

€5.3 million tender for Hybrid Cloud Platform serving science

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Today Helix Nebula - The Science Cloud (HNSciCloud) launched a [€5.3 million tender](#) for the establishment of a European hybrid cloud platform. The purpose of the platform is to support the deployment of high-performance computing and big-data capabilities for scientific research.

Today's **pre-commercial procurement** tender covers R&D services relevant to the design, development and pilot use of an innovative platform to support hybrid cloud environments. The **HNSciCloud pre-commercial procurement project** is funded by ten of Europe's top research organisations^[1] and by the European Commission.

The new cloud platform must address the many challenges involved with providing a combination of services at the Infrastructure as a Service (IaaS) level, integrated with an environment that supports the full life cycles of [diverse scientific workflows](#). These include:

- *Compute and Storage* – support a range of virtual machines and container configurations to support researchers working with datasets in the petabyte range
- *Network Connectivity and Federated Identity Management* – provide high-end network capacity for the whole platform, with common identity and access management
- *Service Payment Models* - explore a range of purchasing options to determine the most appropriate ones for the scientific application workloads to be deployed.

The platform will serve scientists and engineers working in high-energy physics, astronomy, the life sciences including biomedical research, and the photon/neutron science in which the ten procurers operate. These procurers will be the **first customers of the platform**, and will integrate their in-house resources with the procured cloud services.

During the pilot phase, the hybrid cloud platform will provide **on-demand and elastic services to geographically distributed users**. This will include access to data produced by research organisations and hosted on the platform.

The platform must serve stakeholders beyond the initial procurers, reaching out to the private sector to offer innovative services that unlock the potential of research data. This will open up new possibilities for economic growth and contribute to the establishment of the [European Cloud Initiative](#).

^[1] (1) The European Organization for Nuclear Research (CERN) [Lead Procurer], Switzerland; (2) Centre National de la Recherche Scientifique, (CNRS), France; (3) Deutsches Elektronen-Synchrotron (DESY), Germany; (4) The European Molecular Biology Laboratory (EMBL), Germany; (5) The European Synchrotron Radiation Facility (ESRF), France; (6) Institut de Física d'Altes Energies (IFAE), Spain; (7) Istituto Nazionale di Fisica Nucleare (INFN), Italy; (8) Karlsruher Institut für Technologie (KIT), Germany; (9) The Science and Technology Facilities Council (STFC), United Kingdom; (10) SURFsara, the Netherlands.



Günther H. Oettinger, Commissioner for the Digital Economy and Society: *“The European Cloud Initiative will unlock the value of big data by providing world-class supercomputing capability, high-speed connectivity and leading-edge data and software services for science, industry and the public sector.”* (See [Digital Single Market.](#))

For more information visit www.hnscicloud.eu

All questions received will be handled on the Tender Information Day hosted by CERN in Geneva, Switzerland on 7 September 2016.

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