A11 - Product: PIA (Product Information App)

# Summary of the innovation

*PIA is an application that reaches beyond enterprise borders and realizes a chain encompassing exchange of information between actors across the whole food supply chain, reaching from production agriculture to retail.*

*This application provides a solution for many problems the food chains are presently experiencing. It provides transparency across the chain on product characteristics, product quality, characteristics of production processes (e.g. inputs in agricultural production), logistics, tracking and tracing needs, and more. It also provides the basis for monitoring product quality and deliveries along the chain.*

*At retail, PIA provides the interface for applications that communicate information to consumers. Beyond its reach across the chain, its innovation is in the separation of the information exchange into a sequence of individual apps that are run by individual enterprises, i.e. it is not based on a central data management approach. The central data management approach of previous systems has been the core barrier for adoption of information exchange solutions by the food sector. This innovative approach, enabled by the FIspace platform, has the potential of being adopted by the sector beyond individual applications.*

# Key features / capabilities

* Capturing of initial product information as well as aggregation, disaggregation, adding and forwarding of product information with a fine-grained access control,
* Receiving product information (accumulated along the supply chain) for incoming goods, providing quality feedback to suppliers, and offering the basis to communicate product information to consumers,
* Secure exchange of quality-related product information between supply chain stakeholders, supporting private data sources with access management,
* Enabling a decentralised information storage, while also allowing a shared storage, just in accordance to end-user preferences,
* Company confidential data can be made available as appropriate, taking into account requirements of business agreements with different partners or individual situations in the supply chain,
* Establishing traceability by linking incoming and outgoing goods,
* Facilitating data acquisition based on templates that can be created with respect to requirements of partners, products or transport conditions,
* Master data management that is able to reflect most recent standards in terms of content and format.

# Maturity level (TRL - Technology Readiness Level)

* TRL 4 – technology validated in lab

# Availability

* Deliverable (report)
  + D400.6 (PU) - Functionalities of Baseline Applications, section 2
  + D400.7 (PP) - Initial (Baseline) Applications 1st Release, section 3.1.1
  + D400.8 (PP) - Initial Applications 2nd Release, section 3.1
  + D400.9 (PP) - Initial Applications Third Release, section 3.1
  + [Overview](http://fispace.eu/piaapp.html) of PIA on FIspace website
* Deliverable (code/prototype)
  + **PIA prototype start widget** deployed on the dashboard of a test user account in the Experimentation Environment
  + **PIA prototype backend** (provides also the PIA frontend) deployed on two servers
    - https://pia-schorsch.fispace.eu:8443/ffv
    - <https://pia-ie.fispace.eu:8443/ffv>
* Publication
  + Sundmaeker, Harald; Einramhof, Peter; Systematic Heterogeneity: How to combine Smartphone related Apps with FIspace. Journal on Food System Dynamics, Vol 6(2); PP. 117-128; available at <http://www.foodsystemdynamics.org/>
* Presentation
  + Poster and accompanying PowerPoint presentation at the ECFI 2, September 2014, Munich

# Licensing

Closed source (prototype code)

# FIspace partner(s) that own innovation & contact points

*PIA has been developed by ATB - Institute for Applied Systems Technology Bremen GmbH (Germany). E-mail contacts:*

* Harald Sundmaeker <[sundmaeker@atb-bremen.de](mailto:sundmaeker@atb-bremen.de)>
* Norman Gülcü <[guelcue@atb-bremen.de](mailto:guelcue@atb-bremen.de)>
* Peter Einramhof <[einramhof@atb-bremen.de](mailto:einramhof@atb-bremen.de)>