What is FIspace?

The Future Internet Public Private Partnership (FI-PPP) aims to advance Europe's competitiveness in Future Internet (FI) technologies and to support emerging FI-enhanced applications of public and social relevance. As a use case project in Phase 2 of the FI-PPP, FIspace is leveraging on outcomes of the Phase 1 use case projects “Finest” and ”SmartAgriFood”.

The aim of FIspace is to pioneer towards fundamental changes on how collaborative business networks will work in the future. FIspace will develop a multi-domain Business Collaboration Space (short: FIspace) that employs FI technologies for enabling seamless collaboration in open, cross-organizational business networks.

Future Internet will facilitate:

- ... seamless B2B Collaboration (information exchange, communication, coordination of activities)
- ... rapid & easy development of customized solutions at minimal costs
- ... quick formation & evolution of open business networks

In total, FIspace will establish eight use case trial experimentation sites in Europe. This is where pilot applications for Agri-Food, Transport & Logistics are tested in early trials and also be prepared for industrial uptake (planned for FI-PPP phase 3) by engaging with players & associations from relevant industry sectors and IT industry.

What is the Use Case Trial Crop Protection Information Sharing about?

During the growing season, the potato crop needs to be sprayed frequently with fungicides in order to prevent infection with potato blight. The chances of infection are governed by the weather, combined with the degree of protection left from the last spraying action. Conventional spraying occurs on a regular basis, which is costly and environmentally adverse. More effective, sustainable spraying is possible if both the weather and the last spraying action is taken into account. Modules as part of farm management information systems are available to generate such an advice.

Background & Vision of the CPIS Trial

At present farmers are locked in by their Farm Management Information System. This system determines the advice model to use and the source from which historical and predicted weather is obtained. This makes it impossible to use new developed systems and/or to choose the source for weather data.

To make optimal use of new developments in advisory systems and improved sources of information, requires an environment of independent modules and services, which can be accessed by the end users and fed with their specific information on crop development.

The new generation Farm Management Information Systems provide the possibility to exchange data with the different services and modules. When this is not already implemented, the provider of a service can easily add a module to formulate the specific messages for its service.

How does it work?

The CPIS trial uses an instance of the Business Collaboration Object (BCO), a core of the FIspace platform. The end user, in this case the potato grower, selects on the FIspace platform the applications he wants to cooperate to achieve optimal control of Phytophthora. He chooses an application from a crop protection specialist that will advise him on required spraying actions, selects his farm management Information System for
administrating his activities, weather predictions from a bureau that predicts his location as best and the Task Controller for his tractor and sprayer.

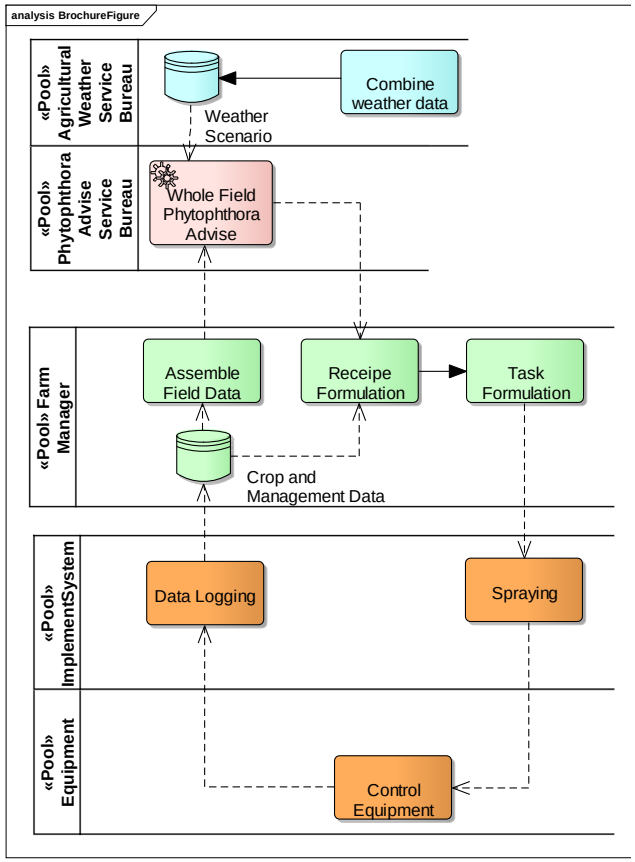
The BCO for crop protection is configured in such that it knows how these type of applications from different business partners cooperate and after which events particular applications must be triggered. Those applications are informed on which location the required data for their process can be collected.

Interfaces for data exchange are defined and based on a common reference data model (drmCrop). Other providers of mentioned applications can be chosen, when their interfaces are conform the standard. The process for crop protection can be extended by one for canopy density dependent advise, an application to determine workable time, one for scheduling, etc.

The benefits of the CPIS Trial

Various parties will benefit from this approach. Farmer: The spatio-temporal optimization of the application, resulting in an effective and less costly spray regime. Also flexibility towards the use of this potatoblight app. Contracting parties will benefit from the increased transparency. The weather data from weather bureaus can also be used for other application, both in the agricultural and on-agricultural domain.
Specialists can provide modules reflecting their skills and knowledge without bothering all other administration and data gathering functionality.

Cooperating Applications in the CPIS Trial



More Information on CPIS Trial

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FIspace Facts

Project Name	FIspace: Future Internet Business Collaboration Networks in Agri-Food, Transport & Logistics
Duration:	01.04.2013 – 31.03.2015 (24 Month)
Call:	FP7-2012-ICT-FI
Funding Scheme:	Large-scale Integrating Project (IP)

Consortium

Arcelik - TR
Aston University - GB
ATB Bremen – DE
ATOS - ES
CentMa – DE
DLO - NL
ENoLL - BE
EuroPoolSystem - DE
FloriCode - NL
GS1 Germany – DE
IBM - IL
iMinds - BE
Innovators - GR
KocSistem - TR
KTBL - DE
Kühne + Nagel - CH
Kverneland - NL
LimeTri - NL
Marintek - NO
Mieloo & Alexander - NL
NKUA – GR
North Sea Container Line – NO
OPEKEPE – GR
Plus Fresc – ES
The Open Group – GB
University Duisburg Essen – DE
University Politecnica Madrid – ES
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More Information

www.FIspace.eu

FIspace Business Collaboration

FIspace Business Collaboration

Future Internet Business Collaboration Networks in Agri-Food, Transport & Logistics

Crop Protection Information Sharing

Use Case Trial related to theme:

Greenhouse Management and Control

FUTURE INTERNET PPP
SEVENTH FRAMEWORK PROGRAMME

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