



Coordination and support of setting up  
a network for developing a system for  
common data exchange in the  
agricultural sector

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GeoFARMatics conference  
Cologne, 24 Nov 2010



# Project background (1)

- Knowledge-based bio-economy:
  - information sharing is important
  - ICT plays an enabling key role
- Information sharing in agri-food is complex because:
  - many aspects and dimensions
  - existing installed base of information systems
  - lack of standardization
    - ➔ inefficient exchange of information
    - ➔ inefficient business processes
    - ➔ hampers adoption of new knowledge and technology



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# Project background (2)

- Standardization of data exchange is fragmented, while the need is still growing → new technologies: precision agriculture, radio frequency identification, use of spatial data, mobile solutions, wireless sensors, etc.
- Exchange of information at whole chain or network level is poorly organized.
- Similar problems for all sectors (arable, horticulture, livestock, etc.)



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# Problem statement

- increasing, complex requirements for handling of data that are part of various processes
- how to deal with existing installed base of information systems?
- how to integrate these systems smoothly?
  - need for integrative framework
  - need for coordination network



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# Main objectives and deliverables

- establish a platform on data exchange in agriculture in the EU, consisting of
  - technical infrastructure
  - community of practice
- develop a reference framework for interoperability of data exchange in agriculture
- identify the main challenges for harmonizing data exchange in agriculture in the EU => Strategic Research Agenda



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# Target groups

- directly: information systems/tools developers
- indirectly: farmers, advisors, etc.
- Challenge: get support, commitment and concerted action from various management levels of these target groups



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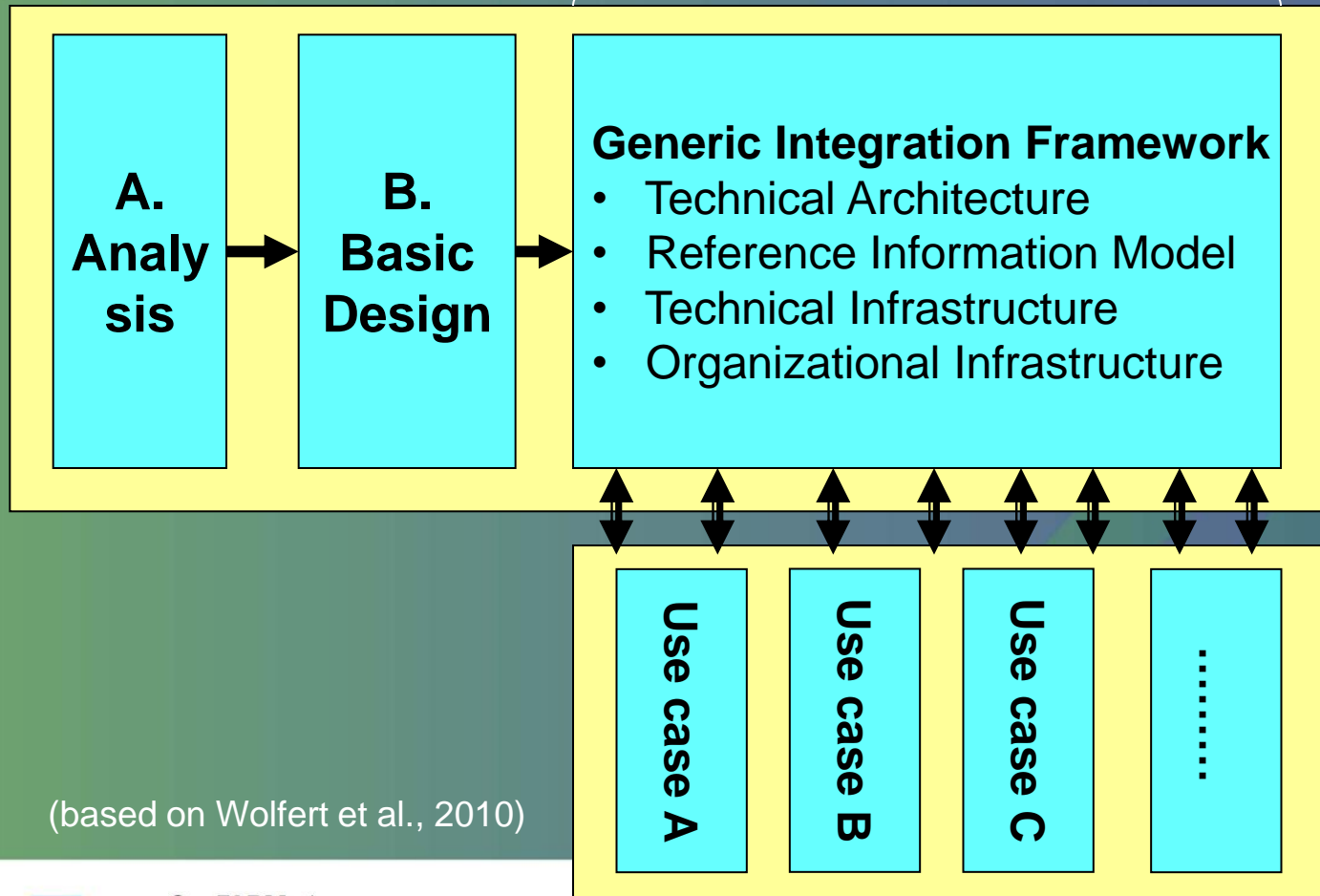




