



Algemene gegevens	
Nummer	AF-EU-13023 / BO-25.06-002-001
Titel	SmartAgrifood –cSpace (werkelijke titel is later veranderd in FIspace)
Topsector (A&F of T&U)	A&F en T&U
Projectleider (onderzoek)	Sjaak Wolfert
Contactpersoon overheid	Jan van Vliet
Status (lopend of afgerond)	Afgerond
Type onderzoek (F, T of V)	Toegepast
Werkelijke startdatum	01-04-2011
Werkelijke einddatum	31-09-2015
Korte omschrijving inhoud	LEI is coördinator van deze FP7 projecten. Naast het management nemen diverse DLO instituten inhoudelijke taken op zich, zoals het leiden van twee trials in het project, het oprichten van een foundation om de commercialisatie van het FIspace mogelijk te maken na afloop van het project.

Highlights
<p>In 2015 is de finale implementatie van het Future Internet-gebaseerde FIspace platform gerealiseerd. De <i>App store</i> vormt de kern van het platform. De <i>B2B collaboration core</i> zorgt ervoor dat verschillende Apps met elkaar samenwerken om een compleet business proces in de keten te ondersteunen. Via de <i>System en Data Integration</i> module vindt uitwisseling plaats met externe data en systemen. Dit gaat via de <i>Security, Privacy & Trust</i> laag, zodat data veilig en betrouwbaar kan worden uitgewisseld. Een <i>Software Development Kit</i> faciliteert App-ontwikkelaars om eenvoudig Apps voor het FIspace platform te ontwikkelen. Op dit moment zijn er reeds tientallen Apps ontwikkeld en uitgetest in een achttal trials die de hele voedselketen omvatten:</p> <ol style="list-style-type: none">1. Crop Protection Information Sharing2. Greenhouse Management & Control3. Fish Distribution & (Re-)Planning4. Fresh Fruit and Vegetables QA5. Flowers & Plants SC Chain Monitoring6. Meat Information Provenance7. Import & Export of Consumer Goods8. Tailored Information for Consumers <p>De concrete resultaten zijn te vinden via http://www.fispace.eu/apps.html In 2015 is ook de FIspace Foundation opgericht die als doel heeft het ontwikkelde platform te beheren en commerciële implementaties te initiëren en faciliteren.</p>

Opgeleverde producten
Zie ook: http://www.fispace.eu/publicdeliverables.html en in het bijzonder http://www.fispace.eu/Documentations/Deliverables/FIspace-D500_6_7_FinalReport-V003.pdf

Wetenschappelijke publicaties:

- Poppe, K. J., Wolfert, J., Verdouw, C. N., & Renwick, A. (2015). A European perspective on the economics of Big Data. *Farm Policy Journal*, 12(1), 11-19.
- Barmounakis, S., Kaloxylou, A., Groumas, A., Katsikas, L., Sarris, V., Dimtsa, K., Fournier, F., Antoniou, E., Alonistioti, N., Wolfert, S., 2015. Management and control applications in Agriculture domain via a Future Internet Business-to-Business platform. *Information Processing in Agriculture 2*, 51-63.
- C. Reinartz, A. Metzger, and K. Pohl, "Model-based Verification of Event-driven Business Processes," in 8th Int'l Conference on Distributed Event-Based Systems (DEBS), Oslo, Norway, June 29 - July 3. ACM, 2015
- F. Föcker, A. Neubauer, A. Metzger, G. Gröner, and K. Pohl, "Real-time cargo volume recognition using internet-connected 3D scanners," in 10th International Conference on Evaluation of Novel Approaches to Software Engineering (ENASE), Barcelona, Spain, April 29-30, 2015.
- Verdouw, C., Robbmond, R., Verwaart, T., Wolfert, J., Beulens, A., 2015. A reference architecture for IoT-based logistic information systems in agri-food supply chains. *Enterprise Information Systems*, 1-25.
- Verdouw, C., Beulens, A., Reijers, H., van der Vorst, J., 2015. A control model for object virtualization in supply chain management. *Computers in Industry* 68, 116-131.

