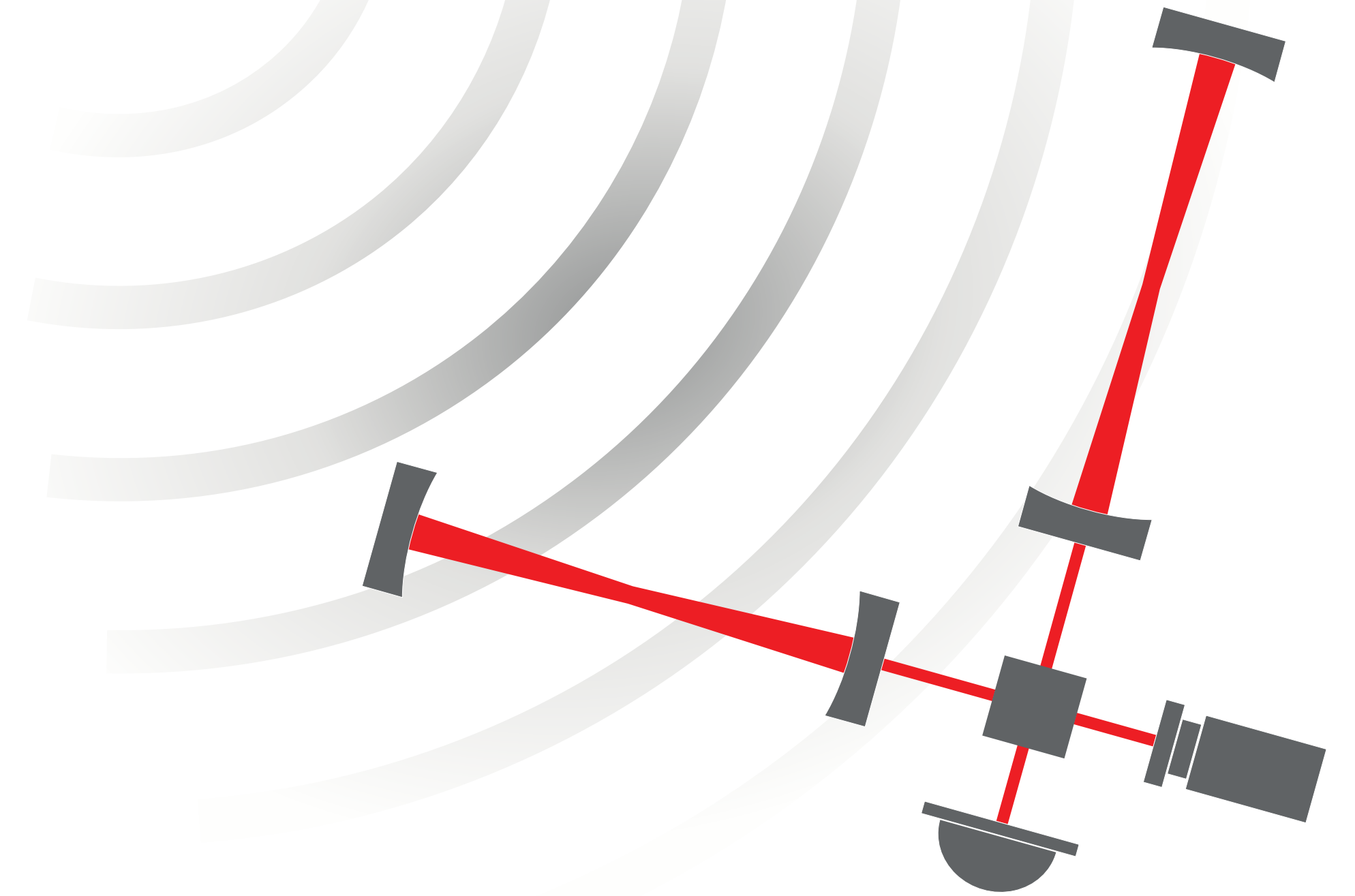


WP5

progress on project office and engineering department



Andreas Freise, 19.12.2022

Overview

- Project office deliverables: first drafts available, slides from Alessandro Variola
- Proposed structure of the engineering department, slides from Patrick Werneke

