Fortissimo: Dates and Facts

Fortissimo is a project funded by the European Commission within the I4MS initiative (ICT Innovation for Manufacturing Small & Medium Enterprises) framework. It consists of two phases: the first phase began in July 2013 and ended in December 2016; the second phase began in November 2015 and will end in October 2018.

THE AIM OF FORTISSIMO

The aim of Fortissimo is to strengthen the global competitiveness of European industry. Fortissimo drives the uptake of advanced modelling, simulation and data analytics by European engineering and manufacturing Small & Medium Enterprises (SMEs) and midcaps. Such an uptake will deliver improved design processes, better products and services, and improved competitiveness. For the European Union as a whole this means improved employment opportunities and economic growth.

THE CHALLENGE

In the past, gaining access to the resources required for digital simulation has often posed serious technical and financial challenges to SMEs. Through the use of High Performance Computing (HPC) simulations available via a cloud-based infrastructure, opportunities for business benefits can be identified and applied across the complete value chain, thus saving companies time and money and improving their competitive position.

THE MARKETPLACE

The Fortissimo Marketplace – launched in October 2016 – provides all European businesses, in particular Small & Medium Enterprises (SMEs), with permanent, simple and cost-effective access to the hardware, software, and expertise required for computationally intensive simulations, via an on-demand, pay-per-use, “one-stop-shop” model.

Improvements resulting from the Fortissimo Marketplace approach are manifold, including: better and more precise design of complex components and systems; acceleration of time-to-market; and cost savings in development, production and operation.
SME PARTICIPATION

Fortissimo collaborates with SMEs, technical experts, independent software vendors (ISVs) and HPC-Computer centres to demonstrate the business benefits of Cloud-based HPC simulations. SMEs can propose potential experiments through "open calls". During the 18-month duration of an experiment, the Fortissimo partners provide the participating SMEs with free access to HPC-resources via a cloud-infrastructure and support them in the planning, implementation and realisation of their experiment.

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<th>PROJECT NAME</th>
<th>Fortissimo - Factories of the Future Resources, Technology, Infrastructure and Services for Simulation and Modelling</th>
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| DURATION      | 1st phase: July 1st 2013 - December 31st 2016  
2nd phase: November 1st 2015 - October 31st 2018 |
| TOTAL BUDGET  | 1st phase: 21.7 MIO€  
2nd phase: 11.1 MIO€ |
| EU CONTRIBUTION | 1st phase: 16.0 MIO€  
2nd phase: 10.0 MIO€ |
| CONTRACT NUMBER | 1st phase: 609029 under the 7th Framework Programme  
2nd phase: 680481 under the H2020 Framework Programme |
| NO OF PARTNERS | 1st phase: 122 in total (14 Core Partners and 108 Partners in Experiments)  
2nd phase: 38 in total (12 core Partners and currently 26 Partners involved in Experiments) |
| CORE PARTNERS | 1st phase: The University of Edinburgh (EPCC), Arctur, Bull, CESGA, CINECA, GENCI, Gompute, University of Stuttgart (HLRS), INRIA, Intel, Scapos, Sicos BW, SURFsara and Xlab.  
2nd phase: The University of Edinburgh (EPCC), Arctur, Atos, CESGA, CINECA, Gompute, University of Stuttgart (HLRS), Intel, Scapos, Sicos BW, SURFsara and Xlab. |
Both phases comprise in total 92 experiments, of which 67 have already finished and 25 are currently running. The first phase included 53 experiments in total, 33 of which were added as the result of two open calls. The second phase (Fortissimo 2) includes 39 experiments, 10 of which have been added through the first open call from early 2016 and 15 have been added through the second open call from early 2017.

**About Fortissimo**

**Fortissimo** is a pair of projects funded by the European Commission. The aims of the projects are to strengthen the competitiveness of European businesses in a global market. To do this, Fortissimo provides companies with an easy cloud-based access to computationally intensive digital simulations. The possible improvements resulting from this approach include the more precise design of complex workpieces, acceleration of time-to-market, and cost savings of materials. In the Fortissimo marketplace, businesses find permanent and cost-effective access to expertise and technology on a pre-pay or pay-per-use basis. In addition, the marketplace offers solution providers a platform to distribute their solutions.

For further information, please visit: [www.fortissimo-project.eu](http://www.fortissimo-project.eu)