

Update of VirgoLab Organisational Proposal

EGO/Virgo Governance Implementation Committee

Status

- Presentations of the draft document of the VirgoLab Organisational proposal :
 - 2/10 : Implementation Committee meeting
 - 31/10: EGO Council
 - 7/11: Virgo Collaboration meeting
 - 21/11: EGO STAC
- Comments received and implemented in the document

1. Definition of VirgoLab

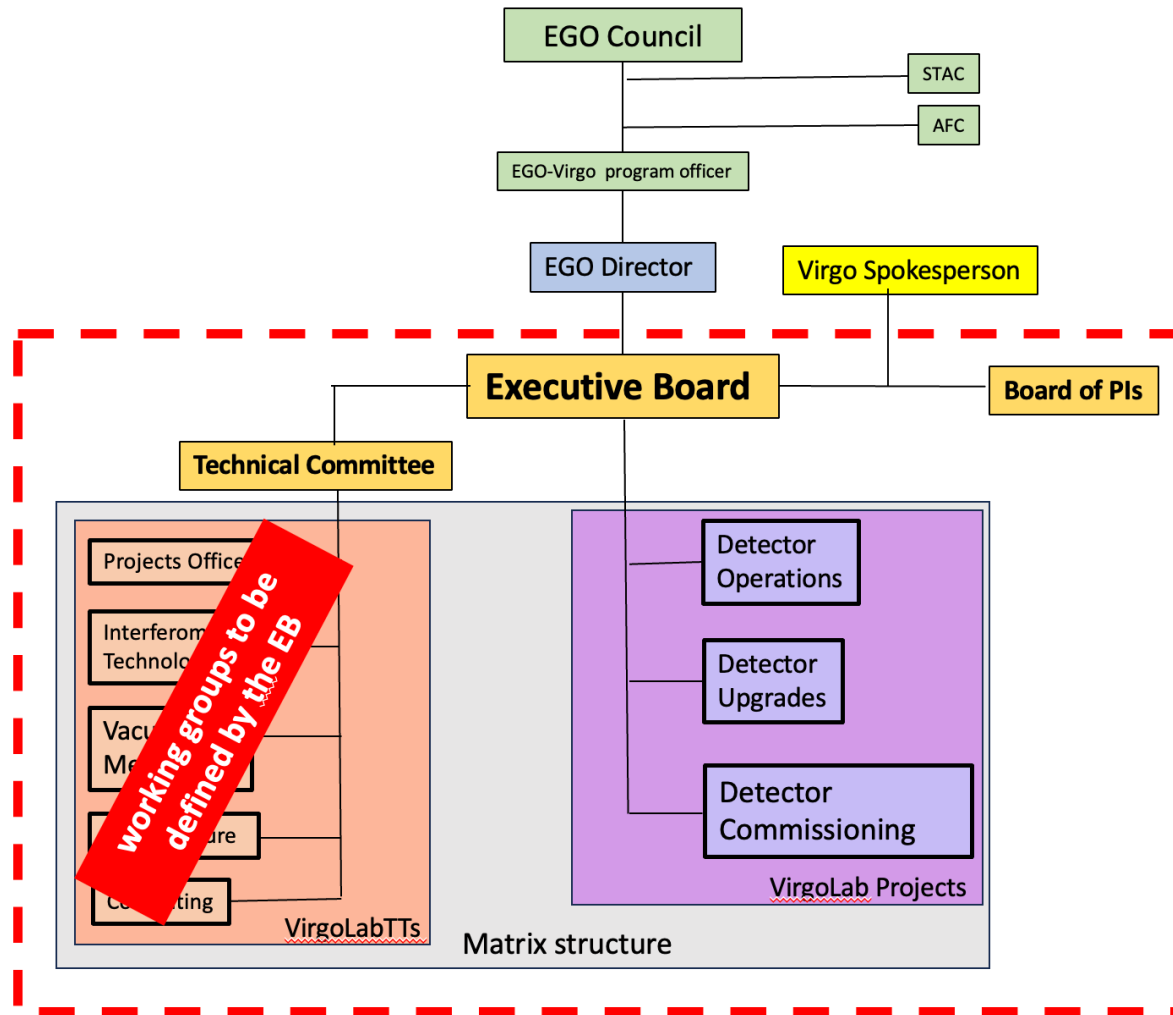
- VirgoLab is a distributed laboratory hosted at EGO

