Proposal to Fortissimo Project Call 2

Call Information:

Identifier: Fortissimo Call-2

Call title: New SME modelling and simulation experiments

Project full name: Factories of the Future Resources, Technology, Infrastructure and Services for Simulation and Modelling

Acronym: FORTISSIMO

Grant agreement number: 609029

Deadline: 18th June, 2014, at 17:00 Brussels local time

FORTISSIMO

Experiment Title

Name of the coordinating person:

Title First Name, last Name, Partner Organisation

E-mail:

Fax:

No.	Participant organisation name	Participant short name	Country
1			
2			
3			
4			

No.	Participant short name	SME (yes/no)	PIC
1			
2			
3			
4			

Summary

(Guideline: 0.5 pages)

Industrial relevance, potential impact and exploitation plans

(Guideline: 3.5 pages)

Fortissimo Call-2 targets the augmentation of the current set of application experiments. The new application experiments should provide business relevant investigations and demonstrations of simulation services in the Fortissimo HPC Cloud that have the potential to create business benefits for manufacturing SMEs. The business-relevance of the application experiment is essential, as Fortissimo places considerable emphasis on the exploitation of opportunities at all levels of the value chain ranging from the end-user, through Independent Software Vendors (ISVs), domain experts and technology providers to the HPC infrastructure provider.

The expected business impact and commercial exploitation possibilities of the targeted results should be explained and substantiated by market figures (target markets, market sizes, competitors, competing solutions,..). The alignment of the proposed experiments with the objectives of Fortissimo Call-2 should be explained.

Description of the work plan and concept

(Guideline: 3 pages)

Introductory text & explanation of the experiment concept.

Experiment Title					
Participant short name					
Role[1]					
Description: •					
Workplan **Task 1 Task name** Task description. ***Deliverable****: Deliverable short description (Experiment Month nn (i.e. within months 1 to 18 of the experiment))*					
Impact and Outputs					

[1] Examples of roles: End-user, application or technology expert, HPC expert, ISV, HPC Centre

(Output = concrete results from the experiments, such as, but not limited to, business case analyses/reports, software releases, user workflows, experience reports,..
Impact = explanation of the use of project results and the related business impact, enhanced capabilities or potential for service offerings, etc.)

The output of experiment will be:

-

The results of the experiment will be ..

Participants and effort						
Participant						**TOTAL**
Effort (PM)						

PM = Person Months

Quality of the consortium as a whole and of the individual proposers

(Guideline: 2 pages)

The descriptions of the individual proposers should explain the proposer's capability, as an entity and, in terms of the key staff to be assigned to the project, to carry out the assigned tasks. The description of the consortium (for the experiment) as a whole should provide evidence that the consortium includes the necessary and sufficient set of complementary capabilities (i.e. no unnecessary overlap of capabilities nor omission of required capabilities).

Justification of costs and resources

(Guideline: 1 page)

Participant Number	Participant short name	Estimated eligible costs						Requested Funding (€)
		Effort (PM)	Personnel Costs (€)	Subcontracting (€)	Other Direct costs (€)	Indirect costs (€)	Total costs	

Total							

Cost breakdown per Participant

New/Existing beneficiaries	Participant Number	Participant short name	Requested Funding (€)
New Beneficiaries			
Sub-Total			
Existing Beneficiaries			
Sub-Total			
Total			

Funding for new and existing beneficiaries[2]

Costs for subcontracting and other direct costs, including computing costs need to be clearly explained. The basis (calculation model) for the calculation of indirect costs should be reported.

Computing costs, in terms of the required core hours, should be scoped for the whole value chain of the proposed experiment and assigned under "Other Direct costs". The budgeting for computing resources is to follow the Fortissimo Token Model:

The Fortissimo Token Model for Computing Resources

Paying for on-demand access to HPC Cloud resources is a key part of running such a service. During the project lifetime, Fortissimo will study the best way of doing this sustainably and transparently in the long term. However, the project also needs a model of resource charging during the project and this will be accomplished as follows. The model takes into account the restrictions placed on the project by the FP7 financial guidelines.

Most experiments will need specific software and licences installed on whatever components of the Fortissimo HPC Cloud they intend to use. We therefore expect each experiment to choose an on-demand provider for the duration of their experiment. Whichever provider is chosen may either provide free access to their resources or to charge for them. Because one beneficiary in an FP7 project may not invoice another and then charge that invoice to the European Commission Fortissimo uses the following token-based model during the project:

1. *A token will have a notional monetary value of €0.01.*
2. *Each HPC Cloud Provider will calculate the actual direct costs with no profit component associated with providing access to their resources.*

[2] Existing beneficiaries are those proposal participants who are already Fortissimo partners, new beneficiaries are those participants who would become Fortissimo partners in the case of the proposal being selected for integration into the project.

3. *For example one core hour of access to the resource may cost three tokens. An experiment using 256 cores for 2 hours would therefore consume 1,536 tokens (256 x 2 x 3) on this resource (with a real monetary value of €15.36).*
4. *Each resource provider will record how many tokens of resource it provides to each experiment.*
5. ***Each experiment must include in its budget an estimate of the required resources for the successful completion of the experiment.***
6. ***The costs for computing time are allocated as direct costs for the appropriate provider***
7. *At the end of each project year the Project Coordinator will amend the project budget by moving money from the resource fund it holds centrally to each HPC Cloud Provider up to cover the tokens they have collected.*
8. *If an experiment underestimates its token requirements it may approach the management board for extra tokens, which may or may not be granted depending on the then current resources available.*

In the case where an experiment requires more resources than are granted, either the HPC Cloud Provider will grant free access to complete the experiment or more tokens may be purchased from the provider. These purchased tokens will not form part of the project funding.