



Smart Objects For Intelligent Applications

# D 7.43 Dissemination and Exploitation Report (t18)

## Legal disclaimer

The material contained herein is Confidential Information which may only be used in accordance with the terms of the SOFIA Project Consortium Agreement (PCA).

Access Rights needed for the execution of the SOFIA project are granted unless excluded in Annex IV of the PCA. No other licenses to any related IPR are implied.

The material is protected by copyright laws, and may not be reproduced, distributed or otherwise exploited in any manner without the prior permission of the rights holders.

The contributors are not liable for the use of this material except as stated in the SOFIA PCA.

This R&D project (100017) is partially financed by ARTEMIS Joint Undertaking and the Spanish Ministry of Industry, Tourism and Trade

## Change History

Version	Date	Description	Affected Sections
0.1	2010-05-13	Initial version	All
0.2	2010-06-01	Dissemination updates	Section 3
0.3	2010-07-05	More Partners ´ contributions added	Section 3
0.4	2010-07-30	Multi-partner dissemination section added & audience nature & size info. included	Section 3 + Section 4
0.5	2010-08-20	Final editing	All
0.6	2010-09-02	More contributions added	All
0.7	2010-09-06	More contributions added	All
1.0	2010-09-07	More contributions added & Final editing	All

## List of Contributors

Participating Entity	Contributing Individuals
INDRA	Elisa Gayol Cuervo (editor)
INDRA	Antonia Velasco Valdepeñas
NOKIA	Jukka Honkola
ED	Paolo Pucci
ED	Michela D'Errico
VTT	Soininen Juha-Pekka
VTT	Eila Ovaska
UnBO	Tullio Salmon Cinotti
CRF	Alessio Corongiu
CCC	Valerio Nannini
CONANTE	Stefan Rapp

## Table of Contents

1.	Introduction .....	5
2.	Dissemination by the SOFIA project .....	6
	Standardization .....	6
	Press releases and events visibility by the project consortium.....	6
	Public deliverables by WP1 .....	7
	Public deliverables by WP2 .....	8
	Public deliverables by WP3 .....	9
	Public deliverables by WP4 .....	10
	Public deliverables by WP5 .....	10
	Public deliverables by WP6 .....	11
	Public deliverables by WP7 .....	13
3.	Dissemination by the SOFIA project partners .....	13
	Nokia.....	13
	Acciona Infraestructuras.....	16
	Consorzio Cooperative Costruzioni .....	17
	Conante .....	17
	Ecole Polytechnique Fédérale de Lausanne .....	20
	Elsag Datamat.....	20
	European Software Institute - Tecnalía.....	21
	Eurotech.....	24
	Centro Ricerche FIAT.....	25
	INDRA.....	27
	Meshworks Wireless .....	33
	Nextworks .....	33
	NXP Semiconductors .....	35
	Philips Research Laboratories Eindhoven.....	35
	Twente Institute for Wireless and Mobile Communications B.V. ....	36
	University of Bologna .....	36
	Technical University of Eindhoven.....	40
	University of Rome La Sapienza .....	41
	VTT Technical Research Centre of Finland.....	42
4.	Multi-partner dissemination .....	48
5.	Exploitation by the SOFIA project partners .....	55
	Nokia.....	55
	Acciona Infraestructuras.....	56
	Consorzio Cooperative Costruzioni .....	56
	Conante .....	56
	Ecole Polytechnique Fédérale de Lausanne .....	57
	Elsag Datamat.....	57
	European Software Institute - Tecnalía.....	58
	Eurotech.....	59
	Centro Ricerche FIAT.....	59
	INDRA.....	60
	Meshworks Wireless .....	61
	Nextworks .....	61
	NXP Semiconductors .....	62
	Philips Research Laboratories Eindhoven.....	62
	Twente Institute for Wireless and Mobile Communications B.V. ....	63
	University of Bologna .....	63
	Technical University of Eindhoven.....	64
	University of Rome La Sapienza .....	65
	VTT Technical Research Centre of Finland.....	65
6.	Summary.....	66



## 1. Introduction

The objective of this document is to report the progress on the project exploitation and dissemination activities programmed in the Dissemination and Exploitation Plan.

During the first eighteen months from January 2009 to June 2010 the project has progressed as follows in relation with:

- Standardization
- Press releases and events visibility by the project consortium
- Public deliverables by WP
- Dissemination by the SOFIA project partners
- Exploitation by the SOFIA project partners

For more information, please contact the representative of the project coordinator:

Heikki Waris, Principal Researcher, Nokia Research Center ([heikki.waris@nokia.com](mailto:heikki.waris@nokia.com))

## 2. Dissemination by the SOFIA project

### **Standardization**

As standardization efforts from interface standardization towards common agreement on information are planned for after December 2009, there is not further information to include at this point apart from the information already completed in the Dissemination and Exploitation Plan (D.7.42).

### **Press releases and events visibility by the project consortium**

The project consortium intends to publish press releases to accompany its milestones and to raise attention towards the publicly visible demonstrations and deliverables. Nokia as coordinator will be responsible for the press releases. In addition to press releases by the individual project partners, releases are planned in the name of the whole consortium as follows:

Time	Type	Status	Contents	Details/ Progress
t9-12	Press release	<b>completed</b>	Presentation of the SOFIA goals and plans and the upcoming (or already presented) demonstrations, and technology availability	NoTA Conference, SOFIA project and Smart-M3 open source launch, San Jose. Artemis/ITEA2 co-summit & exhibition, Oct 29-30 Madrid.  <b>Audience Nature:</b> Industrial + Academic - International  <b>Audience Size:</b> Call 2008 ARTEMIS + ITEA projects representatives + public authorities...
t18	Press release	planned	Description of the first demonstrators based on IOP	
t24	Press release	planned	Logical reference architecture and how it improves the way in which interoperable devices and applications can be developed	
t30	Press release	planned	Description of the upcoming trial and the technologies developed and integrated for it during the SOFIA project	
t36	Press release	planned	Report on the success of the SOFIA trial, projections on the adoption of technology, and advertisement of any continuation activities	

In addition, the consortium will present posters or demonstrators at conferences and industrial fairs, and aims at organizing workshops on smart spaces collocated with major conferences and events. The first public events where multiple SOFIA partners present demonstrators is the NoTA conference in San Diego, Sep 29-30, 2009. More joint participations are expected later on.

Uniform communication material will be provided for use in press releases, exhibitions and piloting venues; or for references in professional or scientific publications.

### **Public deliverables by WP1**

Work package 1 will produce public deliverables as follows:

Time	Type	Status	Contents	Details/ Progress
t9	Demo	<b>completed</b>	Personal Space use cases, corresponds to D1.21 and D1.31. Coincides with open source release of M3 baseline	Demo presented in NoTA conference 30.9.-1.10.2009  Open source release of M3 baseline link: <a href="http://sourceforge.net/projects/smart-m3/">http://sourceforge.net/projects/smart-m3/</a>
t12-24	Demo(s)	planned	Personal Space use cases, to be decided	
t18	D1.31	planned	Specification and implementation of WP5, update of the baseline with Personal Space use cases linked with the above public demo	
t33	D1.32	planned	Specification and implementation of WP5, update of the baseline with Personal Space use cases	
t33	D1.41	planned	Demonstration of personal environment use cases and SOFIA application development environment	
t36	D1.51	planned	Final integrated trial and dissemination	

Work package 1 standards related efforts will focus on the following forums:

- NoTA interconnect standard (<http://www.notaworld.org/>).
- Potentially Bluetooth SIG (Bluetooth NoTA Lain down adaptation).

### **Public deliverables by WP2**

Work package 2 will produce public deliverables as follows:

Time	Type	Status	Contents	Details/ Progress
t21	D2.22	planned	Generalized criteria to specify configure, host and optimize home specific services	Possible if first trials or pilots have been performed to assess criteria
t30	D2.14	planned	Use cases demonstration, results evaluation and impact assessment	Plan is to do the demonstration in different pilots for different interesting parties at different locations
t30	D2.32	planned	Adapters for interoperable connectivity and service discovery in smart indoor spaces	Possible if first trials or pilots have been performed to test the adapters
t30	D2.41	planned	Concept demonstrators of user-system interaction solutions	Will be done in same pilots in D2.14
t30	D2.52	planned	Smart technologies for OIP	Will be done in same pilots in D2.14

Work package 2 standards related efforts will focus on the following forums:

- CENELEC Technical Committee TC 205 Home and Building Electronic Systems (HBES).
- W3C and ICT Standards Board (ICTSB) - Smart House Standards Steering Group (SHSSG).
- International Alliance for Interoperability (IAI) (<http://www.iai-international.org/>).
- Potentially harmonizing of ISO 12006-2 and IFC standardization efforts.
- Potentially NoTA interconnect standard.

### **Public deliverables by WP3**

Work package 3 will produce public deliverables as follows:

<b>Time</b>	<b>Type</b>	<b>Status</b>	<b>Contents</b>	<b>Details/ Progress</b>
t30	D3.55	planned	Final prototype of the Smart City surveillance	
t30	D3.56	planned	Final prototype of the Smart City public infrastructure	
t30	D3.57	planned	Final prototype of the Smart City infoservice	

Work package 3 covers a wide area, and its standards related efforts consider the following forums:

- UMVS architecture and building blocks via e.g. SOFIA website or Sourceforge
- Potentially OASIS emergency, IdTrust and Open Composite Services Architecture (CSA) WGs.
- Potentially ZoneMinder (<http://www.zoneminder.com/>)
- Potentially IETF MMUSIC WG.
- Potentially 3GPP/TISPAN IP Multimedia Subsystem (IMS)
- Potentially City GML ([www.citygml.org](http://www.citygml.org/)).
- Potentially Open Geospatial Consortium (<http://www.opengeospatial.org/>) as well as their adoptions within ISO (e.g. ISO 19136).
- Potentially IEEE 802.11, 802.15 and 802.16 domains.
- Potentially IETF MANET, AUTOCONF and ROLL groups.

Work package 3 dissemination activities have progressed as follows:

### **Public deliverables by WP4**

Work package 4 will produce public deliverables as follows:

Time	Type	Status	Contents	Details/ Progress
t3	D4.11	<b>completed</b>	Description and Assessment of Interaction Tool Set	
t6	D4.21	<b>completed</b>	Analysis of Scenarios, Extracting of Technical Requirements	

Work package 4 standards related efforts will focus on the following forums:

- ISO 9241, especially ISO 9241 – 10, ISO 9241 – 16 and ISO 9241 – 410:2008.
- ISO/TR 16982:2002.
- OpenCV ([www.willowgarage.com](http://www.willowgarage.com))
- WEKA (<http://www.cs.waikato.ac.nz/ml/weka/>)
- Potentially DIN-Norm 33455, DIN-Norm 11073 and DIN EN ISO 6385:2004-05.
- Potentially ISO/DIS 9241-20, ISO 13407.
- Potentially W3C Web Accessibility Initiative WAI (<http://www.w3.org/WAI/>).
- Potentially ETSI EG 201 472 HF.

### **Public deliverables by WP5**

Work package 5 has progressed regarding public deliverables as follows:

Time	Type	Status	Contents	Details/ Progress
t12	D5.11	<b>completed</b>	Interoperability platform principles	
t12	D5.21	ongoing	Interoperable service architecture	Revised version under work
t24	D5.22	planned	Logical reference architecture	-
t36	D5.33	ongoing	Enforcement support	TOC defined
t36	D5.42	ongoing	Reference implementation of the	Smart-M3 published, several KPs implemented and shared

			interoperability platform	with partners. Open source release of M3 baseline link: <a href="http://sourceforge.net/projects/smart-m3/">http://sourceforge.net/projects/smart-m3/</a>
t12	D5.11	<b>completed</b>	Interoperability platform principles	Completed on time
t12	D5.21	<b>completed</b>	Interoperable service architecture	Completed on time
t24	D5.22	ongoing	Logical reference architecture	Under work
t18	D5.31	<b>completed</b>	Design of quality management services	
t36	D5.33	ongoing	Enforcement support	TOC defined
t6	D5.41	<b>completed</b>	Feasibility evaluation plan	Completed until t16.
t36	D5.42	ongoing	Reference implementation of the interoperability platform	<p>Smart-M3 published, several KPs implemented and shared with partners. Open source release of M3 baseline link: <a href="http://sourceforge.net/projects/smart-m3/">http://sourceforge.net/projects/smart-m3/</a></p> <p>KPI_low in Ansi C published at <a href="http://sourceforge.net/projects/kpilow/">http://sourceforge.net/projects/kpilow/</a></p> <p>Java-KPI to be published as an Open Source project of sourceforge.</p>

Work package 5 standards related efforts will focus on the following forums:

- OSS communities.
- Potentially NEXOF (<http://www.nexof-ra.eu/>, <http://www.nessi-europe.com/Nessi/SRA/NEXOF/NEXOFtheimplementationofNESSI/tabid/311/Default.aspx>).
- Potentially ISO/IEC 9126 and ISO/IEC 2500.

