

# Financial Study for Sustainable Computing e-Infrastructures

## Background

The e-FISCAL project leads on from earlier work on the costs of e-Infrastructures that began in the e-IRGSP2 FP7 project, supporting the e-Infrastructure Reflection Group (e-IRG).

This involved an initial study to estimate the costs of NGIs (National Grid Initiatives) based on a questionnaire. This study demonstrated the complexity of the Grid ecosystem as it is funded by several sources, complicating cost calculations. It became clear that NGIs do not always have a clear financial record of how much it costs to provide their physical infrastructure and support services. These results drove the development of a project to tackle the broader issue of e-Infrastructure costs.

## Project information

**Project Name:** Financial Study for Sustainable Computing e-Infrastructures

**Acronym:** e-FISCAL

**Start date:** 01/08/2011

**Duration:** 18 Months

**Contract number:** RI-283449

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# e-FISCAL

## Partners

The e-FISCAL project brings together experts on e-Infrastructure policy, economics and exploitation, as well as representatives from leading e-Infrastructures.



## Financial analysis

The project's methodology for financial analysis is based on a questionnaire, research into available data sources and a set of analysis steps, shown below.

Questionnaire data on equipment and costs

Simulation of physical infrastructure

Development of financial model

Costs of software, personnel, power, premises, network, other operating costs

Annualisation of physical infrastructure costs via depreciation rates

Yearly Total Cost of Ownership

## Outputs and future plans

The e-Fiscal Project gathers information about costs and business models of e-Infrastructure and commercial computing services, to generate information of interest to infrastructure providers and users in planning their usage and service provision.

Key projects outputs include an evaluation of the overall cost of the entire European HTC and HPC infrastructures and comparison with the closest commercial on-demand offerings. It will also include the development of a generic cost model, business models and sustainability outlook contributions.

These will be conveyed to the community through a preliminary report in May 2012 and a final report including business models in January 2013. A second e-Fiscal workshop in September 2012 will allow the project to communicate its preliminary results and gather further input from the community.

## e-FISCAL @ EGITF

The e-FISCAL workshop provides an introduction to the project, stimulates discussion of e-Infrastructure costs, as well getting feedback on the e-FISCAL draft questionnaire. It also aims to introduce the goals and the work-plan of the project and review the state-of-the-art on costs and business models for e-Infrastructures. An open discussion assisted by an expert panel will stimulate feedback from the participants.

The target audiences are EGI/NGI representatives, PRACE and HPC centre representatives and other financial experts from the commercial and Cloud sectors. However, the project is interested in discussions with anyone with a genuine interest in the financial underpinning of e-Infrastructures, and looks forward to broad engagement with the computing community.