ICT-258724

PASTA

Integrating Platform for Advanced Smart Textile Applications

Instrument : Large-scale Integrating Project
Thematic Priority : Information and Communication Technologies (ICT)

Deliverable D7.14

Year 3 dissemination report

Due date of deliverable : 30.9.2013
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Start date of Project : 1.10.2010 **Duration : 48 months**

Responsible beneficiary : imec **Revision : 2.0**
Contributing beneficiaries : All

Contact person : Frederick Bossuyt – imec

Project co-funded by the European Commission within the Seventh Framework Programme (2007-2013)		
Dissemination Level		
PU	Public	**X**
PP	Restricted to other programme participants (including the Commission Services	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	Confidential, only for members of the consortium (including the Commission Services)	

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Abbreviations

SME	Small and Medium Enterprises

Document history

Date	Revision	Author	Remarks
23.9.2013	0.1	F. Bossuyt	Table of contents available
21.11.2013	1.0	F. Bossuyt	Draft version available for internal review
27.11.2013	1.1	F. Bossuyt	Revised version after internal review, available for approval by the Project Steering Committee
28.11.2013	2.0	PSC	Formal approval by the Project Steering Committee
		J. De Baets	Formal approval by the Project Coordinator for submission to the European Commission

Internal review team

Name	Beneficiary
Andreas Ostmann	Fraunhofer IZM
Gust Schols	Fundico

1. Executive summary

The objective of this document is to update the dissemination strategy within the PASTA Large-scale Integrating Project and to report on the specific dissemination activities performed by the PASTA consortium as a whole and on the more specific dissemination actions undertaken by the individual PASTA partners during the third project year.

A dedicated dissemination plan ensures the use of the PASTA project results. On one hand, it concerns the obvious activities such as the set-up of a PASTA website, the organization of workshops and training sessions, the publication of specific results on each company specific website and newsletters or availability of technology licenses will serve as a seed for the uptake of the technology by external entities, in particular SMEs. Scientific papers related to the results achieved during this project are being submitted to Journals and selected International Conferences. The dissemination concerns both the developed PASTA technologies and the targeted applications.

In Year 3, we maximally focused on disseminating the PASTA vision & technologies to a big number of stakeholders. This by disseminating on a whole range of events (fairs, conferences,..). The dissemination material has been adapted making it easy accessible and readable.

In summary the following dissemination activities have been performed by the PASTA consortium during the third project year:

- The **Alfresco tool** is a web-based platform for structured storage of information and can be accessed through the private webpage of the PASTA website. The Alfresco tool has been further updated and maintained. It's the source for all partners to find project related information and dissemination material.

- The **public PASTA website** (www.pasta-project.eu) contains general information on the project such as a project abstract, the objectives of the project and a description of the objectives of the different project work packages. In Year 3, the website has been regularly updated with new content. The amount of visitors has increased by 65% in Year 3. This is a major indication that the dissemination activities are very fruitful.

- A **third PASTA Newsletter** has been published with the aim to support the dialog between the PASTA Consortium and the development communities, which work on similar topics, and potential customers. 1200 copies have been distributed by the PASTA consortium. It is also downloadable from the PASTA website. Compared to previous versions, the style and language of the newsletter have changed, targeting a broader, non-technical audience. In this issue, the focus is on the added value that the Pasta technologies can bring to your smart textiles.

- A **fourth PASTA Newsletter** has been published, now with focus on the demonstrators. Again, 1200 copies were distributed to the PASTA consortium and the newsletter can be downloaded from the website. Focus of this issue is on the demonstrators, showing capabilities not previously possible with state-of-the-art technologies.

- An updated **PASTA poster** has been made and is available to all partners through Alfresco. It has been used on a number of events to highlight what the Pasta technology can do for your smart textile. It has the aim to give in one view a general overview of the project to interested parties on different occasions.

- A **PASTA movie** has been made. The movie was not initially planned but became part of an improved dissemination strategy after Review Meeting 3 of the PASTA project. It is an additional general dissemination channel of PASTA that intends to explain to a non-specialized audience what PASTA is about, what it intends to develop and what overall impact it envisages to achieve.

  The movie's demand is to bring smart textiles and the changes needed in Europe's textile, electronics, and machine industry closer to the audience. The large steps that were already made

in the project are explained as well as envisioned products and future applications and markets. We refer to Deliverable 7.12 for more information on the movie.

- PASTA has also been involved in the organization of the **Fourth Flex-Stretch Electronics International Workshop** (www.flexstretch.eu), that has been organized in Eindhoven on November 11-13, 2013. 2 presentations have been given by PASTA researchers (IMEC, CEA-LETI). Furthermore, during the workshop on the first day, a tutorial was given on the stretchable interposer technology being used in the bedlinen demonstrator (IMEC). Around 30 people participated in this workshop. The audience was broad and consisted of engineers, product developers, designers, etc. They showed high interest in the technology which resulted in a number of leads.

- The **partner specific dissemination activities** performed in the course of the third project year can be summarized as follows: A huge number (39) of presentations have been given on different fairs and conferences. 3 partners participated in the Avantex Innovation Award contest. CEA-LETI has won the prize in the category 'New Materials' for their Diabolo technology. A number of articles have been published, in magazines and online. Furthermore, through bilateral contacts on fairs/events, the capabilities of the PASTA technology were disseminated, especially related to manufacturability (CSEM) and the added value to demonstrators (end-users). In Year 3, no publications were made in peer reviewed journals. All the dissemination activities (71) have led to 294 contacts/leads, from which it is expected that 1/3 will lead to a co-operation in the future.

Within PASTA, the dissemination activities mainly focus on the professional/commercial audience segment. As PASTA is focusing on novel integration technologies for electronics in smart textiles, with focus on manufacturability, this is logical. Dissemination material (presentations, newsletters,..) is mainly provided in this segment, what should lead to further exploitation with interested professional parties or commercial parties.

2. Introduction – Aim of deliverable

A dedicated dissemination plan ensures the use of the PASTA project results. On one hand, it concerns the obvious activities such as the set-up of a PASTA website, the organisation of workshops and training sessions, the publication of specific results on each company specific website and newsletters or availability of technology licenses will serve as a seed for the uptake of the technology by external entities, in particular SMEs. Scientific papers related to the results achieved during this project will be submitted to Journals and selected International Conferences. The dissemination concerns both the developed PASTA technologies and the targeted applications.

The PASTA Large-scale Integrating Project has included from the start on innovation-related activities relating to the :

- Protection of knowledge
- Dissemination of knowledge
- Studies on the wider socio-economic impact of that knowledge
- Activities to promote the exploitation of the PASTA results
- Investigation of potential 'take-up' actions based on the outcome of the PASTA project.

These activities are inter-related and are being conceived and implemented in a coherent way during the PASTA project.

This deliverable report concentrates on the aspect of dissemination of the developed knowledge within the frame of the PASTA project during the second year of the project.

Dissemination comprises different aspects of information transfer. Most important is the visibility of the project and the transmission of the results towards the industrial and the academic community as well as to public.

Dissemination activities can be split in dissemination activities for 3 target groups :

- **The general public**
  - Website
  - Project flyers
  - Project Newsletters
  - Press releases

- **The scientific community**
  - Academic publications
  - Academic lectures and conferences
  - University teaching

- **The industry and potential customers**
  - Executive seminars, trainings and conferences
  - Demonstrators
  - Booth at conferences

The methods for dissemination are appointed above to one of the three target groups, but of course they also address the other two.

In Year 3, we maximally focused on disseminating the PASTA vision & technologies to a big number of stakeholders, mainly in the professional/commercial segment. This by disseminating on a whole range of events (fairs, conferences,..). The dissemination material has been adapted making it easy accessible and readable. These dissemination activities were very effective and have lead to a number of leads, ready for further exploitation.

3. PASTA Website

3.1 Objective and structure

The PASTA website (www.pasta-project.eu) (Figure 1) must meet the three following objectives:

- The visibility of the project for the large public.
- The availability of technical information and results for the academic and industrial community.
- The transfer of information between the PASTA partners, as a tool for the research.