1.1 Purpose:

VirgoLab is mandated by the EGO Council for the production of calibrated, high-quality strain gravitational wave data, obtained with the Virgo Interferometer and to be provided to the Virgo Collaboration* with sensitivities and timelines comparable to the data of world leading gravitational wave observatories.

VirgoLab operates in coherence with the other observatories of the LIGO-Virgo-KAGRA* scientific collaboration.

Organisational Chart



1.2 Organisation of VirgoLab

Projects:

Detector Upgrade or Detector Upgrades?

- Definition of the boundary between research for long-time upgrades (in the scientific collaboration Virgo/IGWN) and Detector Upgrade Project
→ with the establishment of the baseline design, and upgrade projects becomes part of the VirgoLab Project ?

Technical Teams:

- The structure of the Technical Teams will be proposed in detail by the Executive Board.

1.3 Resources

The property of instrumental equipment installed in the Virgo Interferometer on site is transferred to EGO as the responsible legal entity. The maintenance, operation and performance monitoring of the equipment is overseen by the EB under the particular responsibility and with the expertise of VirgoLab members and groups who have contributed to the equipment. The commitment of resources of and towards the various VirgoLab groups and the fulfilment of their mission are reviewed and updated annually after a resource review procedure, specified in a separate section 5.1.

1.3 Resources (cont'd)

Financial Resources of VirgoLab are:

- contributions from the EGO Member states to EGO and attributed to VirgoLab
- Resource sharing between VirgoLab and other EGO activities is decided by Council on proposal of the EGO director?
- Common Fund paid by members of the Virgo Collaboration dedicated to VirgoLab
- Sharing of the common funds between VirgoLab and the Virgo Scientific collaboration is decided by whom? How will this evolve with IGWN?

2. Organisational Structure of VirgoLab

Project Coordinators and technical Team Leaders have deputies such that ideally one of them is on-site and the other off-site.

2.2 VirgoLab Technical Teams

The VirgoLab TTs can be understood as overarching working-groups on technical subjects, fostering the exchange between the different External Labs and EGO, as well as enhancing the underlying expertise and facilitating the cross-fertilization of technical aspects between the projects.

While VirgoLab operates within the broader EGO structure, the VirgoLab TTs do not coincide with the established EGO departments and operate independently of the existing EGO departments, as they are distributed, cross-institutional teams, integrating personnel from EGO and from External Labs.

2.2 VirgoLab Technical Teams (cont'd)

The structure of the VirgoLab TTs is elaborated by the Executive Board and presented to the VirgoLab Board of PIs and the EGO Council. Areas of activities that should be covered by the VirgoLab TTs are:

- **Projects office:** Oversees the overall system design and integration, including risk management and quality control, ensuring the coherence of all subsystems.
- ...

Changes to the VirgoLabTT structure should be presented to the VirgoLab Board of PIs and the EGO Council.

3.1 Executive Board

3.1.1. Key responsibilities:

Organisation and oversight of internal and external project reviews:

The EB will organise project reviews for the projects or for parts of them.

Internal project reviews will be organised by the projects themselves and the outcome reported to the EB.

External project reviews will be organised by the EB and the outcome reported to EGO Council and the VirgoLab Board of PIs.

On-site equipment: The EB oversees the installation and proper functioning is responsible for of all equipment in the Virgo Interferometer.

3.1 Executive Board (cont'd)

3.1.2 Composition:

- EGO Director (Chair)
- Upgrades Coordinator
- Commissioning Coordinator
- Detector Operation Coordinator
- Chair of the Technical Committee
- Virgo Spokesperson*
- Chair of the Virgo Lab Board of PIs

Changes to the composition of the EB will be presented by the EGO director to the VirgoLab Board of PIs and the EGO Council.