# General development framework

## C. Iterative Implementation

*Overall Development*



*Prototyping*

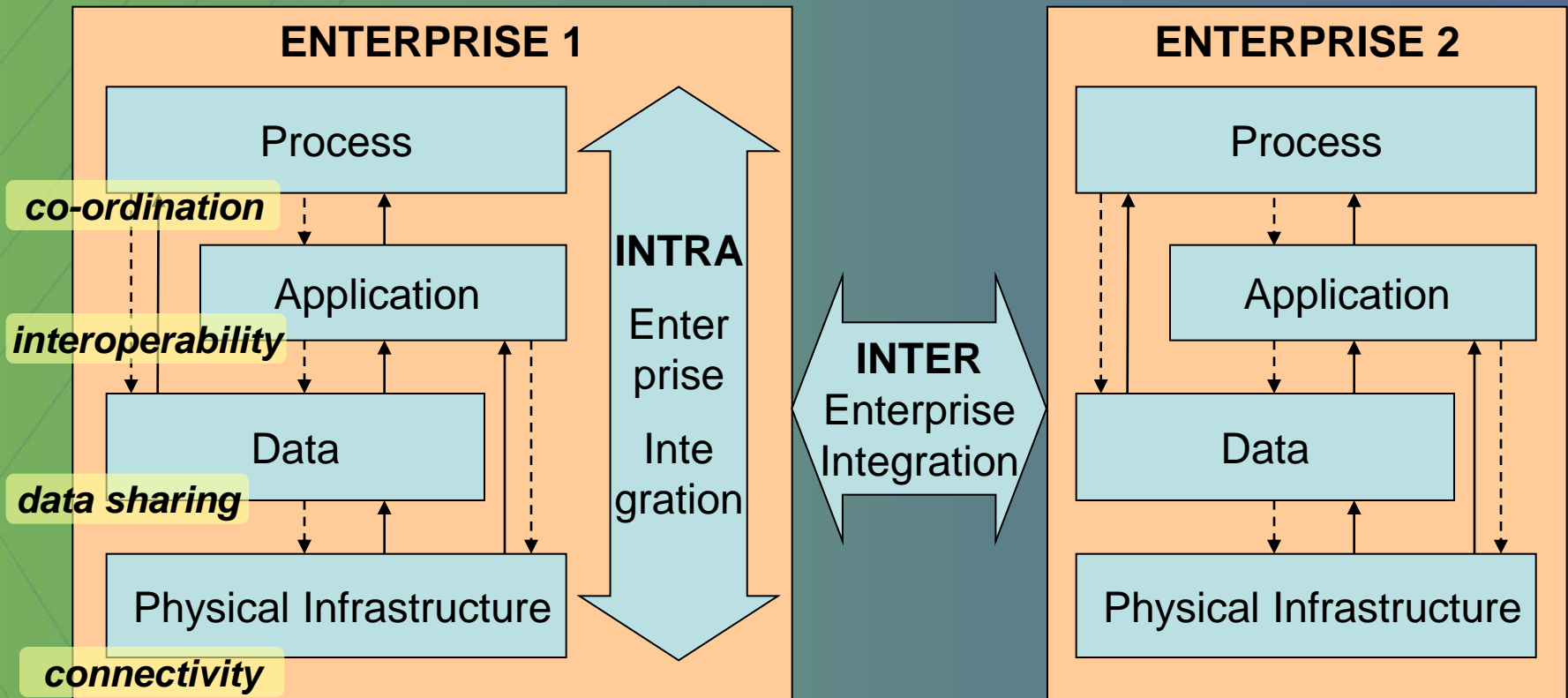
(based on Wolfert et al., 2010)