Figure 1 : The PASTA website.

The website must address these three different target groups. The first constraint on the structure of the site is to differentiate these groups in function of the level of information that will be provided. Two levels of disclosure of the information are defined :

- The general information about the project, intended to introduce and present the project to the largest public; this information must be directly available by anyone visiting www.pasta-project.eu.

- The information that must transfer between partners, but can be seen and consulted by users-groups and by academic and industrial target groups, as well as by the European Commission Scientific Officer and the reviewers appointed by the EC for assessing the status of the PASTA project. This information must be protected and is accessible after login.

This distinction leads to the creation of **public web-pages**, with free access from the website address www.pasta-project.eu, and **private web-pages**, for which a login and password are asked. These public and private parts are built following the same structure, but after login, the type of information and the tools available are different.

Similar in structure, the public and private parts are completely different in nature :

- The public part is a tool for broad publicity of the project, it is handled by the webmaster to publish content approved by the Project Steering Committee.

- The private part is a dynamic tool, a multi-users platform where all the partners can add material.

3.2 Public web-pages

The goal of the public pages is to introduce the PASTA project to the largest public. The main features of the project are presented, explained in clear terms, in an easy to browse structure.

The home page gives a glimpse to the project. The visitor can then navigate to know more about :

- Project Summary.
- Objectives of the project.
- Targeted innovations of the project.
- The PASTA consortium.
- Planned events related to the field of PASTA.
- Links to other websites related to the PASTA project.
- Contact persons for PASTA.
- Downloads of public documents generated by the PASTA consortium.
- Newsletters generated during the PASTA project duration.
- Pictures of samples/demonstrators/..

This public part of the site is *"static"*, in the sense that it can be updated only by the webmaster, following the indications of the Project Steering Committee. This avoids the accidental dissemination of protected information, which is a risk if it could be updated from the private part.

The following information has currently been implemented on the PASTA website :

- **Home page** : Welcome page with project and EC FP7 logo's and links to the main web pages
- **Goal** : Presentation of the technologies that will be generated within the PASTA project.
- **Applications** : Overview of applications where the PASTA technology will be used for.
- **Dissemination** : List of all dissemination activities including conference proceedings, journal papers, articles in press, … + **Calendar:** an overview of upcoming events where PASTA partners will be present on.
- **Consortium** : Overview of the members of the consortium.
- **Links** : This page contains links to other interesting websites related to the activities within the PASTA project. This can be links to other project websites, organizations, …
- **Documents** : This page contains the link to the private document section (Alfresco), Furthermore, it contains public information and intermediate results from PASTA, such as the PASTA newsletters, publications of PASTA in international journals, presentations on PASTA by consortium partners, etc.
- **Showroom:** An overview of pictures of samples, machines, demonstrators, .. being developed in the course of the project.
- **Contact page**: This page generates an e-mail to the Project Coordinator, Johan De Baets from imec.

During the third project year the following updates have been implemented in the public webpage:

- The layout of the website has changed, making it more visual and attractive
- The front page includes now news items: e.g. prizes, announcements of events, newsletters,..
- Updating of the dissemination list on a regular base
- The PASTA Newsletter 3 has been uploaded
- The PASTA Newsletter 4 has been uploaded
- A 'demonstration' + 'behind the scenes of PASTA' page has been added

Some screenshots of these Year 3 updates are provided on the next page.

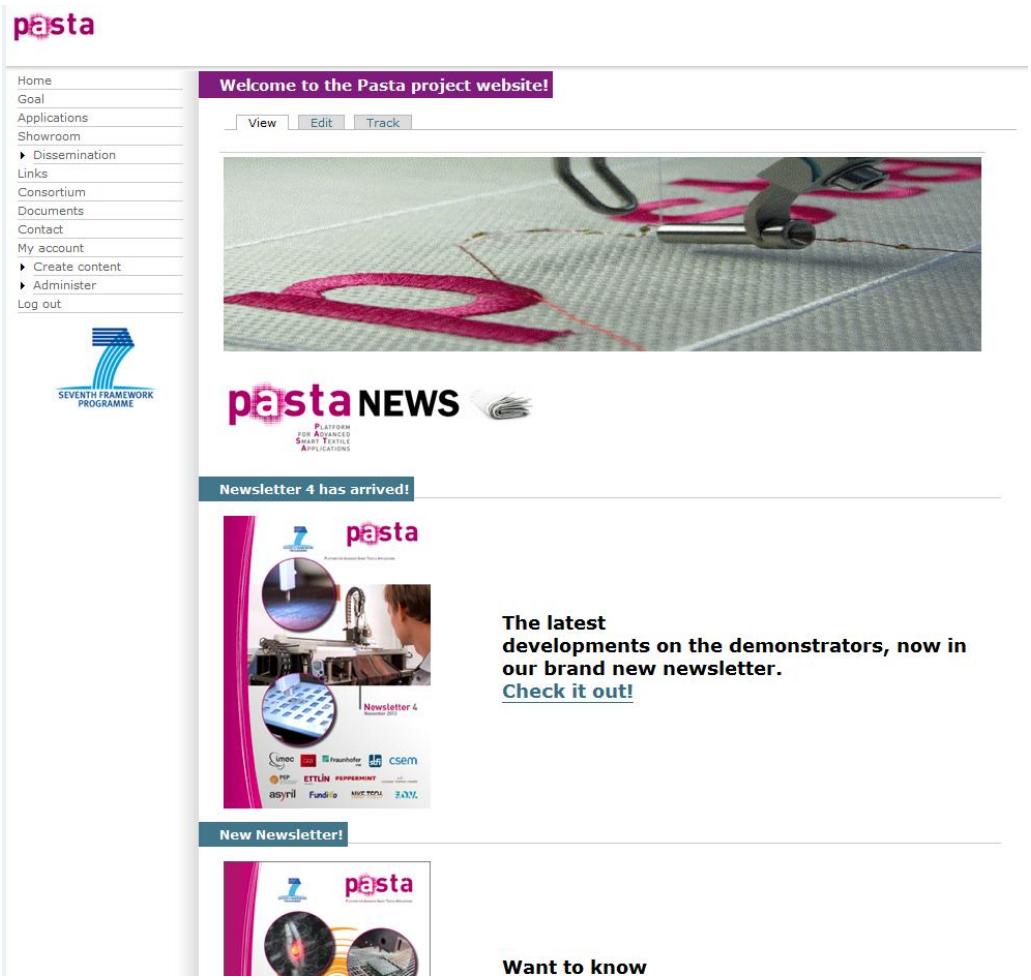

Figure 2 : Screenshot of the homepage of the PASTA public webpage.

Figure 3: Screenshot of the Dissemination section of the PASTA public webpage.

Public website statistics

Every website page has a counter, so that we can measure the popularity of the different pages (Figure 4. Because the homepage is the first page all people access when surfing to www.pasta-project.eu, this is the page with the biggest amount of hits. Since the beginning of the project, ~ 13500 people have visited the website. Compared to the stats of last year, this is an increase by 65%!

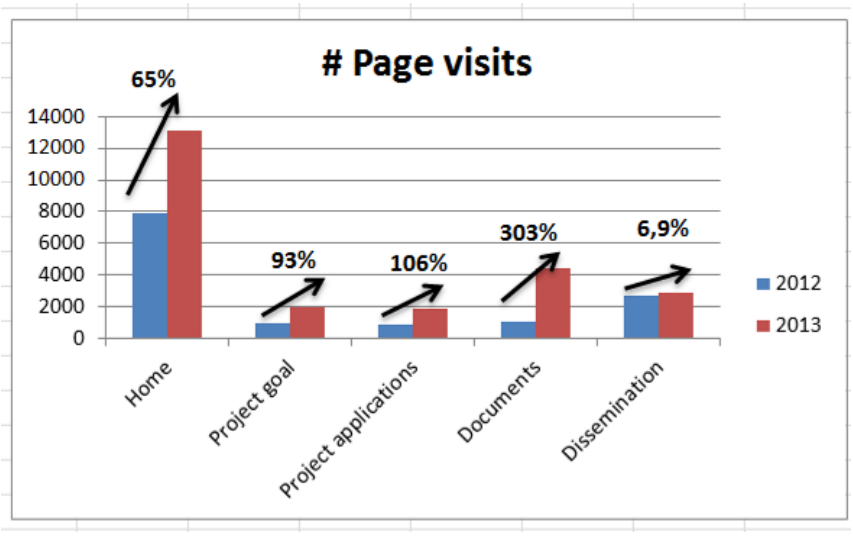

Figure 4 : Statistics of visits on the different pages of the PASTA website. Year 2 and Year 3 comparison.

