



Chalmers e-Infrastructure Commons

or

How recommendations from e-IRG were taken on by a university (and beyond)

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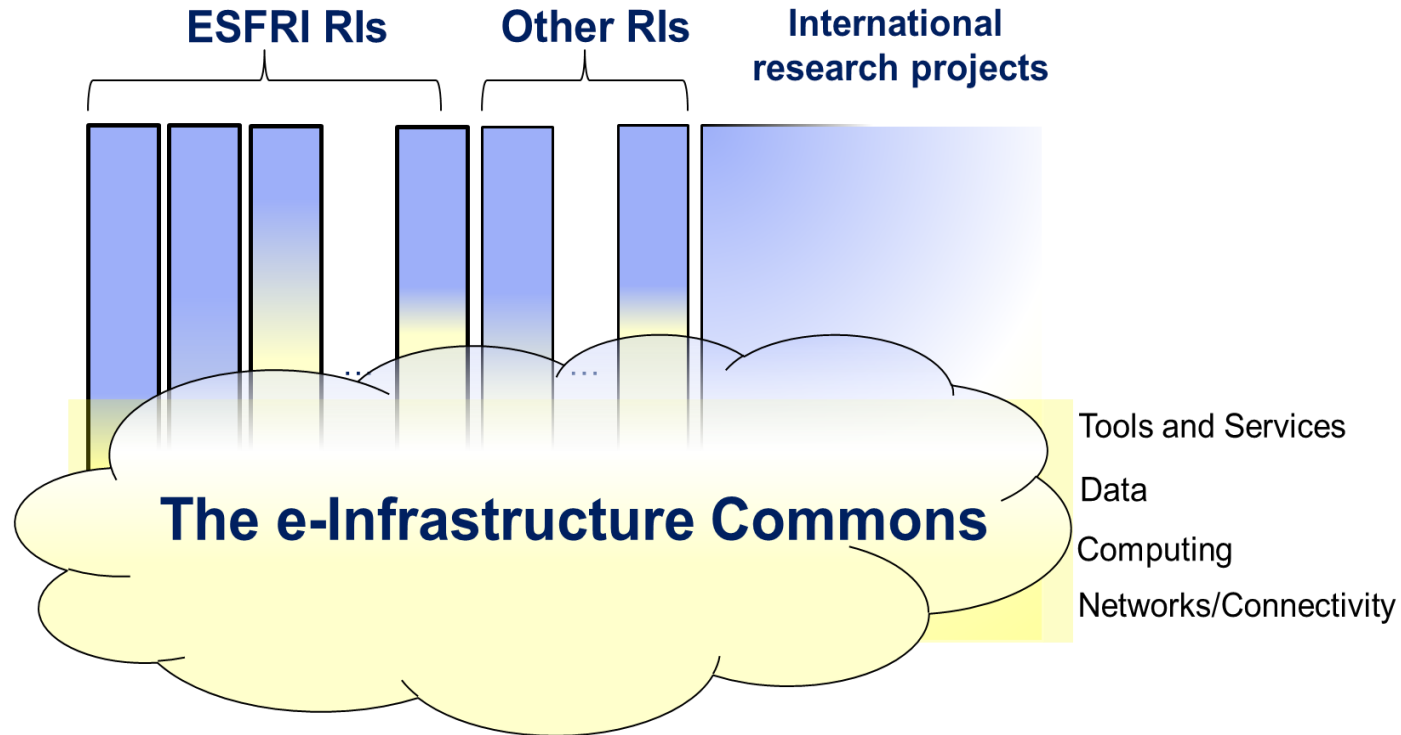
Chalmers University of Technology



- In Gothenburg, Sweden. Founded 1829. One of the two “old” Universities of Technology in Sweden.
- www.chalmers.se/en
- 3000 employees, 10600 students (full-time equivalents) in engineering, science, shipping and architecture. A focus both on basic research and industrial collaboration
- 17% of publications co-authored with industry
- Hosts e.g. the European Graphene Flagship and the main Swedish quantum computer research and development effort



The e-Infrastructure Commons



The e-Infrastructure Commons

Three distinct core functions:

1. **Community building, high level strategy and coordination:** a coherent governance model with a central role for user communities
2. **Service provisioning:** a flexible, open, and competitive approach to national, European, and global service provision; with advanced collaboration among the interested public and commercial service providers.
3. **Innovation:** Implementation of major innovation projects through the best consortia including e-Infrastructure suppliers, industry, users and academia.

The Swedish Context



- Ten main research universities, Chalmers is one of these
- National **e-infrastructures**
 - **NAISS** – HPC/EuroHPC – Linköping University (follow-up of SNIC)
 - **SND** - Finding, describing and sharing research data – Gothenburg University
 - **SUNET** – Connectivity + selling other services - Anomaly: owned by the Swedish Research Council
- The universities, the SRC and the National Library have Open Science mandates from the government – **full transition to an Open Science research system by 2026**
- EOSC AISBL: Eight universities. SRC is mandated organization
- Sweden is a member of the EuroHPC LUMI consortium and will now also have a national EuroHPC system, access via NAISS.

What has happened after 2016?