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# A. Analysis



(adapted from Giachetti 2004)

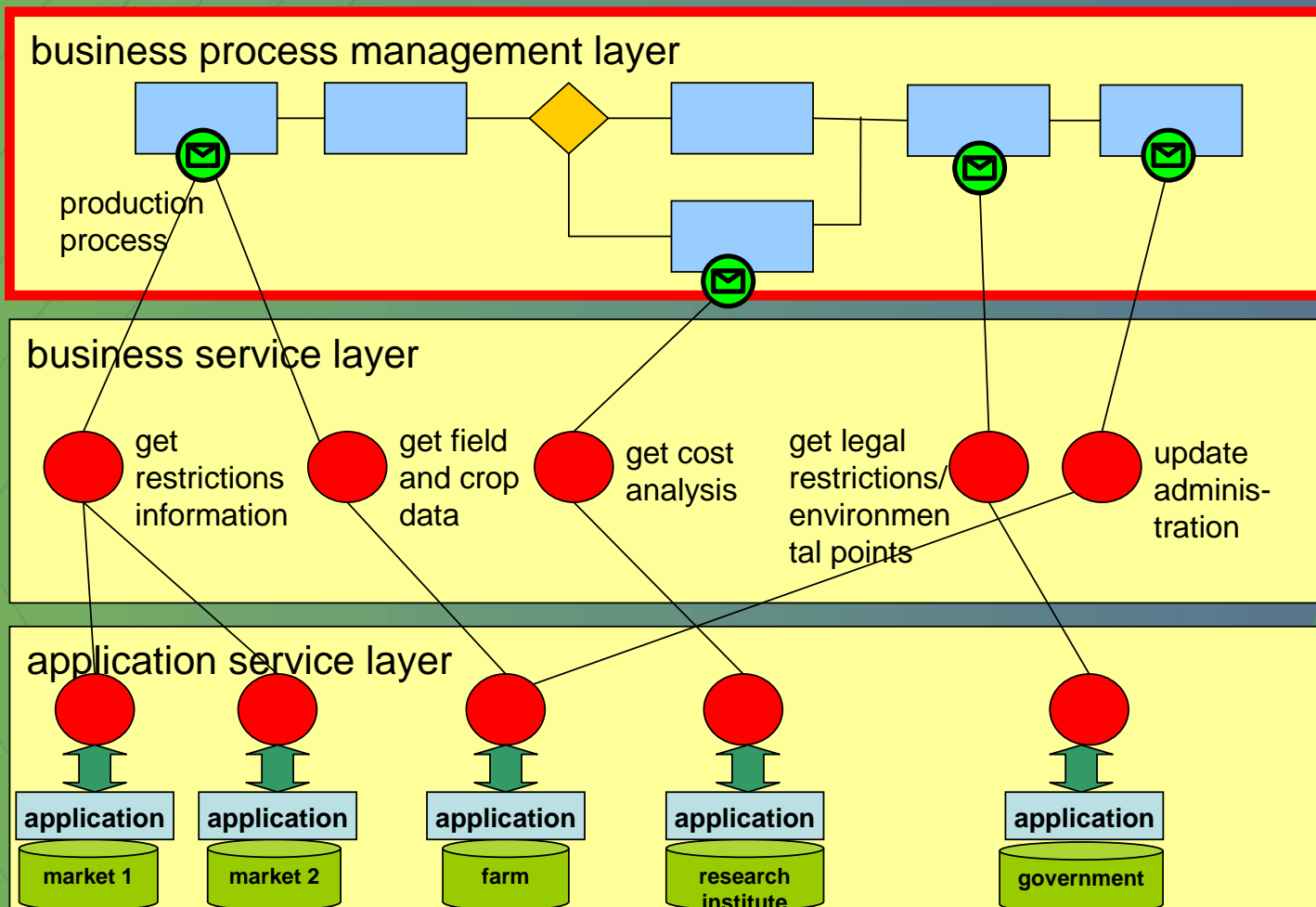


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# B. Basic design



generic (EU) level



Interoperable (cross-country) level



