Helix Nebula support for SMEs

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This document has been prepared to provide a written statement as input to the EC workshop entitled *European Research e-Infrastructures and Innovation Clusters* held in Brussels on the 3rd October 2014.

1. How are you currently facilitating access to and use of the e-infrastructure resources by SMEs? (including what types of SMEs are supported, providers, users, etc.)

The Helix Nebula initiative[1] includes 16 SMEs representing approximately 30% of the total membership. Participation in the Helix Nebula initiative provides SMEs with a network of contacts amongst the service suppliers and user organisations. Many of the SMEs have used the network to develop business relationships through which they have generated revenue by offering their services to the user organisations or suppliers. The HNX[2] product provides an opportunity to SMEs to offer their services to a wider user-base including sectors other than publicly funded research.

2. What, in brief, are the terms of that support?

- Helix Nebula has a documented process by which SMEs can engage as a supplier of cloud based services or as a consumer/user and profit from the expertise of the other members.

- Existing members review the SMEs request to determine if the Helix Nebula initiative offers a good match to their expectations.

- Successful applicants which are willing to contribute towards the development of the platform are invited to join the Helix Nebula initiative and sign an NDA. Currently there is no membership fee. SMEs which simply want to make use of the HNX services are not obliged to join the initiative and sign the NDA.

- New members are given the opportunity to participate in the Helix Nebula assembly meetings where they present their company and discuss with suppliers and users.

- HNX as a product provides an opportunity to SMEs to offer their services to a wider user-base.

- Helix Nebula is the only European hybrid public-private e-Infrastructure which can provide SMEs with access to commercial services and public resources adhering to European values and legislation.

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[1] http://www.helix-nebula.eu/
[2] http://hnx.helix-nebula.eu/

3. Are there any best practices / success stories / lesson learnt as a result of this support?

Success stories:

CloudSigma[3] has been able to find new customers and enter new business sectors with its IaaS as a result of being a member of Helix Nebula. TheServerLabs[4] have developed new skills and revenue by porting earth science applications to the HNX platform. SixSq[5] has been funded by the EC and the multinational companies involved in HNX to further develop their SlipStream[6] product which forms the basis of the HNX broker. All three SMEs have received sustained feedback and input from the publicly funded research organisations (CERN, EMBL and ESA) who have co-sponsored the deployment of the flagship applications on HNX.

The PIC use case[7] deployment by CloudSigma has led PIC to identify important exploitation opportunities in the future and they are now considering spinning-off a new SME to take these ideas forward.

Best practises and lessons learnt:

The application process for SMEs wishing to work with Helix Nebula includes a review of their business plan and valuable feedback has been provided to the SMEs about how they can position themselves with respect to the cloud services market.

Engagement with SMEs that have no experience in the ICT & cloud domains is a labour intensive activity that requires business and cloud expertise. It is difficult to ask other companies to provide this support from their own funds if it does not generate revenue for them directly.

The Helix Nebula pay-per-use business model means SMEs can engage without making substantial upfront financial investment in ICT infrastructure and operational staff.

4. What (if any) are your future plans to continue and broaden support?

The HNX suppliers are putting in place a dedicated sandbox area to support small scale tests and demonstrators as a means of simplifying the engagement of SMEs.

The 2 year pilot phase of Helix Nebula has demonstrated the potential of cloud services for the public research sector. Helix Nebula will pursue the implementation of the e-Infrastructure commons marketplace[8] as a means of enabling a dynamic cloud ecosystem. Specifically, Helix Nebula will use PICSE, the recently announced H2020 support action, to develop a network of publicly funded research organisations willing to participate in joint procurement activities that can further develop the usage, capacity and functionality of the European hybrid public-private e-Infrastructure cloud services marketplace. The PICSE platform and results including the Procurement Best Practices and the Cloud Service Procurement Roadmap will benefit private sector companies that procure IT services. PICSE's privileged relationship with EuroCIO[9] via the PICSE Task Force will ensure more than 600 companies around Europe are able to benefit from the added value services and procurement model.

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[3] https://www.cloudsigma.com/
[4] http://www.theserverlabs.com/
[5] http://sixsq.com/
[6] http://sixsq.com/products/slipstream.html
[7] http://www.helix-nebula.eu/usecases/pic-use-case
[8] https://cdsweb.cern.ch/record/1709709/files/HelixNebula-MISC-2014-001.pdf
[9] http://www.eurocio.org/

5. What type of funding support / instruments would facilitate provision of increased support to SMEs by your e-infrastructure?

Helix Nebula sees the e-Infrastructure commons marketplace as the most effective implementation of the European hybrid public-private e-Infrastructure which can support a dynamic cloud ecosystem and provide SMEs with access to commercial services and public resources adhering to European values/legislation. Providing financial incentives that encourage the engagement of SMEs is seen as the most effective form of support that the EC can provide. Members of the Helix Nebula consortium recently submitted the PROSUM support action proposal which foresees the implementation of a pilot ICT innovation voucher scheme for SMEs. Such ICT innovation voucher schemes should be expanded in the future work-programmes. The ICT innovation voucher scheme model can also offer a mechanism for the other EC directorates to contribute to the development of the cloud services marketplace for SMEs in specific business sectors. For example, DG-AGRI could be approached to sponsor a financial incentive programme to encourage the uptake of cloud services by SMEs active in agriculture, fisheries, forestry and rural development, etc.

The EC has put in place dedicated SME instruments in H2020. Linking these dedicated SME instruments to the e-Infrastructure commons marketplace, so the cloud services platform can be used by SMEs during the feasibility, innovation and commercialisation phases will offer SMEs a ready-made solution for developing their business activities.