



# FORTISSIMO

Press Release:

## FORTISSIMO – Enabling European Small and Medium Enterprises (SMEs) in the manufacturing sector to benefit from high-performance digital simulation and modelling

Edinburgh, October 7<sup>th</sup> 2013 – Today, a consortium of 45 partners announced the formation of Fortissimo: a collaborative project that will enable European SMEs to be more competitive globally through the use of simulation services running on a High Performance Computing cloud infrastructure. The project is coordinated by the University of Edinburgh and involves partners including Manufacturing Companies, Application Developers, Domain Experts, IT Solution Providers and HPC Cloud Service Providers from 14 countries. The project is funded by the European Commission within the 7<sup>th</sup> Framework Programme.

### The Challenge

The importance of advanced simulation to the competitiveness of both large and small companies is well established. However, the simulation of, for example, high-pressure gas cylinders or the moulding of plastics requires enormous computing power and specialized software tools and services. Generally, large companies have easier access to advanced simulation than SMEs, which are facing both technological hurdles and financial challenges. This means that SMEs are often not able to take advantage of advanced simulation, even though it would clearly make them more competitive.

### The Goal

The goal of Fortissimo is to overcome this impasse through the provision of simulation services and tools running on a cloud infrastructure. A “one-stop-shop” will greatly simplify access to advanced simulation, particularly to SMEs. This will make hardware, expertise, applications, visualisation and tools easily available and affordable on a pay-per-use basis. In doing this Fortissimo will create and demonstrate a viable and sustainable commercial ecosystem.

### The Experiments

Fortissimo will be driven by end-user requirements: approximately 50 business-relevant application experiments will serve to develop, test and demonstrate both the infrastructure and the “one-stop pay-per-use shop”. 20 experiments – all HPC-cloud-based – have already been defined in fields such as the simulation of continuous casting and die casting, environmental control and urban planning, and aerodynamic design and optimisation. Fortissimo will issue two more calls for participation in 30 experiments in the coming months: the first in November 2013 and the second in May 2104. Results from the first 20 experiments are expected for the first half of 2015.

## The Impact

Fortissimo will contribute to the increased competitiveness of European manufacturing industry through the innovative infrastructure that it will develop and test. It will also create commercial opportunities for European Independent Software Vendors and for service and High Performance Computing infrastructure providers, through the creation of a new market for their products and services. Fortissimo places emphasis on the exploitation of opportunities at all levels of the value chain all the way from the SME end-users to the providers of High Performance Computing infrastructure.

## The Details

Project Name:	Fortissimo – <u>F</u> actories of the Future <u>R</u> esources, <u>T</u> echnology, <u>I</u> nfrastructure and <u>S</u> ervices for <u>S</u> imulation and <u>M</u> odelling
Start date:	July 1 <sup>st</sup> 2013
End date:	June 30 <sup>th</sup> 2016
Total Budget:	21.7 M€
EU Contribution:	16 M€
Contract Number:	609029 under the 7 <sup>th</sup> Framework Programme
No of Partners:	45 in total (14 core Partners and currently 31 Partners in Experiments)
Core Partners:	University of Edinburgh, Scapos, Bull SAS, GENCI, INRIA, University of Stuttgart, CINECA, Surf SARA, XLAB, Arctur, CESGA, Gompute, Sicos and Intel
No of Experiments:	about 50 in total of which 20 have been already started with the project; two open calls for participation for about 30 additional experiments to be issued
Date of first call:	Early November 2013

More information on Fortissimo is available at <http://www.fortissimo-project.eu> or [info@fortissimo-project.eu](mailto:info@fortissimo-project.eu).