



## Deliverable D1.2: Report specifying the collaborative software, operating system, drawing package, prototypes, applications and their initial designs and how sustainability will be achieved

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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 non-confidential summary:**

**Deliverable D1.2: Report specifying the collaborative software, operating system, drawing package, prototypes, applications and their initial designs and how sustainability will be achieved**

This deliverable documents the functional specification of each part of the software, selects the operating system, programming language compilers and the existing drawing package. In addition the specification of the target advanced fabric prototypes is presented as well as the specifications of the two applications, Design for sustainability is also considered.

Windows will be used as the operating system. Programming will be undertaken in: HTML5 CSS3, JavaScript, C# and ASP.NET MVC. Microsoft Visual Studio will be the integrated development environment together with the compilers are included within it. It is used to develop console and graphical user interface applications along with Windows Forms or WPF applications, web sites, web applications, and web services in both native code together with managed code for all platforms supported by Microsoft Windows, Windows Mobile, Windows CE, .NET Framework, .NET Compact Framework and Microsoft Silverlight. Visual Studio includes a code editor supporting IntelliSense as well as code refactoring. Google Chrome has been selected as the officially supported browser. Most of the CREATIF software features will be available in commonly used web browsers and the official support of Google Chrome will not restrict designers to use just that browser.

Specifications are provided of three advanced smart fabric prototypes for interactive light emission, interactive colour change and sound emission/touch. Example configurations of the fabric based devices are given. Specifications are also provided of two applications relevant to the cultural and creative industries: an interactive, modular blind and exhibition stand. The prototype specifications cover the expected configuration, the fabrics to be used, the method of incorporation of the fabrics into the overall assembly and the target performance. Interconnection of the fabrics to the electronics is also considered. The electronics, which will be rectangular, will be housed in attractive container e.g. anodised aluminium which is available in different colours. The circuitry will be designed to fit into a longer lower profile box which is guessed to be 20cm long, 4cm wide and 2cm deep to allow it to be mounted on the periphery of the fabric in a discrete manner. The box could be decorated by designers or be concealed within a fabric pocket.



Life cycle assessment is considered and the approach to sustainability will be addressed within the framework of ISO14001. The ISO14000 family provides practical tools for companies to identify and control their environmental impact and improve their environmental performance.

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*GSoft* - Grafisoft - <http://www.grafisoft.com/> - Bulgaria

*Diffus* – Diffus Design - <http://www.diffus.dk/> - Denmark

*Base* – Base Structures Ltd - <http://www.basestructures.com/> - UK

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

*Ardeje* – Ardeje - <http://www.ardeje.com/> - France