# EURO\_IT4I Supercomputer Proposal

## Proposal for technical solution

### Proposal for hardware solution

*Please, provide detailed information about architecture of solution, architecture of its components, proposed technologies, proposed devices, proposed number of devices and key features and properties.*

#### Architecture of supercomputer

#### Universal compute partition

#### Accelerated compute partition

#### Data analytics compute partition

#### Cloud infrastructure compute partition

#### High speed compute network

#### User’s data storage SCRATCH

#### User’s data storage PROJECT

#### User’s data storage HOME

#### System’s data storage INFRA

#### Login nodes

#### Visualization nodes

#### Data management nodes

#### Infrastructure and management nodes

#### Backup for infrastructure and management nodes

#### Network infrastructure LAN

#### Network infrastructure WAN – integration only

#### Racks, power and cooling equipment – integration into data center

### Proposal for software solution

*Please, provide information about proposed software stack of solution.*

### Performance and capacity parameters of the solution

*Please, provide performance and capacity parameters of solution and its components. In particular, for compute partitions – Linpack and HPCG performance, for storages sequential bandwidth (for read and write, 1MB block size) and random I/O performance (80/20 read/write mix load, 4KiB block size).*

*Please, provide the information about the bi-section bandwidth of the proposed high-speed computer network. If islands are proposed, please specify the amount and capacity of links between such islands.*

### Energy requirements of the solution

*Please, provide power consumption of solution and its components.*

### Description of supercomputer cooling

### Description of functionality and properties of the solution

### Reliability and availability of the solution

### Estimated time availability of proposed technologies

### Comments, ideas and propositions

*Please, provide comments, ideas and propositions regarding the information contained in Annex1.*

### Alternative design of the solution (optional)

## Proposal for warranty and service

### Reactive services

### Software maintenance

## Proposal for licensing terms

## Estimated financial costs

|  |  |
| --- | --- |
|  | Price excl. VAT  (thousand EUR) |
| Universal compute partition |  |
| Accelerated compute partition |  |
| Data analytics compute partition |  |
| Cloud infrastructure compute partition |  |
| High speed compute network |  |
| User’s data storage SCRATCH |  |
| User’s data storage PROJECT |  |
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| Login nodes |  |
| Visualization nodes |  |
| Data management nodes |  |
| Infrastructure and management nodes |  |
| Backup |  |
| Network infrastructure LAN |  |
| Network infrastructure WAN – integration only |  |
| Racks, power and cooling equipment – integration into data center |  |
| Software |  |
| Implementation |  |
| Training |  |
| Warranty and services |  |
| **Total** |  |