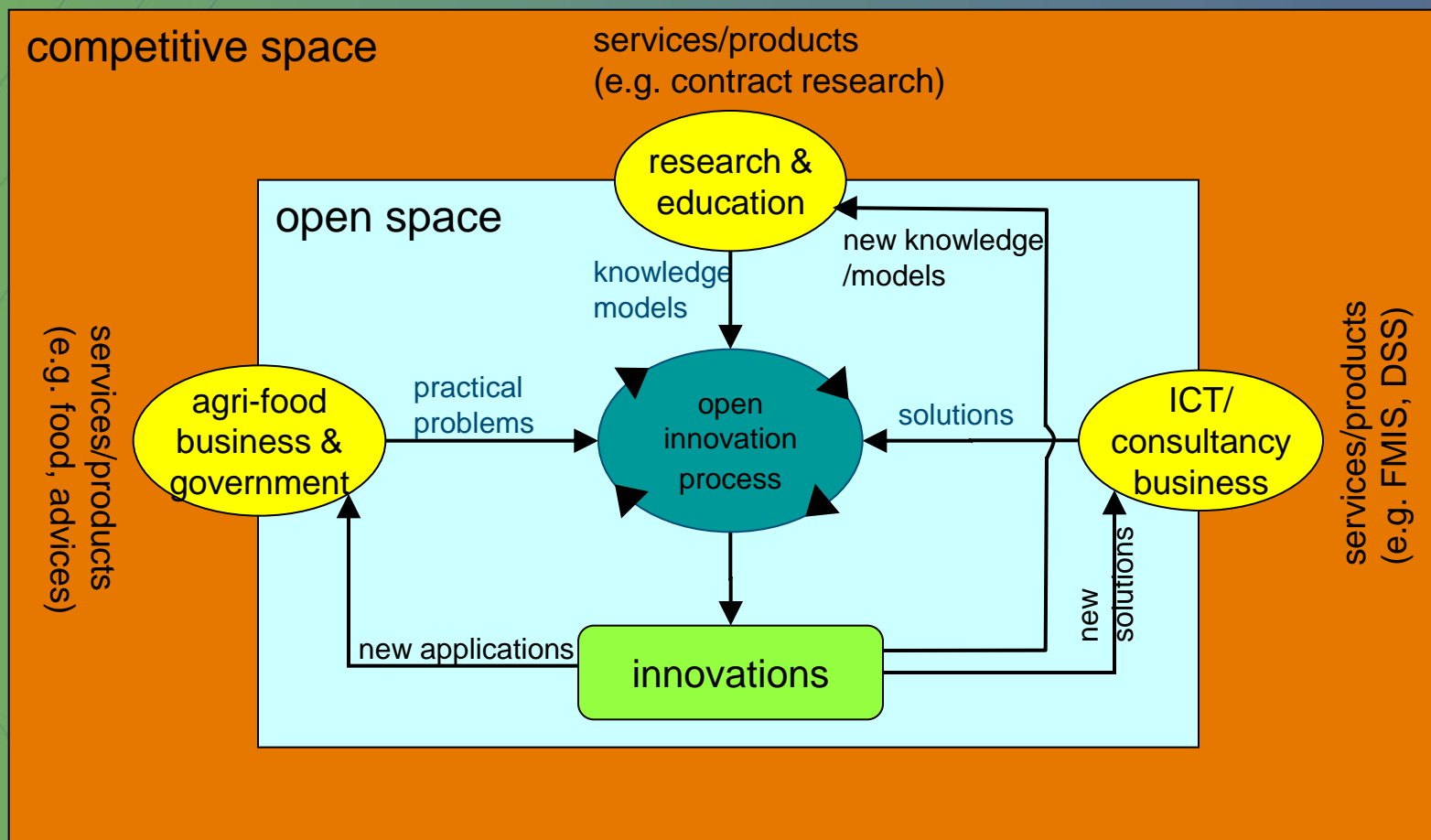
specific (national) level



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# C. Iterative implementation by Living Labs



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# Project details

