



## Intelligent and luminous textiles



### > CONSORTIUM

The i-TEX project consortium is a closed consortium with five partners:

**PHILIPS** **SIOEN** INDUSTRIES **TU/e**



[www.i-tex.nl](http://www.i-tex.nl)



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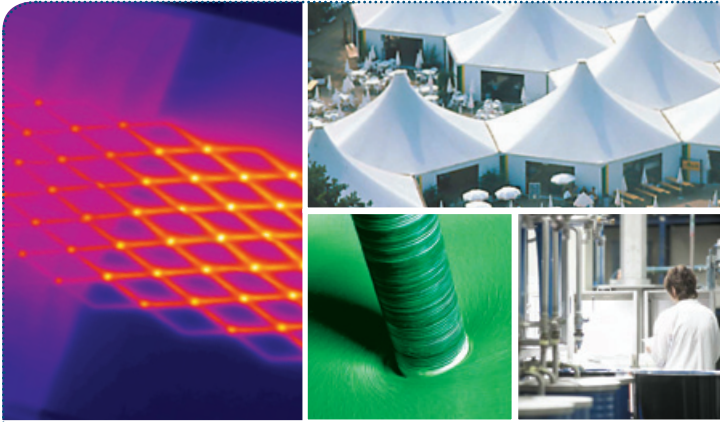
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FP7-ICT-2011-7



## > CONCEPT OBJECTIVES

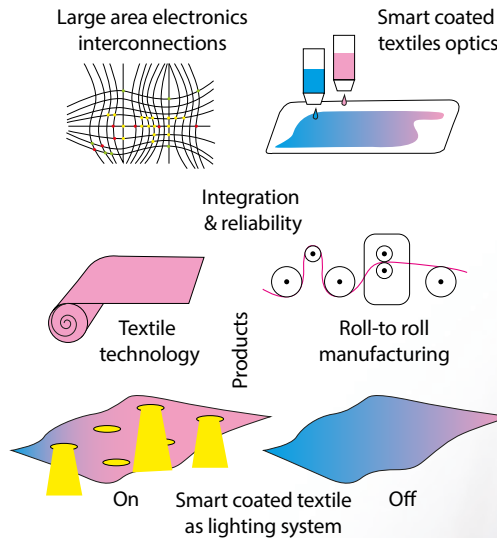
i-TEX targets the development and roll-to-roll production feasibility of large area, intelligent, LED-based lighting systems integrated in coated textiles.

In order to yield these innovative lighting solutions, the i-TEX project targets the following technological objectives:

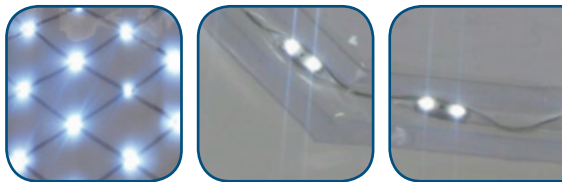
- > Novel large area electronic interconnections incorporating LEDs and other functionalities/intelligence
- > Integration of these novel interconnections into coated textiles
- > Smart optical coating materials interacting with the LEDs (e.g. tunable pigments) thus creating new appearances and high optical output
- > Reliable, low-cost, roll-to-roll (RTR) manufacturing process
- > Reliability and robustness studies over the entire value chain of the targeted products
- > Demonstration of large area, intelligent, LED-based lighting systems integrated in coated textiles

## > TREND

Driven by advances in R&D and in inorganic light-emitting diodes (LEDs), and by a growing consumer need for more pervasive intelligence, novel design possibilities and novel user interfaces, the lighting industry is expected to change largely up to 2020. R&D in Europe will anticipate this change to higher-added-value products and needs to move quickly to stay at the forefront of innovations, keeping the foci of the lighting industry in Europe.



The resulting future lighting solutions will be applicable for indoor and outdoor, decorative and functional lighting applications.



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