

Smart Food and Agribusiness: Future Internet for Safe and Healthy Food from Farm to Fork



*Transparency in the Food Chain
Stakeholder Event of the European project Transparent_Food
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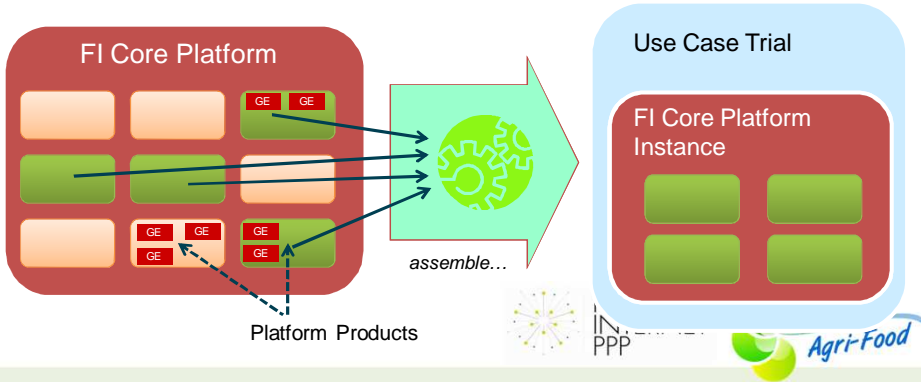
Call: FP7-2011-ICT-FI
Proposal Number: 285 326
Proposal Acronym: SmartAgriFood
DG Information Society and Media

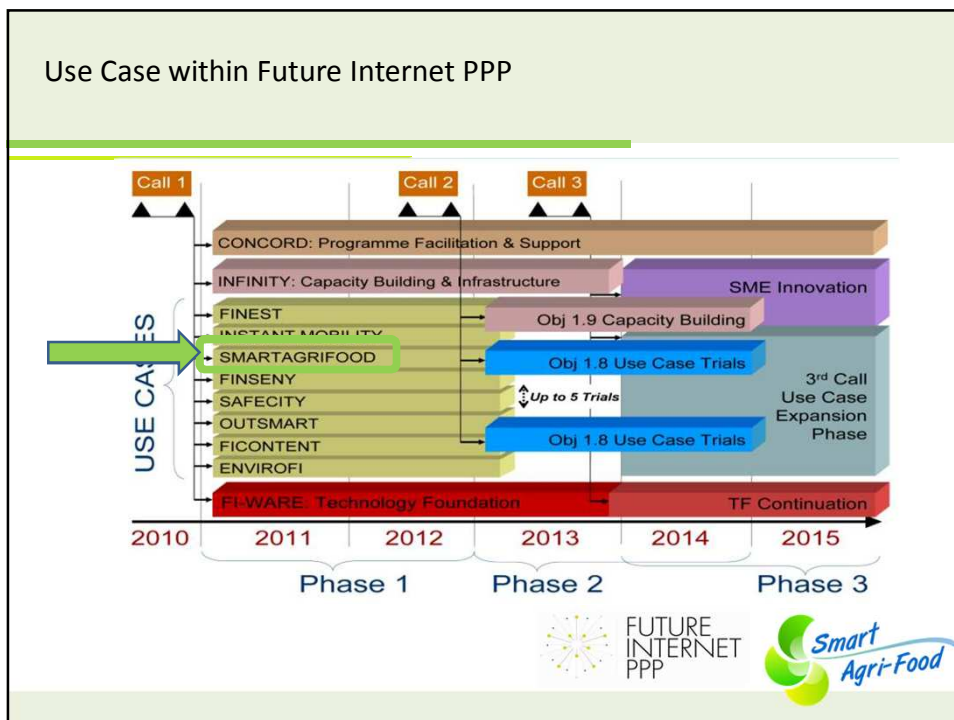



FI-PPP programme approach



- Industry-led
- Creating internet innovation
- User-driven
- Integrated programme notion
- Overall FI-PPP budget: – 300 Million Euro EC contribution





Introduction

AGRI-FOOD DOMAIN

- 40% of the EU's land area being farmed (Eurostat 2010)
- Agriculture has a very important impact on the natural environment
- The food and drink industry is representing 13% of EU manufacturing sector turnover (CIAA 2010, data 2007)
- The EU is the world's largest food and drink exporter with a share of EU exports to world markets of 17.5% in 2008 (CIAA 2010)
- Share of agri-food logistics in the EU road transport is about 20% (Eurostat/TLN 2008, data 2007)
- 11% share of agriculture-related products in total export value of EU countries in 2009 (Eurostat Comext trade data / Eurostat)

CHALLENGES TO BE MET

- Increase of world population
- To reduce the effects of climate change
- Growing welfare in emerging economies
- Shift towards a bio-based economy
- Competing claims on land, fresh water and labour
- Etc.