### **Public deliverables by WP6**

Work package 6 will produce public deliverables as follows:

Time	Type	Status	Contents	Details/ Progress
t12	D6.34	<b>completed</b>	ADK environment and developer tools public release	
t12	D6.41	<b>completed</b>	SOFIA Community Oriented Strategy	<b>Submitted</b>
t24	D6.42	planned	SOFIA Community Web	
t36	D6.43	planned	SOFIA roadmap; maintenance and best practices for a long and healthy future	

Work package 6 standards related efforts will focus on the following forums:

- OSGI Alliance (<http://www.osgi.org>), in particular Mobile Expert Group and Residential Expert Group and potentially Vehicle Expert Group and the Enterprise Expert Group.
- OSS and AmI community
- Eclipse platform and plug-in central, e.g. RAP (Rich AJAX Platform).
- W3C RDF, W3C OWL or WSMO WSML.

### Public deliverables by WP7

INDRA, as WP7 leader, has produced the scheduled public deliverables as follows:

Time	Type	Status	Contents	Details/ Progress
t12	D7.43	<b>completed</b>	Dissemination and exploitation report	Document presented and approved
t18	D7.43 (t18)	<b>completed</b>	Dissemination and exploitation report	Completed and presented Additional deliverable
t24	TBD	ongoing	SOFIA Demos + Small Scale Pilots Catalogue	Additional deliverable
t24	D7.44	on-going	Dissemination and exploitation report	
t24	D7.11	on-going	Pilot Use case definition	
t35	D7.46	planned	Evaluation of demonstration	
t36	D7.48	planned	Dissemination and exploitation report	




### 3. Dissemination by the SOFIA project partners






Project partners have disseminated the SOFIA results and have utilized the SOFIA project in external communication as follows:

#### Nokia

Dissemination activities have progressed as follows:

Time	Type	Status	Forums and topics	Details/ Progress
t4	Keynote	<b>completed</b>	Mobilware'09 keynote speech "Application Development Platforms for Emerging Smart Environments"	Completed in Apr 29, 2009.  Audience Nature (Industrial/Academic - National/International): TBC  Audience Size: TBC

t8	Developer tool	<b>completed</b>	Ontology library generator by Åbo Akademi (Nokia subcontractor)	<p>Completed. The library generator is available together with Smart-M3 platform at sourceforge.net.</p> <p>Audience Nature (Industrial/Academic - National/International): TBC</p> <p>Audience Size: TBC</p>
t9	M3 launch	<b>completed</b>	At NoTA conference	<p>Completed on Oct 1, 2009.</p> <p><a href="http://www.sofia-project.eu/system/files/Juha-Pekka+Soininen_M3+smart+space+infrastructure.ppt">http://www.sofia-project.eu/system/files/Juha-Pekka+Soininen_M3+smart+space+infrastructure.ppt</a></p> <p>Audience Nature (Industrial/Academic - National/International): TBC</p> <p>Audience Size: TBC</p>
t1-36	Papers	<b>completed</b>	Topics and forums to be decided (international conferences, workshops and journals)	<p>SOFIA project, Artemis Magazine No. 5. Oct.2009.</p> <p>TRONSHOW2010, Dec-09, Tokyo, SOFIA project presentation.</p> <p>RuSmart 2009 (1)</p> <p> Cross-DomainInteroperabilityCaseStudy.i</p> <p>Audience Nature (Industrial/Academic - National/International): TBC</p> <p>Audience Size: TBC</p> <p>SISS 2010 (2)</p> <p> Smart-M3InformationSharingPlatform.pdf</p> <p>Audience Nature (Industrial/Academic - National/International): TBC</p> <p>Audience Size: TBC</p> <p>RuSmart 2010 (3)</p> <p> IntegrationofananswerengineintoSmart-I</p> <p>Audience Nature (Industrial/Academic -</p>

				National/International): TBC Audience Size: TBC
t1-36	Promotion	ongoing	To Nokia's ecosystem of partners and suppliers (de-facto standardization)	Presented SOFIA project to number of Nokia technology vendors and partners.
t1-36	Promotion	<b>completed</b>	In the Russian academic community (FRUCT program, <a href="http://www.fruct.org">www.fruct.org</a> )	Smart-M3 Open Source, 5 <sup>th</sup> Nov 2009 (4)  Smart-M3.pdf Smart-M3 Demonstrators, 5 <sup>th</sup> Nov 2009 (5)  Smart-M3_Demos.pdf Smart-M3 hands-on training, 5 <sup>th</sup> Nov 2009 (6)  Smart-M3_hands_on_training.pdf Smart-M3 hands-on training, 28 <sup>th</sup> Apr 2010 (7)  Smart-M3_hands_on_training_FRUCT.pdf Smart-M3 Information Sharing Platform, 29 <sup>th</sup> Apr 2010 (8)  Smart-M3_Information_Sharing Audience Nature (Industrial/Academic - National/International): TBC Audience Size: TBC
t18-	Press	planned	During SOFIA trials at t18 and	

36	release		during SOFIA pilot at t36	
----	---------	--	---------------------------	--

1. Honkola, J., Laine, H., Brown, R., Oliver, I.: Cross-Domain Interoperability: A Case Study. Lecture Notes in Computer Science 5764, Springer, 2009.
2. Honkola, J., Laine, H., Brown, R., Tyrkkö, O.; Smart-M3 Information Sharing Platform. To appear in proceedings of 1<sup>st</sup> workshop on Semantic Interoperability in Smart Spaces (SISS), 2010
3. Luukkala, V. and Honkola, J.: Integration of an answer set engine to Smart-M3. Submitted to RuSmart 2010.
4. Honkola, J., Laine, H. and Brown, R.; Smart-M3 Open Source. Presentation in 6<sup>th</sup> FRUCT conference, 2009
5. Honkola, J., Laine, H., Luukkala, V. and Brown, R.; Smart-M3 Demonstrators. Presentation in 6<sup>th</sup> FRUCT conference, 2009
6. Laine, H. and Honkola, J.: Smart-M3 hands-on training. ½ day training in 6<sup>th</sup> FRUCT conference, 2009
7. Honkola, J. and Laine, H.: Smart-M3 hands-on training. ½ day training in 7<sup>th</sup> FRUCT conference, 2010
8. Honkola, J., Laine, H., Brown, R., Tyrkkö, O.: Smart-M3 Information Sharing Platform. Presentation in 7<sup>th</sup> FRUCT conference, 2010

### ***Acciona Infraestructuras***

Dissemination activities have progressed as follows:

<b>Time</b>	<b>Type</b>	<b>Status</b>	<b>Forums and topics</b>	<b>Details/ Progress</b>
t1-36	Papers	planned	Publication of papers at international conferences, workshops and journals (e.g. ECTP)	
t1-36	Promotion	ongoing	Internal promotion to all the different Acciona business lines	
t1-36	Promotion	ongoing	Promotion to SMEs	


### **Conorzio Cooperative Costruzioni**

Dissemination activities have progressed as follows:





Time	Type	Status	Forums and topics	Details/ Progress
t1-36	Promotion	ongoing	Publication of paper, posters presentation, workshops and national events oriented to the construction sector and ITC applications.	
t15	Video	<b>completed</b>	CCC has produced a video describing the "smart maintenance scenario" in a real environment: The video has been realized in the CCC offices headquarter. This acts as a preliminary representation of the service level platform for WP2.	The video has been already completed during the 2 <sup>nd</sup> Review meeting in Brussels and will be used to promote SOFIA in dissemination events at public level.  Audience Nature: Industrial/Academic - International  Audience Size: TBC
t24-36	Promotion	planned	External promotion towards relevant national (Italy)stakeholders in the construction value chain such as potential client (public and private) and professionals suppliers (architects, engineers and ITC integrators)	
t18-24	Promotion	planned	Internal promotion to all 230 construction companies related to the CCC consortium (big companies and SME)	
t24-36	Promotion	planned	External promotion towards relevant national (Italy)stakeholders in the construction value chain such as potential client (public and private) and professionals suppliers (architects, engineers and ITC integrators)	

### **Conante**

Dissemination activities have progressed as follows:

Time	Type	Status	Forums and topics	Details/ Progress
t12	Event (presentation)	<b>completed</b>	t12: Talk at Sign09 Workshop	 DrRappLumEnActive Signage.pdf  Stefan Rapp, "Application of

				<p>LumEnActive for signage and route guidance", Slide presentation and system demonstration, sign09, December 3-11, 2009, Vienna, Austria.</p> <p>Audience Nature: Industrial &amp; Academic - International</p> <p>Audience Size: 50 signage professionals</p>
T12	Demos	completed	t12: Live demo at Sign09 Workshop	<p>Audience Nature: Industrial &amp; Academic - International</p> <p>Audience Size: 50 signage professionals</p>
T17	Paper	completed	Stefan Rapp paper (2010) "Spotlight Navigation: a pioneering user interface for mobile projection", Ubiprojection 2010 -- Workshop on Personal Projection, Helsinki, Finland, May, 2010	 <p>spotlight.pdf</p> <p>Audience Nature: Industrial &amp; Academic - International</p> <p>Audience Size: 30 researchers</p>
T17	Event (presentation)	completed	Stefan Rapp presentation (2010) "Spotlight Navigation: a pioneering user interface for mobile projection", Ubiprojection 2010 -- Workshop on Personal Projection, Helsinki, Finland, May, 2010	 <p>RappSpotlight.pdf</p> <p>Audience Nature: Industrial &amp; Academic - International</p> <p>Audience Size: 30 researchers</p>
T17	demo	completed	Stefan Rapp live demo (2010) Ubiprojection 2010 -- Workshop on Personal Projection, Helsinki, Finland, May, 2010	<p>Audience Nature: Industrial &amp; Academic - International</p> <p>Audience Size: 30 researchers</p>

T17	Event presentation	completed	<p>Presentation Stefan Rapp (2010) "LumEnActive and pervasive digital signage projection", Workshop Pervasive Advertising and Shopping 2010, Helsinki, Finland, 2010</p>	 LumEnActiveRapp.pdf  Audience Nature: Industrial & Academic - International  Audience Size: 30 researchers
T17	paper	completed	<p>Paper: Stefan Rapp (2010) "LumEnActive and pervasive digital signage projection", Workshop Pervasive Advertising and Shopping 2010, Helsinki, Finland, 2010</p>	 RappWeber-PervAdv 2010-LumEnActive.pc  Audience Nature: Industrial & Academic - International  Audience Size: 30 researchers
T17	paper	completed	<p>Type: Publication Stefan Rapp (2010) "Spotlight Navigation and LumEnActive: Ubiquitous projection user interfaces", Pervasive 2010, Demo session, Helsinki, Finland, 17-20 May, 2010</p>	<p>Audience Nature: Industrial &amp; Academic - International</p> <p>Audience Size: 250 researchers</p>  LEA-Spotlight-demo.pdf
T17	demo	completed	<p>Type: Demonstration Stefan Rapp (2010) "Spotlight Navigation and LumEnActive: Ubiquitous projection user interfaces", Pervasive 2010, Demo session, Helsinki, Finland, 17-20 May, 2010</p>	<p>Audience Nature: Industrial &amp; Academic - International</p> <p>Audience Size: 250 researchers</p>  1.Stefan.Rapp.pdf
t9-36	Demos	planned	<p>Contribution to demonstrators of SOFIA</p>	

## ***Ecole Polytechnique Fédérale de Lausanne***


Dissemination activities have progressed as follows:

