

**Grant Agreement No: 609206**

**Factory in a Day**

**D8.5**

**Workshops, press conferences and stakeholder events II**

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**30 March 2015**

**Version 1.0**

Start date of project:	01102013
Duration:	48 Month
Classification:	PU(public)
File name:	D8.5_Workshops_Press_Events_TUM_WP8_30032015
Project website:	<a href="http://www.factory-in-a-day.eu">www.factory-in-a-day.eu</a>

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The work leading to these results has received funding from the European Community's Seventh Framework Programme (FP7/2007-2013) under grant agreement n° 609206. The opinions expressed in the document are of the authors only and no way reflect the European Commission's opinions. The European Union is not liable for any use that may be made of the information.

## Change Control

Version #	Date	Author	Organisation
0.1	09032015	Wibke Borngesser	TUM
1.0	30032015	Wibke Borngesser	TUM

### Release Approval

Name	Role	Date
Martijn Wisse	Coordinator	30032015

### Change History

0.1 initial draft

1.0 Submitted version

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## 1. Executive Summary

The aim of this deliverable is to give an updated report on the actions and activities that have taken place in the area of communication and dissemination in the past months of the project Factory-in-a-day. All activities in this area are summarized in WP8.

The consortium recognizes all dissemination and communication activities as groundwork for further exploitation opportunities that will rise at a later point in the lifespan of the project. In the meantime, the project partners will focus on raising awareness for the Factory-in-a-day project, its concept, innovations, results and expected benefits.

Key target groups for the dissemination and communication activities of the project are SMEs in all different kind of market segments that want to automate certain tasks, public authorities, academic communities and researchers (mostly in the robotic field), EU representatives, as well as general public interested in the development of robotics.

To achieve a compelling result, numerous communications channels have been identified and set-up, targeted either to the general public and/or special groups of stakeholders. These communication channels include the Factory-in-a-day-website, participation in events such as conferences and trade fairs or contact with the media.

A corporate design of the project has been created, including a logo, templates for a presentation and a flyer (more in Deliverable 8.3).

The project will plan activities - adequately resourced - devoted to dissemination for specific target groups. The dissemination plan deliverable will be adjusted and more focused on the stakeholders once more results tailored to the exploitation of the project will be achieved in the future.

## 2. Workshops

Workshops with real cases similar to the ones described in Deliverable 8.4 were also carried out in the past months but the focus was on the case brought in the focus the consortium by Philips. As Philips is a partner in the consortium, there is a slight difference in the set-up of the workshops – internally called “Robothon”. This has namely to do with the fact that the business angle of the evaluation is more in the focus and several workshops took place and will take place to solve this task. In this case the (un)loading of trays with razor parts is in the focus. In the future, this case will be used as one of the demonstration cases to which we can invite external guests for experiencing real-life implementation of the Factory-in-a-day idea in an actual production space. This means in reverse that we have not done any external workshops especially tailored to SMEs in the period of this deliverable.

## 3. Scientific conferences

The Factory-in-a-day project has attended several international conferences in order to get feedback from the scientific community about the on-going research activities, as well as assess any other developments in that field that could be useful for the project:

Partner	Name	Date	Location
IPA	International Symposium on Robotics	June 2-3, 2014	Munich/GER
TU Delft	EFTA Conference	September, 16-19, 2014	Barcelona/ES
TU München	Humanoids	November, 18-20, 2014	Madrid/ES
TUM	ERF 2015 (Workshop and Exhibitor)	March 11-13, 2015	Vienna/AUT

At the eu Robotics Forum 2015 the EU funded projects Factory-in-a-day, LIAA and RoboPartner organized a follow-up workshop of their first joint workshop on “Hybrid Production Systems” at the ERF 2014 ([www.robotics-forum.eu](http://www.robotics-forum.eu)). This time the other newly funded projects SYMBIO-TIC, FourByThree, Symplexity also presented themselves.

The workshop shall further open the dialogue between the participating projects in order to explore possible synergies between these projects and other on-going research projects. Furthermore, the idea to start a dialogue between the projects and the scientific community about methodologies, technologies and the platforms used was further advanced. The workshop took place on March 11, 2015 from 14:00- 15:30 hours.

Other than that, the projects funded in this programme are still looking at other possibilities for expanding the cooperation.

Regarding publications, 15 publications at conference proceedings or journals have been published since the start of the project. We expect this number to grow, especially with respect to journal publications.

The publications will be available online, in accordance to the open access policy where possible.

The partners in the Factory-in-a-day project will be constantly participating in scientific events such as conferences or congresses, further enhancing the connections already existing into the scientific community.

