Smart Agri-Food Logistics
Smart AgriMatics International Conference, 14 June 2012, Paris

Smart AgriMatics
2012
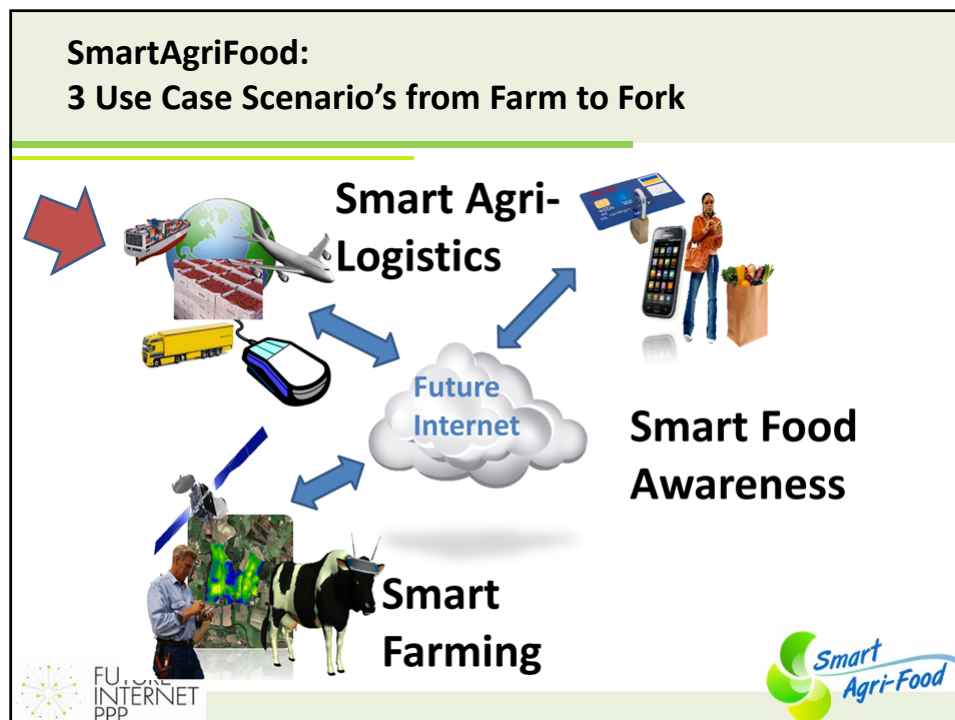INTERNATIONAL
CONFERENCE

Smart Agri-Food

Smart Logistics in the Food and Agribusiness

Smart Agrimatics Conference
Paris, 13 and 14 June 2012

Cor Verdouw (LEI, part of Wageningen UR)
Work Package Leader
WP300 Smart Agri-Food Logistics
SmartAgriFood

FUTURE INTERNET PPP

SEVENTH FRAMEWORK PROGRAMME

SmartAgriFood:
3 Use Case Scenario's from Farm to Fork

Smart Agri-Logistics

Smart Food Awareness

Future Internet

Smart Farming

FUTURE INTERNET PPP

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Logistics in the food and agri-business

Agri-Food: ± **20%** share in the EU road transport
(Eurostat/TLN 2008)

- Demanding sector-specific challenges, including:
  - High supply uncertainty due to natural production
  - High perishability
  - Seasonable growing, global sourcing
  - High demands on food safety, quality and legislation
  - High tracking and tracing and planning complexities
  - Additional phytosanitary and veterinary inspections
  - Many SMEs
- Current ICT solutions not sufficiently meet these demands
  - Poor level of integration
  - Limited flexibility
  - Intelligent use of data lags behind

