#### What is Flspace?

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.



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 Import & Export of Consumer Goods about?

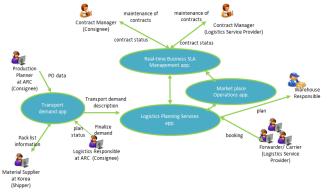
This trial is concerned with planning and execution of logistics activity in consumer goods sector ensuring effective planning of related activities resulting in improved coordination, loss minimization, efficient use of resources and high customer satisfaction level.

In FIspace two main challenges deemed to be essential for effective management of the supply chains namely Shipment Tracking(ST) and Transport Order Management (TOM).

## Background & Vision of the Import & Export of Consumer Goods Trial

Korean Steel Company Ltd. is a company located at Ansan, Korea produces several different components continuously, sells them to consumer electronics manufacturing firms overseas. Arcelik purchases many items from Korean Steel to be used in production. Arcelik's logistics department is responsible from coordinating the transport activity of the purchased materials i.e. selection of the partners that will carry out the logistics operations, booking/contracting of transport services, customs declarations, follow up, and tracking and tracing of cargo. The story of the trial begins with the planning of transportation of components to be used in the manufacturing process of a washing machine model which will then be transformed into a finished good at the facility of Arcelik located in Cavirova, Istanbul and then will be transported to the warehouse of a subsidiary of Arcelik, namely Beko PLC, located in UK.

During the planning process of the inbound, it is expected that real-time information about the services of the logistics service providers are available therefore the (re)planning process can be based upon up-to-date information, benchmarking several different services available on the market. The envisioned solution provides the shipper and consignee with a collaboration environment during the transport demand description phase. Users can define monitoring requests according to their interests aiming proactive or real-time notifications of the deviations in the transport planning phase. Envisioned interactions between several users in the inbound planning is depicted below:

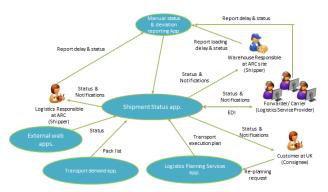


Export scenario is built upon a shipment from Arcelik's washing machine plant to Beko PLC. Planning of the

transportation is under Arcelik's responsibility due to agreed incoterms between Beko PLC and Ar-celik A.S. Currently real-time information regarding the status of the shipments is distributed among sev-eral stakeholders and Arcelik contracts each party one by one to ensure on time delivery in full.

The scenario starts with a production delay, as a result, the logistics responsible re-plans the shipment by altering the pick-up date with the same logistics service providers in the original plan. The story is focused on the real-time information sharing about deviations through the platform to ensure that related parties can plan their internal operations accordingly without any delay. Although several events might lead to deviations from the plan in real-life, only four of them are included in the scenario: delay in the booking response, delay at pick-up from Arcelik's plant, delay in the transshipment port, postponed inland delivery to Beko PLC warehouse due to space unavailability.

The envisioned interactions between main actors are schematized as below:



### **Business Requirements**

Effective planning and timely monitoring of the transportation process is very crucial since unexpected delays might lead to many problems and losses in several stages starting from the production activity till the delivery of finished goods to the customers. Additionally it is very critical for shippers outsourcing the transport activity to have the ability to reach several different logistics service providers that can fulfill their request in a fast and efficient manner without losing time and effort with manual activities.

### **Shipment Tracking and Transport Order Management Challenges**

#### **Shipment Tracking AS-IS Situation**

- Manual input from LSPs about the status of the cargo
- Time delays in information input ٠
- Lack of an automated alert system for deviations •

#### Shipment Tracking Solution with FIspace

- Automated input from tracking systems
- Information is visible to the parties that have authorization at the same time
- Timely notification different formats from multiple data sources. Creating an overview of deviations

#### **Transport Order Management AS-IS Situation**

- Manual process of data collection
- Data is collected from many different sources which • have different formats
- Time delays in information input ٠
- Hard to track updates
- Manual data processing for forming a cost overview

#### **Transport Order Management Solution with Flspace**

- Online service description connected to booking ٠ app.
- Automated data gathering
- Automatic pre-cost estimation
- Visibility of historical usage on the time of purchasing
- Effective contract management
- Collaboration among partners who work on the • same transport chain plan

## More Information on Import & Export of Consumer Goods Trial

- Arcelik A.S.; TR, contact: Hande KOÇ, hande.koc@arcelik.com
- K+N: DE. contact: Michael ZAHLMANN, Michael.Zahlmann@Kuehne-Nagel.com

### **FIspace** Facts

Call:

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

## **Consortium**

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

## Coordinator

Dr. Sjaak Wolfert LEI Wageningen UR, P.O. Box 35 6700 AA Wageningen e-mail: sjaak.wolfert@wur.nl

## **More Information**

www.Flspace.eu





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

# **Import & Export of Consumer Goods**



Use Case Trial related to theme: **Smart Distribution and Consumption** 



Co-funded by the European Union, FP 7, Collaborative Project, Grant No. 604123