<b>Time</b>	<b>Type</b>	<b>Status</b>	<b>Forums and topics</b>	<b>Details/ Progress</b>
t12-36	Papers	planned	Topics and forums to be decided (international conferences, workshops and journals, such as ACM CHI, Ubicomp, mobile HCI, Personal & Ubiquitous Computing)	
t12-36	Education	planned	Introducing the issues and topics addressed by SOFIA in lessons and courses to give the opportunity for the students to know the issues and topics addressed by SOFIA, letting them participate in SOFIA activities	

## ***Elsag Datamat***

Dissemination activities have progressed as follows:

<b>Time</b>	<b>Type</b>	<b>Status</b>	<b>Forums and topics</b>	<b>Details/ Progress</b>
t1-36	Promotion	<b>completed</b>	Internally, people involved in the project will disseminate the project features toward both the divisional management and the company management, in order to reach a business-oriented audience having a broad view and able to recognize opportunities for application of project outcomes	Presented SOFIA project to a number of technicians in the ICT division in Elsag Datamat, by starting an open discussion about the project outcomes and the future applications.  Audience Nature: Industrial + National  Audience Size: TBC
t1-36	Press Release	<b>completed</b>	The promotion will be extended to other Finmeccanica group companies, involved all around the world in markets which are potentially interested to the project features: Telecommunications, Utilities, Services, Energy & Industry, Public Administration, Healthcare, Transports, Security, Police and Civil	Published an article in May on a Finmeccanica's group magazine EDLink (issue number 35, pages 19-21) describing the SOFIA project, its outcomes and possible future applications,

			Defence.	 EDLink_Publication.pdf  Audience Nature (Industrial/Academic - National/International): TBC  Audience Size: TBC
t1-36	Promotion	ongoing	<p>People involved in the project will disseminate the project features toward the marketing staff, in order to make the customers know about project features and analyze the possibility of application of project outcomes to the customers' business. Customers' main markets are Telecommunications, Utilities, Services, Public Administration, Healthcare, Transports, Security, Police and Civil Defence. Customers are spread all around the world.</p>	

### European Software Institute - Tecnalía

Dissemination activities have progressed as follows:

Time	Type	Status	Forums and topics	Details/ Progress
t1-36	Papers	planned	<p>In international conferences, workshops and journals such as:</p> <ul style="list-style-type: none"> <li>• AMI09 (vision paper)</li> <li>• PROMETEO2009 (presentation of SOFIA objectives)</li> <li>• AMI10 (paper and workshop proposal)</li> <li>• AMI11 (demo and workshop proposal)</li> <li>• 4th International conference on Mobile Ubiquitous Computing, systems, services and technologies (UBICOMM) – 2010</li> <li>• 2011 International Conference Ubiquitous Computing and Multimedia Applications- UCMA</li> </ul>	<p>All papers will be sent in the 2<sup>nd</sup> year of the project, once SOFIA could show some results.</p>

			<ul style="list-style-type: none"> <li>• IT Week Espana on SOFIA's IOP vision – 2010</li> <li>• IEEE Pervasive Computing – 2011</li> <li>• ACM Transactions in Embedded Computing Systems (TECS) – 2011</li> <li>• “Revista Española de Innovación, Calidad e Ingeniería del Software” – 2010</li> </ul>	
t12-36	Demos	planned	<p>Demonstrators in events such as:</p> <ul style="list-style-type: none"> <li>• 2010 – PROMETEO Event (Spain)</li> <li>• 2010 – ESI Week (Network) (Spain)</li> <li>• 2010 – JISBD, October 2010 (Spain)</li> <li>• 2011 – MORFEO Community Event (Spain)</li> <li>• 2011 – International Conference Ubiquitous Computing and Multimedia Applications- UCMA.</li> <li>• 2011 – Demo on AMI11</li> <li>• 2011 – ESI Week (Network) (Spain)</li> </ul>	<p>ESI will present demos regarding Sofia tooling and software engineering in several international context. The goal is convince the audience the value of using Sofia platform.</p>
t1-36	Promotion	planned	<p>ESI will use three strategic channels to disseminate SOFIA results:</p> <ul style="list-style-type: none"> <li>• ESI's Commercial Network (ESI@net) with 58 partners affecting 39 countries mainly in Europe, America and Asia</li> <li>• ESI is co-leading the Spanish technology platform PROMETEO, formed by more than 155 companies and research organisations active in the field of embedded systems</li> <li>• ESI is a board member partner of Morfeo CommunityProject, the most important movement of OSS in Spain, formed by the most important technologies centres</li> </ul>	

			and IT companies, plus Telcos like Telefonica	
--	--	--	---	--


## **Eurotech**

Dissemination activities have progressed as follows:

<b>Time</b>	<b>Type</b>	<b>Status</b>	<b>Forums and topics</b>	<b>Details/ Progress</b>
t1-36	Papers	ongoing	Publication of papers at international conferences, in scientific and in market oriented journals. Participation to workshops.	
t1-36	Promotion	ongoing	Promotion within Eurotech Group and FinMeccanica Group.	Activities intended to promote Sofia's results in existing and future project, both from a research and an industrial point of view.  This activity allows also collecting important feedback from other projects and from the industrial world.
t1-36	Promotion	ongoing	Promotion with customers	Promote Sofia's results, with a particular attention to interoperability and OIP, to customers. Obtain feedback from customers, a third part that will take direct advantage of Sofia's results.
t1-36	Promotion	ongoing	Publication of whitepapers	Technical whitepapers on Sofia and OIP.
t11	Press Release	<b>completed</b>	ARTEMIS Autumn Event  Published on Eurotech's Intranet	Audience Nature (Industrial/Academic - National/International): TBC  Audience Size: TBC

## Centro Ricerche FIAT


Dissemination activities have progressed as follows:



Time	Type	Status	Forums and topics	Details/ Progress
t1-36	Dedicated workshops	ongoing	Within the FIAT group (FIAT Group Automobiles, IVECO, CNH, Ferrari and Maserati)	
t11-12	Dedicated workshops	<b>completed</b>	First informative meetings have been held in FIAT Group Automobiles and Magneti Marelli.	<p>The SOFIA IOP concept has been presented, highlighting all the benefits for the interaction of the On-Board Telematic Unit with nomadic devices and consumer electronics inside a personal smart space.</p>  <p>Project.pdf</p> <p>Audience Nature (Industrial/Academic - National/International): TBC</p> <p>Audience Size: TBC</p>
t1-36	Papers	planned	Topics and forums to be decided. Major congresses at European level (e.g. ITS-Europe Regional Conference), scientific magazines or journals (e.g. IEEE, SAE) will be targeted.	
t18-30	Special sessions	ongoing	In future ITS congresses and major events at European level	
t1-36	Promotion	ongoing	To FIAT's ecosystem of partners and suppliers (de-facto standardization)	
t1-36	Promotion	ongoing	CRF will widely disseminate the project results via its web site	
t15	Video	<b>completed</b>	CRF has produced a video describing the "Media Follows User" scenario. This acts as a preliminary documentation of the service-level	<p>The video has been already presented during the 2<sup>nd</sup> Review meeting in Brussels and will be used to promote SOFIA in dissemination</p>


			platform for WP1.	events.
t9-36	Demos	<b>completed</b>	Demonstrators of SOFIA results in the automotive application area with presentation of vehicle demonstrators to major international events (e.g. ITS-Europe Regional Conference) such as:	<ul style="list-style-type: none"> <li>t18: Next ITS – Europe Regional Conference <b>Audience Nature:</b> Industrial/Academic + International  Audience Size: TBC</li> <li>t18: Transport Research Arena <b>Audience Nature:</b> Industrial/Academic + International <b>Audience Size: TBC</b></li> <li>t18: Automotive Interiors Expo 2010 <b>Audience Nature:</b> Industrial/Academic + International  Audience Size: TBC</li> <li>t15: Intertraffic 2010 <b>Audience Nature:</b> Industrial/Academic + International  Audience Size: TBC</li> </ul>
t18	Demos	<b>completed</b>	CRF will take part in the SOFIA dissemination event, organized in Riccione (Italy) on June 2010, in conjunction with the first International Workshop on Semantic Interoperability for Smart Spaces (SISS 2010), part of the IEEE Symposium on Computers and Communications ISCC'10.	<p>The Workshop includes demo sessions where CRF will present the “Media Follows User” use cases in a real vehicle.</p> <p>Audience Nature (Industrial/Academic - National/International): TBC</p> <p>Audience Size: TBC</p>
t36	Press release	planned	During SOFIA pilot at t36	


**INDRA**

Dissemination activities have progressed as follows:

Time	Type	Status	Forums and topics	Progress/ Details
t1-36	Promotion	<b>completed</b>	<p>Through business areas of INDRA (vertical):</p> <ul style="list-style-type: none"> <li>• Energy and Industry</li> <li>• Financial Services</li> <li>• Public Administration and Healthcare</li> <li>• Telecom and Media</li> <li>• Transport and Traffic</li> <li>• Defence and Security</li> </ul> <p>Distribution of business of INDRA in the world is:</p> <ul style="list-style-type: none"> <li>• Spain 66 %</li> <li>• Rest of Europe 16 %</li> <li>• Latam 10 %</li> <li>• USA 2 %</li> <li>• Others 6 %</li> </ul>	<p>Informative meetings have taken place (with these INDRA's areas), in order to disseminate the advantages of use of SOFIA technology.</p> <p><b>Audience Nature:</b> Industrial /National</p> <p><b>Audience Size:</b> 30 Indra's market managers with an impact on around 10.000 employees</p>
t1-36	Promotion	ongoing	<p>Worldwide using INDRA subsidiaries (horizontal).</p> <p>INDRA has over 30 subsidiaries worldwide. For example: USA, Argentina, Mexico, France, Moldova, Slovakia, Morocco, Philippines, Zimbabwe, etc.</p> <p>In Latam INDRA has 5.500 professionals with presence in 14 countries.</p>	<p>Opening internal channels of communication in order to achieve SOFIA dissemination through worldwide INDRA subsidiaries.</p>
t8	Press Release	<b>completed</b>	<p>Subject: Pilot presentation in Rome</p> <p>Published on INDRA's Intranet Target: 29.000 employees</p>	 <p>SOFIA_INDRA_Rome.pdf</p> <p><b>Audience Nature:</b> Industrial /International</p>

				<b>Audience Size:</b> 29.000 employees
t10	Presentation	<b>completed</b>	<b>October 28<sup>th</sup> Madrid:</b> INDRA has presented SOFIA in PROMETEO (Spanish Embedded Systems Technological Platform that constitutes a network of scientific cooperation integrated by excellent technological agents (Technological Companies, Universities, Centers, etc.	<b>Audience Nature:</b> Industrial  <b>Audience Size:</b> 30 attendees
t11	Press Release	<b>completed</b>	Subject: ARTEMIS Autumn Event in Madrid  Published on INDRA's Intranet Target: 29.000 employees	 SOFIA_INDRA_Best_Project_Press_Releas  <b>Audience Nature:</b> Industrial / International  <b>Audience Size:</b> 29.000 employees
t12	Press report	<b>completed</b>	<b>ACTUAL Magazine:</b> INDRA has published a complete report about SOFIA in its corporative magazine (November paper and digital edition- English/Spanish).	Available at: <a href="http://www.indracompany.com/actual/2009/november_09/01.html">http://www.indracompany.com/actual/2009/november_09/01.html</a>  <b>Audience Nature:</b> General public / International  <b>Audience Size:</b> Paper edition 4.500 copies Digital edition directly sent to 29.000 clients + clients + partners. The magazine is also available at Indra's public portal. <a href="http://www.indracompany.com/en/prensa/actual-magazine">http://www.indracompany.com/en/prensa/actual-magazine</a>
t12	Media	<b>completed</b>	<b>Spanish Media dissemination:</b> INDRA's Communication and Marketing department is managing SOFIA's dissemination in La Razón Newspaper, dated on 20/12/2009.	Available at: <a href="http://www.larazon.es/hemeroteca/6451-el-telefono-movil-como-mando-a-distancia">http://www.larazon.es/hemeroteca/6451-el-telefono-movil-como-mando-a-distancia</a>   SOFIA_INDRA_La_Razon_Press_Release.  <b>Audience Nature:</b> Industrial, Academic & general public / National  <b>Audience Size:</b>

				Paper edition: 213.418 copies + digital versión.
t12	Media	<b>completed</b>	<b>Spanish Media dissemination:</b> INDRA's Communication and Marketing department has managed SOFIA's dissemination within Diario Financiero Newspaper, dated on 21/12/2009.	Available at: <a href="http://www.df.cl/vcms/site/imp_rimir.jsp?id=128494">http://www.df.cl/vcms/site/imp_rimir.jsp?id=128494</a>  SOFIA_INDRA_Diario_Financiero_Press_Rc <b>Audience Nature:</b> General public / International <b>Audience Size:</b> NA
t12	Press report	<b>completed</b>	<b>ACTUAL Magazine:</b> INDRA has published a complete report about INDRA's R&D&I investment in its corporative magazine and SOFIA has been mentioned. (December paper and digital edition-English/Spanish).	Available at: <a href="http://www.indracompany.com/actual/2009/december_09/index.html">http://www.indracompany.com/actual/2009/december_09/index.html</a> <b>Audience Nature:</b> General public / International <b>Audience Size:</b> Paper edition: 4.500 copies Digital edition directly sent to 29.000 clients + clients + partners. The magazine is also available at Indra's public portal. <a href="http://www.indracompany.com/en/prensa/actual-magazine">http://www.indracompany.com/en/prensa/actual-magazine</a>
t15	Promotion	<b>completed</b>	<b>Prezentation:</b> INDRA has presented the project to the R+D managers and teachers of the University of Cartagena- Murcia- Spain in order to disseminate SOFIA within the Spanish University Community	The University representatives have shown great interest in relation with SOFIA project. Location: INDRA's Headquarters <b>Audience Nature:</b> Academic /National <b>Audience Size:</b> 4 university's representatives with a high impact on their alumni and academics
t15	Promotion	<b>completed</b>	<b>Prezentations</b> to INDRA's	Informative meetings have taken place (with these

			areas: <ul style="list-style-type: none"> <li>• Simulation Department</li> <li>• E-Business Department</li> </ul>	INDRA's areas), in order to disseminate the advantages of use of SOFIA technology.  <b>Audience Nature:</b> Industrial /National  <b>Audience Size:</b> 10 Indra's manager with an impact on 600 employees
t17	Press Release	<b>completed</b>	Subject: ARTEMISIA and Embedded Systems Projects Published on INDRA's Intranet Target:29.000 employees	 SOFIA_INDRA_PRO METEO.pdf  <b>Audience Nature:</b> Industrial /National  <b>Audience Size:</b> 29.000 employees
t18	Brochure	<b>completed</b>	INDRA has designed, coordinated and produced a SOFIA brochure in order to boost dissemination within the project.	Target: Audience of events where SOFIA has been and is going to be disseminated.  Formats: Paper + Digital versions (available at: <a href="http://www.sofia-project.eu/system/files/SOFIA_BROCHURE_2010_06_07_v.3.pdf">http://www.sofia-project.eu/system/files/SOFIA_BROCHURE_2010_06_07_v.3.pdf</a> )  <b>Audience Nature:</b> Industrial & Academic + National + International  <b>Audience Size:</b> NA
t18	Paper	<b>completed</b>	The aim of the First International Workshop on Semantic Interoperability for Smart Spaces (SISS 2010) is to solicit and promoting the discussion among academic/industrial researchers, practitioners in the field, and most relevant industry players about the above issue of cost reduction via interoperability, with the primary guideline of <b>addressing interoperability of heterogeneous devices and systems</b> via the adoption of proper semantic solutions for open smart spaces.  <a href="http://www.ieee-isc.org/2010/web_pages/SISS/SI">http://www.ieee-isc.org/2010/web_pages/SISS/SI</a>	INDRA has sent a paper, related to SOFIA, entitled: <i>Semantic technologies and techniques for interoperable information in smart environments</i> which has been accepted and presented during the event.  Paper: <a href="http://www.sofia-project.eu/system/files/Indra%C2%B4s_paper_SISS_2010.pdf">http://www.sofia-project.eu/system/files/Indra%C2%B4s_paper_SISS_2010.pdf</a>  Poster: <a href="http://www.sofia-project.eu/system/files/SOFIA_POSTER_RICCIONE_SEMANTIC_TRANSFORMERS">http://www.sofia-project.eu/system/files/SOFIA_POSTER_RICCIONE_SEMANTIC_TRANSFORMERS</a>

			<a href="#">SS.html</a> Riccione – 22-23 June 2010 Palazzo dei Congressi – Riccione Italy	<a href="#">A4.pdf</a>  <b>Audience Nature:</b> Industrial & Academic / International  <b>Audience Size:</b> Approx. 30 attendees
t18	Event	<b>completed</b>	SOFIA First Adriatic dissemination event in conjunction with SISS2010  Riccione – 22-23 June 2010 Palazzo dei Congressi – Riccione Italy	INDRA has financed and co - organized this event.  INDRA has also actively participated in this event through paper and poster presentations.  <b>Audience Nature:</b> Industrial & Academic / National / International  <b>Audience Size:</b> Approx. 60 attendees
t19	Event	<b>completed</b>	Technological Workshop <b>Internet                  of the future</b> . INDRA has organised an internal workshop day entitled The Internet of the Future., where SOFIA was presented as one of the main project on R+D+I on progress within the company in order to foreseen tomorrow’s solutions.	 SOFIA_INDRA_Inter net_Of_The_Future_1  <b>Audience Nature:</b> Industrial /National  <b>Audience Size:</b> 50 attendees (managers & directors)
t19	Press release	ongoing	Internal press release about SOFIA presentation within ARTEMIS Summer Camp	Subject: INDRA’s participation on the ARTEMIS Summer Camp as part of the SOFIA project.
t19	Press release	ongoing	Internal press release about 1 <sup>st</sup> Adriatic SOFIA meeting.	Subject: INDRA actively participation within the 1 <sup>st</sup> Adriatic SOFIA Dissemination Event. Indra has financed, co-organised and participated.
t21-36	Newsletter	planned	The first issue of the SOFIA newsletter will be presented during the 3 <sup>rd</sup> review meeting.	This newsletter issue will cover information on the Small Scale Pilots/ Demos

				and Large Scale Pilots.
t17	Online Press Article	<b>completed</b>	Neo is bilingual publication (ES/EN) within Indra’s public innovation portal which disseminates ideas, innovation and trends and shares intelligence and case studies.	<p>The second issue of NEO delves into two of the technologies with the greatest development potential at this time: semantic technologies and increased reality. These technologies enrich the way that users interact with their environment, which may radically transform certain business models.</p> <p>INDRA describes the potential of these technologies through its own experience in the SOFIA innovation project, which is aimed at developing a platform that will allow the automation of cities, buildings and cars.</p> <p><a href="http://www.INDRAcompany.com/en/sostenibilidad-e-innovacion/neo%3A-trends%2C-ideas-and-innovation">http://www.INDRAcompany.com/en/sostenibilidad-e-innovacion/neo%3A-trends%2C-ideas-and-innovation</a></p> <p><b>Audience Nature:</b> General public / International</p> <p><b>Audience Size:</b> Digital edition targeting 29.000 clients + clients + partners. The publication also available at Indra’s public portal.</p>
t23	Event	planned	Eclipse embedded Day. Organised by PROMETEO platform.	The workshop will contemplate the various initiatives based on Eclipse, European and local projects with interesting results to disseminate within the Eclipse community. Among others invited people MOSKitt, Universidad de Murcia (project EEF4CPP), IBM Rational Spain, France Sodius (MDWorkbench).

## Meshworks Wireless

Dissemination activities have progressed as follows:

Time	Type	Status	Forums and topics	Details/ Progress
t1-36	Promotion	ongoing	Internal	
t1-36	Promotion	ongoing	Through partners' and customers' network	
t1-36	Promotion	ongoing	As part of the company's marketing strategy	
t1-36	Papers	planned	Topics and forums to be decided (international conferences, workshops and journals)	
t12-36	Demos	planned	Demonstrators of SOFIA results	
t18-36	Press release	planned	During SOFIA trials at t18 and during SOFIA pilot at t36	

## Nextworks

Dissemination activities have progressed as follows:

Time	Type	Status	Forums and topics	Details/ Progress
t1-36	Papers	planned	At international conferences, workshops and journals: <ul style="list-style-type: none"> <li>• IEEE International Workshop on Visual Surveillance</li> <li>• IEEE International Conference on Advanced Video and Signal Based Surveillance</li> <li>• ACM/IEEE International Conference on Distributed Smart Cameras</li> </ul>	Papers have not yet been submitted.
t1-36	Promotion	ongoing	Throughout the company national and European partners' and customers' network	Promotion will be done when more tangible results are available.
t1-36	Promotion	ongoing	Advertisement of the project activities as part of the company's	News about the SOFIA project published on the company

			marketing strategy in promoting its CCTV products.	web-site.
--	--	--	--	-----------

## ***NXP Semiconductors***

Dissemination activities have progressed as follows:

<b>Time</b>	<b>Type</b>	<b>Status</b>	<b>Forums and topics</b>	<b>Details/ Progress</b>
t1-36	Papers	planned	Topics and forums to be decided (international conferences, scientific and market oriented journals)	
t1-36	Promotion	ongoing	With customers and business partners	Promotion will be done when more tangible results are available.
t12	Demos	<b>completed</b>	Demonstrators of SOFIA results	T12 demo is being worked on to show energy measuring lamp in a cooperative system.
t9-36	Demos	ongoing	Demonstrators of SOFIA results	.

## ***Philips Research Laboratories Eindhoven***

Dissemination activities have progressed as follows:

<b>Time</b>	<b>Type</b>	<b>Status</b>	<b>Forums and topics</b>	<b>Details/ Progress</b>
t1-36	Papers, posters	<b>completed</b>	Topics and forums to be decided (conferences and journals)  Contributions (i.e., papers, posters, workshops) will be submitted to the following conferences: <ul style="list-style-type: none"> <li>• t20: ECAI 2010 – 19th European Conference on Artificial Intelligence</li> <li>• t17: IEEE Pervasive 2010</li> <li>• t21: ACM UbiComp 2010 - 2010 ACM Conference on Ubiquitous Computing</li> <li>• t16: ACM CHI 2010</li> </ul>	First paper submitted for review to CHI 2010 conference (April 2010) in Atalanta on 'social connectedness'.
t1-36	Promotion	ongoing	Internal to Philips Research	
t1-36	Promotion	ongoing	Internal to Philips Sectors: Consumer Lifestyle / Lighting and its business units of the	

			technologies	
t12-36	Demos	planned	Demonstrators of use cases	
t18-36	Press release	planned	During SOFIA trials at t18 and during SOFIA pilot at t36, using the ExperienceLab	SOFIA General Assemblée has been visiting the ExperienceLab with positive review

### ***Twente Institute for Wireless and Mobile Communications B.V.***

Dissemination activities have progressed as follows:

<b>Time</b>	<b>Type</b>	<b>Status</b>	<b>Forums and topics</b>	<b>Details/ Progress</b>
t1-36	Papers	planned	Technical contributions in the context of context-aware public safety applications to be presented in international public safety and disaster recovery fora as PSC Europe Forum and the ETSI/TIA project MESA	
t1-36	Papers	planned	Publications in scientific journals and conferences	
t1-36	Papers	planned	Publications in popular Dutch technical magazines as "Bits and Chips", Technisch Weekblad and Automatiseringsgids.	
t1-36	Promotion	planned	Promotion activities in the public safety and disaster recovery sector as the Dutch workshops "Wireless roadmap voor OOV", 15 October 2009, Utrecht	

### ***University of Bologna***

Dissemination activities have progressed as follows:

Time	Type	Status	Forums and topics	Details/ Progress
t9	Keynote	<b>completed</b>	JITEL'09 keynote speech: "From Vehicular Sensor Networks to Collaborative Pervasive Systems as Social Sharing Spaces"	Audience Nature (Industrial/Academic - National/International): TBC  Audience Size: TBC
t6	Paper	<b>completed</b>	"Hidden Markov Models Implementation for Tangible Interfaces" at Third International Conference on Intelligent Technologies for Interactive Entertainment	Audience Nature (Industrial/Academic - National/International): TBC  Audience Size: TBC
t10	Invited Paper	<b>completed</b> Oct 1, 2009	"Climbing the learning curve in smart environments application design" presentation at Second Int. NoTA Conference in San José	<a href="http://www.vtt.fi/files/projects/nota2009/tulliosalmoncinotti.pdf">http://www.vtt.fi/files/projects/nota2009/tulliosalmoncinotti.pdf</a>  Audience Nature (Industrial/Academic - National/International): TBC  Audience Size: TBC
t10	Events	<b>completed</b> Oct 26, 2009	MMNS'09, 12th IFIP/IEEE International Conference on Management of Multimedia and Mobile Networks and Services  (Oct 26-30, 2009 –Venice - I) - Sofia mentioned in first plenary session speech given by UnBo Chair	Audience Nature (Industrial/Academic - National/International): TBC  Audience Size: TBC
t10	Paper	<b>completed</b>	"Hidden Markov Model Based Gesture Recognition on Low-Cost, Low-Power Tangible User Interfaces" in Journal for Entertainment Computing (special issue)	Audience Nature (Industrial/Academic - National/International): TBC  Audience Size: TBC
t15	Paper	<b>completed</b> March 11, 2010	"A Smart Space Application to Dynamically Relate Medical and Environmental Information" at DATE2010 – Dresden	<a href="http://www.date-conference.com/conference/date10-session-11-4">http://www.date-conference.com/conference/date10-session-11-4</a>  Audience Nature

				(Industrial/Academic - National/International): TBC  Audience Size: TBC
t18	Paper	accepted To be <b>completed</b> June 22, 2010	<b>“Mobile Visual Search using Smart-M3”</b> at First International Workshop on Semantic Interoperability for Smart Spaces (SISS 2010) in conjunction with IEEE International conference ISCC2010	Audience Nature (Industrial/Academic - National/International): TBC  Audience Size: TBC
t18-36	Journal special issues	planned	E.g. on International Journal of Smart Home, <a href="http://www.sersc.org/journals/IJSH/">http://www.sersc.org/journals/IJSH/</a> , Elsevier's Pervasive and Mobile Computing journal, <a href="http://www.elsevier.com/locate/pmc">http://www.elsevier.com/locate/pmc</a>	
t15-18	Postgrad. Lab course	<b>completed</b> Mar-Jun 2010	SMART-M3 Lab – a 3 Credits master students lab course held at the University of Bologna with 40 student (8 demo projects) – this experimental lab course is part of a 9 credits course on Information Processing Systems	<a href="http://www.eng.unibo.it/PortaleEn/Academic+programmes/Teachings/dettaglio.htm?AnnoAccademico=2009&amp;IdComponenteAF=340910&amp;CodDocente=015095&amp;CodMateria=34777">http://www.eng.unibo.it/PortaleEn/Academic+programmes/Teachings/dettaglio.htm?AnnoAccademico=2009&amp;IdComponenteAF=340910&amp;CodDocente=015095&amp;CodMateria=34777</a>  Audience Nature (Industrial/Academic - National/International): TBC  Audience Size: TBC
t18-36	Events	planned	Sessions, panels and posters in relevant conferences to raise the interests in the issues and topics addressed by SOFIA  Distribution of SOFIA-related material and possible round-table about pervasive systems at the following conferences at least:  <ul style="list-style-type: none"> <li>t18: Mobilware'10, 3rd International ICST Conference on MOBILE Wireless MiddleWARE, Operating</li> </ul>	

			<p>Systems, and Applications</p> <ul style="list-style-type: none"> <li>t19: COMPSAC'10, 34th IEEE Annual International Computer Software and Applications Conference</li> </ul>	
t10-17	Book chapter	<b>completed</b>	<p>“Requirements on System Design to Increase Understanding and Visibility of Cultural Heritage” in “Handbook of Research on Technologies and Cultural Heritage: Applications and Environments”, edited by <i>G. Styliaras</i>, <i>D. Koukopoulos</i> and <i>F. Lazarinis</i>, to be published by IGI Global in 2011</p>	<p>In press, expected in bookstores on jan 211</p> <p>Audience Nature (Industrial/Academic - National/International): TBC</p> <p>Audience Size: TBC</p>
t30-36	Doctoral Course	considered	<p>A short course (6 to 12 hours) on interoperability in smart environments for Bologna Doctoral School in “Information Science and Engineering” which includes 5 PhD Curricula (more than 30 PhD students per year)</p>	

### Technical University of Eindhoven

Dissemination activities have progressed as follows:

Time	Type	Status	Forums and topics	Details/ Progress
t1-36	Papers	planned/ accepted	International conferences and journals in the field of human-computer interaction, ubiquitous computing, software architecture and industrial design.	<ul style="list-style-type: none"> <li>t11: "Service and Resource Discovery in Smart Spaces Composed of Very Low Capacity Nodes" in Proceedings of the IEEE International Conference on Consumer Electronics (ICCE)</li> </ul> <p>Audience Nature (Industrial/Academic - National/International): TBC</p> <p>Audience Size: TBC</p> <ul style="list-style-type: none"> <li>t10: "L.M.G. Feijs (2009). Commutative product semantics. In Proceedings of Design and semantics of form and movement (DeSForM) 2009. (pp. 12).</li> </ul> <p>Audience Nature (Industrial/Academic - National/International): TBC</p> <p>Audience Size: TBC</p>
t12-36	Journal special issues	planned	Around a particular topic that is related to the project (e.g. designing for ambient intelligent environments)	
t12-36	Workshops	planned	<p>Conference workshops around a particular topic (e.g. product semantics, user interaction in smart environments)</p> <p>Possibly at DeSForM 2010 or other suitable international conferences.</p>	

t10-36	Education	ongoing	<p>Based on the results TU/e will create student projects that:</p> <ul style="list-style-type: none"> <li>• Raise the interests in the issues and topics addressed by SOFIA among the students</li> <li>• Gives the opportunity for them to participate in the project and further brings the experiences along with them in their future careers</li> </ul>	<p>Master student projects related to SOFIA (Blurring the Boundaries) have been set up and are available for students to work on. Similar projects will be set-up for bachelor students. Project partner CONANTE (Dr. Stefan Rapp) will act as a client from industry and will provide the students with interaction technologies developed by his company.</p>
t12-36	Education	planned	<p>Courses will be set-up; teaching students about SOFIA related technologies and concepts. SOFIA can serve as a context to demonstrate the related technologies, concepts and insights.</p>	

## University of Rome La Sapienza

Dissemination activities have progressed as follows:

Time	Type	Status	Forums and topics	Details/ Progress
t1-36	Papers	<b>completed</b>	<p>International conferences and journals in the field of distributed systems, middleware, mobile ad-hoc networks and wireless sensor networks (e.g. DOA, Middleware, etc.)</p>	<p><i>“Designing Highly Available Repositories for Heterogeneous Sensor Data in Open Home Automation Systems”</i>. In Proceedings of the Software Technologies for Embedded and Ubiquitous System, 7th IFIP WG 10.2 International Workshop, SEUS 2009 Newport Beach, CA, USA, November 16-18, 2009.</p> <p>Audience Nature (Industrial/Academic - National/International): TBC</p> <p>Audience Size: TBC</p>
t1-36	Promotion	ongoing	<p>Introducing relationship with other projects of European FP7 Research Programme (SM4ALL); introducing SOFIA Technologies to local SMEs and Rome municipality</p>	

t12-36	Education	planned	Introducing the issues and topics addressed by SOFIA in lessons and courses to give the opportunity for the students to know the issues and topics addressed by SOFIA, letting them participate in SOFIA activities. More specifically we plan to introduce SOFIA topics in the context of Ph.D. in Computer Engineering (e.g. specific lectures in the course of "Seminar of Distributed Systems").
--------	-----------	---------	--

### **VTT Technical Research Centre of Finland**

Dissemination activities have progressed as follows:

Time	Type	Status	Forums and topics
t1-18	Papers	<b>completed</b>	<ol style="list-style-type: none"> <li> <p>Evesti, A.; Ovaska, E. Savola, R. 2009. From security modelling to run-time security monitoring. Fifth European Conference on Model-driven Architecture Foundations and Applications, Enchede, 23 - 26 Jun. 2009. CTIT Centre for Telematics and Information Technology, ss. 33 - 41. European Workshop on Security in Model Driven Architecture 2009. SECMDA 2009</p> <p>Audience Nature (Industrial/Academic - National/International): TBC</p> <p>Audience Size: TBC</p> </li> <li> <p>Dobrica, L.; Ovaska, E. 2009. A Service based approach for a cross domain reference architecture development. Proceedings of ENASE 2009. 4th International Conference on Evaluation of Novel Approaches to Software Engineering. 9-10 May.</p> <p>Audience Nature (Industrial/Academic - National/International): TBC</p> <p>Audience Size: TBC</p> </li> <li> <p>Khan, S.; Pantsar-Syväniemi, S.; Kreku, J.; Tiensyrjä, K. Soininen, J-P.. 2009. Linking GENESYS application architecture modelling with platform performance simulation. Forum on Specification and Design Languages 2009 (FDL2009). Sophia Antipolis, France, September 22-24, 2009. ECSI</p> <p>Audience Nature (Industrial/Academic - National/International): TBC</p> <p>Audience Size: TBC</p> </li> <li> <p>Aho, P.; Merilinna, J.; Ovaska, E. 2009. Model-driven open</p> </li> </ol>

			<p>source software development: the open models approach. The Fourth International Conference on Software Engineering Advances. ICSEA 2009. Porto, Portugal, September 20-25, 2009.. IEEE, pp. 185 – 190</p> <p>Audience Nature (Industrial/Academic - National/International): TBC</p> <p>Audience Size: TBC</p>
			<p>5. Evesti A, Eteläperä M, Kiljander J, Kuusijärvi J, Purhonen A, Stenudd S, Semantic Information Interoperability in Smart Spaces, MUM'09, November 22–25, 2009, Cambridge, United Kingdom.</p> <p>Audience Nature (Industrial/Academic - National/International): TBC</p> <p>Audience Size: TBC</p>
			<p>6. Model based architecting with MARTE and SysML profiles Pantsar-Syväniemi, Susanna; Ovaska, Eila. The IASTED International Conference on Software Engineering, SE 2010. February, 16-18, 2010, Innsbruck, Austria..</p> <p>Audience Nature (Industrial/Academic - National/International): TBC</p> <p>Audience Size: TBC</p>
			<p>7. Knowledge based quality-driven architecture design and evaluation Ovaska, E. Evesti, A. Henttonen, K. Palviainen, M.. Aho, P. <i>Information and Software Technology</i>. Elsevier. Vol. 52 (2010) No: 6, 577– 601</p> <p>Audience Nature (Industrial/Academic - National/International): TBC</p> <p>Audience Size: TBC</p>
			<p>8. A demo on using Visualization to aid Run-time Verification of Dynamic Service Systems, J. Kuusijärvi, International Conference on Software Testing, Verification and Validation Workshops, 2010. ICSTW '10, 6 p, April 6–10, 2010, Paris, France, in press.</p> <p>Audience Nature (Industrial/Academic - National/International): TBC</p> <p>Audience Size: TBC</p>
			<p>9. Towards ontology-driven development of applications for smart environments, A. Katasonov and M. Palviainen, in Proc. Workshops of IEEE Intl. Conf. on Pervasive Computing and Communications, Mannheim, Germany, March 29, 2010, pp. 696-701.</p> <p>Audience Nature (Industrial/Academic - National/International): TBC</p>