The SMARTAGRIFOOD project aims to:

- Boost the application and use of future internet ICTs in Agri-Food
- Increase the competitiveness and sustainability of Agri-Food
- Affect a huge number of Agri-Food SMEs throughout Europe

Agri-Food-specific characteristics and needs

	Generic	Specific
<ul style="list-style-type: none"> Natural conditions (e.g. soil, weather, pests) Seasonal growing Natural products: growth, decay, high quality variations High demands from consumers and society (legislation, certification, food safety) High volume distribution Governance: large processors, many SME's in global chains Dynamic open Supply Chain networks (SCN) 	augmented reality, geo-information, wireless sensors and networks, mobile	precision farming, product storing and conservation
	(real time) data handling, context-sensitive eContent, web mash-ups	on-line business intelligence, integrate scientific knowledge ('active publishing')
	eBusiness, eGovernment eHealth	crop production message, flower web shops, veterinary issues, animal health/welfare
	social/semantic web, (ERP) cloud software (BPM, SOA, Saas)	knowledge networking (at distance), chain info-integration, dynamic planning, tracking & tracing, transparency

Objectives Smart Agri-Food

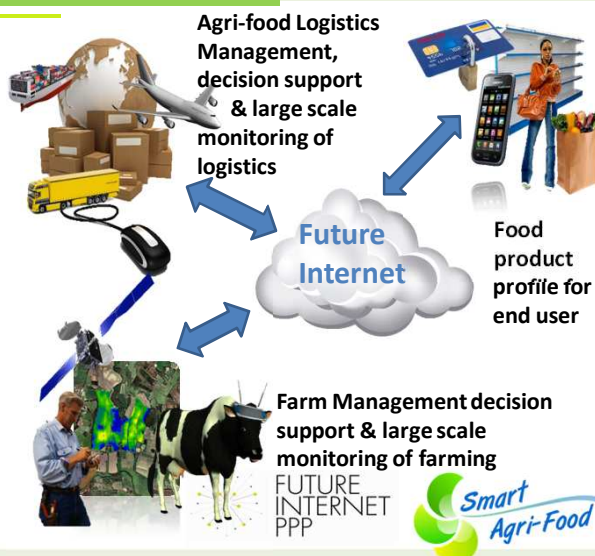
To boost the application and use of future internet ICTs in the agri-food sector by:

- identifying and describing the technical, functional and non-functional **FI-specifications** for experimentation in smart agri-food production as a whole system and in particular for smart farming, smart agri-logistics and smart food awareness
- identifying and developing smart agri-food-specific **capabilities and conceptual prototypes**, demonstrating critical technological solutions including the feasibility to further develop them in large scale experimentation and validation
- identifying and describing existing **experimentation structures** and start **user community building**, resulting in an implementation plan for the next phase