- The European e-Infrastructure Commons idea was taken up and further developed towards the EOSC
- e-IRG presented further recommendations on the need of integrated national digital/data-infrastructures
- The “Rectors Conference” and the Swedish Research Council in 2021 proposed that existing national e-infrastructures (SNIC/NAISS, SND, SUNET, ++) should be integrated into a “National e-infrastructure commons”
 - The proposal is now at the table of the Ministry...
- The “Rectors Conference” in 2021 adopted a national University Roadmap for Open Science.
 - This is now being implemented.

Meanwhile at Chalmers...



In 2016, a Work Group was mandated to propose a **new model for digital research infrastructure** at Chalmers

- Survey, hearing, extensive discussions/anchoring among researchers, centers and research infrastructures, heads of departments, university leadership,...

Late 2019: Decision by the Chalmers President – **Initiate Chalmers e-Infrastructure Commons**

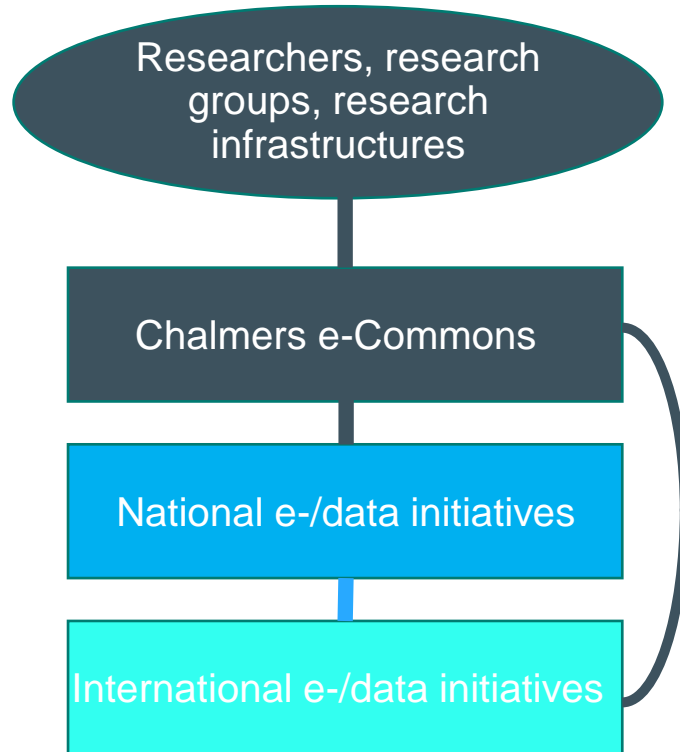
Spring 2020: Hiring of Director, appointment of Steering Board and Advisory Board etc

Spring 2021: Adoption of Strategic Plan 2021-2025, hiring of *Digital Research Engineers* etc

Chalmers e-Commons – Mandate

- Deliver digital support for research to Chalmers researchers **based on data-centric workflows, including e.g. support for data collection, data management, computing including HPC, data storage, visualisation, sharing and publishing of data, and long-term preservation/archiving.**
- E-Commons should provide the **entry point for researchers where they get access to qualified advise** from experts in relevant areas and **find relevant tools/resources/services for their research, at Chalmers, nationally and internationally.**
- Work together with support functions at Chalmers that delivers services to researchers **via e-Commons**, e.g. IT support, Library, Archive, ...
- Provide Chalmers interface and researcher support to national and international e-infrastructures, including e.g. NAISS, SND, SUNET, ..., **EOSC** and **EuroHPC**

Chalmers e-Commons – in the eco-system



- Choices: How to participate in international activities?
 - As Chalmers?
 - Via national initiatives like NAISS and SND?
- Chalmers e-Commons provides e-infrastructure support to local/national/international research infrastructures and collaborations (e.g. Data-Driven Life Science, InfraVis, SKA, ...)

Chalmers e-Commons – Business Model in the Mandate



- Chalmers e-Commons funds Chalmers participation (fees etc) in national and international e-infrastructures
- Deliver a basis set of e-infrastructure services and advice to researchers *free-at-the-point-of use* using the base-level faculty funding grant
- More extensive services and resources provided *at cost*

Relation to e-IRG Commons...



Yes, Chalmers e-Commons is set up to be a *political, technological, and administrative framework for an easy and cost-effective shared use of distributed electronic resources and an integrated living ecosystem of resources and services that is open, user friendly and accessible to [Chalmers] researchers, and continuously adapts to the changing requirements of research.*

- **Community building, high level strategy and coordination:** Yes, a coherent governance model with a central role for user communities
- **Service provisioning:** Yes, a flexible, open, and “competitive” approach to local, national, European (and global) service provision.
- **Innovation:** Yes, implementation of innovation projects locally, within the national e-infrastructures, and in international projects. Governed by the needs of Chalmers researchers and research activities.

Relation to EOSC...



Yes, Chalmers e-Commons is set up to be an *environment with open and seamless services for storage, management, analysis and re-use of research data, across borders and scientific disciplines and will place research at the centre of the initiative and will thus prioritise engagement with research communities to understand their requirements, helping them and ensuring academic sovereignty of research data.*

- E-Commons will participate in the EOSC *federating of existing data infrastructures* with local resources and/or via e.g. the Swedish National Data Service
- Note: E-Commons integrates “digital expertise”, e-Infrastructure and data management/sharing in a single organization (not a Yin-Yang model)



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