			<p>Audience Size: TBC</p> <p>10. A dynamic behaviour and reliability evaluation method for applications that are based on asynchronous processing nodes. Palviainen, M. First International workshop on Validation and Verification of Dynamic Software Systems ViDaS' 10 in; in conjunction with ICST 2010, April 6-10, Paris, France. IEEE</p> <p>Audience Nature (Industrial/Academic - National/International): TBC</p> <p>Audience Size: TBC</p> <p>11. Enabling non-programmers to develop smart environment applications, A. Katasonov , in Proc. SISS workshop at IEEE symposium on Computers and Communications, Riccione, Italy, June 22, 2010, in press</p> <p>Audience Nature (Industrial/Academic - National/International): TBC</p> <p>Audience Size: TBC</p> <p>12. Visualizing Structure and Quality Properties of Smart Spaces, J. Kuusijärvi, A. Evesti and E. Ovaska, First International Workshop on Semantic Interoperability for Smart Spaces, SISS 2010, pp. 3, June 22, 2010, Riccione, Italy, in press.</p> <p>Audience Nature (Industrial/Academic - National/International): TBC</p> <p>Audience Size: TBC</p> <p>13. Applying UML Extensions in Modeling Software Product Line Architecture of a Distribution Services Platform, Dobrica, L, Ovaska, E. Model-Driven Domain Analysis and Software Development: Architecture and Functions, IGI Global, in press.</p> <p>Audience Nature (Industrial/Academic - National/International): TBC</p> <p>Audience Size: TBC</p> <p>14. Instantiating GENESYS Application Architecture Modelling via UML 2.0 constructs and MARTE Profile. Khan, S. et al. Eurimicro on Digital System Design. France, Lille, 1-3 Sept. 2010.</p> <p>Audience Nature (Industrial/Academic - National/International): TBC</p> <p>Audience Size: TBC</p> <p>15. OntoArch Reliability-aware Software Architecture Design and Experience, Zhou, J., Ovaska, E., Evesti, A., Immonen, A. Revised version of the chapter to book Modern Software</p>
--	--	--	---

			<p>Engineering Concepts and Practices: Advanced Approaches, Dogru &amp; Bicer (eds.), IGI Global.</p> <p>Audience Nature (Industrial/Academic - National/International): TBC</p> <p>Audience Size: TBC</p> <p>16. Model and ontology -based development of smart space applications, M. Palviainen and A. Katasonov, To appear in the book "Pervasive Computing and Communications Design and Deployment: Technologies, Trends, and Applications"</p> <p>Audience Nature (Industrial/Academic - National/International): TBC</p> <p>Audience Size: TBC</p>
t12-18	Papers	submitted	<p>1. Architecting Real-time and Embedded Software, Pantsar-Syvaniemi, Susanna. 4th European Software Architecture Conference, ECSA 2010. August, 23 - 26, 2010, Copenhagen, Denmark.</p> <p>2. Ontology driven piecemeal architecting, Ovaska, E. An emerging research paper to ECSA 2010, Copenhagen, August 2010, 8 p.</p> <p>3. Reliability Estimation, Prediction and Measuring of Component Based Software, Palviainen, M., Evesti, A., Ovaska, E., Revised version to <i>Journal of Systems and Software</i>.</p> <p>4. Ontology-based Security Adaptation at Run-time, Evesti, A., Ovaska, E. SASO 2010, 4th IEEE International Conference on Self-Adaptive and Self-Organizing Systems.</p> <p>5. Autonomic Dependable Service Platform for Smart Cities, Ovaska, E., Purhonen, A., Jaakola, M., Dobrica, L. SASO 2010, 4<sup>th</sup> IEEE International Conference on Self-Adaptive and Self-Organizing Systems</p> <p>6. Secure Information Sharing between Heterogeneous Embedded Devices. Suomalainen, J., Hyttinen, P., Tarvainen, P. Submitted to MeSSa 2010, 1st International Workshop on Measurability of Security in Software Architectures. Copenhagen, Denmark, August 23, 2010. Co-located with ECSA 2010.</p> <p>7. Performance Evaluation of smart of NoTA using Binary Instrumentation and sampling profiling. Khan, S.</p> <p>8. A survey of performance simulation techniques for embedded systems. Khan, S.</p> <p>9. Linking Smart Space Applications operating Over NoTA with Application workload based performance simulation. Khan, S.</p>

t12-24	Papers	planned	<ol style="list-style-type: none"> <li>1. Two journals related to self-adaptive systems and metadata framework for ODD</li> <li>2. 2-3 conference papers based on the cross domain demonstrator.</li> </ol>
t1-12	Promotion	<b>completed</b>	<p>Through other research activities done by VTT:</p> <ul style="list-style-type: none"> <li>• VTT's strategic programme OPENS (3 presentations and 1 demonstration in OPENS seminars)</li> <li>• Finnish national project DIEM (collaboration within VTT)</li> <li>• Japanese co-operation project OPUTE (collaboration within VTT)</li> <li>• EU and ITEA2 projects related to quality, interoperability and semantics modeling (POBICOS, SMEPP, Evolve, CAM4Home, Osami Commons)</li> </ul> <p>Public video demonstrations in Innovation Kitchen at VTT, Sept. 2009, in MUM November 2009 and Greenhouse demonstration and video in TronShow, Tokyo, Japan, December 2009.</p> <p>Public video: Implementation of some of the identified EPM module features started in WP2. Smart Green House Demo shows how the context based quality management, i.e. for performance/energy efficiency and security, are achieved at run-time. Vide of this demo is on YouTube: <a href="http://www.youtube.com/watch?v=EU9alk9t7dA">http://www.youtube.com/watch?v=EU9alk9t7dA</a></p> <p>Demonstration and Smart-M3 launch in NoTA conference , San Jose, CA, September 2009</p> <p>Joint demonstration with Nokia and University of Bologna in ARTEMIS/ITEA2 Symposium October 2009 (received Artemis Exhibition Award).</p> <p><b>In 2010 activities done in Finland:</b></p> <ul style="list-style-type: none"> <li>• Sofia seminar for academic and industry 24 Feb. 2010. Besides the technical session also the demonstrator and business sessions were organized.</li> <li>• Collaboration meetings with EU and ITEA2 projects (POBICOS, Evolve, CAM4Home)</li> <li>• Collaboration with DIEM/ICT-SHOK in defining the Demo2.</li> </ul> <p><b>In 2010 activities done in Europe:</b></p> <ul style="list-style-type: none"> <li>• Demonstrator in SISS (Demo with the use of IQVis tool) (Jarkko Kuusijärvi)</li> <li>• SmartModeller demonstrator in ISCC Sofia demonstrator session 22 June 2010 (Artem Katasonov).</li> </ul>



			<ul style="list-style-type: none"> <li>• Organization of Doctoral Symposium (Eila Ovaska) and 1st International Workshop on Measurability of Security in Software Architectures (Reijo Savola, Teemu Kanstren, Antti Evesti) within ECSA 2010 in Copenhagen 23 August 2010 as an collaboration of GEMOM (EU), BOGYO Beyond (ITEA2) and Sofia (Artemis).</li> </ul>
t18-36	Promotion	ongoing	<p>Through OPENS programme; collaboration with VTT's strategic project, EU, ITEA2 and ICT-SHOK (DIEM, Cloud-SW) and contract research projects.</p> <p>Sofia is participating in the European Institute of Innovation and Technology (EIT) through the ICT-Labs in Espoo.</p> <ul style="list-style-type: none"> <li>• Contactless Payment seminar 6 May 2010 Hki (Antti Evesti). In collaboration with GEMOM/EU-ICT project.</li> <li>• Benchmarking/collaboration meeting with TNO May 2010 (Presentation and demonstration of Sofia).</li> <li>• Meeting with Finnish companies in May 2010 and June aiming at a contract project (Presentation and demonstration).</li> <li>• OPENS researcher seminar 23 June in Hki</li> <li>• Meeting with City of Oulu for seeking collaboration within cross-domain demonstrator with VTT.</li> <li>• Poster and demo video in Messa and ECSA August 2010.</li> <li>• ICT 2010 Symposium in September (optional)</li> <li>• Demonstrations to industrial companies and meetings about collaboration projects.</li> <li>• Participation in NoTA conference and TronShow (optional)</li> <li>• Meetings with Italian partners targeting to joint and contract research projects.</li> <li>• Two Artemis projects, potential exploiters of Sofia results, are in the PO phase</li> </ul> <ul style="list-style-type: none"> <li>• Public demonstrations in appropriate events in Finland and Europe.</li> </ul> <p>Demonstrations and workshops for Finnish industrial companies in November 2010.</p> <ul style="list-style-type: none"> <li>• Using the concept and approach in other international research projects</li> <li>• Supporting the emergence of new smart environment ecosystem by setting up and participating to collaboration activities</li> </ul>




## 4. Multi-partner dissemination


Multi-partner dissemination of the SOFIA has progressed as follows:

Time	Type	Status	Partners	Forums and topics	Details/ Progress
t6-36	Demos	ongoing	Eurotech UnBo CCC	Demonstrators in public events: <ul style="list-style-type: none"> <li>Artemis Autumn Event</li> </ul>	Demonstration focused on the use of Sofia's concepts and technologies in indoor smart spaces. The demo is generic and has a component related to building maintenance.
t09	Promotion	<b>Completed</b>	Eurotech UnBo CCC	Event "Night of research", held in Bologna, Italy (25 September 2009). The event is an action of "The night of the research- "Researchers in Europe", a programme launched in 2005 by European Commission, that offers to the large public a unique opportunity to discover the researchers and their world of labs, universities, enterprises, foundations.	A SOFIA poster, a mannequin and involved researchers promoted different smart object and technologies related to the SOFIA project and the smart maintenance application. ( <a href="http://www.aster.it/nottedeirercatori/doc/bologna.pdf">http://www.aster.it/nottedeirercatori/doc/bologna.pdf</a> )
t9	Demos @ Events (poster and demo)	<b>completed</b> Sept 30, 2009	UnBo Nokia	NoTA Conference in San Josè: Using M3 in a cross domain context-aware demo application with information aggregators for semantics enhancement	Single SIB demo  Audience Nature (Industrial/Academic - National/International): TBC  Audience Size: TBC
t10	Promotion	<b>completed</b>	Eurotech UnBo CCC	National exhibition "ECOMONDO" (28 - 31 October 2009), Rimini, Italy. ( <a href="http://www.ecomondo.com">www.ecomondo.com</a> ). The exhibition is dedicated to the Green Economy and related technologies tailored to sustainable progress in the construction sector and land use management.	A SOFIA poster, a mannequin and involved researchers promoted technologies related to the SOFIA project and solutions for environmental monitoring and maintenance application.


t11	Demos @ Events (poster and demo)	<b>completed</b> Oct 29, 2009	UnBo Eurotech Nokia VTT	Artemis Autumn Event 2009 in Madrid: "Information collected from the environment promotes SOFIA's Smart Applications"	Dual SIB - dual Ontology demo (jointly with Eurotech, Nokia, VTT - Artemis exhibition Award received)  Audience Nature: Industrial +Academic + International  Audience Size: TBC
t11	Demos	<b>completed</b>	UNBO Nokia	Joint demonstration with Nokia and University of Bologna in ARTEMIS/ITEA2 Symposium October 2009 (received Artemis Exhibition Award).	
t11	Paper	<b>completed</b> Nov 1, 2009	UnBo VTT	"Supporting Context Awareness in Smart Environments: a Scalable Approach to Information Interoperability" at International Workshop on Middleware for Pervasive Mobile and Embedded Computing (M-MPAC'09), within the ACM/IFIP/USENIX 10th International Middleware Conference	Audience Nature (Industrial/Academic - National/International): TBC  Audience Size: TBC
t12-36	Demos	ongoing, planned	Eurotech UnBo CCC	Demonstration in public events.	Full demonstration focused on building maintenance scenario.
t12	Demos	<b>completed</b>	NXP Eurotech UNBO TU/e	Demonstrators of SOFIA results	Audience Nature (Industrial/Academic - National/International): TBC  Audience Size: TBC
t1-t18	Paper	<b>completed</b>	VTT ?	Joint paper writing with industrial partners in Sofia (2) and outside Sofia (2)	Audience Nature (Industrial/Academic - National/International): TBC


