Safety Session
IEFC workshop 2011

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Session outline

1. Early safety management of projects and experiments *(Isabel Bejar-Alonso)*
2. ALARA Experience and lessons learnt *(Heinz Vincke)*
3. Safety consolidation in and around the accelerator chain *(Simon Baird)*
4. Evolution and Future of access safety and control systems *(Rende Steerenberg)*
5. Evolution of Radiation Monitoring *(Gustavo Segura)*
6. Safety management of shutdowns *(David McFarlane)*

Safety Management

Early safety management of projects and experiments

- Everybody is expected to contribute by announcing new projects, experiments, activities well in advance.
- Proper documentation serving the full life cycle is a must, and supporting guidelines are available.
- Adequate resources must be provided on both sides:
  project – safety experts (DSO's, HSE, etc.)
- Action:
  - Extend the training foreseen for GLIMOSes of small and medium sized experiments to Project Safety Officers in project. HSE

Safety management of shutdowns

- Actions:
  - Extend the LHC and SPS method and tools to all other beam facilities. EN-MEF
  - Train shutdown coordinators on Safety. HSE

ALARA

ALARA experience and lessons learnt

- ALARA principles and corresponding methods are well accepted and progressively extended to all facilities. Tune-up of the process must now take place based on lessons learnt over the last few years.
  DGS/RP, RSOC

- Remote handling and monitoring is important for ALARA. Needs top management support, and creation of a dedicated center of competence, e.g. in EN-HE.

- Documentation of equipment installed and tasks to be performed in particularly radioactive environment is essential.
  Examples : taking video footage on site for difficult operations, training with mockups or spare parts before actual intervention.

Safety Consolidation

Safety consolidation in and around the accelerator chain

- The results of a PS safety review spotting today's status quo were presented
- Safety consolidation proposals will be based on proper risk management techniques, including risk evaluation and scoring to establish priorities and highest effectiveness of measures.
- Such review should also be done for the PSB and the SPS.

- The conclusions of a review of the radiological impact of the PS was presented: Radiation (stray radiation and activation) and Emissions (ventilation).
- One should specify the maximum allowed beam losses as part of key parameters of projects of beam facilities and new installations. Could be used as a key parameter for design of the facility and its equipment but also the required shielding and other protective measures.

Access - RAMSES

Evolution and Future of access safety and control systems

Action:

- Deploy the new access system during LS1 to be operational for the 2014 physics run (incl. L2 and L4), and provide training (users, OP…) GS-ASE
- Pursue SPS study for similar upgrade BE-OP, BE-ASR-SU
- Parallel upgrade for exp. areas to be extended to exp. Halls EN-MEF, GS-ASE

Evolution of Radiation Monitoring

Issues have been solved and there is now a clear transition path from ArCon to RAMSES II that minimizes the risks to beam operation of the injector complex

Action:

- Report “regularly” to IEFC HSE (RP & SEE)