

# **ET e-Infrastructure Board Kickoff Workshop**

**Tuesday, November 30, 2021 - Wednesday, December 1, 2021**

**EGO**

## **Scientific Program**

### EIB Charge

The mandate of the e-Infrastructure board is to design, create and operate an evolving, efficient and functional e-infrastructure environment at a reasonable cost for the collaboration. Initially the focus will be the development of a Computing Model for the ET.

Prepare a plan of the studies and activities that need to be undertaken for the development of the ET computing.

Propose a computing model and its updates to the collaboration.

The computing model, in its final version, should include:

The overall architecture of the e-Infrastructure, either as a single integrated system or as a few separate systems (e.g. instrument control and DAQ, low-latency, and offline)

A documented way of evaluating the required computing power and storage space from the evolving scientific program of the collaboration

Estimates of the involved costs and growth timelines

A description of the data flows, with estimates for the needed network performances

A description of the User Experience and workflows for relevant activities

A description of the tools chosen to provide all the required functionalities (foundation libraries, frameworks, middleware,...)

Separate “Work Breakdown Structure” and “Implementation Plan” documents

Liaise with the existing shared national and international e-infrastructures (EGI, WLCG, EOSC,...) and with other large scale computing endeavours like the ones by LHC and SKA.

Track the technology evolution to adapt the computing model and its implementation to exploit new available technologies, both hardware and software

Interact with the entities defined by the Collaboration (participating institutes, common infrastructures,...) to handle the gradual provisioning of the required resources

Coordinate the deployment of the required tools and services through succeeding releases

Adopt a DevOps-like strategy of continuous deployment of tools and services to verify the match between the Collaboration’s needs and the functionalities provided by the e-Infrastructure.

Supervise the ET computing resources and their use

Organize the interaction with the user community to gather feedback

The computing resources include:

the e-infrastructure for the operation of the interferometers,

the e-infrastructures for the low-latency and offline analysis of data, including centralized and shared distributed resources,

the e-infrastructure for the management of the collaboration, including outreach activities.