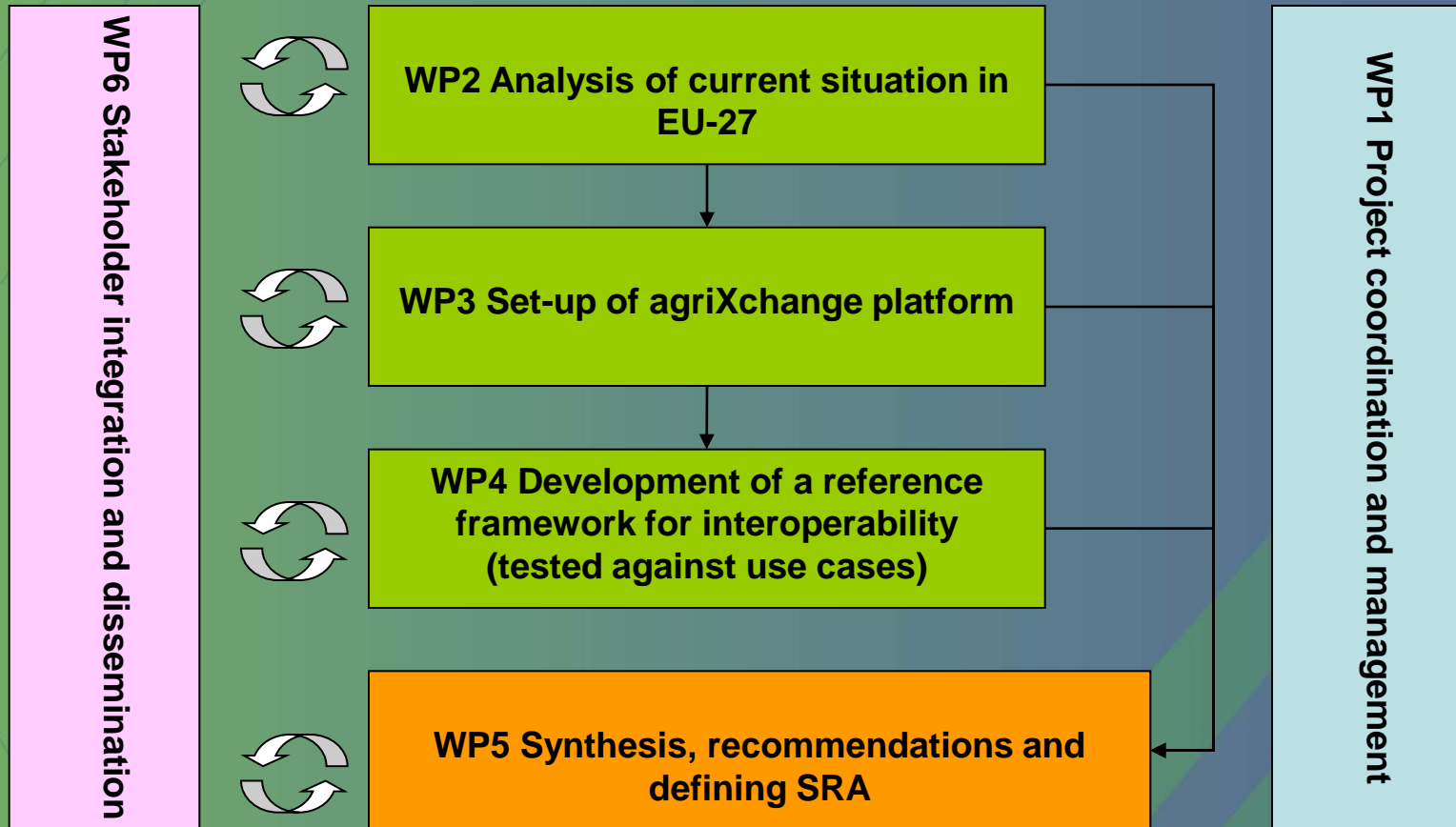
- EU Seventh Framework Program (7FP)
  - Knowledge Based Bio Economy (KBBE)
- Coordination and Support Action (CSA)
  - Total budget: 1.3 M€
  - EC contribution: 1 M€
- Start date: 1 Dec. 2009
- End date: 1 Dec. 2012
- Grant agreement no. 244957