If we look into more detail to the stats of the other pages, we see that all of them have increased a lot since last year (except for the dissemination page). The amount of visitors for the project goal/applications pages have doubled and tripled for the documents page, where newsletters are available.

3.3 Private web-pages

The private part is a communication tool for the people active in the PASTA Project, an information tool for the other actors of the project: IST (European Commission), Users Group, industrial and scientific communities, members of the partner institutions that are not directly active in the project.

The private part is supported by a publishing system, called Alfresco. This means that contrary to the public part, which content is changed only by the webmaster, the private part is a dynamic tool with multi-user management, and is in continuous expansion. Information can be put online in a very straightforward way. This system has the advantage of making the information more up to date and more accessible - being directly available in the browser without need of downloading documents.

Alfresco is an open source enterprise content management system. It can be accessed through the main PASTA website: http://www.pasta-project.eu. For PASTA, it will be mainly used for document management.

In Alfresco, spaces (=directories) have been created in order to store/share information. An overview of the homepage and the spaces is given in Figure 5.

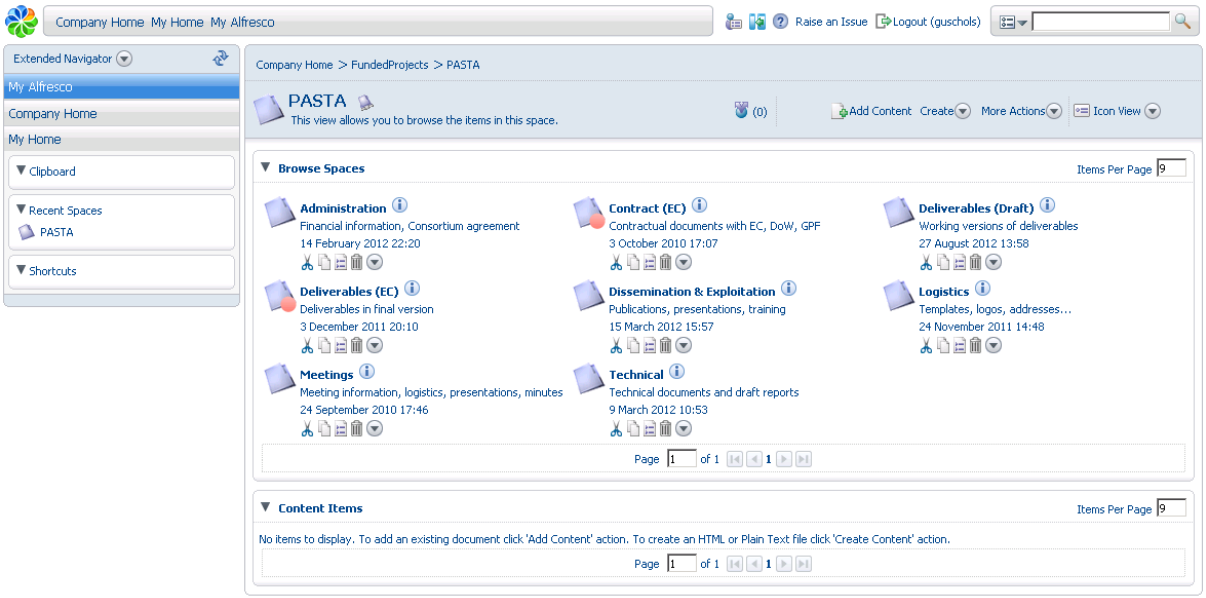

Figure 5 : Homepage of the PASTA server Alfresco, including overview of created spaces for file storage/sharing.

The current spaces and their contents include :

- **Administration** : Financial information, consortium agreement.
- **Contract (EC)** : Contractual documents with EC.
- **Deliverables (Draft)** : Working documents of deliverables.
- **Deliverables (EC)** : Deliverables in final version to be submitted to EC.
- **Dissemination** : Publications, presentations, trainings.
- **Logistics** : Templates, logos, addresses, approved pictures.
- **Meetings** : Meeting information, logistics, presentations, minutes, pictures.
- **Technical** : Technical documents and draft reports, test vehicles, datasheets.

Within every space, it is possible to :

- **Add content** : files from local hard drive
- **Create content** : HTML, Text, XML

- **Create spaces** : Name, Title, Description, Icon.
- **More actions** :
  - Cut, Copy, Delete
  - Import, Export, Create Shortcut
  - Email Space users
  - Run Action, Start Discussion, View permissions

From the PASTA partners, it is expected that:

- Deliverable work is posted: all versions, reviews,..
- Presentations are uploaded from meetings.
- Technical information is made available for all partners
- Logistic updates are done (logos, contact info,…)

During the third project year the PASTA server Alfresco has been constantly kept updated and maintained. This is the primary source for all partners to find project related information and to find all dissemination material (e.g. posters, project presentation, etc.)

4. PASTA newsletters

The PASTA Newsletter has the aim to support the dialog between the PASTA Consortium and the development communities, which work on similar topics, respectively potential customers.

The following reader groups are targeted :

- Project partners
- European Commission, EC Reviewers, Scientific Officer
- Development community
- Interested public: product designers, textile companies, machine makers, etc.

So far the dominant way of publishing is by electronic means (pdf-file). The newsletter is available in the download area of the project web page: www.pasta-project.eu

The PASTA newsletters are published roughly every 9 months. In total 5 Newsletters are planned in the course of the PASTA project.

During the third project year, the third and fourth issues of the PASTA Newsletter have been published. The style and language of both newsletters have been adjusted, in a way that they are targeting a broader audience (non-technical people). Furthermore, the added value of the PASTA technologies are highlighted, focusing on what the technology can do for your smart textiles product.

1. PASTA Newsletter 3

Figure 6 : PASTA Newsletter 3 front page.