Preamble

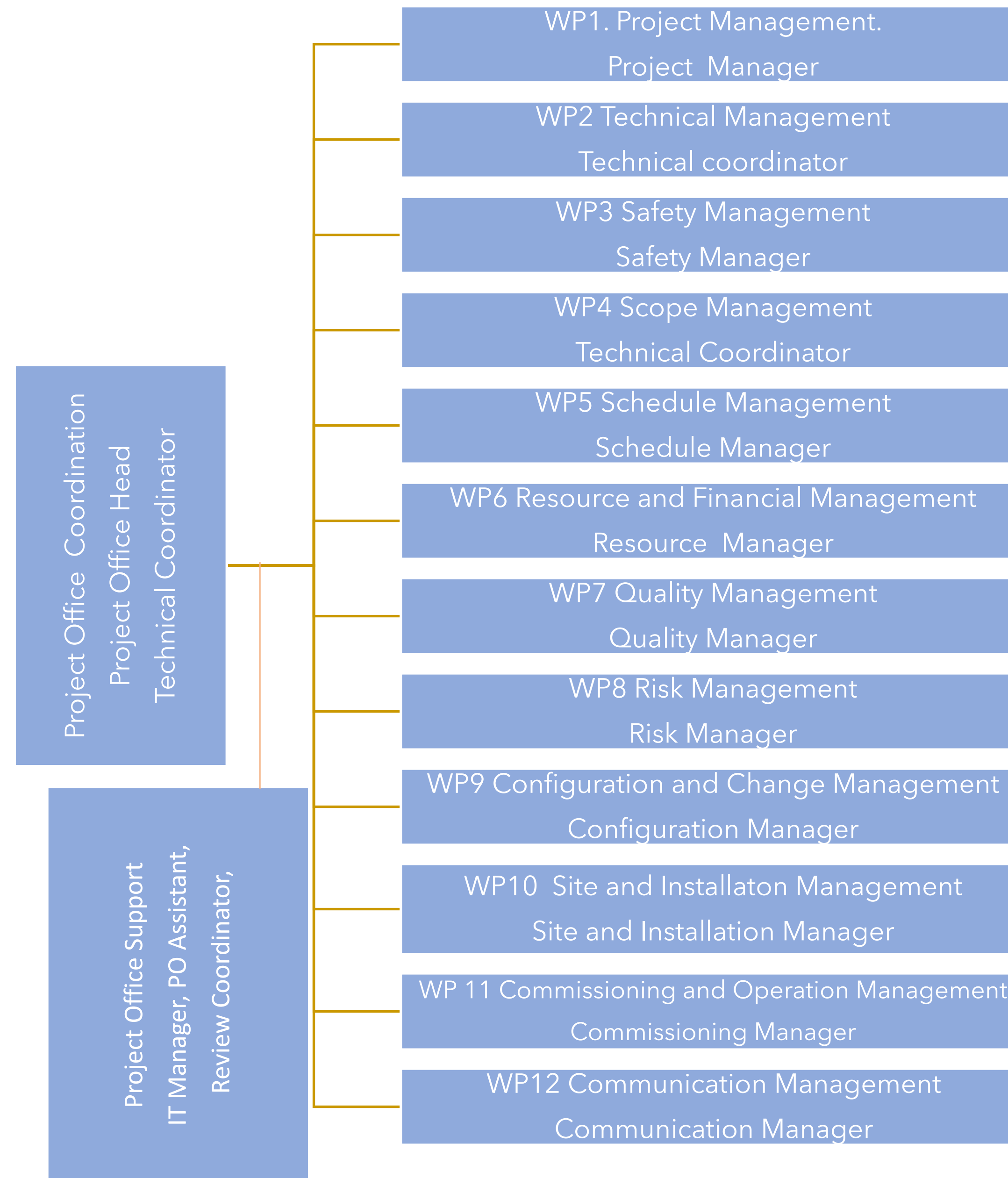
- The documents mostly describe the future activities and the relevant organisation structures of the Project Office (PO) and Engineering Department (ED), envisaged for a later phase of the project.
- In addition we are discussing the activities that PO and ED should undertake in the current phase (first part of the Design and Preparation ending with a site decision).

