# D6.1: Enhanced printer with customised capability and description report

**Date Due:** M24: 31 Sept 2015 **Project acronym:** CREATIF

Project full title: Digital creative tools for digital printing of smart fabrics

**Grant agreement no.:** 610414

### SEVENTH FRAMEWORK PROGRAMME

# FP7-ICT-2013-10: Objective ICT-2013.8.1 Technologies and scientific foundations in the field of creativity

# Publishable short non-confidential summary

This deliverable summarizes the detailed designs of the application prototypes (modular blind and exhibition stand). These will be realised in year 3 of the project to produce the final overall prototypes. This task was undertaken using all the collaborative software tools resulting from WP2 and WP4 resulting in testing of the new software to identify and fix any issues and improve usability. These issues have been fed back to Grafixoft and the software bugs fixed. The identified issues are reported.

The developed printer at UoS has been used in parallel to test the performance of the software in the realization of the smart functions. This allowed further software debugging in respect of the printer driver. Examples of the Diffus blind disc structures were tested for compatibility with the printing and curing processes required in CREATIF. The most complex structure, an electroluminescent lamp, was printed was printed on to the disc. The current blind structure makes use of embroidered wires to use as connections and therefore this printing trial also tested the capability of the printed ink to interact with these conductive yarns.

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### **Project partners:**

*UoS* – University of Southampton (ECS) – <a href="http://www.ecs.soton.ac.uk/">http://www.ecs.soton.ac.uk/</a> - UK

*ITA* - RHEINISCH-WESTFAELISCHE TECHNISCHE HOCHSCHULE AACHEN - <a href="http://www.ita.rwth-aachen.de/">http://www.ita.rwth-aachen.de/</a> - Germany

GSoft - Grafixoft - <a href="http://www.grafixoft.com/">http://www.grafixoft.com/</a> - Bulgaria

*Diffus* – Diffus Design - <a href="http://www.diffus.dk/">http://www.diffus.dk/</a> - Denmark

Base - Base Structures Ltd - http://www.basestructures.com/ - UK

**Zaha** – Zaha Hadid Architects - <a href="http://www.zaha-hadid.com/">http://www.zaha-hadid.com/</a> - UK

Ardeje - Ardeje - <a href="http://www.ardeje.com/">http://www.ardeje.com/</a> - France