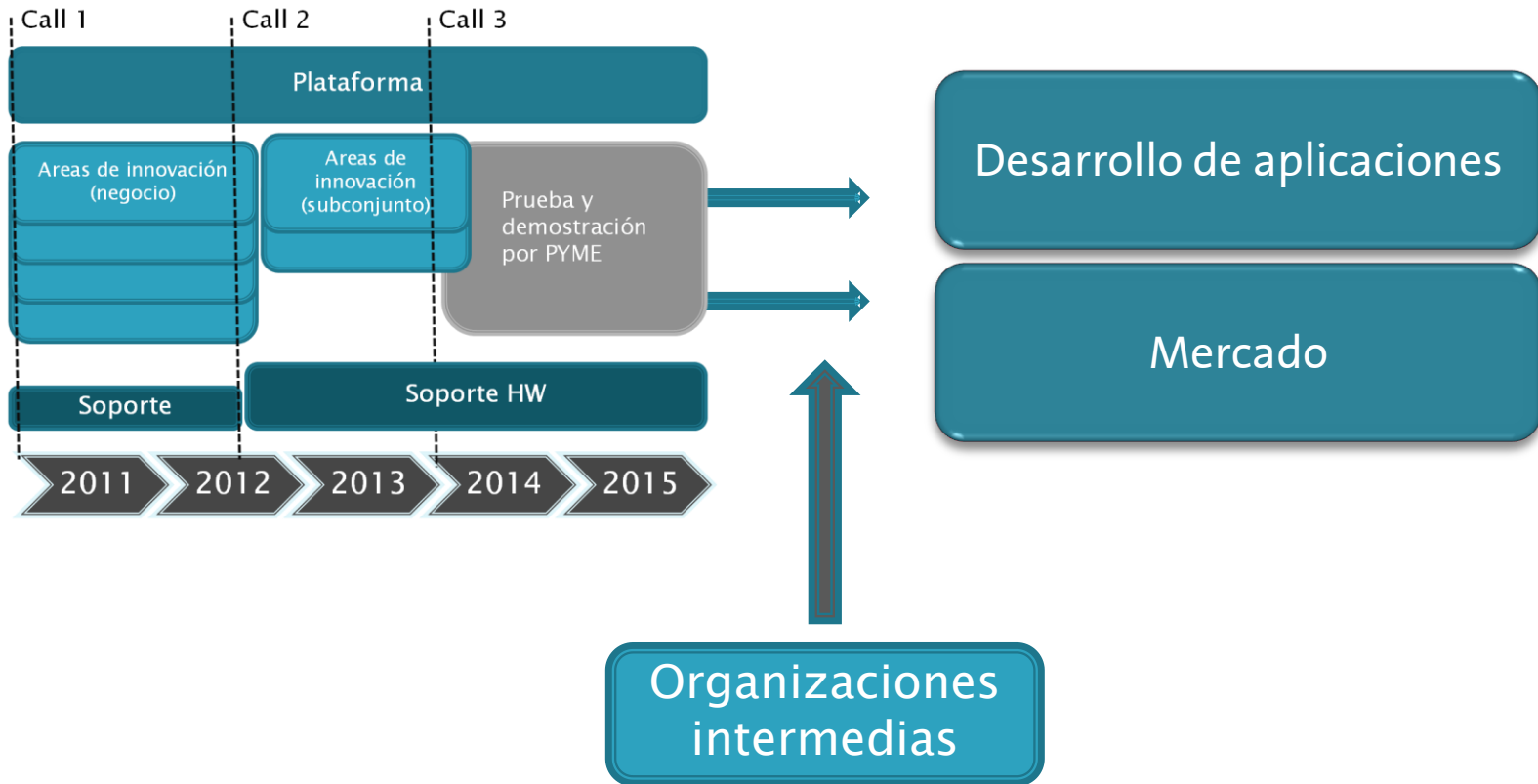


FI-Lab

Accesibles mediante APIs abiertas

Utilizables durante las pruebas

# La fase 3. Una organización distinta



# Documentos y más información

- ▶ [http://bookshop.europa.eu/is-bin/INTERSHOP.enfinity/WFS/EU-Bookshop-Site/fr\\_FR/-/EUR/ViewPublication-Start?PublicationKey=KK3113538](http://bookshop.europa.eu/is-bin/INTERSHOP.enfinity/WFS/EU-Bookshop-Site/fr_FR/-/EUR/ViewPublication-Start?PublicationKey=KK3113538)
- ▶ <http://www.bruegel.org/publications/publication-detail/publication/745-new-ict-sectors-platforms-for-european-growth/>
- ▶ <http://www.fi-ppp.eu/>
- ▶ <https://ec.europa.eu/digital-agenda/future-internet-public-private-partnership>
- ▶ <http://www.fi-ware.eu/>
- ▶ <https://fi-xifi.eu/home.html>
- ▶ EU participants portal