FUTURE INTERNET PPP
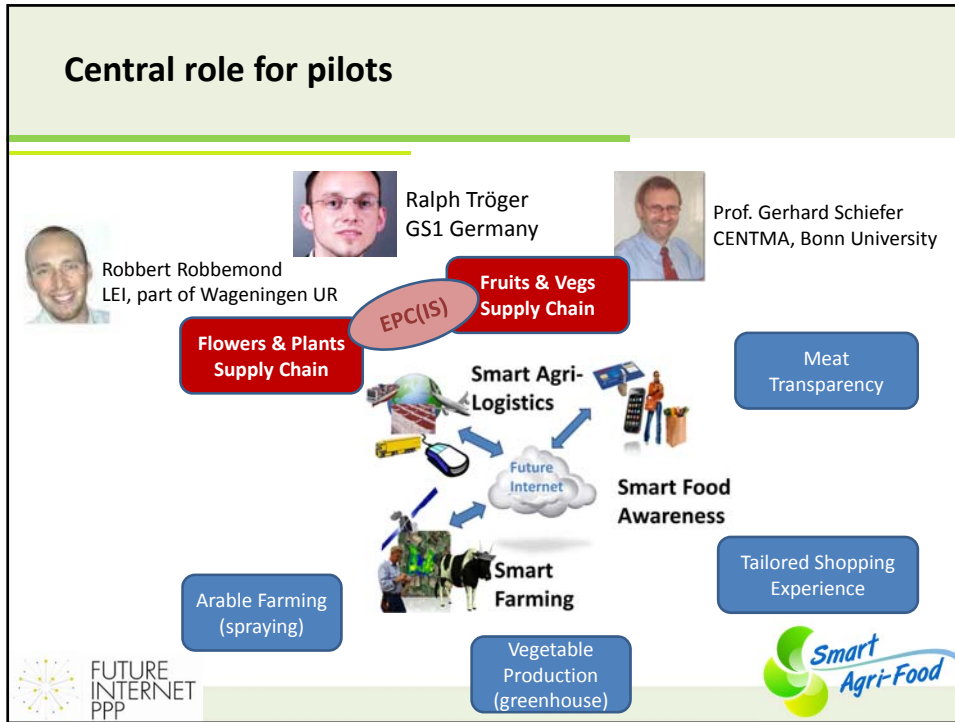
Smart Agri-Food

Smart Agri-Food Logistics

Central Research Question:

How can the Future Internet help to accomplish the specific demands of agri-food logistics?

More specific objective:

to define the requirements on the Future Internet (FI) technologies of the food and agribusiness domain

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Central role for pilots

Ralph Tröger
GS1 Germany

Prof. Gerhard Schiefer
CENTMA, Bonn University

Robbert Robbemond
LEI, part of Wageningen UR

Fruits & Vegs
Supply Chain

EPC(IS)

Flowers & Plants
Supply Chain

Meat
Transparency

Smart Agri-
Logistics

Future
Internet

Smart Food
Awareness

Smart
Farming

Arable Farming
(spraying)

Tailored Shopping
Experience

Vegetable
Production
(greenhouse)

Stay in touch with Smart Agri-Food!

www.smartagrifood.eu

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The next slides are background information and not used in the presention

FUTURE
INTERNET
PPP

SEVENTH FRAMEWORK
PROGRAMME

Evolution of the Internet

Internet of Computers

Internet of People / Content

Internet of Services

Internet of Things

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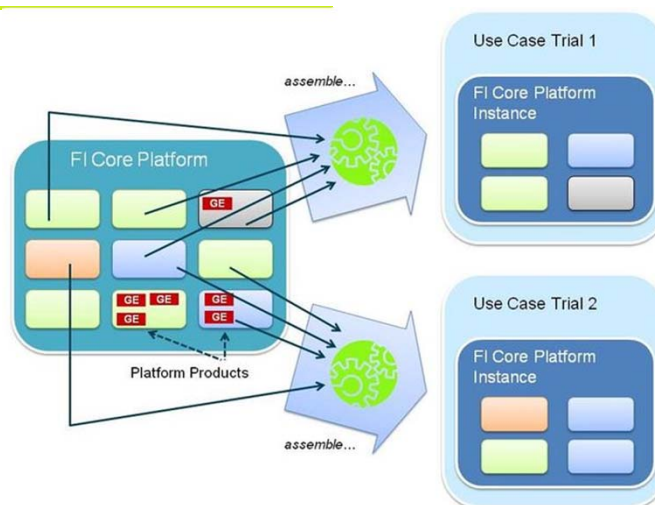**2012**
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5