Disseminatie activiteiten

Date	Type/ Description/ Title	Audience	Countries addressed	Size of Audience	Partner responsible / involved
December 2014, February 2015	Opportunities in Phase 3 info days with Phase 3 projects	Industry, Academia, Research	European Countries	500 to 1000	ARC, KOC, ATB, DLO, GS1 G, Euro Pool, iMinds
22 January 2015	Consumer workshop presentation of TIC apps Lleida, Spain	Industry	Spain	20	Plusfresc
22 January 2015	SIERTEELT(DIGI)TAAL ('Floriculture digital'), Floricode annual conference, "FISpace APP's for the registration of the plant quality in the supply chain" http://www.floricode.com/en-us/floricode/actueel/evnts/naslagwerk.aspx	Industry	Europe	200	R. Robbmond (WUR-LEI), H. Zwinkels Floricode
22 January 2015	Connected Smart Cities Conference, Brussels, Belgium http://www.eventbrite	Industry, Academia, Research	Europe	120	ARC, iMinds, ENoLL

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	.com/e/connected-smart-cities-conference-tickets-14661965333				
4-6. February. 2015	Fruit Logistica 2015, Berlin, Germany, http://www.fruitlogistica.de/en/ Booth Presentation + Q&A	Industry	Germany	200	Euro Pool
09-13 February 2015	GS1 Global Forum, Brussels, Belgium http://forum.gs1.org/	GS1 Global Member Organisations	Global	600	GS1 Germany
9-13. February. 2015	9 th International European Forum (Igls-Forum) - (139th EAAE Seminar) on System Dynamics and Innovation in Food Networks, Innsbruck-Igls, Austria, http://www.fooddynamics.org/	Academia	International	80	CentMa, Euro Pool
23-24. February. 2015	35. GIL-Jahrestagung, Komplexität versus Bedienbarkeit, Mensch-Maschine-Schnittstellen, Geisenheim, Germany (http://www.gil-net.de/Tagung/472.pdf)	Academia, Research, Industry	Germany	90	CentMa
10-11. March. 2015	ITEA & ARTEMIS Co-summit, Berlin (Germany) https://artemis-ia.eu/co-summit-2015/index.html	Academia, Research, Industry	Global	300-400	KOC, UDE
16-19. March. 2015	Milan Global Entrepreneurship Congress (GEC) http://eventegg.com/gec-2015/	Entrepreneurs , Investors, Industry -	Worldwide	3000	ENoLL
18. March. 2015	Future Internet in Horizon 2020: how to build a pan-European framework to support	Academia, Research, Industry	Europe	100-150	ATOS

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	Innovation in SMEs" Summit, Rome, Italy https://www.fixifi.eu/news/eventview/article/future-internet-in-horizon-2020-how-to-build-a-pan-european-framework-to-support-innovation-in-smes.html				
25-26.March. 2015	Net Futures 2015, Brussels, Belgium (former annual Future Internet Assembly-FIA Event), http://netfutures2015.eu/	Academia, Research, Industry	Europe	600	DLO, ATB, KOC, IBM, UDE, ARC, ATOS, ENoLL, NKUA
1.April. 2015	Biennale International Design Saint-Etienne 2015, France; Business Design session http://www.biennale-design.com/saint-etienne/2015/fr/home/	Academia, Research, Industry	Global	~5000 (100 participants on the workshop session)	ENoLL, Grigoris Chatzikostas – FRACTALS Accelerator
29-30 April, 2015	Research Paper Presentation: F. Föcker, A. Neubauer, A. Metzger, G. Gröner, and K. Pohl, "Real-time cargo volume recognition using internet-connected 3D scanners," in 10th Int'l Conference on Evaluation of Novel Approaches to Software Engineering (ENASE), Barcelona, Spain, J. Filipe and L.Maciaszek, Eds., 2015.	Academia, Research	International	120	UDE
May 18-24, 2015	37th International Conference on Software Engineering	Academia, Research, Industry	International	900	UDE
May 2015	Information Processing in Agriculture Journal, Volume 2, Issue 1,	Research, Academia	Global	N/A	Sokratis Barmponakis,