3.1 Executive Board (cont'd)

3.1.4 Decision-Making:

In the event that the EB cannot reach consensus on a particular issue and no decision by means of discussion, including votes, can be reached, the EGO Director has the final authority.

3.2 Technical Committee

3.2.2. Composition

The TC consists of the VirgoLab Team Leaders and the Chair of the Technical Committee (TC Chair), additional Experts are invited as needed. The TC Chair is appointed by the EB normally among the VirgoLab Team Leaders.

3.3. Board of PIs

3.3.1. Key responsibilities

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Publication Policy: The Board of PIs oversees the publication policy and process, as well as the authorship criteria and the authorship list of the VirgoLab activities.

VirgoLab Life: The Board of PIs will organise regular meetings of the VirgoLab community.

3.3.3 Meetings

- Should the Board of PIs have open and closed sessions?

3.3. Board of Pls (cont'd)

Voting Rules:

- annual report and budget forecast:
 - simple majority of all present and voting.
 - The vote may be held openly unless otherwise requested;
- membership:
 - $\frac{2}{3}$ majority of all members.
 - The vote is held secretly.
- personnel matters:
 - $\frac{2}{3}$ majority of all present and voting.
 - The vote is held secretly.

An electronic voting system may be put in place.

3.4 Other Committees

VirgoLab will also benefit from the advice of committees already in place, such as the Administrative and Finance Committee for the resources spending and allocation concerning VirgoLab and in particular, the Scientific and Technical Advisory Committee.

The STAC provides periodic reviews of the scientific and technical aspects of EGO to the EGO Council.

With the creation of VirgoLab, which will be the major scientific and technical activity of EGO, the STAC should be mandated to review the performance of VirgoLab.

The STAC should assess if VirgoLab meets the scientific and technical milestones and even if EGO Council is its primary recipient, the relevant findings will also be made available to the VirgoLab EB and the VirgoLab Board of PIs.

4 Management Positions

4.1 EGO Director:

As Chair of the VirgoLab EB, the EGO Director is particularly engaged in VirgoLab, which is their principal activity; other responsibilities might be delegated to deputies.

4.1.4 Reporting

The EGO Director reports to the EGO Council, at the EGO Council meetings and on a regular basis through the EGO-Virgo Program Officer.

As chair of the VirgoLab EB, the EGO Director attends the meetings of the Board of Pls.

4.2 Program Officer

The EGO-Virgo Program Officer should insure the liaison between EGO Council and the EGO director.

Even though their responsibility is not only focused on VirgoLab, overseeing the activities of VirgoLab would be the major part of their mission.

4.2.1. Key Responsibilities

The Program Officer should act as a strong link between the EGO Council and the EGO director.

The main mission of the Program Officer will be to follow the activities and decisions of the VirgoLab EB.

The Program Officer will oversee the implementation of EGO Council decisions, in particular concerning VirgoLab.

In case of difficulties, the Program Officer could be the first level of information and exchange, before calling EGO Council whenever necessary.

4.2 Program Officer (cont'd)

4.2.2 Mandate

The mandate of the Program Officer is defined by EGO Council.

4.2.3 Appointment

The Program Officer will be appointed by EGO Council.

The person should have no involvement in the VirgoLab or associated scientific collaboration.

4.2.4 Reporting

The Program Officer exchanges on a weekly basis with the EGO director and reports to the EGO Council President.

5.1 Resource Review Procedure

A possible outlay of the resource review procedure could look like the following:

- The EGO Director prepares :
 - annual report on the use of the financial and human resources provided to EGO and to the External Labs and allocated to VirgoLab;
 - proposal for the resources for the coming year;
 - forecast of the resources required for the next five years
 - Annual pledges of each group

5.1 Resource Review Procedure (cont'd)

Presentations:

- Board of PIs → discussion, comments
- STAC and the AFC → examination
- EGO Council → final approval.

- In case of non-fulfilment of the pledges by a group, and after discussion with the PI concerned, the EGO Director may inform the concerned Council members or the funding agency representatives of the difficulties encountered in order to find a solution for the missed engagement.

