ET/EGO-Virgo relations and exchanges

Context

- The gravitational-wave community in Europe consist of a limited group of experts (instrument, data analysis, theory)
- Yet, Virgo & ET operate largely independently of each other
 - Instead of along some common roadmap
- This creates several challenges
 - Limited funding resources are split between projects
 - Delineation of work between the two projects
- Consequences
 - Missed opportunities for synergy
 - Inefficiencies due to limited continuity and long-term planning

Call for stronger cooperation

- Increasing community call for better cooperation/integration
 - Leadership of the two projects should open communication channels
- Areas of discussion
 - Leverage each other's expertise
 - Synergistic use of human/financial resources
- Roadmap: from Virgo to Einstein Telescope
 - Recognise the landscape of the European ground-based detectors
 - Establish a trajectory from Virgo to Einstein Telescope
 - Set out mechanisms for synergy between the project

Current status of the main ET partners

BGR Site selection; Legal entity; Financial framework

ET coordinators Coordinate the EU project - ESFRI

Host Consortia

- Feasibility studies civil engineering, installations
- Feasibility studies subsurface
- Feasibility studies environment and legal

ET Host Consortia (EMR and TETI) Board of Governmental Representatives (BGR)

ET Coordinators

ETO Directorate and Depts

ETO

Strategic coordination and management

- ET Roadmap
- Technical Design Reports
- Site Evaluation Reports
- Technical Plan report
- Organisation report
- Budget report

ET Collaboration

- Scientific vision
- Detector design
- Requirements,
- Common standards

ET Collaboration (ETC)





Bilateral Discussions at Different Levels (example)

	Virgo	Einstein Telescope
Strategic coordination	EGO Council	BGR
Management	VirgoLab	ET Organisation
Scientific Vision	Virgo Collaboration	ET Collaboration
Detector Design	VirgoLab	ET Collaboration
Research & Development	Virgo Collaboration	ET Collaboration

Concluding Remarks

- Evident that communication channels are needed between Virgo and ET
 - Projects are inextricably linked
 - Better leverage human/financial resources
- Initiate the conversation at various levels of organisation
 - New organisational structures should be mandated to engage with the appropriate ET counterpart
- Setup rules of engagement between the projects
- Work towards a joint roadmap/vision document