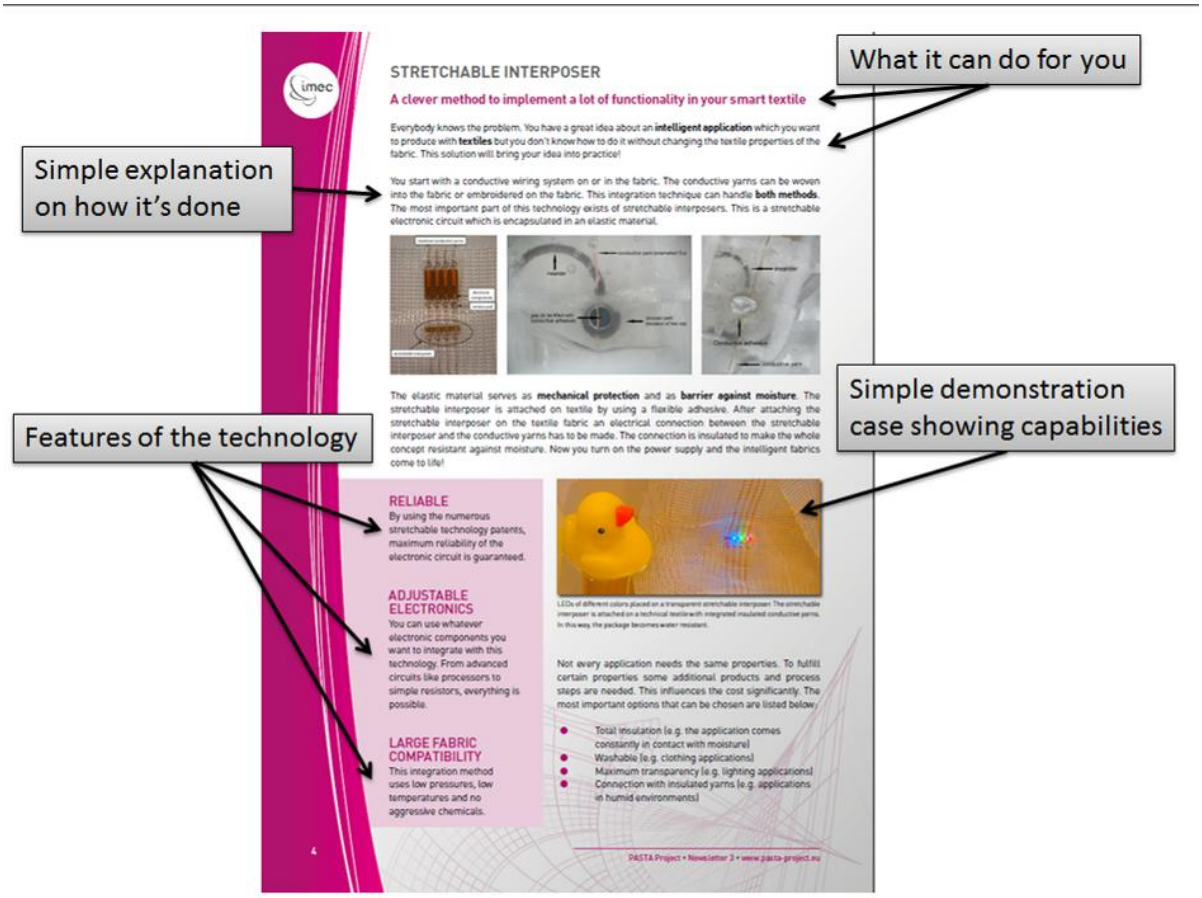

Figure 7 : PASTA Newsletter 3 : An example of the easy readable information with focus on applicability and added values.

Contents of the PASTA Newsletter 3

In Figure 6 and Figure 7, some views are given on the PASTA Newsletter 3. Newsletter 3 focuses on the 3 main Pasta-technologies. The aim is to show the smart fabrics community the added value these 3 technologies can have for their product. The information is easy readable and most important features are highlighted. Also in this issue, the manufacturing aspects are discussed by showing the progress on the developments for the pick & place machines. The Newsletter concludes with a News section and future dissemination activities.

More details are provided in Deliverable D7.11 (PASTA Newsletter 3).

2. PASTA Newsletter 4

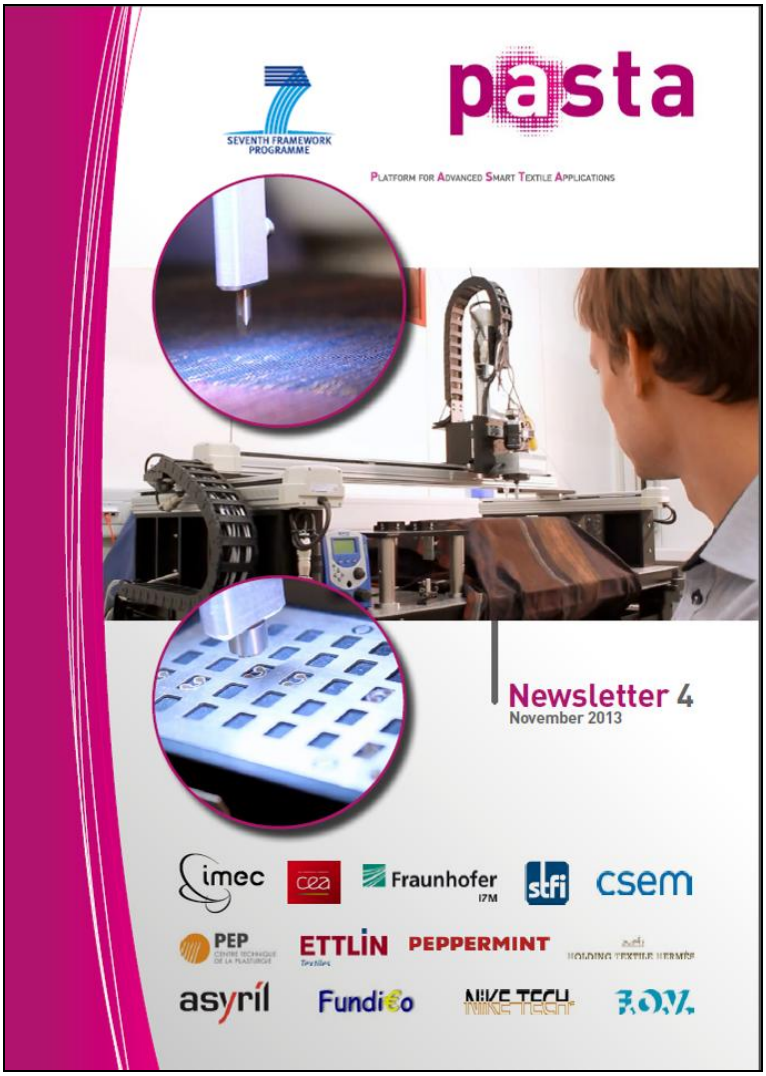

Figure 8 : PASTA Newsletter 4 front page.

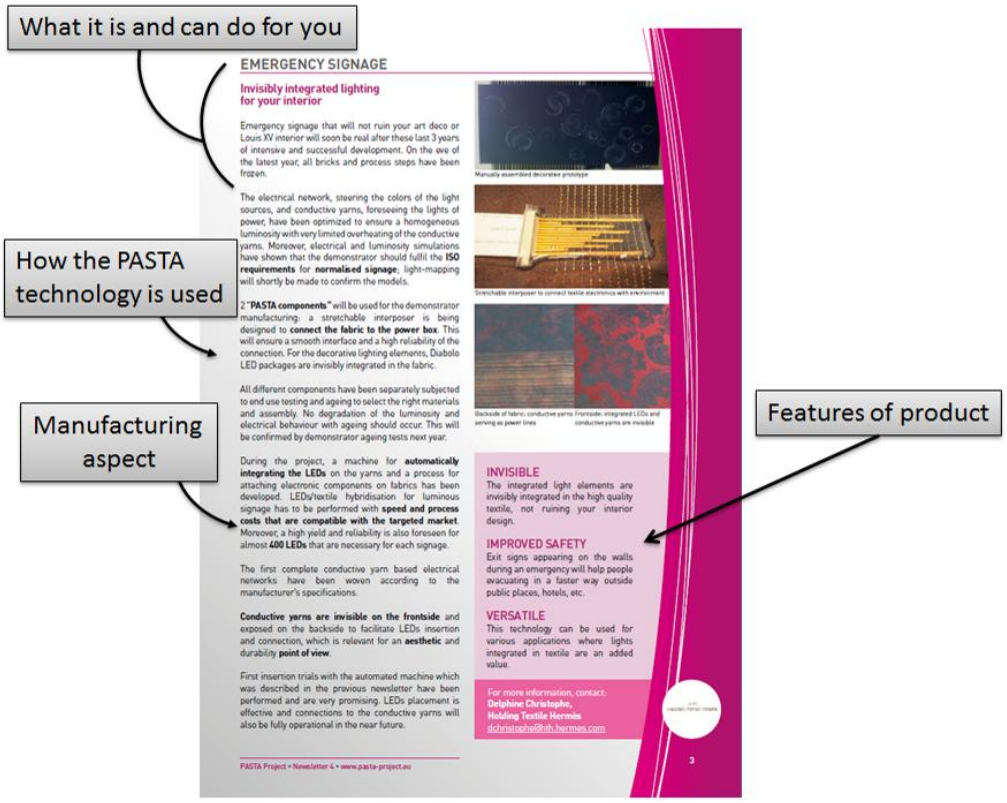

Figure 9 : PASTA Newsletter 4 : An example of the easy readable information with focus on applicability and added values.