#### 4. Trade fairs and business-oriented events

Factory-in-a-day participated in a number of events that have a more business-oriented focus:

Partner	Name	Date	Location
TU Delft	RoboBusiness	October 2014	Boston/USA
Philips	World of technology & Science	30.09- 3.10.2014	Utrecht/NL
Materialise	Empack	September 24.-25, 2014	Brussels/BEL
TUM, PAL and TU Delft	Automatica 2014	June 3-6, 2014	Munich/GER
TU Delft	Greentech	June 10-12,2014	Amsterdam/NL

In 2014 Factory-in-a-day participated in its first trade fairs. A rather big fair focusing on Automation is Automatica in Munich, which takes place every two years. Automatica is the “leading platform for innovations in automation and production processes”, and it has the “world’s largest range of robotics, assembly and machine-vision solutions” (self-description by Messe München<sup>1</sup>). Roughly 35.000 visitors attended the fair 2014, with more than one third of international visitors. The former European Commissioner for the Digital Agenda, Neelie Kroes, also visited the trade fair and the booth of the project.

TU Delft also participated in the Greentech trade fair in Amsterdam/The Netherlands. With 8.150 visitors and a number of high-ranking politicians (such as Sharon Dijksma, the State Secretary of Economic Affairs of the Netherlands) visiting the booth of TU Delft representing Factory-in-a-day, the participation was successful. A valuable insight was also achieved by the number of QuickScans carried out at the trade fair, in which the consortium analyses tasks of companies in order to find out whether a task is feasible for automatisisation.

In November 2014, Dr. Martijn Wisse participated in the official Dutch National Smart Industry agenda release. TNO, the Ministry of Economic Affairs, VNO-NCW, Confederation of Netherlands Industry and Employers, and the Chambers of Commerce and FME (organization for technological industry) have taken the initiative to make a report on the

<sup>1</sup> [http://www.automatica-munich.com/en/Home/cn/about\\_the\\_fair/umcn/exhibition-profile/at-a-glance](http://www.automatica-munich.com/en/Home/cn/about_the_fair/umcn/exhibition-profile/at-a-glance) (date 09.03.2015)

meaning of Smart Industry for companies, knowledge institutions, and government in the Netherlands. The report was presented at the company Lacquey, partner in Factory-in-a-day<sup>2</sup>. Lacquey is involved in the Smartfood fieldlab.



Figure 1: Ineke Dezontje (FME-CWM), Dutch Minister of Economic Affairs, Henk Kamp and Dr. Wisse, coordinator (from left) at the Smart industry agenda release ©Smart industry

In April 2015, we will have our next big trade fair event with the partners Lacquey and TU Delft participating in Hannover fair with a demonstration of a robot equipped with grippers.

## 5. Media

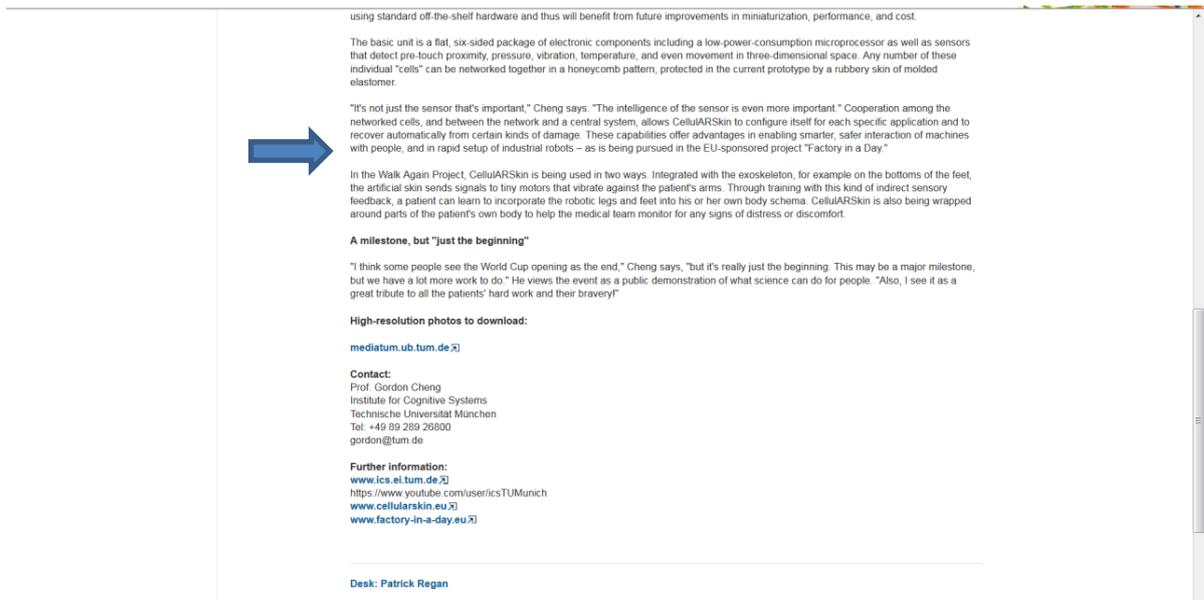
Factory-in-a-day has been mentioned in the following articles in various international media. Due to the fact that the coordinator and many partners are located in the Netherlands, the interest for this topic is naturally higher in this country than in other participating ones.