					Audience Size: TBC
t18	Promotion	<b>completed</b>	VTT UNBO	1 <sup>st</sup> international workshop on Semantic Information for Smart Spaces (SISS) 2010 organized by Eila Ovaska and Paolo Bellavista in conjunction with International Symposium of Computers and Communications (ISCC 2010) in Riccione, Italy, 22 June 2010.	
t12-36	Demos	ongoing, planned	Eurotech UnBo CCC	Demonstration in public events.	Full demonstration focused on building maintenance scenario.
t13	Promotion	<b>completed</b>	CRF Nokia	Sharing of publishable project results with the SMEs in the Piemonte area to FIAT's ecosystem of partners and suppliers	First informative meetings have been held in January with two medium Enterprises of the Turin district.   SOFIA_NOKIA_ARTE MIS.pdf  <b>Audience Nature -</b> Industrial + International  Audience Size: TBC
t14	Paper	submitted February 2010 to SENSORCO MM2010 Conference ( <a href="http://www.iaaria.org/conferences2010/ManuscriptSENSORCOMM10">http://www.iaaria.org/conferences2010/ManuscriptSENSORCOMM10</a> ).	UniRoma Elsag-Datamat Nextworks	In this paper we present the Smart City Architecture developed in the context of the ARTEMIS JU SP3 SOFIA project. It is an Event Driven Architecture that allows the management and cooperation of heterogeneous sensors	 SOFIA_Smart_City_Paper_ED_UNIROMA_I  Audience Nature (Industrial/Academic - National/International): TBC  Audience Size: TBC

		html)		for monitoring public spaces. The main components of the architecture are implemented in a test bed on a subway scenario with the objective to demonstrate that our proposed solution, can enhance the detection of anomalous events and simplify both the operators tasks and the communications to passengers in case of emergency	
t16	Paper	<b>completed</b>	CRF Nokia VTT	CRF contributed in the preparation of a paper entitled "Experiences in Implementing a Cross-domain Use Case by Combining Semantic and Service Level Platforms", submitted at the first International Workshop on Semantic Interoperability for Smart Spaces (SISS 2010) organized in Riccione (Italy) on June 2010, as part of the IEEE Symposium on Computers and Communications ISCC'10.	<p>The paper describes the experiences of implementing a mash-up of two independent use cases, one operating in the embedded domain and the other in the internet messaging domain.</p>  <p>SOFIA_Combining_Semantic_and_Service</p> <p><b>Audience Nature:</b> Industrial &amp; Academic / National / International</p> <p><b>Audience Size:</b> Approx. 60 attendees</p>
t17	paper	<b>completed</b> May at Pervasive 2010 Workshop ( <a href="http://www.pervasive2010.org">http://www.pervasive2010.org</a> )	Nextworks Elsag-Datamat Conante	Paper : Giada Landi, Giorgio Laura, Vincenzo Memeo, Paolo Pucci, and Stefan Rapp (2010) "A Unified Monitoring for Smart City Environment based on SOFIA's Interoperability Open Platform" Pervasive 2010, Poster session, Helsinki, Finland, 17-20 May, 2010	 <p>UMVS-Pervasive2010.pdf</p> <p><b>Audience Nature:</b> Industrial &amp; Academic / International</p> <p><b>Audience Size:</b> Approx. 250 researchers</p>
t17	Poster	<b>completed</b> May at Pervasive 2010 Workshop	Nextworks Elsag-Datamat	The purpose of the poster is to show main results we obtained during the first year of the SOFIA Project. We	 <p>SOFIA_A_unified_smart_city_environment</p>

		<a href="http://www.pervasives2010.org">http://www.pervasives2010.org</a>	Conante	focus on the application area related to smart city spaces and, in particular, on the Unified Monitoring and Video Surveillance system built on the common semantic Interoperability Open Platform developed in SOFIA	<p><b>Audience Nature:</b> Industrial &amp; Academic / International</p> <p><b>Audience Size:</b> Approx. 250 researchers</p> <p>Audience Nature (Industrial/Academic - National/International): TBC</p> <p>Audience Size: TBC</p>
t17	Paper	Submitted in May 2010 to the XXth edition of the Telecom I + D congress. ( <a href="http://www.telecom-id.com/">http://www.telecom-id.com/</a> )	INDRA ESI	In this paper the SOFIA project is presented, with particular regard to WP6 and WP3 activities. The focus is on three main themes of interest: the SOFIA ADK, the concept of Smart Spaces in SOFIA, and the Unified Monitoring and Video Surveillance System.	 SOFIA_Smart_Objects_For_Intelligent_Ap
t12-t18	Paper	Submitted	VTT UNBO	Design principles and practices of interoperable smart spaces, Ovaska, E., Salmon Cinotti, T., Toninelli, A. Chapter in the book: Advanced Design Approaches to Emerging Software Systems: Principles, Methodology and Tools. Xiaodong Liu & Yang Li (eds.), 32 p.	
t18	Poster + Demo	<b>completed 22 June 2010</b>	CCC UNBO	"First Adriatic Dissemination Day", in conjunction with the SISS2010 and IEEE International conference ISCC2010, Riccione, Italy (22 June 2010) .	Demos , poster and video describing the "Smart Maintenance" solution of the Sofia project.
t18	Demos	<b>completed</b>	NXP Eurotech UNBO TU/e	Demonstrators of SOFIA results	<p>Audience Nature (Industrial/Academic - National/International): TBC</p> <p>Audience Size: TBC</p>

t18	Paper	<b>completed</b> June 22, 2010	UNBO CCC Eurotech VTT	<p>“Smart-M3 and OSGi: the Interoperability Platform” First International Workshop on Semantic Interoperability for Smart Spaces (SISS 2010) in conjunction with IEEE International conference ISCC2010</p>	<p><b>Audience Nature:</b> Industrial &amp; Academic / National / International</p> <p><b>Audience Size:</b> Approx. 60 attendees</p>
t18	Paper	<b>completed</b> June 22, 2010	UNBO CCC Eurotech	<p>“Smart Applications for the Maintenance of Large Buildings: How to Achieve Ontology-based Interoperability” at First International Workshop on Semantic Interoperability for Smart Spaces (SISS 2010) in conjunction with IEEE International conference ISCC2010</p>	<p><b>Audience Nature:</b> Industrial &amp; Academic / National / International</p> <p><b>Audience Size:</b> Approx. 60 attendees</p>
t18	<b>Workshop</b>	<b>completed</b> June 22, 2010	UNBO VTT	<p>“First International Workshop on Semantic Interoperability for Smart Spaces” (SISS 2010), organized in association with the</p> <p>IEEE Symposium on Computers and Communications (ISCC 2010)</p> <p>22 June 2010, Riccione, Italy</p> <p><a href="http://www.ieee-iscc.org/2010/">http://www.ieee-iscc.org/2010/</a>.</p>	<p><b>Audience Nature:</b> Industrial &amp; Academic / National / International</p> <p><b>Audience Size:</b> Approx. 60 attendees</p>
t18	Seminar	<b>completed</b> June 1, 2010	UNBO NRC	<p>“A European Interoperability Platform for Cross Domain Smart Environments Applications”, University of Bologna, Second Faculty of Engineering, Cesena</p>	<p>Seminar was organized by UnBo and given to over 50 attendees by NRC (Jukka Honkola) – students projects were also completed</p> <p><b>Audience Nature:</b> Academic + International</p> <p><b>Audience Size:</b> over 50 attendees</p>
t18-36	Open source	planned	VTT	Contributions to open source distribution of	Audience Nature (Industrial/Academic -

			UnBo	<p>smart environment reference implementation.</p> <p>KPI_low in Ansi C published at <a href="http://sourceforge.net/projects/kpilow/">http://sourceforge.net/projects/kpilow/</a></p> <p>Java-KPI published as an Open Source project of sourceforge.net</p>	<p>National/International): TBC</p> <p>Audience Size: TBC</p>
t21	Paper	ongoing	INDRA ESI	<p>RED DSDM (Development of Model-Driven Software), will be hold in Valencia, Spain on the 7<sup>th</sup> September (<a href="http://www.taro.ull.es/dsdm10/index.php?s=CFP">http://www.taro.ull.es/dsdm10/index.php?s=CFP</a>)</p> <p>DSDM is a proposal for the development of software which is attributed to the primary role models throughout the process, the DSDM aims to raise the level of abstraction in software development, making models and transformations between them in the main artifacts from all phases of software development process. This is achieved by improving the efficiency of the development process and the quality of the final application.</p>	<p>Paper accepted.</p>  <p>SOFIA_ADK_INDRA_ESI.pdf</p> <p>This complete article about SOFIA will be part of the Workshop papers, which will be presented to all attendees.</p>
t21	Event	planned	INDRA ESI	<p>In conjunction with DSDM event Indra and ESI have organized a SOFIA workshop focused on the ADK.</p>	
t21	Poster	ongoing	INDRA ESI	<p>IEEE Symposium on Visual Languages and Human-Centric Computing 2010, <a href="http://dei.inf.uc3m.es/vlh">http://dei.inf.uc3m.es/vlh</a></p>	<p>Poster Abstract accepted</p>

				<a href="http://cc10/index.html">cc10/index.html</a>	 SOFIA_ADK_INDRA_ESI_VLHCC.pdf  Final poster version will be presented during the conference on September 23 <sup>rd</sup> 2010.
				The IEEE Symposium on Visual Languages and Human-Centric Computing (VL/HCC) is the premier international forum for researchers and industrial practitioners to discuss the theory, applications and evaluation of technologies, visual and otherwise, that enhance the role of humans in the computing process.	

## 5. Exploitation by the SOFIA project partners

This chapter outlines the impacts and progression that project partners have achieved through the SOFIA results by December 2009.

### **Nokia**

Exploitation of the SOFIA results has progressed as follows:

Time	Result	Status	Nature of exploitation	Details/ Progress
t12-36	All	planned	Improved time-to-market of Nokia solutions and increase in the new features contributed by developer community	
t12-36	IOP	planned	Improved efficiency and user interface of Nokia devices through the use of local resources	
t12-36	IOP	planned	Improved access to and cross-use of service internal features in Ovi by Nokia services	
t12-36	IOP	planned	Improved mash-up application creation for physical devices, provide means for SMEs to rapidly innovate on top of Nokia's device platform	
t12-36	Technology	planned	Improved energy efficiency of Nokia products	

t12-36	Use cases	planned	Improved image of Nokia products, e.g. greenness	
t12-36	Use cases	planned	Expansion of Nokia offering to new domains and business areas	

### ***Acciona Infraestructuras***

Exploitation of the SOFIA results has progressed as follows:

<b>Time</b>	<b>Result</b>	<b>Status</b>	<b>Nature of exploitation</b>	<b>Details/ Progress</b>
t12-36	Technology	planned	Deploy project results in the development of innovative wireless architectures in buildings and public infrastructures. Building and public areas such metro stations maintenance is the area in which the improvements are expected.	

### ***Consorzio Cooperative Costruzioni***

Exploitation of the SOFIA results has progressed as follows:

<b>Time</b>	<b>Result</b>	<b>Status</b>	<b>Nature of exploitation</b>	<b>Details/ Progress</b>
t24-36	Technology	planned	Deploy project results in the development of innovative wireless solutions devoted to the facility management of buildings	

### ***Conante***

Exploitation of the SOFIA results has progressed as follows:

<b>Time</b>	<b>Result</b>	<b>Status</b>	<b>Nature of exploitation</b>	<b>Details/ Progress</b>
t24	IOP	planned	Inclusion of SOFIA technology in LumEnActive	
t36+	IOP	planned	Inclusion of SOFIA technology in future Conante products	
t24+	Knowhow	planned	Consulting and teaching of SOFIA technology to third parties	

### ***Ecole Polytechnique Fédérale de Lausanne***

Exploitation of the SOFIA results has progressed as follows:

Time	Result	Status	Nature of exploitation	Details/ Progress
?	Expertise	planned	Input to education and future research projects	
?	Technology	planned	Consulting on IOP based public infrastructure solutions	

### ***Elsag Datamat***

Exploitation of the SOFIA results has progressed as follows:

Time	Result	Status	Nature of exploitation	Details/ Progress
t12-36	Technology	planned	Input for new research phases aimed at developing pre-production prototypes to be used for building, monitoring and controlling start environments. The development of new models for service providing in start environments and the study of new technologies for building, monitoring and controlling start environments will give Elsag Datamat a chance to increase its competition level and its offering in the area of integration and control of embedded systems. The project outcomes will be exploited as a first step toward Telecommunication market (addressing proposals toward network, service or information providers, both in Italy and abroad); later on they will be extended to other possibly interested markets, e.g. Utilities, Public Administration, Transports and Security.	
t12-36	IOP	planned	Possible usage of SOFIA IOP as a multi-vendor interoperation platform, to build a technology-agnostic solution for service and information providers	
t12-36	Knowhow	planned	Research and Development: the increased know-how in some of the areas covered by the project will constitute the basis for further	

			research activities in fields related to the Artemis initiative
t12-36		planned	Cooperation and alliance with SOFIA partners for new joint projects and/or business oriented activities