Contents of the PASTA Newsletter 4

In Figure 8 and Figure 9, some views are given on the contents of the PASTA Newsletter 4. Newsletter 4 focuses on the latest developments regarding the demonstrators. It is explained how the different PASTA technologies are used to develop new products having features not possible with previous, state-of-the-art technologies. The language is again very accessible addressing a non-technical public. The newsletter concludes with the upcoming events.

More details are provided in Deliverable D7.13 (PASTA Newsletter 4).

In total 1200 copies of the Newsletter 3 and 1200 copies of the Newsletter 4 have been distributed to/by the different PASTA partners.

5. PASTA project presentation

Another tool available on Alfresco for the PASTA consortium is the general project presentation (Figure 10). It's a ready-to-use presentation giving a general overview on what the PASTA project is about and showing the ongoing developments within PASTA. It has already been used on many occasions to introduce the project to different audiences. It is regularly updated with new results.

Figure 10 : PASTA project presentation.

6. PASTA poster

The PASTA poster has been updated and is available on Alfresco to all partners (Figure 11). It gives a one-view overview on the project: targeted demonstrators, technology highlights and the manufacturing aspects. The poster has been used on a number of events. It always attracts a lot of people, leading to a starting point for discussions on the topic.

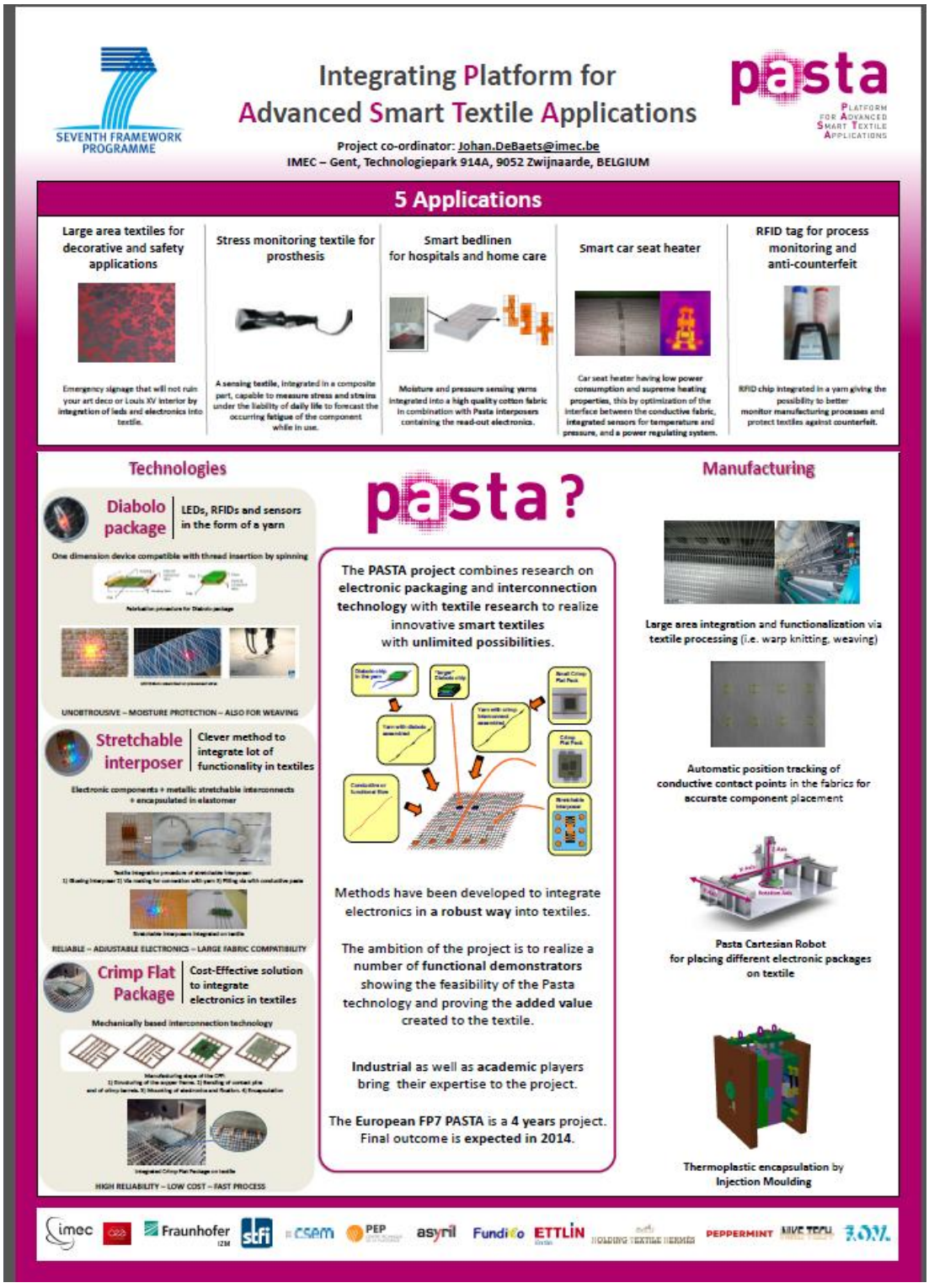

Figure 11 : PASTA poster.

7. PASTA Movie

The movie was not initially planned but became part of an improved dissemination strategy after Review Meeting 3 of the PASTA project. It is an additional general dissemination channel of PASTA that intends to explain to a non-specialized audience what PASTA is about, what it intends to develop and what overall impact it envisages to achieve.

The promotional movie is a 6-minute round-up of the goals and activities of the PASTA project and the involved partners. Rather to explain technology in detail it focuses on the strategy and impacts of the research done during the 4-years period. The message is that during the PASTA project a necessary change in Europe's textile industry was initiated. A variety of end-users do see large market potential for the newly developed products. Furthermore, machine manufacturers developed innovative concepts to be able to produce new electronic integrated textile products on a large scale.

The movie targets a very broad and non-specialized audience and can be shown on fairs, conferences, as well as on partner's websites and on youtube.

An optional second version of the movie can be produced with finalization of the project in order to better present final prototypes of the involved end-users.

The production of the movie was subcontracted to a professional company, mmpro;film- und medienproduktion GmbH in Berlin, Germany.

We refer to Deliverable D7.12 (PASTA promotional movie) for more information on the movie.

Figure 12 : Shots from the PASTA movie.

8. 4th Flexible and Stretchable Electronics Conference 2013

This conference is part of the activities of the Integrated Projects PASTA, PLACE-it and ITEX and other nationally funded projects in the field of flexible and stretchable electronics. Moreover international experts in the field, both from industry and from academia were present.

The organization of this event was for a big part in the hands of the PASTA consortium, where mainly imec and Fraunhofer IZM contributed to the general organization.

This unique event on flexible, stretchable and textile integration technologies was again a success. The 3 days of talks and tutorials were again very interesting for everyone wanting to increase the added value of their products by integration of electronics in their non-conventional substrates (e.g. textiles).

On the first day, the tutorial day, in small groups of participants, the Stretchable Interposer technology was introduced. The bed linen demonstrator was taken as use-case, showing the possibilities of the Pasta technologies in relation to improved healthcare. Around 30 people participated, having different backgrounds like product design, textile & fashion, engineering, etc.

On the second day, an overview was given by Johan De Baets on the PASTA project. For everyone, it was clear that the focus of PASTA is on manufacturability of smart textiles, and that we're on a good way to achieve this. Furthermore, the spinoff company Primo1D, founded by Dominique Vicard on the Diabolo technology, was presented to the general public. The audience was convinced that the integration of LEDs and RFID tags into yarns is no longer an idea on paper.

The workshop was for the fourth time a big success and the contribution of the PASTA partners was again huge.

Figure 13 : Flex-Stretch Workshop 4: Some impressions.

Figure 14 : Flex-Stretch workshop programme tutorial day.

