



Smart Textiles and wearable intelligence: from intelligent prototypes to industrial and practical products

Smart textiles and wearable intelligence: Why is the industry still facing challenges?

Major trade fairs are showing an increasing number and variety of smart textile and wearable intelligence prototypes for all kinds of applications that will eventually alter our lives.

Specialists consider safety and intervention, (home) care and medical, military, sports and leisure applications as the major growth markets for these products. The presence of (Flemish) companies on these markets is growing but they still encounter open questions and deficits.

Knowledge on smart textiles and wearable intelligence, industrial processing and communication possibilities, distribution channels, maintenance... are some of these issues.

By stimulating the collaboration across the ICT, electronic and textile sectors and confection companies by means of the collective project (Trajectory) SMARTpro we aim at supporting companies in application-specific product development and production.

We define smart textiles and wearable intelligence as the collection of (textile) materials and (textile-based) products incorporating one or more electronic components and/or communication capabilities.

In this context, Centexbel, Sirris, IMEC, HoGent, KHBO, DSP Valley, UGent, KU Leuven and iMinds have started the SMARTpro project, financed by IWT.

The focus will not be on the development of "new electronic systems or prototypes" but on the industrial processability and applications of smart textiles and wearable intelligence in :

- * safety and intervention
- * (home) care
- * sports and leisure
- * technical applications

Therefore, we choose to work exclusively with reliable and modular electronic systems and software. We will build on the knowledge already acquired in many European and other R&D projects.

Complex systems will be avoided. "Keep it simple" and "less is more" are guidelines determining the selection of e-systems and industrial application or assembling techniques.

Who are the end-users and industries who may benefit from mature smart textiles and wearable intelligence technologies?

We would like to involve companies (suppliers, manufacturers, process equipment developers...) from a variety of backgrounds, such as textiles, confection, ICT and electronics,...

By simultaneously engaging the end-users and other actors (care providers, sports clubs, security services, intervention services, laundries, recycling companies...) in the project, we are also focusing on the users' specifications and needs in the different application fields.

More information:

Mark CROES
mc@centexbel.be
Frederik GOETHALS
frg@centexbel.be
www.centexbel.be

Partners:

