

## MEMORANDUM

**To:** Members of the Directorate and the Enlarged Directorate  
Members of the Project Office

**From:** Steve Myers, Director for Accelerators and Technology



**Subject:** **Projects Structure in the Accelerators and Technology Sector**

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### MAJOR PROJECTS

Following the management proposals resulting from the technical discussions at the Chamonix 2010 workshop, four major studies/projects emerged in the Accelerators and Technology Sector. Three of these studies/projects are closely related to the performance of the LHC and the fourth is related to the future collider project of the CERN organization (Linear Colliders studies).

The projects are:

- High Luminosity LHC (HL-LHC)
- Accelerators Consolidation (CONS)
- LHC Injectors Upgrade (LIU)
- Accelerator Linear Collider Studies (ALC)

#### High Luminosity LHC (HL-LHC)

This new study combines all work related to the provision of a peak luminosity of five times the design luminosity of the LHC (i.e.  $5 \times 10^{34} \text{ cm}^{-2} \text{ s}^{-1}$ ) and with an enhanced luminosity lifetime by "luminosity leveling".

#### Accelerators Consolidation (CONS)

This new project covers all consolidation associated with the CERN accelerator complex including the accelerators, the experimental facilities, the transfer lines and the associated infrastructure (sources, LINAC2, LINAC3, LINAC4, LEIR, PS booster, PS, SPS, and the LHC). The consolidation of the LHC injectors will allow reliable operation of the injectors until the end of the life of the LHC, presently assumed to be later than 2030.

#### LHC Injectors Upgrade (LIU)

The LHC Injectors Upgrade should plan for delivering reliably to the LHC the beams required for reaching the goals of the HL-LHC. This includes LINAC4, the PS booster, the PS, the SPS, as well as the heavy ion chain.

## Linear Collider Studies (LC)

CERN wide, the Linear Collider Studies will encompass all subjects related to a future electron positron linear collider, both from the accelerator and the detector viewpoint under the leadership of the studies leader. The studies will include the ILC as well as CLIC. Within the Accelerator and Technology Sector the studies are limited to the accelerators and accelerator technologies (ALC). The Linear Collider detector development will fall under the responsibility of the Director of Research and Computing.

## OFFICE OF THE DIRECTOR OF ACCELERATORS AND TECHNOLOGY

The present Project Office will be restructured and renamed the “Office of the Director of Accelerators and Technology” (ODAT).

The units and responsibilities in this new office are:

1. Projects Support for major projects in the accelerator sector (and others if requested). This unit will provide support in all areas of project management (e.g. time and cost, quality assurance, risk, safety, ... , as well as advising, mentoring and training in projects management.
2. Accelerator Collaborations, including the EU.
3. Other small accelerator units which do not fit inside a specific department (e.g. CERN Accelerator school, ...).

The Projects Support will be a small unit, and operate using a matrix structure consisting of a core team who safeguard the experience acquired with Project Management at CERN but rely and work in synergy with the groups and people who master the required expertise.

The staff in the present Project Office who are not directly related to the responsibilities of the ODAT may be re-integrated in the Accelerator and Technology Sector.

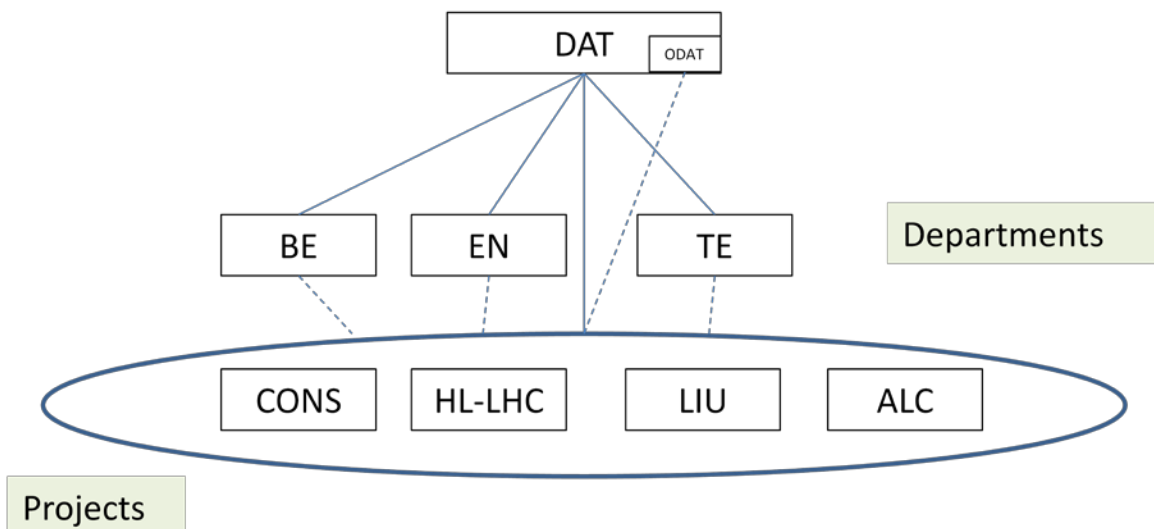


Figure 1: The Structure of the Accelerators and Technology Sector

## PROJECT CO-ORDINATORS

The executive role for manpower and budget for the projects/studies remains with the technical groups in the departments.

The project co-ordinators will have the responsibility for the project management (WBS, technical co-ordination and integration, manpower and budget agreement with the departments as well as budget and timescale control). They will report on a regular basis to the Director of Accelerators and Technology. Table 1 gives the names and responsibilities related to the four projects.

<b>Project Acronym</b>	<b>Scope</b>	<b>Co-ordinator</b>	<b>Other duties</b>	<b>Deputy Co-ordinator</b>
HL-LHC	Future Upgrades of the LHC Performance	Lucio Rossi	Deputy Dept head TE	Oliver Brüning (BE)
CONS	Consolidation of all Accelerators	Simon Baird	Deputy Dept head EN	Francesco Bertinelli (TE)
LIU	Upgrades of LHC Injector Chain	Roland Garoby	Deputy Dept head BE	Malika Meddahi (TE)
ALC	Accelerator Linear Collider Studies	TBD	TBD	TBD

Table 1: Persons with leading responsibilities for Projects

## **IMPLEMENTATION**

The implementation of this new Projects Structure will be done as soon as possible with a goal of not later than the end of October.