4TH INTERNATIONAL CONFERENCE ON FLEXIBLE & STRETCHABLE ELECTRONICS
NOVEMBER 12 – 13, 2013

DAY 1, NOVEMBER 12, 2013

OPENING SESSION

09.30	Opening	Jaap Lumbeeck, Holst Centre/TNO, NL
09.40	Opening Keynote: Thin, Smart and Large Area Electronics: EU R&D and Innovation Support - State of Play and Future Opportunities	Henri Ripplinbach, European Commission
09.55	The FP 7 project PLACE-it	Koen van Os, Philips Research, NL
10.10	The FP 7 project PASTA	Johan de Baets, imec-CMST, B
10.25	The FP 7 project i-TEX	Giovanni Cesoni, Philips Research, NL
10.40	Coffee Break	

FOIL & FLEX

11.10	Keynote: Ultra-thin, Imperceptible Plastic Electronics	Martin Kaltenbrunner, The University of Tokyo, J
11.40	The Way to Flexible Organic Electronics	Richard Frantz, Roic Technologies, CH
12.00	Stretching the Limits of Electronics	Marc Koetse, Holst Centre/TNO, NL
12.20	Flexible Plastic Displays: Status and Challenges	Gerwin Gelinck, Holst Centre/TNO, NL
12.40	Lunch break	

LIGHTING FOR MOBILE APPLICATIONS

13.40	Keynote: Light for Health Applications Using LED in Textile Technology	David Aubert, Philips Lighting, NL
14.10	PLACE-it: What Are the Challenges for New Applications?	Jürgen Gauthier, Freudenberg Forschungsdienste, D
14.30	Embedded Electronics within Interior Surfaces for High Technical Value Vehicles	Luca Bisturini, Yili Lamberto, Nello Li Pira, Centro Ricerche Fiat, I
14.50	Precision Lighting with the E-Thread® Technology	Dominique Ward, Prima TD - CEA, F
15.10	Coffee Break and Poster Session	

STRETCHABLE

16.00	Keynote: Stretchable Electronics Through Graded Composite Substrates	André Studart, ETH Zurich, CH
16.30	SHI-based Thermoplastically Deformable and Thin-film Elastic Circuits	Jan Vanfleteren, imec-CMST, B
16.50	Stretchable Electronics – a Microfluidic Approach	Zhigang Wu, Uppsala University, S
17.10	Interconnection of Stretchable and Textile Circuits	Mette von Arnim-Bleker, Fraunhofer IZM, D
18.00	Conference Dinner	

DAY 2, NOVEMBER 13, 2013

SPORTS & WEARABLE

09.30	Keynote: Wearable Technology and the Changing Face of Sport	Kenny Chan, ASI Smart Clothing, TW
10.00	Sports & Wellness - The Expansion of Wearable Electronics	Andy Jackson, CloudTag, UK
10.20	Tailoring Embodied Textile Services	Oscar Tomico, TU Eindhoven, NL
10.40	A Clear Head and a Healthy Body - Can Wearable Sensor Technology Get Us There?	Chris van Hoof, imec, B
11.00	Coffee Break & Posters	

TEXTILE TECHNOLOGY

11.20	Keynote: Polymers in Motion: New Prospects Towards Smart Textiles	Dick Broer, TU Eindhoven, NL
11.50	Bekinox - a Flexible and Durable Solution	Dominique Anders, Bekaert, B
12.10	Lumineux Textiles	Bert Groenendaal, Nicolas Dargent, SOEN Industries, B Philippe Guermonprez, Pierre Blouvac, ETH, F
12.30	Cabric - Wearable Device in Medical Field	Arthur Cheng, LinkWin Technology, TW
12.50	Lunch break	

MEDICAL

14.00	Keynote: Man-machine Interfaces for Upper Limb Prosthetics	Bernhard Graimann, Otto Bock, D
14.30	Electronics for Life: Quite a Stretch!	Ronald Dekker, TU Delft, NL
14.50	Textile Integrated Flexible Electronics	Ari Spoka, Clothing+, FIN
15.10	Ultra-compliant Neural Electrode Technology	Ivan Minev, EPFL, CH
15.30	Farewell Drinks	

Figure 15 : Flex-Stretch workshop programme for Days 2 and 3.

9. Partner specific dissemination activities

All **partner specific dissemination activities** performed in the course of the third project year are reviewed in Table 1.

	PRESENTATIONS @ FAIRS/CONFERENCES	CONTESTS	BLOG ARTICLE	ARTICLE IN MAGAZINE	FAIRS WITH BILATERAL CONTACTS	WEBSITE PUBLICATION	PEER REVIEW JOURNAL PUBLICATIONS	OTHER CONTACT	Total dissemination activities	Total leads/contacts generated	Estimated # leads that will lead to cooperation
IMEC	13	1	1	0	0	0	0	1	16	50	24
CEA	2	1	1	0	0	0	0	0	4	9	5
IZM	3	1	0	0	0	0	0	0	4	51	4
STFI	4	0	0	1	0	0	0	0	5	21	7
CSEM	2	0	0	1	7	1	0	1	12	90	13
ASYRIL	1	0	0	1	0	1	0	0	3	0	0
PEP	1	0	0	1	0	0	0	0	2	3	0
PHG	2	0	0	0	4	0	0	0	6	23	13
ETTLIN	1	0	0	0	4	0	0	0	5	0	0
HTH	0	0	0	0	4	0	0	0	4	5	3
FOV	5	0	0	0	0	0	0	0	5	1	1
NIKE TECH	5	0	0	0	0	0	0	0	5	41	26
TOTAL	**39**	**3**	**2**	**4**	**19**	**2**	**0**	**2**	**71**	**294**	**96**

Table 1 : Partner specific dissemination activities subdivided in types including leads/contacts generated + estimated leads leading to future co-operation.

A huge number (39) of presentations have been given on different fairs and conferences. 3 partners participated in the Avantex Innovation Award contest. CEA-LETI has won the prize in the category 'New Materials' for their Diabolo technology. A number of articles have been published, in magazines and online. Furthermore, through bilateral contacts on fairs/events, the capabilities of the PASTA technology were disseminated, especially related to manufacturability (CSEM) and the added value to demonstrators (end-users). In Year 3, no publications were made in peer reviewed journals. All the dissemination activities (71) have led to 294 contacts/leads, from which it is expected that 1/3 will lead to a co-operation in the future.

Within PASTA, the dissemination activities mainly focus on the professional/commercial audience segment. As PASTA is focusing on novel integration technologies for electronics in smart textiles, with focus on manufacturability, this is logical. Dissemination material (presentations, newsletters,..) is mainly provided in this segment, what should lead to further exploitation with interested professional parties or commercial parties. The number of leads generated above, shows that this is the case. In Table 2, we show the partner specific activities in the different segments (professional and commercial is mostly overlapping for some events).

	Professional/Commercial	Professional	Commercial	Scientific	Broad audience
IMEC	10	5	0	1	0
CEA	4	0	0	0	0
IZM	0	3	0	1	0
STFI	2	1	0	0	2
CSEM	5	0	6	0	1
ASYRIL	2	1	0	0	0
PEP	1	1	0	0	0
PHG	3	3	0	0	0
ETTLIN	4	1	0	0	0
HTH	4	0	0	0	0
FOV	2	0	3	0	0
NIKE TECH	4	0	0	0	1
TOTAL	**41**	**15**	**9**	**2**	**4**

Table 2 : Targeted audience segments.

On the following pages, all activities are listed with more details on the date of the event, the name of the event, the type of public present, the reason to participate to this conference, the number of leads/contacts that has been made and the expected number of contacts/leads that will lead to a future co-operation.

