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# Standardization in research and innovation projects

Success story: new technologies - health and safety

## SUSTA-SMART:

Supporting Standardization for Smart Textiles, was an 18 month FP7 (7<sup>th</sup> European Research Framework Programme) project which finished in March 2014. The project developed tools for research proposers and projects to improve the integration of standardization issues into their work programme and the exploitation and commercialisation of project results. Focus domains were smart textiles for Personal Protective Equipment, Construction Products and Consumer Goods. There was a strong cooperation with CEN/TC 248 WG31 – Smart textiles and CEN-CLC BT/WG 8 – Protective textiles and personal protective clothing and equipment.

[www.susta-smart.eu](http://www.susta-smart.eu)

## THE PROJECT



Several European smart textiles research projects resulted in high market potential developments but often standardization was neglected as a tool for further exploitation, especially where CE marking was required. The aim of SUSTA-SMART was to find solutions to this problem. Given the wide range of potential applications, the efforts were restricted to 3 focus domains: PPE, Construction Products and Consumer Goods.

The aim of this project was not to develop specific standards, but rather to support the R&D community and to facilitate standardization in the development process. In order to address this SUSTA-SMART followed a systematic 3 step approach:

- 1 Mapping of the relevant standardization actors and the standardization issues of past FP6 and FP7 projects
- 2 Synthesising and prioritising of needs, developing a standardization roadmap
- 3 Compilation of dedicated standardization input documents.

## STANDARDS: A SOLUTION FOR MARKET UPTAKE

Without standards, the uptake of new products by the market is extremely hard, certainly for those products that require CE marking. Notified Bodies are not necessarily familiar with the new technology and hence reluctant to certify products based on technical specifications rather than on existing standards that have proven test methods and requirements. On the other hand, customers are used to have products marked with references to standards. Without a standard reference, customers have no trust in the products and hence marketing them is a very difficult task. Standards provide trust to the complete supply chain (also including market surveillance authorities) and are thus essential for the introduction of new smart textiles.

 Standards are key enablers for demonstrating the applicability of novel technology, without standards the technology can never become a product available to industry or consumers. 

## HOW WAS THE STANDARDIZATION WORK DEVELOPED?

SUSTA-SMART contributed to ongoing standardization activities in CEN/TC 248 WG 31 Smart Textiles as well as in CEN-CLC BT/WG 8 Protective textiles and personal protective clothing and equipment.

Two guidance documents were developed to support the smart textiles research and innovation community. One document gives advice on "How to integrate standardization issues into the work plan of research projects (Horizon 2020)". The second one addresses "Certification and conformity assessment (with EU legislation) of complex products, for smart textile products in the PPE and Construction Products field."

In addition, proposals for new standardization projects were developed and will be presented to the relevant technical bodies in CEN (the PPE sector forum, the respective working groups of CEN TC 162, and CEN/TC 248 WG31 for the general issues).

## BENEFITS OF LINKING WITH STANDARDIZATION

The SUSTA-SMART project was a support project concerning standardization of smart textiles; linking with standardization was therefore a central activity of the project.

Standardization in this field is crucial for the industry. But, in order to shorten the time between development and marketing of new products, standardization needs to be considered from the beginning of the research project. This includes checking existing standards (and legal requirements) that could be applicable to the new product or service, but may also include to start work on new standards at an early stage of the development process.

## LONG-TERM EXPECTED IMPACT

The results from the SUSTA-SMART project and the experiences gained will improve the interaction between standardization and research. Researchers and innovators will appreciate better the value of standardization in their research, including the value of standards for demonstrating the usefulness of the new technologies developed and to increase the chances for exploitation and commercialisation of research project results. From their side, standardizers will be more aware of ongoing new research developments in the smart textiles field.

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□□ The project partners came from different backgrounds, namely research and standardization. It was a learning experience for both sides to understand each other and to work together. This learning experience was also the key factor that enabled the research project to contribute to standardization and vice versa, and to provide guidance on how to further improve the interchange process. □□

Dr. Karin Eufinger, Researcher "Textile Functionalisation & Surface Modification", CENTEXBEL

[www.cencenelec.eu/research](http://www.cencenelec.eu/research)



Every project is different. The CEN-CENELEC Research Helpdesk can provide you with advice on how to include standardization in your project. Please feel free to contact us!

**Email:** [research@cencenelec.eu](mailto:research@cencenelec.eu)  
**Tel.:** +32 2 550 08 11  
Avenue Marnix, 17 - B-1000 Brussels, Belgium

www.lostele.com

PEFC PEFC07:31-4:17/4

