ELI Beamlines Organization

# Introduction

Human resource planning is required for two distinct project phases:

* Project Delivery - design, construction, installation and commissioning of the new Facility;
* Facility Operation – operation, maintenance, modification and eventual decommissioning.

The Project Delivery phase will require a significantly larger pool of people, with a wider range of skills, than the Facility Operation phase.

Some of the individuals employed in the Project Delivery phase will naturally transpose into the Facility Operation organisation. Others will only be required for the Delivery phase and so will have limited periods of engagement. This will influence the way in which some personnel will be engaged, e.g. contract rather than permanent staff.

# Project Delivery Phase Organization

The roles of the various positions in the Project Delivery phase organisation, as shown in Figure 1, are described below.

## ELI Beamlines Managing Director

The ELI Beamlines Managing Director interfaces through the IOP Director with the ELI Beamlines Scientific Advisory Board, External Authorities and the EU/Czech Funding Bodies to match the goals and objectives of the Project with available funds and external requirements. The ELI Beamlines Managing Director has the overall responsibility and authority for the Project in accordance with the ELI Beamlines Project Execution Plan.

To carry out this responsibility, the ELI Beamlines Managing Director relies on the assistance of the Project Delivery Manager supported by various teams.

## Project Delivery Manager

The Project Delivery Manager will have the responsibility of bringing the project to successful and timely delivery by planning, organizing, coordinating and monitoring the implementation activities. The Project Delivery Manager will work under the authority of the ELI Beamlines Managing Director, in compliance with the Institute’s commitments and consistently with the decisions of project’s Steering Committee. The Project Delivery Manager will be a member *ex officio* of this committee. The responsibilities of the Project Delivery Manager will involve coordinating and supervising the delivery team in connection with and with the support of the Scientific Coordinators, the Technical Director and the Project Administration Manager.

The principal duties of the Project Delivery Manager will be the following:

* Planning and monitoring project activities:
  + The Project Delivery manager will ensure that the project rests on a well defined and risk assessed scope of work and work breakdown structure;
  + He/she will monitor progress in the implementation of the project and suggest modification of the objectives and scope of work to the Managing Director when appropriate;
  + He/she will organise the effective communication of the project’s objectives within the delivery team and will ensure that team members have access to clear, comprehensive and up-to-date information in relation with their duties.
* Planning and managing resources:
  + The Project Delivery Manager shall ensure that the resources needed for the implementation of the project are clearly identified and planned;
  + He/she will be in charge of planning the needs and allocation of financial and human resources within the project, of preparing the procurement plan in coordination with the scientific coordinators, the technical director and the project administration manager;
  + He/she will submit to the Managing Director budget proposals, and recommend subsequent budget changes where necessary.
* Organisation:
  + He/she will identify issues and conflicts within the project team and will suggest to the Managing Director or the other project leaders with appropriate solutions to them;
  + He/she will supervise contractors, and influence them to take positive action and accountability for their assigned work;
  + The Project Delivery Manager will ensure that the members of the delivery team participate appropriately into the coordination activities initiated and organised by the ELI-Delivery Consortium and that all necessary information is provided to the Managing Director.

## Scientific Coordinator for Research Program RP1

The Scientific Coordinator for Research Program RP1 reports to the Project Delivery Manager and is responsible for the scientific integrity of the relevant Research Activities, executing this responsibility by activities which include the following:

* Interfacing with the Scientific Advisory Board to review and maintain the technical objectives and milestones of the ELI Beamlines laser systems;
* Establishing the acceptance criteria for the laser systems functionality;
* Review and maintain the functional requirements for the technical baseline of the laser systems;
* Managing the resources of the Research Program RP1 Scientific Team to establish the design of the Technology Scope of these laser systems and to transfer these requirements through the Systems Integration Coordinators to the Project Delivery Teams for detailed engineering and procurement.
* Ensuring resolution of science and technology issues to meet Project needs;

## Scientific Coordinator for Research Programs RP2 to RP 6

The Scientific Coordinator for Research Programs RP2 to RP6 Director reports to the Project Delivery Manager and is responsible for the scientific integrity of the relevant Research Activities, executing this responsibility by activities which include the following:

* Interfacing with the Scientific Advisory Board to review and maintain the technical objectives and milestones of the ELI Beamlines experimental programme;
* Establishing the acceptance criteria for the experimental systems functionality;
* Review and maintain the functional requirements for the technical baseline of the experimental systems;
* Managing the resources of the Research Programs RP2 to RP6 Scientific Teams to establish the design of the Technology Scope of these activities and to transfer these requirements through the Systems Integration Coordinators to the Project Delivery Teams for detailed engineering and procurement;
* Ensuring resolution of science and technology issues to meet Project needs;

## Technical Director

The Technical Director reports to the Project Delivery Manager and liaises closely with the Scientific Coordinator for Research Program 1 (Laser Systems) and the Scientific Coordinator for Research Programs 2 to 6 (Target Areas), and with the Project Administrative Manager. The Technical Director is responsible for ensuring an integrated systems approach to the design and construction of the ELI Beamlines facility. The responsibilities of the Technical Director include the following:

* Coordinating design requirements and criteria for the Technology Scope systems to assure proper flow down of the primary criteria and functional requirements to the engineering disciplines in the Project delivery team;
* Assessing technical risks and advising the Project Delivery Manager, Chief Scientists, and Project Control Manager on technical risk management;
* Establishing interface controls to document key interfaces among Technology Scope systems, such as e.g. energy management, interference prevention;
* Evaluating ELI performance through operational analyses;
* Coordinating beam transport of large beams, alignment, synchronization and beam diagnostic systems, focusing systems and focus diagnostic systems;
* Coordination of development of prototypes at the Institute of Physics;
* Coordination of development of high repetition-rate and prototype lasers;
* Monitoring of contracts in laser and optics development.

## Project Administrative Manager

The Project Administrative Manager reports to the Project Delivery Manager and is responsible for project procurement, project controls, legal, insurance, financial services, human resources and other non-technical services. Within its scope of duties, the Project Administrative Manager shall:

* Manage the project administrative team, and its working groups;
* Be responsible for preparing the Monitoring Report;
* Provide the Steering Committee with the monthly Project Status Report about the activities of the project team, structured as the Monitoring Report;
* Be responsible for the Risk Register and for identifying risks timely and proposing the mitigation thereof;
* Be responsible for the content of the Project Schedule (project plan) in terms of ensuring it is up to date, complete, and comprehensive;
* Be responsible for the Tender Plans;
* Be responsible for Supplier Contracts;
* Be responsible for the content of the project budget in terms of ensuring it is up to date, complete, and comprehensive;
* Be responsible for preparing and archiving the hand-over and acceptance protocols;
* Be responsible for document archiving;
* Be responsible for maintaining and organising the project documentation as a whole;
* Be responsible for delivering the Human Resources Plan prepared by the HR staff.

## Quality Assurance Manager

The Quality Assurance Manager reports to the Project Delivery Manager, and is responsible for developing and issuing the Quality Assurance Programme Plan and for reviewing and concurring in management plans, sub-tier and ancillary Quality Assurance Plans and implementing procedures. The QA Manager is responsible for activities which include the following:

* Advising management of quality achievements and recommending means of improving quality performance;
* Developing a project management/quality assurance training program for Project personnel;
* Establishing generic project management/quality assurance procedures and instructions;
* Verifying the quality of internal and external work by audit or surveillance;
* Investigating and reporting on quality issues;
* Furnishing quality assurance expertise to support Project assessments and inspections.