
Real Photon Collaboration Experiments

Collaboration Meeting

5/18/01

Requirements

WBS

Bill Olson

Agenda

- **Introduction**
- **Requirements**
 - **Content**
 - **Organization**
 - **Schedule**
- **WBS**

Introduction

- Requirements is Key document
 - Tells us *where* we are going
 - Tells us *when* we are going to get there
 - Tells us *how* we are going to get there
 - Bottom line – avoid things falling in a crack or last minute “gotcha’s”
- Work Breakdown Structure (WBS)

Content of Requirements

- **Requirements define**
 - **What the users want to achieve**
 - **Physics**
 - **Time**
 - **What the system must do to satisfy user needs**
 - **What must be implemented to satisfy these needs**
 - **What each component must do, and how components will interact**
 - **How implementation and performance will be verified**

Organization of Requirements

- **Physics requirements**
- **System requirements**
 - **Photon Beamline**
 - **E160 System requirements**
 - **E161 System requirements**
 - **E159 System requirements**
- **When incorporated into DOORS and on the web, it will have the capability for sorting**
- **Can be modified thru change control**
- **Note: Organization is similar to the Work Breakdown Structure**

Requirements Schedule

- DOORS Web site established by 6/4/01
- First draft by 6/20/01
- Final by 7/20/01
- Changes can be made

WBS

- **53.0.0.0** **Photon Beamline**
- **54.0.0.0** **E160 Specific activities & hardware**
- **55.0.0.0** **E161 Specific activities & hardware**
- **56.0.0.0** **E159 Specific activities & hardware**

WBS, RPCE Common Activities & Hardware

- **53.0.0.0 RPCE common activities and hardware**
 - **53.0.1.0 Pre-engineering**
- **53.1.0.0 Photon beam line**
 - **53.1.1.0 Engineering and Design**
 - **53.1.1.1 Engineering**
 - **53.1.1.2 Drafting**
 - **53.1.2.0 Procurement**
 - **53.1.2.1 Material**
 - **53.1.2.2 Outside fabrication**
 - **53.1.2.3 Inside fabrication**
 - **53.1.9.0 Seismic Safety**
- **53.2.0.0 Goniometer**
- **53.3.0.0 Wire array**
- **53.4.0.0 Magnets**
- **53.5.0.0 Photon collimator**
- **53.6.0.0 Photon Beam Detectors**
 - **53.6.1.0 ION Chamber**
 - **53.6.2.0 Cerenkov**
 - **53.6.3.0 SEQ**
- **53.9.0.0 Radiation shielding for photon beam line**

WBS, E160

- **54.0.0.0 E160 specific activities and hardware**
 - **54.0.1.0 Pre-engineering**
- **54.1.0.0 Beam line**
 - **54.1.1.0 Engineering and Design**
 - **54.1.2.0 Procurement**
 - **54.1.9.0 Seismic Safety**
- **54.2.0.0 Target**
- **54.3.0.0 Magnet**
- **54.4.0.0 Collimator/Absorber**
- **54.5.0.0 Detectors**
- **54.6.0.0 DAQ**
- **54.7.0.0 Radiation shielding**
- **54.8.0.0**
- **54.9.0.0**

WBS, E161

- **55.0.0.0 E161 specific activities and hardware**
 - **55.0.1.0 Pre-engineering**
- **55.1.0.0 Beam line**
 - **55.1.1.0 Engineering and Design**
 - **55.1.2.0 Procurement**
 - **55.1.9.0 Seismic Safety**
- **55.2.0.0 Target**
- **55.3.0.0 Magnet**
- **55.4.0.0 Collimator/Absorber**
- **55.5.0.0 Detectors**
- **55.6.0.0 DAQ**
- **55.7.0.0 Radiation shielding**
- **55.8.0.0**
- **55.9.0.0**

WBS, E159

- **56.0.0.0 E159 specific activities and hardware**
 - **56.0.1.0 Pre-engineering**
- **56.1.0.0 Beam line**
- **56.2.0.0 Beam Hardener**
- **56.3.0.0 Target**
- **56.4.0.0 Magnet**
- **56.5.0.0 Collimator**
- **56.6.0.0 Detectors**
- **56.7.0.0 DAQ**
- **56.8.0.0 Radiation shielding**
- **56.9.0.0 Compton Polarimeter**