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# Work packages



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# Workshops with stakeholders

- 1st workshop (Nov. 2010 - GeoFARMatics)
  - results from analysis (WP2)
  - WP3/4: preliminary results and plans
- 2nd workshop (Jul. 2011 – Prague conference)
  - final results WP2
  - on-going work in WP3/4
  - get input for planning of WP5
- 3rd workshop (Jun. 2012)
  - present final results (WP5, including others)
  - launch new/continuation activities



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# Project consortium

- Wageningen University & Research Center (LEI, LSR, Alterra) – The Netherlands
- Kuratorium für Technik und Bauwesen in der Landwirtschaft (KTBL) – Germany
- MTT Agrifood Research – Finland
- Wireless Info (WRLS) - Czech Republic
- Institut de l'Elevage (ELEV) – France
- Institut de Recerca i Tecnologia Agroalimentàries (IRTA) – Spain
- Teagasc –Ireland
- Universität Rostock –Germany
- Forschungsinstitut für Biologischen Landbau (FiBL) – Switzerland
- Altavia – Italy
- Poznan University of Life Sciences (PULS) – Poland
- ACTA Informatique – France
- Progis software -Austria

15 partners from 11 countries



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# Steering committee

- Sjaak Wolfert (Wageningen UR) – project coördinator (WP1)
- Henri Holster (LSR) – WP2 leader
- Daniel Martini (KTBL) – WP3 leader
- Liisa Pesonen (MTT) – WP4 leader
- Karel Charvat (WRLS) – WP5 leader
- Guy Waksman (ACTA info) – WP6 leader
- Martin Kunisch (KTBL)
- Erik Rehben (ELEV)



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# Advisory committee (1)

- Hans-Jörg Lutzeyer (DG Research)
- Ansgar Bernardi (iGreen/DFKI)
- Peter Pickel (John Deere/Manufuture)
- Hans-Peter Grothaus (Claas)
- Mark Moore (AGCO)
- Iver Thysen (ICT-agri ERAnet)
- Wim Devos (JRC)
- Johannes Keizer (FAO)
- N.N. (ICAR)
- Stefan Böttinger (Uni Hohenheim)



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# Advisory committee (2)

## Vacancies:

- Standardization bodies (e.g. GS1, UN/Cefact)
- Other EU-DGs (e.g. DG INFISO)
- Farmer's association
- Interbull
- Ag-Software company
- Non-Ag software companies?
- ...



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# agriXchange subconference

- State of the art on data exchange in agriculture in the EU27 and Switzerland
- Reference Framework for Interoperability
- The agriXchange platform for Open Innovation and Collaboration
- Open Space workshop on all work packages using the platform – Living Lab!
- Joint workshop with FutureFarm → Cologne Declaration



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