Date from	Date to	Partner	Info	Community addressed?	Type	Aim of action	# Contacts made/leads	# Expected leads that will lead to co-operation
20/11/2013	23/11/2013	PHG	Medica in Düsseldorf	Professional/ Commercial	Presentation	Market overview, contacts, competition, feedback on PASTA demonstrator	0	0
19/11/2013	21/11/2013	FOV	Performance Days functional Fabric Fair	Commercial	Presentation	Show textile community possibilities of PASTA technology.	0	0
19/11/2013	19/11/2013	IMEC	sustech event	Professional/ Commercial	Presentation	Show textile community possibilities of PASTA technology. Bilateral cooperations/new projects	0	0
19/11/2013	19/11/2013	CSEM	Hill-Rom: Hospital bed sheet sensors	Commercial	Bilateral contact	Meet partners for project cooperation	1	1
11/11/2013	13/11/2013	IMEC	Flex-Stretch workshop 2013: Pasta project presentation	Professional/ Commercial	Presentation	Show flex/stretch/textile community possibilities of Pasta technology. Bilateral cooperations/new projects	10	5
11/11/2013	13/11/2013	IMEC	Flex-Stretch workshop 2013: Tutorial on Pasta technology	Professional/ Commercial	Presentation	Show flex/stretch/textile community possibilities of Pasta technology. Bilateral cooperations/new projects	0	0
11/11/2013	13/11/2013	CEA	Flex-Stretch workshop 2013: Presentation of lighting applications by Primo1D, citing PASTA	Professional/ Commercial	Presentation	Show flex/stretch/textile community possibilities of the E-Thread technology in lighting.	5	3
11/11/2013	13/11/2013	PHG	Flex-Stretch workshop 2013: Pasta project presentation	Professional/ Commercial	Presentation	Show flex/stretch/textile community possibilities of Pasta technology. Bilateral cooperations/new projects	0	0
11/11/2013	13/11/2013	PHG	Flex-Stretch workshop 2013: Tutorial on Pasta technology	Professional/ Commercial	Presentation	Show flex/stretch/textile community possibilities of Pasta technology. Bilateral cooperations/new projects	0	0
7/11/2013	7/11/2013	FOV	Disscutions with Groz&Beckert about Pasta and future requirements to machine part suppliers.	Professional/ Commercial	Presentation	Show supplier possibilities of PASTA technology.	0	0
4/11/2013	4/11/2013	IMEC	Blog Article Imec Interconnect website	Professional/ Commercial	Blog article	Show electronics community possibilities of Pasta technology. Bilateral cooperations/new projects	0	5
4/11/2013	4/11/2013	HTH	VIA	Professional/ Commercial	Bilateral contact	Discussion on luminous fabrics dissemination in furnishing	1	>1
1/11/2013	1/11/2013	STFI	Technische Textilien/Technical Textiles	Professional/ Commercial	Magazine article	Show textile community possibilities of PASTA technology. Bilateral cooperations/new projects	1	Still open
1/11/2013	1/11/2013	CSEM	Samsung Electronics Co. Ltd	Commercial	Presentation	Meet partners for project cooperation	4	1
18/10/2013	18/10/2013	IZM	IMAPS Germany Fall Conference, Munich	Scientific	Presentation	Presentation of newly developed technologies and possible applications	2	1

17/10/2013	17/10/2013	IZM	Kooperationsforum "Intelligente Textilien", Lindau, Germany	Professional	Presentation / Booth	Presentation of technologies and showing of demonstrators, discussions with potential partners/customers	7	1
17/10/2013	17/10/2013	ETTLIN	Conference AFBW – Allianz Faserbasierte Werkstoffe Baden-Württemberg – is an association of companies, research institutes, business organisations and universities in Baden-Württemberg.	Professional/ Commercial	Bilateral contact	Exhibition of PASTA demonstrator	2	1
15/10/2013	17/10/2013	PHG	"Pflege und Homecare" Fair in Leipzig, Germany	Professional/ Commercial	Presentation	Market overview, contacts, competition, feedback on Pasta demonstrator	16	6
15/10/2013	15/10/2013	HTH	Transportation professionnal	Professional/ Commercial	Bilateral contact	Discussion about the integration of luminous fabrics in transportation subparts	1	1
11/10/2013	11/10/2013	IMEC	European congress on Innovations in Textiles for Health Care	Professional/ Commercial	Presentation	Show textile healthcare community possibilities of Pasta technology. Bilateral cooperations/new projects	6	3
3/10/2013	3/10/2013	CEA	Techtera : innovation and creation forum	Professional/ Commercial	Blog article	Show electronics community possibilities of PASTA technology. Bilateral cooperations/new projects	1	?
1/10/2013	1/10/2013	IMEC	Smart@Fire market consulations	Professional	Presentation	Meet partners for project cooperation	10	3
26/09/2013	26/09/2013	Asyril	Article in the regional newspaper "la Gruyère"	Broad audience	Magazine article	Inform the public about the new technology developed in the pasta project	0	0
25/09/2013	26/09/2013	PHG	"Aktuelle Entwicklungen beim Schlichten und der funtkionellen Garnbeschichtungen" - Denkendorf, Germany	Professional/ Commercial	Bilateral contact	Search for and finishing of conductive yarns	4	4
25/09/2013	25/09/2013	IMEC	MNBS Conference CORK	Professional	Presentation	Meet important players on micro and bio-systems. Show them possibilities of Pasta technologies	8	1
17/09/2013	17/09/2013	CSEM	Wold MedTech Forum, Luzern	Professional/ Commercial	Bilateral contact	Exhibition and B2B Meetings	10	3
13/09/2013	13/09/2013	STFI	Open house/Customer's Day	Broad audience	Presentation	Show textile community possibilities of PASTA technology. Bilateral cooperations/new projects	10	2
12/09/2013	13/09/2013	STFI	52nd Man-Made Fibres Congress Dornbirn	Professional	Presentation	Show textile community possibilities of PASTA technology. Bilateral cooperations/new projects	5	3
4/09/2013	4/09/2013	PHG	GETEX (Geithain Textilien), in Geithain, Germany	Professional	Bilateral contact	Define washing standards for hospital and testing	1	1
12/07/2013	12/07/2013	PHG	GETEX (Geithain Textilien), in Geithain, Germany	Professional	Bilateral contact	Define washing standards for hospital and testing	1	1
9/07/2013	9/07/2013	CSEM	Printcolor Screen Ltd.	Commercial	Bilateral contact	Meet partners for project cooperation	1	1
4/07/2013	4/07/2013	HTH	METIS technical comitee	Professional/ Commercial	Bilateral contact	Presentation of PASTA technologies to medical industry	1	1

26/06/2013	26/06/2013	IMEC	EIPC Summer Conference Luxemburg 2013	Professional	Presentation	Show electronics community possibilities of PASTA technology. Bilateral cooperations/new projects	2	1
19/06/2013	20/06/2013	Asyril	Mikromontage Conference in Stuttgart	Professional/ Commercial	Presentation	Present the PASTA project and results	0	0
17/06/2013	17/06/2013	CSEM	SRC, Flexible electronics and energy harvesting	Commercial	Bilateral contact	Meet partners for project cooperation	1	1
13/06/2013	13/06/2013	IMEC	COHESI Event "From Electronic Building Blocks to Innovative Microsystems	Professional	Presentation	Show electronics community possibilities of PASTA technology. Bilateral cooperations/new projects	3	1
11/06/2013	13/06/2013	FOV	TechTextil 2013:	Professional/ Commercial	Presentation	Show textile community possibilities of PASTA technology.	0	0
11/06/2013	13/06/2013	ETTLIN	TechTextil	Professional	Bilateral contact	Exhibition of PASTA demonstrator	100	5
10/06/2013	12/06/2013	STFI	TechTextil 2013: STFI Booth	Professional/ Commercial	Presentation	Visibility	2	1
10/06/2013	10/06/2013	IMEC	TechTextil 2013: Avantex Innovation Award: stretchable interposer submitted	Professional/ Commercial	Contest	Visibility	0	0
10/06/2013	10/06/2013	CEA	TechTextil 2013: Avantex Innovation Award Winner: Diabolo technology =>Article in "Solid State Technology" =>Article in "The Wall Street journal"	Professional/ Commercial	Contest	Visibility	1	1
6/06/2013	6/06/2013	IMEC	Smart Textiles Salon, Gent, BE	Professional/ Commercial	Presentation	Show textile community possibilities of PASTA technology. Bilateral cooperations/new projects	2	1
5/06/2013	5/06/2013	CSEM	CSEM Packaging & Laser Event, Alpnach	Professional/ Commercial	Presentation	Show micro-technology community possibilities of PASTA technology. Bilateral cooperations/new projects	40	2
1/06/2013	1/06/2013	CSEM	CSEM scientific and technical report 2012, activity report	Professional/ Commercial	Website publication	Show microtechnology community possibilities of PASTA technology. Bilateral cooperations/new projects	10	1
15/05/2013	15/05/2013	ETTLIN	Fair Sensor-Test	Professional/ Commercial	Bilateral contact	Contact strain gauge manufacturer	2	1
10/05/2013	10/05/2013	PEP	Article in Plastilien	Professional/ Commercial	Article	Show plastic community the opportunities for plastic materials regarding electronic packaging and smart textiles	0	0
29/04/2013	29/04/2013	ETTLIN	Aachen, DWI 3F-Talks	Professional/ Commercial	Presentation	Show textile community possibilities of PASTA technology. Bilateral cooperations/new projects	5	0
24/04/2013	24/04/2013	CSEM	DBApparel - DIM.	Commercial	Bilateral contact	Meet partners for project cooperation	1	1
19/04/2013	19/04/2013	CSEM	Cityzen Sciences	Commercial	Bilateral contact	Meet partners for project cooperation	1	1
18/04/2013	18/04/2013	IZM	Meeting of the German manufacturers of sun protextors and tents, Fulda, Germany	Professional	Presentation	Presentation of newly developed technologies and possible applications	17	0