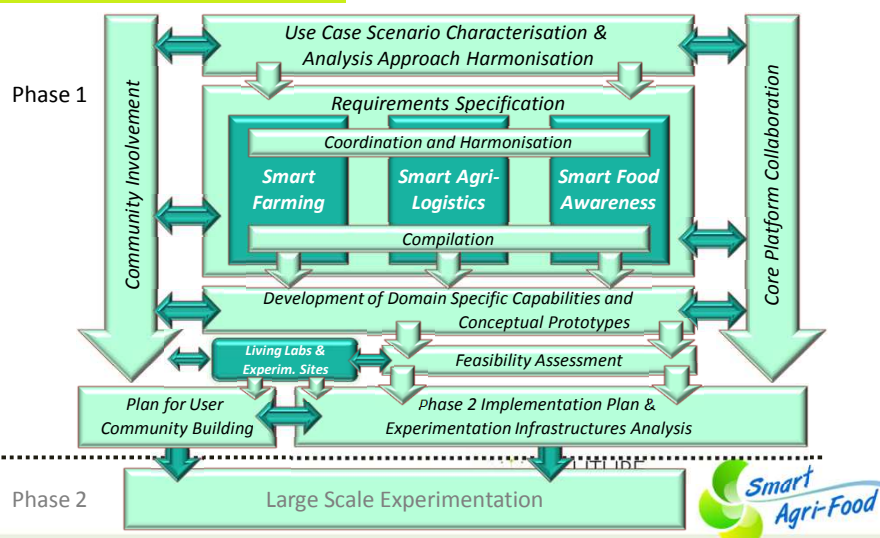


3 Use Case Scenario's: from farm to fork

- A. Smart Farming
- B. Smart Agri-Logistics
- C. Smart Food Awareness



Methodology

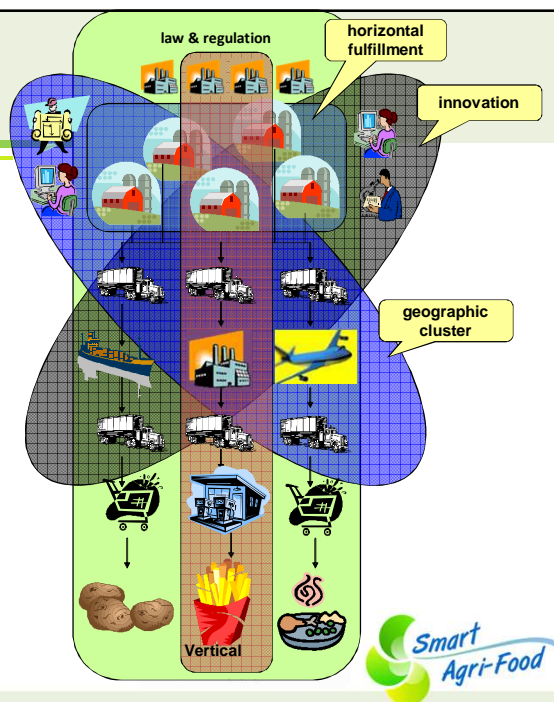


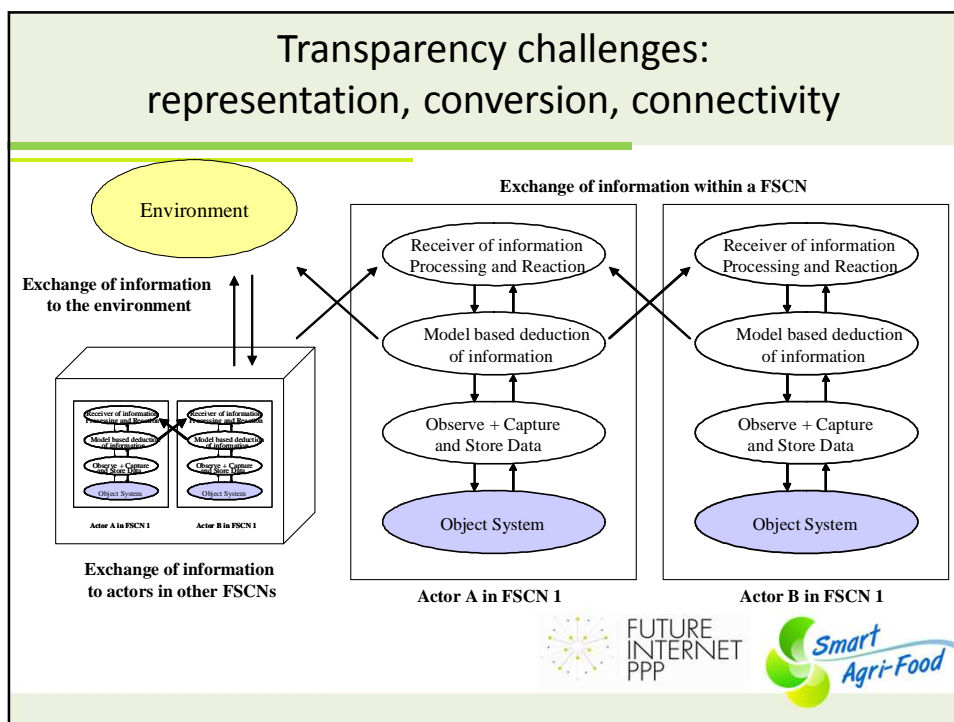
Consortium	Research		Industry/end-users	
	Agri-food	ICT	Agri-food	ICT
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- 21 beneficiaries from 7 countries
- Balanced consortium
- Connected to
 - ETP Food for Life by CBHU
 - ETP Manufature, subgroup Agricultural Engineering and Technology (AET) by John Deere
 - ETP EpoSS by VTT
 - ICT-agri ERANET by TNO/Wageningen University
 - Network of EHI retail institute
 - Local industry platforms
 - Local governments
 - Euro Pool System

Role of transparency

- multi-dimensional Agri-Food Supply Chain Networks (AFSCN)
- ICT plays a crucial role for each actor in network perspective
- Transparency is a key issue
 - Management & control
 - Coordination
 - Compliance
 - Accountability





Transparency dilemma's

- Property of information
- Liabilities, including IP
- Access rights
- Usage rights
- Unintended use



**Smart
Agri-Food**

**Thank you!
Questions? Discussion...**



FUTURE
INTERNET
PPP



SEVENTH FRAMEWORK
PROGRAMME