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	May 2015, Pages 51-63, http://www.sciencedirect.com/science/article/pii/S2214317315000153				Alexandros Kaloxylos, Aggelos Groumas, et al.
17-19 June 2015	BDVA 2015 Madrid Summit, Madrid, Spain http://www.bdva.eu/	Industry, Academia, Research	Europe	350	UDE
June 29 - July 3, 2015	Research Paper Presentation: C. Reinartz, A. Metzger, and K. Pohl, "Model-based Verification of Event-driven Business Processes," in 9th Int'l Conference on Distributed Event-Based Systems (DEBS), Oslo, Norway, June 29 - July 3, F. Eliassen, R. Vitenberg, R. Friedman, and D. Eysers, Eds. ACM, 2015.	Academia, Research	International	200	UDE
25-28. August. 2015	OpenLivingLab Days 2015-01-26, Turkey, Istanbul http://www.openlivinglabs.eu/event/openlivinglab-days-2015	Academia, Research, Industry, Policymakers	Global	~170	ENoLL, Arcelik
31. August. 2015	Data- & Artifact-Centric BPM 4th Workshop Organizer, Innsbruck, Austria, https://sites.google.com/site/dabws2015/	Academia, Research	Global	50	Fabiana Fournier IBM
2. September. 2015	FIspace Technical Workshop	Accelerators, SMEs	Europe	25	All partners
23-24. September. 2015	Conference "ECR Tag 2015", Bonn, Germany, http://www.ecrtag.de/	Industry, Retail	Germany	1.000	GS1 G
9/2015	Annual Survey	Industry, Retail	Germany	3.500	GS1 G
2. October.	Workshop on "State of the art technologies in	Industry,	Greece	~150	Sokratis Barmponak

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2015	next generation data networks", "Future Internet Space: Cloud-enabled IoT data management for Smart Farming, tracing and business request matching", PCI 2015, 19th Panhellenic Conference on Informatics	Academia, Research			is, NKUA
5-6. October 2015	Horizon 2020 Workshop, Bursa, Turkey	Industry, Academia, Research	Turkey	~200	Arcelik
8-9. October 2015	Conference on Turkish Universities in the European Research Area (ERA), Ankara, Turkey	Industry, Academia, Research	Europe	~500	Arcelik
12-13. October .2015	Horizon 2020 Bridging Days, Izmir Turkey	Industry, Academia, Research	Turkey	~250	Arcelik
20 – 22 October 2015	ICT 2015 Innovate, Connect, Transform, Lisbon, Portugal http://ec.europa.eu/digital-agenda/en/ict2015-innovate-connect-transform-lisbon-20-22-october-2015	Industry, Academia, Research	Europe	~5000	Arcelik, UDE, ATOS, Koc, IBM
4-7 November 2015, Hamburg	ECFI 2015 – 3rd European Conference on the Future Internet http://www.ecfi.eu/	Industry, Academia, Research	Europe	>400	DLO, ATB, UDE, ATOS, Arcelik, iMinds, ENoLL
16-17. November . 2015	European Data Forum 2015 http://2015.data-forum.eu/	Industry, Researchers, Policymakers	Europe	~700	UDE, ATOS, Arcelik
17-19. November . 2015	Smart City Expo, World Congress, Barcelona, Spain http://www.smartcitye	Industry, Policy Makers, Research, Municipalities	Global	~9000	ENoLL, ATOS

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	xpo.com/en/				
7-10 December 2015	7th European Innovation Summit, Brussels, Belgium http://www.knowledge4innovation.eu/7th-european-innovation-summit-7-10-december-2015	Industry, Policy Makers, Research,	Europe	500	Arcelik
2015	Business Process Management Workshops, Springer Book, Fabiana Fournier (Editor) http://www.springer.com/us/book/9783319158945	Academia, Research	Global	N/A	Fabiana Fournier(Editor) IBM

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2015	http://www.fruitlogistica.de/en/ Booth Presentation + Q&A				
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May 2015	Information Processing in Agriculture Journal, Volume 2, Issue 1, May 2015, Pages 51-63, http://www.sciencedirect.com/science/article/pii/S2214317315000153	Research, Academia	Global	N/A	Sokratis Barmponakis, Alexandros Kaloxylos, Aggelos Groumas, et al.
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2015	and K. Pohl, "Model-based Verification of Event-driven Business Processes," in 9th Int'l Conference on Distributed Event-Based Systems (DEBS), Oslo, Norway, June 29 - July 3, F. Eliassen, R. Vitenberg, R. Friedman, and D. Eysers, Eds. ACM, 2015.				
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