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# Management Plan for the AdV Computing Model

The Virgo collaboration and the EGO IT Department

 $\begin{array}{c} \text{VIR-0185A-14} \\ \text{Date}: & \text{April 14, 2014} \end{array}$ 

**Abstract**: This document is intended to sustain the AdV Computing Model (VIR-0129F-13) and the Implementation Plan (VIR-0177A-14) by addressing the management procedures to make reality checks on them. It recalls also the basic management rules with External Computing Centers and the composition of the committees created to manage and ease the interactions.

VIRGO Collaboration

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### 1 Management Plan

This document is intended to sustain the AdV Computing Model (VIR-0129F-13) and the Implementation Plan (VIR-0177A-14) by addressing the management procedures to make reality checks on them. The committees and rules to manage the agreements with external Computing Centers (CC) are listed here.

#### 1.1 Management of the Computing Model

The AdV Computing Model (CM) first release is dated April 2013 and has been approved by the Virgo Steering Committee (VSC) in November 2013, after the first round of comments by the External Computing Committee (ECC), chaired by Prof. Manuel Delfino and by the Scientific and Technical Advisory Committee (STAC), chaired by Harald Lück.

The VSC has approved to have the document authored by "The Virgo collaboration and the EGO IT Department".

The CM addresses and describes the needs of the data analysis (DA) groups, for scientific analysis and detector characterization. It describes the commissioning and calibration needs which have impact for the DA groups.

The updates of the document will follow an official schedule and strict rules to be reasonably confident that the every day reality will not diverge from the requirements and needs the document contains. Here is the path:

- A-Compare the requirements and needs in the document to the reality. This implies to include in the process updates of the Implementation Plan (IP), as detailed below.
- B-Even in the case of compatibility, check whether new requirements or needs are foreseen.
- C-Discuss within the groups, as detailed below, and apply an official decision mechanism if there is no convergence on some choices.
- D-Modify, when applicable.
- E-Circulate the modified version to the collaboration, allowing a period of two weeks for comments
- F-Submit the document to the VSC for comments and approval, after one week period
- G-upload the new version to TDS and distribute it to our partners, e.g. LIGO.

Steps A, B, C, D will be a joint responsibility for the DA coordinator (DAC) and the VDASC chair. The DA chairs will provide inputs for the needed changes. They have to be sure the document addresses the requirements and needs for their groups, propose the necessary modifications and apply them, after having discussed within their groups and with the DA coordinator and VDASC chair.

The VDASC teleconferences will be the natural place to present the modifications and discuss.

The decision mechanism for technical work, in case of debate which can't be solved within the VDASC group, is the following: the VDASC chair report the issue to the Spokesperson and to the VSC, asking them to decide and ,if needed, to create a review team. The review team can be formed by people internal to the collaboration (so to handle the impact of any choice in the collaboration) and by one or more expert (so to give us some guidelines).

We foresee yearly updates during the period 2014 to 2016. We will then be re-defining the schedule, on the basis of new possible scenarios related to the schedule of the detector's runs and maybe other needs which we can't predict now. We propose to tie the updates to the October STAC meetings (that is: phases A, B, C, D, E of the process completed by the October STAC). An early estimation of the next year resource needs will be given in June, to help the CC in their planning.

#### 1.2 Management of the IP

Step A will be done by a critical reading and study of the CM and of the associated Implementation Plan (IP). The procedure to update the IP can be different from the one to update the CM, as changes do depend on results of technical tests. We document the ongoing activities with Redmine (https://redmine.virgo.infn.it/projects/), where names of people responsible for each task have been attached. We do expect significative outcomes for solutions in the IP in one year from now (April 2014). The work of updating the Implementation Plan is coordinated by the VDASC chair. The VDASC teleconferences are the natural place to discuss the ongoing activities and modifications to the IP.

Once the first version of the IP will be released, we will tie the schedule to update it to the schedule to update the CM (that is yearly updates).

## 1.3 Management of agreements with external Computing Centers (CC)

Our work at the external CCs is mainly organized within two committees: Joint External Computing Committee (JECC), which takes care of the basic agreements and financial aspects, and the Computing Technical Coordination Committee (CTCC), which is the place to discuss and organize technical work.

#### • JECC:

The agreements with External Computing Centers are defined at the level of the Virgo and EGO managements, through discussions and meetings of the JECC group. JECC is composed of the collaboration Spokesperson, the EGO Director, the head of the EGO IT Department, the data analysis coordinator (DAC), the two Virgo reference persons in each external CC and by one person appointed by the directors of each CC. We will ask to the VSC to add the chair of the VDASC group, who is charged of managing the computing issues for the collaboration. The financial aspects will be discussed by EGO and the CCs when appropriate.

The needs in external CCs are detailed in yearly reports. The DAC and the VDASC chairs write a report of activities at the CCs and needs for the next year by late October of each year. The head of the EGO IT Dept. then prepares a financial report. A joint discussion of JECC members is held every November.

#### • CTCC:

All the technical discussions, aimed to help the collaboration to find good solutions, common to the different CCs when applicable, are within the CTCC group. This group has been jointly asked by the ECC and STAC and has officially been appointed by the Council, in July 2013. It is composed of the DAC chair, the head of EGO IT Dept., and one or more experts representative of each external CC, nominated by the Directors. We will ask VSC and the EGO Council to add the VDASC chair. In case it is needed, the meetings and teleconferences are opened to other members of the collaboration and/or of EGO and external CCs. The mailing list, open to the members and to expert collaborators, has been set up.