Question: does the Council fulfil the role of a resource review board?

5.2 Selection procedure for the EGO Director

The EGO Council is steering the procedure to select a new EGO director.

One year before the end of the term of the EGO director, EGO Council decided on a prolongation.

If a new EGO director has to be appointed, EGO Council Chair proposes the composition of the search committee to the EGO Council for approval.

The search committee should be composed of at least 3 people, and could comprise:

- The Chair of the VirgoLab Board of PIs or someone appointed by the VirgoLab Board of PIs
- The Virgo Spokesperson or their representative (IGWN spokesperson)
- The Chair of the EGO Council or a representative from EGO Council
- (The Chair of the STAC and the AFC)
- 2-4 additional expert members proposed by the Board of PIs to EGO Council

An open, international call for candidates is published by EGO Council.

5.2 Selection procedure for the EGO Director (cont'd)

The search committee receives candidatures, that can be:

- individuals answering the call
- members of EGO Council proposing potential candidates
- members of the VirgoLab Board of PI proposing potential candidates
- members of the search committee proposing candidates.

From this extended list of potential candidates, the search committee contacts the candidates and invites them to send their application, which should comprise a CV and vision statement.

The received applications are reviewed by the search committee, who establishes a list of candidates to be auditioned.

After the auditions, the search committee presents a candidate/a list of at least 3 candidates to the EGO Council.

EGO Council interviews the candidate(s) and designates the EGO DG elect.

The whole process should not take more than 6 months in order to have sufficient overlap time with the incumbent EGO director.

5.3 Process for the admission of new groups

Any new group that would like to join VirgoLab should send an application letter to:
 the EGO Director,
 the EGO Council Chair
 The Virgo Spokesperson
 the Chair of the Board of PIs

giving precisions on the involvement they would like to have in VirgoLab.

A dedicated meeting of the PI of the candidate group, the EGO Director, the VirgoSpokesperson and the two chairs should be held, in order to discuss the future contributions.

The PI of the applicant group will then give a presentation of the group and their potential contributions to the Board of PIs.

The Board of PIs will then vote on the interest of VirgoLab on the admission of the new group.

The EGO director and the PI of the new group will then work-out a MoA, or an addendum to an existing MoA for the new group or its funding agency.

The MoA is presented to the EGO Council for approval and is sent to the VirgoLab Board of PIs for information, before being signed by the EGO Director and the relevant institution.

5.4 Publication policy and process

The VirgoLab author list includes, in alphabetical order, all VirgoLab members who are physicists or engineers owning at least a master's degree. In order to be part of the author list, a person needs to be a member of VirgoLab for at least 1 year.

When leaving the collaboration, authorship is maintained for at least one more year.

The VirgoLab Board of PIs may set up an authorship committee to establish and maintain a list of authors. The author list should be regularly updated.

5.4 Publication policy and process (cont'd)

The VirgoLab Board of PIs may set up an Editorial Committee.

All publications on technical description and performance of the Virgo instrument, and data quality characterisation based on non-public strain h(t) Virgo data shall use the VirgoLab author list.

In keeping with the goal of the VirgoLab to promote the visibility of its members to the scientific community at large, there may be cases where a limited author list is more appropriate.

The publication policy therefore allows for waivers to the rule by petitioning the Virgo Editorial Committee. However, papers granted an exception should have a methodological purpose, should not include new observational results, or should avoid characterising the detector performance over significant portions of an observing run. Decisions on whether or not a petition is granted will rest with the Virgo Editorial Committee chair in consultation with the chair of the board of PIs.

5.4 Publication policy and process (cont'd)

Any author of VirgoLab should be automatically entitled to sign the publications related to the data produced by VirgoLab for the Virgo, LVK or (IGWN collaboration?).

Open matters

Topics to be addressed:

- What are the benefits of participating in VirgoLab?
- Are all groups providing personnel to VirgoLab represented in the EGO Council by their funding institution?
- What are the financial resources provided: wrt to the budget of EGO, wrt to the common fund? Who is managing these resources?