

Costing Meeting

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Introduction

- Summary of CERN costing workshop.
- Proposed Level 3 breakdown.
- Organisation of services.
- Things to do and schedule.

Summary of the Costing Workshop

- Ilias Efthymiopoulos outlined methodology of the costing exercise and schedule for all the work packages.
 - Split each subsystem into 3 phases
 - Industrialisation – engineering required to write tender specs.
 - Procurement – management of construction and material costs.
 - Reception – installation, commissioning and ramping to design spec.
 - Need to identify Cost Focal Points (people responsible for providing cost information for subsystems).
 - Upload data to costing tool with an assumption data sheet.
- Talks on Beta-beam (PBS quite advanced), Neutrino Factory and detectors.
- Super beam is basically the SPL and has it's own costing process.

Summary of the Costing Workshop

- Other things discussed
 - CERN will provide global numbers for buildings and tunnels.
 - Cables, stands.
 - Running costs and maintenance not included.
- Schedule
 - PBS should have been defined by now!
 - June/July interviews with Cost Focal Points.
 - Review of PBS of subsystems, cost estimates, infrastructure, services etc.
 - CERN will provide experts to do the review.
 - Next costing workshop in December.
 - Review cost estimates of each facility in preparation of final report.

Proposed Level 3 Structure



- Need to specify interfaces.
- Proton driver includes final focus. Need to specify geometrical constraints going into the capture solenoid and drift length.
- Pion decay section includes proton absorber chicane?

Generic Services

- Magnet power systems
 - Excluding special kicker supplies
- RF system
- Cryogenic system
- Vacuum system
- Diagnostics
- Controls
- Civil
 - Buildings/tunnels
 - Electrics
 - HVAC
 - Health and safety
 - Water

Organisation of Services

- Need to specify the way services will be grouped.
- Current methodology is to group services for each Level 3 system together. However if one subsystem below level 3 required specialised services then they should be specified within that subsystem.
 - e.g. magnet power supplies and kicker power supplies.

Things to do and Schedule

- Agree on Level 3 breakdown and interfaces.
- Agree on Level 4 (and 5 if needed) breakdown.
- Identify cost focal points for the subsystems.
- First attempt at PBS for subsystems.
- Compare with Beta beam.
- Interviews at CERN.
- First attempt at costing subsystems.
 - Iterate design with engineering support.