NGI H2020 Profile

**NGI.LT**

12-05-2014

# Target user communities

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| --- | --- |
|  | Research Community/Project description (list in order of descending priority) |
| European Space Agency | Lithuanian Space Association  Visualisation of radar data and multilevel-map design |
| LSGC – The Life-Science Grid Community | **Vilnius Unversity Hospital Santariskiu Klinikos**  Visualisation of the data of medical observations for primary diagnosis: encephalograms, human skeleton, lung diseases |
| Worldwide LHC Computing Grid (wLCG)  Computational chemistry | **Scientific research**   * modeling of heterogeneous processes in biology, biochemistry, optical spectroscopy, other algorithms and modeling, analysis of biological macromolecules * calculations of quantum mechanics, material science, modeling crystal and crystal surfaces * analysis and visualization of multidimensional biomedical data * Baltic Sea eco-system modeling * computational linguistic, text corpora, etc. * modeling of free and two-sided surfaces and friable material dynamics, related engineering science problems * computing of pseudo-random data sets, their composing and analysis * computing of physics of elementary particles and atomic nuclei * astrophysics problems such as stars and galactic spectrum analysis, related computing. |
|  |  |

# Resource provisioning for target communities

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| --- | --- | --- | --- | --- |
|  | **Compute and storage capacity currently available (or available in the future) to deal with the data growth** | **Access policy** | **Available funding or funding models (present and future)** | **What existing resources the e-infrastructures can offer, their current usage, the limitations and plans to deal with the data deluge** |
| **European Space Agency** | NGI.LT,  Supercomputer centre resourses of Vilnius University. Over 1500 computing cores and more than 600 TB of disk space | public | Funding models | At least three different technological platforms for cloud computing will be installed. IBM CloudBurst, Microsoft and OpenNebula solutions based on various virtualisation technologies are expected to be provided. |
| **LSGC – The Life-Science Grid Community** | public | Funding models |
| **Worldwide LHC Computing Grid (wLCG)**  **Computational chemistry** | public | Funding models |
| **Other communities** |  |  |  |  |

# User support skills

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| --- | --- |
|  | User support skills and related technical and disciplinary areas |
| Training and education |  |
| Technical skills |  |
| Discipline/user-specific skills | Courses: Grid application for scientific research |
| Other |  |

# Software development skills and experience

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| --- | --- |
| Skill | Description |
| Create | grid, cloud computing, high-performance computing, virtual repositories, related data sets, to serve. |
| Maintain | grid, cloud computing, high-performance computing, virtual repositories, related data sets, to serve |
| Develop | grid, cloud computing, high-performance computing, virtual repositories, related data sets, to serve |
| Serve | the academic environment, public sector, business needs, and requests from foreign partners |