

ebg *Med*Austron

cosylab   
CONTROL SYSTEM LABORATORY

## Cosylab/EBG Organization of common work

Joze Dedic ([joze.dedic@cosylab.com](mailto:joze.dedic@cosylab.com))

... on behalf of CSL MA team

  
the best people make cosylab

- Cosylab and EBG signed a framework agreement
  
- Work is split in Contract Work Orders, per CWO:
  1. input from MACS: identify areas of work
  2. agree on deliverables
  3. work, meet & realign, work
    - @CERN ~once/month, 2-3 ppl / 1 wk
    - weekly Skype conference
    - mail, SharePoint
  4. deliver, check
  5. ...define next CWO
  
- Cosylab team has (now) access to CERN services
  - accounts, SVN, Trac

- 80 person-weeks (April, May, June)
- core of the work
  - studying the overall system,
  - identifying requirements,
  - refining existing requirements;
    - improving overall consistency
    - simplifying complexity
  - prototyping

- main timing system, MTS
  - orchestrating all accelerator devices for perfectly synchronous operation
  
- integration of power converters (PCos) into CS
  - a bridge between CS and PCos, providing PCos
    - real-time set-point values
    - control interface
  
- front end control system, FECOS
  - SW layer for all acc. equipment providing
    - standardized connectivity
    - imposing required functionality
  
- requirement/documentation management (traceability)
- alignment of MA CMP and CSL internal CM environment

# Alignment

understanding improves:  
dynamically adapt

Requirements.doc

MACS team

other groups

CWO-1

Requirements.EAP

CSL team

- 53956: MedAustron 2010 (jdedic) [open]
- 53957: Management (jdedic) [new]
- 51982: Discuss MA PS control with NI (jdedic) [resolved]
- 57016: MA - QA & CMP (jdedic) [new]
- 57017: Preparation work (bzalar) [new]
- 57018: MA & CSL alignment for BM and QA processes (bzalar) [new]
- 57241: MA - FECOS (msekoranja) [new]
- 57242: FECOS architecture and design document (msekoranja) [open]
- 57243: FECOS documentation (msekoranja) [open]
- 57007: MA - MTS (jdedic) [new]
- 57008: Preparation work (jdedic) [new]
- 57009: MA - PCC & FED (jdedic) [new]
- 57012: Preparation work (jdedic) [new]
- 57194: Optical link - preparation work (Isepetavc) [new]
- 57290: PCo references (Isepetavc) [new]
- 57291: Decide on I/s-PCo I/f (Isepetavc) [open]
- 57484: Getting MTS trigger into FlexRIO cards (Isepetavc) [open]
- 58239: Effort estimate for 2nd CWO (Isepetavc) [new]
- 57013: Formalize requirements in EA (jdedic) [new]
- 57040: Optical link (Isepetavc) [open]
- 57041: PCC-FED (Isepetavc) [new]
- 57042: PCC-LabVIEW - high level (msekoranja) [open]
- 57043: PCC-LabVIEW - low level (ratfancic) [new]
- 58252: Incorporate feedback in PCC reqs. (Isepetavc) [open]
- 57014: Architecture design (jdedic) [new]
- 57293: fPCo I/f over RS485 (Isepetavc) [open]
- 57625: Top level architecture (Isepetavc) [open]
- 57626: MAPCL architecture (Isepetavc) [open]
- 57714: PCC-LabVIEW part (bvrto) [new]
- 57848: fPCo I/f over parallel (Isepetavc) [open]
- 58635: FED I/F - check JGU's doc and incorporate feedback (Isepetavc) [open]
- 58682: RS232/485 DB9 (mlevcnik) [new]
- 58686: FED <-> DSP I/F (Isepetavc) [new]
- 57015: Development (jdedic) [new]
- 57195: Optical link (Isepetavc) [open]

Ticket	Summary	Component	Version	Milestone	Type	Priority	Created
#133	Refine MTS requirements	sdp_documents_Requirements_MainTimingSystem	development	CO-091214-a-JGU V1.2.0	enhancement	middle	20/04/10
#135	Definition of MTS architecture	sdp_documents_AnalysisDesign_MTS	development	CO-091214-a-JGU V1.2.0	enhancement	middle	20/04/10
#137	Design of PCO FED	sdp_documents_AnalysisDesign_PCOFED	development	CO-091214-a-JGU V1.1	enhancement	middle	20/04/10
#139	Refine PCC requirements	sdp_documents_Requirements_PCC	development	CO-091214-a-JGU V1.2.0	enhancement	middle	20/04/10
#143	Check in Enterprise Architect Model	sdp_documents_Requirements_RequirementsDocumentTemplate	development	CO-091214-a-JGU V1.2.0	enhancement	middle	20/04/10
#162	Iteration report for CWO-1	sdp_documents_ProjectManagement_CWO	development	CO-091214-a-JGU V1.1	enhancement	middle	20/04/10
#120	Merge requirements for Main Timing System to Enterprise Architect	sdp_documents_Requirements_MainTimingSystem	development	MA2010 Week June 2010 V1.0	enhancement	middle	14/04/10

deliverables

tightly coupled

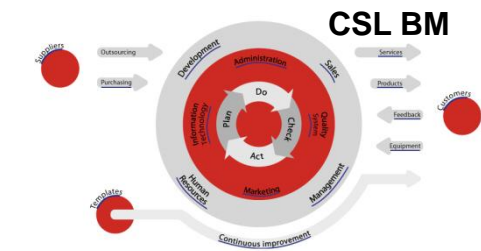
MACS SVN

refinement

CSL SVN

loosely coupled

Cosylab standard SVN structure



MACS CMP

- collaboration procedures (CSL / MACS) aligned
- CSL team set-up (w. CERN accounts) and up to speed
- documentation management env. set-up & aligned / EA
- MTS & PCC requirements refined, consistent, and agreed
- MTS & PCC high-level architecture done
- PCo interface clarified
- FECOS prototype working
- CWO-2; it's perfectly clear, what must be done
- CSL team made a step forward on time critical paths
  - fiber link, timing system
  
- **we are enjoying the work with MACS team and looking forward to CWO-2 😊**