NordForsk is an organisation under the Nordic Council of Ministers that provides funding for Nordic research cooperation as well as advice and input on Nordic research policy. The organisation plays a key role in enhancing the value of existing research activities in the five Nordic countries, Finland, Sweden, Norway, Denmark and Iceland, as well as the autonomous territories of the Faroe Islands, Greenland and the Aaland Islands. NordForsk has a basic allocation of NOK 121 million in 2014. The organisation's head office is located in central Oslo. For further information, see www.nordforsk.org.

The Nordic e-Infrastructure Collaboration (NeIC) is seeking:

External consultant/e-Infrastructure specialist on WLCG Operations

NordForsk is coordinating and hosting the Nordic e-Infrastructure Collaboration (NeIC) since January 2012. NeIC is financed by or via the national research agencies. In 2014, the new organisation has an annual budget of 3 million Euros which covers a director and, as of March 2015, a staff of 38 persons dispersed within the Nordic countries.

NeIC supports the Nordic research community by:

Supporting collaboration on e-infrastructure in the Nordic region.

Providing added value to researchers and national funders.

Contributing to more cost-efficient development and deployment of e-infrastructure services.

Supporting the national einfrastructure providers in terms of competence building, task sharing and joint operation of services.

neic.nordforsk.org

The vision of NeIC is to facilitate the development and operation of high quality e-infrastructure solutions in areas of joint Nordic interest.

The Nordic Tier-1 was created in 2005 to provide a common WLCG Tier-1 site in the Nordics, where no single country is large enough to host one. For reasons of Nordic cooperation and the difficulty in settling on a single institute and sending money across borders a distributed solution was setup with NORDUNet A/S hosting the project. The NDGF Tier-1 site was implemented as a distributed one where the resources (storage servers, tape libraries, compute clusters) are funded nationally and run by HPC sites in all the participating countries. In 2012, NeIC took over the Nordic Tier-1 as the NT1 area and has continued to run this in a distributed fashion to reflect the distributed nature of financing and resources.

The NT1 activity is the glue that presents distributed resources in the Nordics as a single coherent Tier-1 site to WLCG, and as such spends lots of time communicating with the users as well as the resource providers at the individual HPC centres. It is speculated that this communication overhead would be smaller for a single site, and, furthermore, there might be technical simplifications possible with a single site that could lead to lower total operational costs. However, it is relevant also to assess indirect benefits resulting from this cross-border collaboration, such as competence sharing, community building within the e-Infrastructure provider organizations, user community engagement, robustness, etc.

NeIC is now looking for an external consultant who can do an investigation into the boundary conditions for the NT1 operations as given by both formal and informal requirements from WLCG and the LHC experiments supported.

The work will be organized as a project, and it will involve technical assessments and engagement with a multitude of stakeholders (users, PIs, funding bodies, service providers, e-Infrastructure coordination bodies). There is some travel funds available to meet physically with some of these, but a good strategy for how to engage with all the stakeholders within the limited project time is essential for project success.

The consultant must therefore be able to collaborate across disciplinary and international boundaries. This will require a willingness to travel and excellent oral and written communication skills in English, as well as the ability to work independently. In order to tackle the intended tasks both deep technical understanding and inter-personal skills will be needed. The consultant should preferably have expertise in large-scale storage, networking, and high throughput computing as well as understanding complex organizations and the WLCG operational requirements.

The consultant should not have conflicts of interest related to any particular Nordic setup of the WLCG Tier-1 site.

The project's end result should be a report on the cost-efficiency both of the current configuration, and of other possible configurations of a Nordic WLCG Tier-1. This report is intended to be input to the NeIC's planning of the future configuration of the Nordic Tier-1 collaboration. The report should accurately estimate the effects of the different modes of operations, listing the advantages and disadvantages together with the estimated costs. Changes will also be assessed with transition costs and risks. Optionally the report could provide suggestions for efficiency improvements that could be applied even if there isn't enough savings to motivate a major reorganization.

The project has funding for 3 person months available, including salary and institutional overhead, plus some travel funds. This is intended to cover a single person acting as project leader, investigator, and report writer. The project should be completed during 2015.

More information about the NeIC and the Nordic Tier-1 can be found at http://neic.nordforsk.org. The project directive for the investigation can be found under:
https://wiki.neic.no/wiki/Investigating_options_for_future_NT1_operations_project_directive.

For further questions about the project please contact: Mattias Wadenstein, phone +46 707969462, maswan@hpc2n.umu.se or Gudmund Høst, phone +47 95816846, Gudmund.host@nordforsk.org.

If interested, please submit an application including CV and a support letter from your home institution to Gudmund.Host@nordforsk.org before 3 May 2015.