



Organisation Européenne pour la Recherche Nucléaire European Organisation for Nuclear Research Laboratoire Européen pour la Physique des Particules European Laboratory for Particle Physics

Work Organization, Maintenance Planning and Maintenance Experience session

Pierre Bonnal DG-DI Christophe Delamare GS-ASE Marine Gourber-Pace BE-CO Damien Lafarge EN-HE Christophe Mugnier TE-EPC Goran Perinić TE-CRG Regis Pilon TE-EPC Ingo Ruehl EN-HE Eric van Uytvinck EN-EL David Widegren GS-ASE Zornitsa Zaharieva BE-CO

Asset Maintenance Management Workshop

AMMW 2013 15th November 2013



Safety Organization of the ATLAS experiment

- Many conventional risks in the same place
- Many specific risks in the same place
- Projects to define solutions in radioactive environments (live biometry monitoring and remote handling)



Maintenance in the CERN cooling and ventilation group

- KPIs calculated based on WO data
- Importance of quality and completeness of data in WOs for KPIs calculation
- Mobile devices application
- Online vibration analysis



Geneva, Nov. 15th 2013

LS1 maintenance for the cryogenic installations

- Very good performance (~92% availability)
- Systematic analysis of origins of downtimes
- Maintenance plans defined in details through BOM, procedures & schemes

Offline vibration analysis



Inspections of EN/EL transformers

- Periodic interventions on transformers
 ~preventive
- List of parameters evaluated or measured
- Triggers corrective interventions
- Parameters automatically analyzed



Maintenance of Power Conv. based on Failures Data

- Analysis of failures data to optimize maintenance
- Weibull approach to detect obsolescence of diodes based on 5 defects out of 10'000 diodes
- Triggers replacement plan for diodes
- Importance of completeness and quality of data



Geneva, Nov. 15th 2013

Spare part management in the EN-CV group

- Important number of references to manage
- Workflow based on pick tickets for traceability
- Efforts put on improvement of stock thanks to KPIs and standardization



Contract management, contract adjudication, outsourcing

- Presentation of the Best Value for Money method
- Method evaluating bid mark adding price mark and quality mark
- 41 contracts adjudicated since 2008 out of 78 contracts at CERN



Geneva, Nov. 15th 2013



www.cern.ch