Future Internet

- Aims to overcome limitations of the current internet, including:
  - Limited capacity concerning processing power / storage / bandwidth
  - Insufficient data integrity, reliability and trust
  - Lack of data integration and federated storage solutions
  - Lack of flexibility and adaptive control
- "Developing the Future Internet" to combine several trends in internet development into an integrated approach
  - the on-going industrialization of IT
    - cloud computing
    - open service delivery platforms
  - new wireless networking technologies and the deployment of fibre
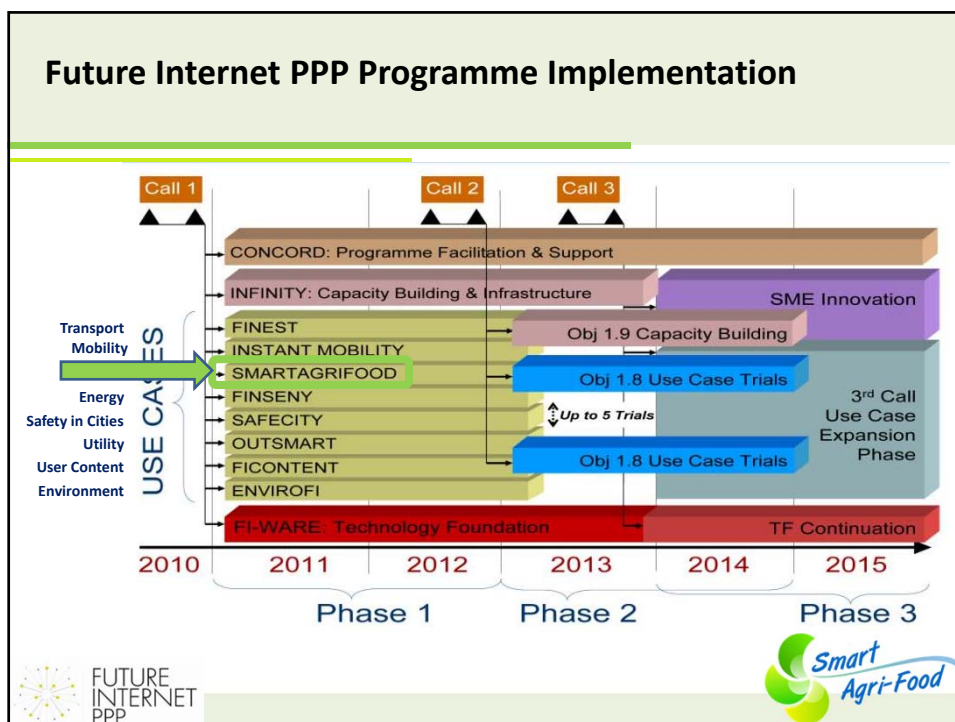 - the breakthrough of the Internet of Things

FUTURE INTERNET PPP

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Future Internet PPP Vision:
Core Technology Platform and Use Case Trials

Source: FIWARE

10

FUTURE INTERNET PPP

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Future Internet PPP Programme Implementation

Objectives of the SmartAgriFood project

Boost the application & 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 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.

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Consortium

- **21** beneficiaries from **7** countries
- Balanced consortium
- Connected to
  - European Technology Platforms
  - Future Internet Assembly
  - European Research Cluster on the Internet of Things
  - ICT-agri ERANET
  - Other EU projects including agriXchange, Cuteloop , TransparantFood, RATIS
  - Industry/ Government

FUTURE INTERNET PPP

	Research		Industry/ end-users	
	Agri-food	ICT	Agri-food	ICT
DLO-WUR	++	+		
ATB	+	++		
TNO	+	++		
CENTMA	++	+		
ATOS				++
ASI				++
HWDU				++
MTT	++	+		
KTBL	++	+		
NKUA		++		
UPM		++		
Campden BHU			++	
Aston Uni.		++		
VTT	+	++		
OPEKEPE			++	
John Deere			++	+
Wageningen Uni.	++	+		
EHI Retail			++	
GS1			++	+
SGS			++	+
BonPreu			++	