List of articles is also available on our project website:

- PT Industriell Management: [“Trends in Robotisering”](#), April 2014 (in Dutch)
- Elektrotechnik.de: [“Eine Feder bringt Roboter “TOM” zum Stoppen”](#), 2.06.2014 (in German)
- medizin.at: “Lähmung: [“Kick-off für Anzug mit Gefühl”](#)”, June 2014 (in German)
- electrooptics.com: [“Paralysed teenager wearing robotic exoskeleton to kick-off World Cup”](#) , June 12, 2014
- NOS: [“Robots nemen arbeidsmarkt over”](#), 29.9.2014 (in Dutch)
- BNR Nieuwsradio: [“Hoe hard werkt de MKB-robot?”](#), 1.10.2014 (in Dutch)
- NRCQ.nl: [“Vress niet vor je baan, zo vell kunnen robots nog niet”](#), 22.11.2014 (in Dutch)
- Automatie PMA: [“Factory in a day”](#) , 25.11.2014 (in Dutch)
- RTL Nieuws: [“Robots aan de macht”](#), 4.12.2014 (in Dutch)
- Faszination Forschung: [“Exoskeleton Enables Paraplegic Man to Walk”](#), December 2014
- Ft.com: [“Robot ‘temp agency’ finds no one’s hiring -yet”](#), 8.1.2015

It is important to note that some articles in the list above are related to a project carried out at TUM – among others – called Walk Again project. In this international project an exoskeleton was equipped with the same skin sensors that are also used in Factory-in-a-day. Some articles also mentioned the possibility of using the sensors also in an industrial application, such as Factory-in-a-day. The exoskeleton was demonstrated at the opening of the Fifa World Cup in Brazil,, in June 2014. The TUM press release for the event mentions Factory-in-a-day: <https://www.tum.de/en/about-tum/news/press-releases/short/article/31565/>.

<sup>2</sup> <http://www.smartindustry.nl/minister-ontvangt-actieagenda-smart-industry/>



using standard off-the-shelf hardware and thus will benefit from future improvements in miniaturization, performance, and cost.

The basic unit is a flat, six-sided package of electronic components including a low-power-consumption microprocessor as well as sensors that detect pre-touch proximity, pressure, vibration, temperature, and even movement in three-dimensional space. Any number of these individual "cells" can be networked together in a honeycomb pattern, protected in the current prototype by a rubbery skin of molded elastomer.

"It's not just the sensor that's important," Cheng says. "The intelligence of the sensor is even more important." Cooperation among the networked cells, and between the network and a central system, allows CelluARSkin to configure itself for each specific application and to recover automatically from certain kinds of damage. These capabilities offer advantages in enabling smarter, safer interaction of machines with people, and in rapid setup of industrial robots – as is being pursued in the EU-sponsored project "Factory in a Day."

In the Walk Again Project, CelluARSkin is being used in two ways. Integrated with the exoskeleton, for example on the bottoms of the feet, the artificial skin sends signals to tiny motors that vibrate against the patient's arms. Through training with this kind of indirect sensory feedback, a patient can learn to incorporate the robotic legs and feet into his or her own body schema. CelluARSkin is also being wrapped around parts of the patient's own body to help the medical team monitor for any signs of distress or discomfort.

**A milestone, but "just the beginning"**

"I think some people see the World Cup opening as the end," Cheng says, "but it's really just the beginning. This may be a major milestone, but we have a lot more work to do." He views the event as a public demonstration of what science can do for people. "Also, I see it as a great tribute to all the patients' hard work and their bravery!"

**High-resolution photos to download:**

[mediatum.ub.tum.de](http://mediatum.ub.tum.de) ↗

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**Further information:**  
[www.ics.ei.tum.de](http://www.ics.ei.tum.de) ↗  
<https://www.youtube.com/user/icsTUMunich>  
[www.cellularskin.eu](http://www.cellularskin.eu) ↗  
[www.factory-in-a-day.eu](http://www.factory-in-a-day.eu) ↗

**Desk: Patrick Regan**

Figure 2: Website tum.de with press release on the Walk Again project

## 6. Conclusion and next steps

So far, the activities carried out in the project Factory-in-a-day are more focused on raising general awareness for the project idea and its objectives.

Whereas the first few months have been used to analyze and test what kind of tasks are possible to robotize, we are now in the stage where we focus on setting up two test cases (Philips' assembling case and one from another industrial partner) before we further elaborate on specific events for one of the main stakeholder groups, namely the SMEs.

With the current focus of participating in events, conference and trade fairs we try to spread the word about the existence and general idea of Factory-in-a-day. Once the demonstrators and the test cases are operational, the more focused we will be on target groups like industry and SMEs that work with assembling or pick and place tasks.

At the last consortium meeting in Leuven in January 2015, it was also decided to have a booth at the Hannover Messe in 2016. This trade fair is among the largest industrial trade fairs in the world. The project will plan activities adequately resourced devoted to dissemination for specific target groups as well as the general public. The dissemination plan will be adjusted and more focused on the stakeholders once more usable results will be achieved in the coming months.