Why Competence Centres?

Competence Centres are a model of engagement and support for research communities, based on distributed centres where research infrastructures, experts of relevant e-infrastructures and technology developers join forces to mobilise common resources from the EOSC-hub service catalogue to setup community-specific services. Therefore, in EOSC-hub we are working with Competence Centres – or CCs for short.

The EOSC-hub CCs cover a variety of scientific disciplines, from life science to psychics, astronomy, earth and environmental sciences.
What are the EOSC-hub Competence Centres?

1. **ELIXIR CC**
   This competence centre will enable the ELIXIR organisation to establish a compute platform which allows ELIXIR cloud and data providers to share cloud compute and storage capacity to replicate and share reference datasets with each other and with their users.

2. **Fusion CC**
   The Fusion research community wants to develop nuclear fusion technologies as a future clean source of energy. The CC has an ambition to assess and operate EOSC-hub services within the community’s use cases.

3. **Marine CC**
   The Marine Competence Centre has an ambition to deploy ocean observations on EOSC infrastructure for data analytics.

4. **EISCAT_3D CC**
   EISCAT_3D will be the world’s leading facility for research of the upper atmosphere and the near Earth space. The Competence Centre is working on developing a data portal for users of the radar system EISCAT_3D.

5. **EPOS-ORFEUS CC**
   ORFEUS coordinates the seismological waveform services in European Plate Observing System (EPOS). The CC assesses the requirements of the solid-Earth science community and addresses them by leveraging the EOSC-hub technical offering.

6. **Radio Astronomy CC**
   LOFAR (LOw-Frequency Array) is a new-generation radio interferometer developed to look at Universe through the lens of low radio frequencies, well outside the visible spectrum. The Radio Astronomy CC is supporting researchers to access and process data produced by the LOFAR telescope.

7. **ICOS-eLTER CC**
   ICOS is a research infrastructure for quantifying and understanding Europe’s greenhouse gas balance. The ICOS group integrates and tests generic services from the EOSC-hub portfolio with the ICOS Carbon portal.

8. **Disaster Mitigation CC+**
   This community assembles and makes available simulation services for the support of climate and disaster mitigation research. The CC makes regional e-Infrastructures from Asia-Pacific compatible with EOSC-hub to support the sharing of data and tools among collaborators in Asia, Europe and beyond.

**EOSC-hub services involved**
EGI Cloud Compute, EGI High-Throughput Compute, EGI Data Transfer, EGI Check-in, B2SHARE, B2FIND, EGI Notebooks, EGI DataHub, B2SAFE, B2DROP, B2ACCESS, DODAS, INDICO-PaaS, B2STAGE, B2HANDLE, EGI Workload Manager, EGI Data Transfer

*Find out more about the EOSC-hub Competence Centres and their achievements!*