18/04/2013	18/04/2013	PEP	Technical day "Smart plastics" in Maxéville (France)	Professional	Presentation	Show plastic community possibilities of PASTA technology and opportunities for plastic materials regarding electronic packaging	3	0
17/04/2013	19/04/2013	IMEC	Smart Fabrics, San Francisco, US	Professional/ Commercial	Presentation	Show textile community possibilities of PASTA technology. Bilateral cooperations/new projects		
1/04/2013	1/04/2013	CSEM	MCCS annual report 2012, research activity report	Professional/ Commercial	Magazine article	Show micro-technology community possibilities of PASTA technology. Bilateral cooperations/new projects	10	0
1/04/2013	1/04/2013	Asyril	promotion movie of the realized machine	Professional/ Commercial	Website publication	Provide promotional material	0	0
28/03/2013	28/03/2013	CEA	Innovation workshop on luminous applications	Professional/ Commercial	Presentation	Workshop to promote innovation in small industries and encouraging new collaboration with research laboratory	2	1
28/03/2013	28/03/2013	PHG	GETEX (Geithain Textilien), in Geithain, Germany	Professional	Bilateral contact	Define washing standards for hospital and testing	1	1
26/03/2013	26/03/2013	IMEC	Gent BC scaling up event, CMST, Zwijnaarde, BE	Professional/ Commercial	Presentation	Show textile community possibilities of PASTA technology. Bilateral cooperations/new projects	3	2
25/03/2013	25/03/2013	STFI	Chemnitz Monitoring	Broad audience	Presentation	Show textile community possibilities of PASTA technology. Bilateral cooperations/new projects	3	1
13/02/2013	13/02/2013	CSEM	Strechable Circuits	Professional/ Commercial	Bilateral contact	Meet partners for project cooperation	1	1
3/02/2013	6/02/2013	IZM	ISPO Munich, Europe's largest sports fair	Professional	Booth	Showing of prototypes and technologies, discussions with potential partners/customers	25	2
3/02/2013	3/02/2013	ETTLIN	ISC Fraunhofer Würzburg	Professional/ Commercial	Bilateral contact	Show textile community possibilities of PASTA technology. Bilateral cooperations/new projects	1	0
22/01/2013	22/01/2013	CSEM	Regierung Obwalden	Broad audience		Visibility	10	0
17/01/2013	22/01/2013	HTH	PARIS Déco off	Professional/ Commercial	Bilateral contact	Presentation of luminous fabrics prototypes	2	1
25/11/2012	30/11/2012	IMEC	MRS Fall Meeting, Boston, US	Scientific	Presentation	Show materials research community possibilities of PASTA technology. Bilateral cooperations/new projects	2	1
21/11/2012	21/11/2012	IMEC	COLAE workshop @ TIC Ronse, BE	Professional	Presentation	Show textile community possibilities of PASTA technology. Bilateral cooperations/new projects	3	1
12/11/2012	12/11/2012	IMEC	Visit KETI (Korea) @ CMST, Zwijnaarde, BE	Professional/ Commercial	Bilateral contact	Cooperation on standardisation + possible project	1	0
2013	2013	FOV	Premiere vision	Commercial	Presentation	Show textile community possibilities of PASTA technology.	0	0
2013	2013	FOV	Various customer visits	Commercial	Presentation	Show customers possibilities of PASTA technology. Our main customer GORE shows some interest in having the tags still in the fabric for ID and arrival registration	1	1
2013	2013	NIKE TECH	Frequent contacts with present and potential customers	Professional/ Commercial	Presentation	Improvement of actual products and development of new products for Automotive Dev. Dep. Covering Europe	6	3

2013	2013	NIKE TECH	Frequent contacts with present and potential customers	Professional/ Commercial	Presentation	Improvement of actual products and development of new products for Seat producers Heavy Vehicles	5	4
2013	2013	NIKE TECH	Frequent contacts with present and potential customers	Professional/ Commercial	Presentation	Improvement of actual products and development of new products for Seat producers Trains	1	1
2013	2013	NIKE TECH	Frequent contacts with present and potential customers	Professional/ Commercial	Presentation	Improvement of actual products and development of new products for Vehicles disabled	2	2
2013	2013	NIKE TECH	Frequent contacts with present and potential customers	Professional/ Commercial	Presentation	Improvement of actual products and development of new products for Electric cars Automotive	2	1
2013	2013	NIKE TECH	Frequent contacts with present and potential customers	Professional/ Commercial	Presentation	Improvement of actual products and development of new products for Furniture and Interior companies	5	2
2013	2013	NIKE TECH	Article in regional newspaper	Broad audience	Presentation		0	0
2013	2013	NIKE TECH	Elmia Subcontractor	Professional/ Commercial	Presentation	Actual and new contacts	0	0
2013	2013	NIKE TECH	Chamber of Commerce	Professional/ Commercial	Presentation	Network	0	0
2013	2013	NIKE TECH	PASTA Newsletter	Professional/ Commercial	Presentation	Spreading the newsletter towards different potentials	0	0

10. Conclusion

In Year 3, the dissemination strategy was to communicate the PASTA vision and technologies to the general public, mainly focussing on the professional/commercial segment. This by visiting a lot of events situated in this category and adapting the dissemination material in a way that it is easy accessible and readable, highlighting the added-value and potential for manufacturability of the PASTA technologies. Dissemination should lead to exploitation, which the consortium is experiencing.

A big number of dissemination activities and tools have been generated and updated :

- The **Alfresco tool** has been further updated and maintained.
- The **public PASTA website** (www.pasta-project.eu) has been regularly updated with new content. The amount of visitors has increased by 65% in Year 3. This is a major indication that the dissemination activities are very fruitful.
- A **third PASTA Newsletter** has been published.
- A **fourth PASTA Newsletter** has been published.
- An updated **PASTA poster** has been made.
- A **PASTA movie** has been generated showing the impact of PASTA.
- Organization of the **Fourth Flex-Stretch Electronics International Workshop** (www.flexstretch.eu), + 2 presentations and 1 tutorial by Pasta partners.
- A huge number (39) of presentations have been given on different fairs and conferences.
- 3 partners participated in the Avantex Innovation Award contest. CEA-LETI has won the prize in the category ‘New Materials’ for their Diabolo technology.
- A number of articles have been published, in magazines and online.
- In Year 3, no publications were made in peer reviewed journals. In the final Year 4, a number of scientific publications are planned, including the finalized developments on the technologies together with simulation results.

All the dissemination activities (71) have led to 294 contacts/leads, from which it is expected that 1/3 will lead to a co-operation in the future.