### **European Software Institute - Tecnalía**

Exploitation of the SOFIA results has progressed as follows:

<b>Time</b>	<b>Result</b>	<b>Status</b>	<b>Nature of exploitation</b>	<b>Details/ Progress</b>
?	Expertise ADK	planned	New category of products and services under the corporate portfolio: SOFIT (Smart Objects for Internet of Things), where ADK elements will be used first as baselines of commercial training courses, and later as consultancy services to transfer the ADK technology to companies (starting with ESI Week 2010)	
?	ADK	planned	Elements to system developers and integrators that will create commercial opportunities to different actors of the embedded system design, development and integration value chain	
?	IOP	planned	Showcase to attract industrial design research interest in order to help them exploit it	
?	Expertise	planned	For future research projects	
?		planned	Cooperation and alliance with SOFIA partners for new joint projects and/or business oriented activities	

## **Eurotech**

Exploitation of the SOFIA results has progressed as follows:

<b>Time</b>	<b>Result</b>	<b>Status</b>	<b>Nature of exploitation</b>	<b>Details/ Progress</b>
t12-36	Knowhow, Technology	planned	Cooperate in promoting and adopting the SOFIA IOP paradigm in Eurotech's pervasive systems and single devices.	Eurotech is directly interested in adopting Sofia's technologies in its products, in order to guarantee interoperability with legacy systems and increase the interoperability of current and future products.
t1-36	Knowhow, Technology	ongoing	Create a double link between Sofia and Eurotech Everywhere Software Framework (ESF), in order to let both platforms to take advantage from each other.	This activity consists mainly in the development of M3 localization based on OSGi (see Sofia Technical Annex).
t12-36	Research	planned	Cooperate with SOFIA partners to propose new joint projects and/or business oriented activities.	
?	Expertise	planned	The expertise acquired during the project will be exploited in future research projects.	
t12-36	Knowhow, Technology	planned	Create new challenges and new research scenarios within Eurotech R&D division.	

## **Centro Ricerche FIAT**

Exploitation of the SOFIA results has progressed as follows:

<b>Time</b>	<b>Result</b>	<b>Status</b>	<b>Nature of exploitation</b>	<b>Details/ Progress</b>
t12-36	Technology	planned	Deploy project results in the development of innovative in-vehicle wireless architectures (strategic)	
t24-36	Technology	planned	CRF represents FIAT Automobiles in this project. The evolution of the Blue&Me telematic platform will be made immediately available for the forthcoming on board telematic platforms. The impact in the	

			exploitation will be therefore huge and in short term, as the market of the Blue&Me platform is rapidly growing	
t1-36	IOP	planned	Cooperate in applying the SOFIA IOP paradigm in Smart Automotive contexts	

### INDRA

Exploitation of the SOFIA results has progressed as follows:

Time	Result	Status	Nature of exploitation	Details/ Progress
?	Knowhow	planned	<p>INDRA will take advantage of its in-depth knowledge of SOFIA technology in order to design and develop services for its wide range of customers. We would like to mention the following examples:</p> <ul style="list-style-type: none"> <li>• Consultancy services and applications for mobile phone operators will be developed by the Telecom &amp; Media market of INDRA, They will use the applicable new capacities in devices, fruit of SOFIA research. These operators will offer them to its final customers.</li> <li>• INDRA, through its Security &amp; Defence market, will offer surveillance and localization systems of to its customers.</li> <li>• Surveillance and emergency systems will be offered to municipalities, hospitals and other public administrations through the Public Administration and Healthcare business area.</li> <li>• Other possible applications will be offered by Transport &amp; Traffic market of INDRA to its customers.</li> </ul>	

?	Technology	planned	All these projects will be presented and developed in any place of the world where INDRA has direct or indirect presence, through its subsidiaries. These projects will be developed by INDRA itself or in cooperation with other SOFIA partners.
---	------------	---------	---

### **Meshworks Wireless**

Exploitation of the SOFIA results has progressed as follows:

Time	Result	Status	Nature of exploitation	Details/ Progress
t12-36	IOP	planned	SOFIA framework will be integrated into MWW's next generation WSN products and solutions. The plan is that SOFIA framework will be used e.g. in applications like cold chain control (CCC), in-door air quality monitoring, asset management, machine remote diagnostics and smart-energy and smart-grid applications.	
t12-36	Knowhow	planned	Provide consultancy and R&D services for customers aligning their activities with SOFIA architecture	

### **Nextworks**

Exploitation of the SOFIA results has progressed as follows in two different market areas addressed by two divisions in the company:

Time	Result	Status	Nature of exploitation	Details/ Progress
t12-36	Knowhow	planned	Research and Development and consultancy: the increased visibility at European level and the increased know-how in the SOFIA technological areas will bring in new opportunities for specific consultancy and for job on requests, and will constitute the basis for further research activities in the fields relevant to the Artemis initiative	
t12-36	Technology	planned	Product development: the SOFIA interoperability concepts and the software components developed by	As stated in the TA work plan, until T12 no SOFIA IOP concepts have been

			the company will be integrated in pre-production prototypes in order to evaluate the impact of the newly designed products for the national and worldwide market, especially in the high-end residential and luxury yachting markets	integrated in the software components developed by the company.
--	--	--	--	---

### ***NXP Semiconductors***

The project is in an early stage; therefore no exploitation of the results of Sofia has been made yet. The future plan will be to use these results in smart lighting controls (WP2).

Exploitation of the SOFIA results has progressed as follows:

<b>Time</b>	<b>Result</b>	<b>Status</b>	<b>Nature of exploitation</b>	<b>Details/ Progress</b>
?	Expertise	planned	Understand market and application requirements and adapt our products accordingly, in market segments such as Car Entertainment Solutions and Solid State Lighting, and potentially Home Automation and Smart Grid	
?	Technology	planned	Build systems based on technologies and concepts developed within the Sofia project to communicate with our customers and help them enable develop cooperative systems	
?		planned	Understand cooperative systems and build low power platforms by e.g. implementing functions for interoperability in HW where possible	

### ***Philips Research Laboratories Eindhoven***

Exploitation of the SOFIA results has progressed as follows:

<b>Time</b>	<b>Result</b>	<b>Status</b>	<b>Nature of exploitation</b>	<b>Details/ Progress</b>
?	Expertise	planned	Understand Porter's Five Competitive Forces: Suppliers, Customers, New entrants, SOFIA proposition to know how to enter the market	
?	Technology	planned	Build systems that use the SOFIA architecture framework. Prospective	

			product categories are in the field of ambient assisted living and social connectedness, especially those products that bond and inform remote family members about each other's well-being, provide piece of mind of informal care givers and give support of professional care providers for personalized care.
?		planned	Cooperating closely with academic and industrial partners within the SOFIA consortium to work at possible end user products

### ***Twente Institute for Wireless and Mobile Communications B.V.***

Exploitation of the SOFIA results has progressed as follows:

Time	Result	Status	Nature of exploitation	Details/ Progress
?	Expertise	planned	Contract Research that WMC conducts for national and international companies	
?	IOP	planned	Possible usage of SOFIA IOP in our ad-hoc radio communications infrastructure product line	
?		planned	Improved embedded systems development and usage in WMC	

### ***University of Bologna***

Exploitation of the SOFIA results has progressed as follows:

Time	Result	Status	Nature of exploitation	Details/ Progress
t9-36	Expertise/ Promotion	ongoing/ planned	Impact on quality of students project, focused on turning environments into smart environments (undergraduate, graduate and PhD) at ARCES, University of Bologna	
t15-36	Expertise/ Promotion	ongoing	Exploitation of the Smart M3 platform in UNIBO courses (a 3 cfu lab with mandatory student projects using SmartM3)	Updated 11/03/2010

t21-36	Expertise/ Promotion	planned	relevant technical impact on the new postgraduate course of "Mobile Systems M", included in the "Laurea Magistrale in Computer Engineering" at UnBo, in Bologna	
t21-36	Expertise/ Promotion	planned	Relevant technical impact on the postgraduate course of "Hardware-Software Design Methodologies", for the Laurea Magistrale in Computer Engineering and Electronics in Bologna	
t12-36	Expertise/ Promotion	ongoing/ planned	Relevant technical impact on the postgraduate course of "Wireless Systems and Networks", for the Laurea Specialistica and Laurea Magistrale in Computer Science at UnBo in Bologna (instructor: Luciano Bononi)	
t12-36	Expertise/ Promotion	ongoing/ planned	Relevant technical impact on the postgraduate course of "Simulation", for the Laurea Specialistica and Laurea Magistrale in Computer Science at UnBo in Bologna (instructor: Luciano Bononi and Lorenzo Donatiello)	
t12-36	Expertise	planned	Expertise on smart environments gained within the project  is intended to lead to joint research with the industry (one-to-one contracts or EU projects)	

### ***Technical University of Eindhoven***

Exploitation of the SOFIA results has progressed as follows:

<b>Time</b>	<b>Result</b>	<b>Status</b>	<b>Nature of exploitation</b>	<b>Details/ Progress</b>
?	Expertise	planned	Excellent showcase to bring forward the focus of industrial design research at TU/e on intelligent products, systems and services	

?	Expertise	planned	Input to both education and future research projects	
?		planned	Cooperating closely with international industrial partners such as Philips and NXP in the SOFIA project, the design results can be used and further developed into commercial products	

### **University of Rome La Sapienza**

Exploitation of the SOFIA results has progressed as follows:

Time	Result	Status	Nature of exploitation	Details/ Progress
?		planned	Cooperation and alliance with other SOFIA partners for new joint projects and/or business oriented activities	
?	Expertise	planned	Training activities and materials for students and users of the IOP, generating education materials and defining courses and lessons focused on the issues and topics addressed by SOFIA	
?	Technology	planned	Designing solutions for smart cities, devoted to increasing citizens safety, monitoring public infrastructures and monitoring citizens in large scale public events by means of cooperation with local SME	
?	Technology	planned	Enabling exploitation of technologies by means of spin-offs and joint industrial initiatives with local companies	

### **VTT Technical Research Centre of Finland**

Exploitation of the SOFIA has progressed as follows:

Time	Result	Status	Nature of exploitation	Details/ Progress
?	Technology	ongoing	In upcoming research projects with companies and joint research projects with European	<b>completed:</b> OPUTE project started.

			<p>academic and industry.</p> <p>Goal: transformation of SOFIA developments into other application areas.</p>	<p>Hydra-Pobicos-Sofia Collaboration workshop in Brussels 22 Feb. 2010.</p> <p>Pobicos presentation in Sofia seminar 24 Feb. 2010.</p> <p>One EU projects started to apply Smart-M3 in the project developments; two other considering the use of Smart-M3.</p> <p>planned: A combined demonstration with Pobicos, Evolve and Cam4Home under work.</p>
?	Technology	ongoing	<p>Ontology enriched application design and quality evaluation and management</p> <p>In new opportunities for enhancing and extending our competence and knowledge portfolio related to the quality and model driven service architecture design and evaluation and related methods, techniques and tools</p> <p>Goal: improved knowledge and offerings to industry</p>	<p><b>completed:</b></p> <p>SmartModeller available under BSD license.</p> <p>SmartModeller evaluated by UNIBO, feedback to be given in SISS 2010.</p> <p>Under work:</p> <p>SmartModeller in use in demo 2 construction.</p> <p>Scalability and performance evaluation method under work.</p> <p>Run-time security adaptation concept under work.</p>
?	Technology	ongoing	<p>Developing new technology offerings to industrial companies</p> <p>Goal: creation of new offerings</p>	<p>IQV is tool as an offering, to be introduced to Finnish companies and demonstrated to the Sofia partners in SISS 2010.</p>

## 6. Summary

The dissemination and exploitation activities tackled by the work packages and project partners until the present moment have matched the planning and even extended the programmed activities. In this sense, these activities have satisfactorily started the distribution of SOFIA technology and expertise in many sectors: education; academic visibility; consultancy; partner internal product development; and partner's supplier and customer networks.