

Exa-scale computing, software and simulation: Objective in FP7 ICT Call 7

IESP workshop

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Exa-Scale objective in FP7: When / How much?

- **Work Programme 2011-12:** Cooperation (ICT – Information and Communications Technologies)
 - **ICT Call 7:**
 - *Open: 28 September 2010*
 - *Deadline: 18 January 2011*
 - Exa-scale topic: “Objective ICT-2011.9.13 Exa-scale computing, software and simulation “
 - **Indicative budget distribution** (total 25 m€):
 - Integrated Projects: 24 m€
 - Coordination and Support Action (CSA): 1 m€

Exa-Scale objective in FP7

Reminder of objectives:

- To develop a small number of advanced computing platforms (100 petaflop/s in 2014 with potential for exa-scale by 2020),
 - Platforms relying on vendors' proprietary hardware or on COTS.
- To develop optimised application codes driven by the computational needs of science and engineering and of today's grand challenges (e.g. climate change, energy,...)
- Proposals should address major challenges of extreme parallelism with millions of cores (programming models, compilers, performance analysis, algorithms, power consumption ...)
- 25 m€ for R&D
- Three Integrated Project proposals will be selected for funding (expected start date of projects between June-Sept 2011)

Overall response to the Call:

- Six Integrated Project proposals covering well the main objectives of the call: adequate number of proposals given the ambition, scope and requirements of the exa-scale Call
- showing critical mass and a comprehensive approach
- the 6 proposals involve all major European players in this area.
- The application vs. system overall split was close to the expected 60/40 balance between systems (hw/sw) and applications, and on the whole both the prototyping work and the application domains were well covered.
- Composition of consortia showed the requested balance of supercomputing centres, academia, and technology providers.
- Good mix of different skills to focus ideas and concentrate resources around the stated Call objectives.
- Synergies with the Capacities programme were addressed, in particular with PRACE.