Project Office

D5.1 Document scope & goal

- Title: **Project Office Mandate and Structure**
- Identification
 - Needs a final approval for doc ID, it should be ET.IDV.05.00.PMD.00001
- Purpose
 - Define the mandate and the structure of the project office
- Content
 - Description of the Project Office mandate and main deliverable (PMP)
 - Description of the Project Office activities to introduce the structure logic
 - Description of the Project Office structure and minimal configuration

PO proposed Organisational Breakdown Structure



D5.2 Document scope & goal

- Title: **Project Office Tools** (TBC)
- Identification:
 - Needs a final approval for doc ID, it should be ET.IDV.05.00.SPC.00001
- Purpose:
 - Support ET Project Office and Eng. Dept. in the choice of IT tools taking into account the general requirements of the ET project
- Content:
 - present the needs for IT tools that will support the PO work
 - Define general and ET-specific requirements for IT tools

Document logic & conclusions

- Structure:
 - Needs are listed for PO activities
 - And not for PO Work Packages, as these will share activities and tools
 - Ensures 100% coverage
 - Tools are presented from typically available categories of PM tools
 - Project mgmt / Document mgmt / Configuration mgmt / Reporting / Interface mgmt / Communication mgmt / Workflow mgmt / Finance & resources monitoring
- Conclusion:
 - Choice of IT Tools follows PO mandate and requirements listed in the doc
 - Final responsibility is in the hands of the WP's and by the constraints imposed by the general context.

Other project office activities

- Establishment of a Working Group to define the logic and produce the first release of a unique Product Breakdown Structure. First meeting on 12th of January
- Participation at the first configuration management workshop in CERN, 2nd and 3rd of February
- Proposals for document templates
- Proposal for documents ID codes
- Discussion with WP4 for introduce quality standards

Engineering Department

ED Activities

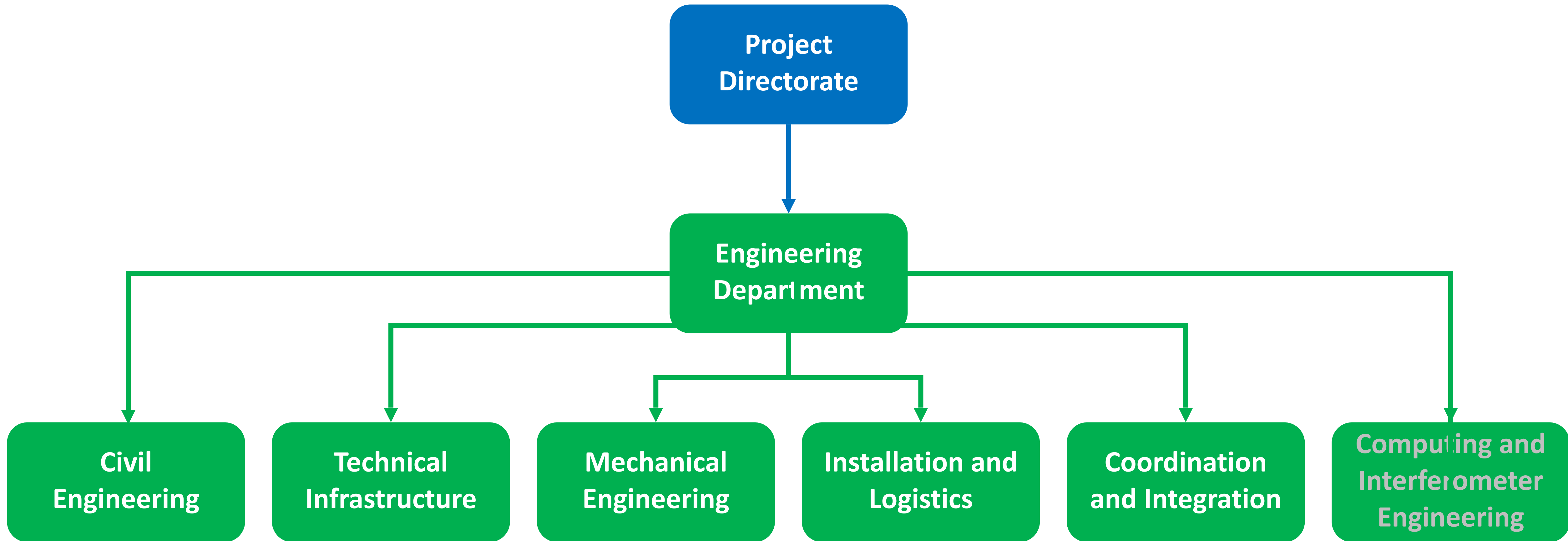
The activity of the Engineering Department is in the following fields:

- The technical infrastructure: civil engineering, cooling, ventilation, electricity, transport, handling, access and alarms;
- The technical systems associated with the gravitational wave detector: vacuum, cryogenics and survey;
- Technical Coordination in close collaboration with the Project Office;
- Giving technical support to the ET Collaboration.

ED Activities

1. Design and Engineering: ends with Final Design Review
2. Procurement: ends with Production Readiness Review
3. Production
4. Installation
5. Commissioning
6. Operation
7. Maintenance and renewal
8. Dismantling

ED structure



ED structure

1. Civil Engineering
Underground (caverns and tunnels), access shafts and surface (roads, office buildings and infrastructure buildings)
2. Technical Infrastructure
Water, electricity, HVAC, access and alarms, cleanrooms, infrastructure operation
3. Mechanical Engineering
Part of GW Detector, infrastructure, vacuum, cryogenic, survey,
4. Installation and Operation
Transport and handling, logistics, clean operations,
5. interferometer operation
6. Coordination & Integration
Planning, integration, safety coordination in the field
7. Computing Engineering
8. GW Detector Engineering

ED personnel

Home Institute	Name	Deployed in	Type of Resource	Extent of involvement [FTE]	Function
CNRS	Guillaume Deleglise	Engineering Department	in-kind	0.20	Vacuum/Mechanical Engineer
CNRS	Bruno Lieunard	Engineering Department	in-kind	0.20	Vacuum/Mechanical Engineer
CNRS	Romain Bonnand	Engineering Department	in-kind	0.15	Optical Engineer
IFAE	Rafael Garcia	Engineering Department	In-kind	0.50	Integration and Infrastructure Engineer
INFN	Maria Marsella	Engineering Department	In-kind	1.00	Head of Civil Engineering
Nikhef	Patrick Werneke	Engineering Department	In-kind	0.50	Head of Engineering Department
Nikhef	Marije Barel	Engineering Department	In-kind	1.00	Vacuum Engineer - starts March 1st
U Antwerpen	yet to be recruited	Engineering Department	In-kind	0.20	Vacuum Engineer
CNRS	yet to be recruited	Engineering Department	INFRA-DEV Recruit	1.00	Vacuum Engineer
INFN	yet to be recruited	Engineering Department	INFRA-DEV Recruit	1.00	Integration and Infrastructure Engineer
Nikhef	yet to be recruited	Engineering Department	INFRA-DEV Recruit	1.00	Civil Engineer

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