

IEFC Workshop 2012

Report of Contributions

Contribution ID: 0

Type: **not specified**

Safety Structure and Safety Organization

Wednesday 7 March 2012 09:15 (30 minutes)

What news from SAPOCO on new version of Safety Policy? Recent changes in Safety Organization; Confirmation of Director A&T as “Chef d’Installation”; single BFSP transformed into three CSAP’s, one per complex: LHC, SPS, PS. What impact does this have on Safety for different facilities (machines and experimental areas)? What are the existing and recognised roles and functions for both Occupational Safety (Sécurité) and Operational Safety (Sûreté). Are there more changes coming? Are there other changes that would be necessary and yet are not foreseen?

Presenter: PEDERSEN, John (CERN)

Session Classification: Safety & RP Issues

Contribution ID: 1

Type: **not specified**

Safety Documentation: Folders and Files

Wednesday 7 March 2012 09:45 (30 minutes)

Safety documentation as seen by different stakeholders (HSE, project office, Safety Officers, BE Safety Unit) and from different viewpoints (conceptual, methodical, goal-based...); there are many different initiatives and strong opinions...

Safety Documentation should primarily be a crucial working-tool for all participants in a project or for personnel involved in the operation and maintenance of equipment or facilities. The question to ask to users is "How useful is Safety Documentation for the general CERN population and you in particular?" Safety Documentation is sometimes also necessary as a basis for discussion with the Host States authorities; this might place some constraints on the format. Summarize by giving a basic and down-to-earth definition of the Safety documentation starting from the primary goal of usefulness at CERN.

Practical case of HiRadMat: what are the experience and lessons learnt while putting together the safety files for HiRadMat? And how can this be of benefit for future projects (new facilities or consolidations) like the TCC2/TDC2 consolidation; where does one start? What method and phasing can be suggested? What is the end product? What are the required care and maintenance for Safety Documentation? Actual usage of the end product?

Special but frequent case of upgrades and transformations: how do we document the Safety of a project linked to an operating facility or destined to be housed in an operating facility and finally upgrade the Safety Documentation of the resulting "new" facility?

Presenter: EVRARD, Sebastien (CERN)

Session Classification: Safety & RP Issues

Contribution ID: 2

Type: **not specified**

Safety Training, Safety Briefings and Access Authorization

Wednesday 7 March 2012 10:15 (30 minutes)

We have at CERN over 25 beam and experimental facilities, access to which is controlled by “access zones” of which there are 152 (these also include other areas such as key cabinets and the CCC kitchen).

Each zone can have training and personal safety equipment requirements set in function of the hazards that may be present, but in practice the hazards are similar in many facilities.

Our aim is to prepare people to be able to work safely in these areas, we look at how we currently train and control contractors and staff for work in these locations and ask what improvements can be implemented ahead of LS1.

Presenter: HUTCHINS, Steve (CERN)

Session Classification: Safety & RP Issues

Contribution ID: 3

Type: **not specified**

As Low As Reasonably Achievable

Wednesday 7 March 2012 11:15 (30 minutes)

Some tools have been in place to formalize the activities around the ALARA principle for a few years now; most notably the requirement for a Dossier d'Intervention en Milieu Radioactif (DIMR). Review the recent change in the criteria to trigger and categorize the DIMR. Can we have a comparison of the points of view of Management, Radiation Protection and Users on this change, and on the ALARA criteria more generally? Practical example of users' experience could be taken from ISOLDE.

Is there a need to further change the ALARA approach for the long shutdown and/or consolidation works? (This could be connected to the topic of lessons learnt from WANF Dismantling and Hi-RadMat installation, and how this experience and the approach of documentation will be applied to TCC2 consolidation)

Presenter: BERNARDES, Ana-Paula (CERN)

Session Classification: Safety & RP Issues

Contribution ID: 4

Type: **not specified**

Traceability

Wednesday 7 March 2012 11:45 (30 minutes)

Review the motivation and objectives of a traceability system, taking from internal motivation, industry standards and regulatory requirements on our partners in recycling industries and final repositories.

Review of the existing system and procedure for traceability of equipment and materials, with presentation of the TREC tool, as seen by users currently using the system, ie presentation of experience and lessons learnt. Is there room for change or optimization? Eg. What are the benefits of local buffer zones vs. a centralized area for sorting and measurement? Could this improve on the way that people handle/collect their equipment? What would be the overall benefits/drawbacks of a centralized buffer zone -> requires feedback from the equipment groups.

Traceability is also important for equipment design (maintenance, repairs...), procurement and actual composition of equipment and installations. This feeds into the Safety Documentation. The goal here is also linked to the ALARA principle with reduction of interventions (number and duration, with impact on Safety as well as operability), reduction of dose to personnel, reduction of activation of equipment (impact on availability for repairs and spare parts), reduction of ultimate waste volume, weight and specificity (difficult isotopes). In order to help engineers with this, guidelines for "safe" materials are being prepared, and best practice handbook could also be assembled and shared. This will be helped with appropriate Safety Documentation.

Presenter: BRUNO, Luca (CERN)

Session Classification: Safety & RP Issues

Contribution ID: 5

Type: **not specified**

Generation and Management of Radioactive Waste

Wednesday 7 March 2012 12:15 (30 minutes)

Once equipment and materials are declared radioactive waste, they follow a very strict procedure before final elimination can be reached. Obviously we should minimize radioactive waste but do we understand why? Presentation of major issues at stake; money is one, others are regulations and additional burden, but also publicity and “good neighbour” attitude. Traceability of waste is treated in the previous presentation. What is the view of Management on waste, e.g. regarding the responsibility for waste being transferred to RP or kept by “owner”? And what about waste produced at CERN by external teams? What is the view of users on waste management; e.g. is this a black box in which useless stuff can be thrown or a service provided to users, with or without cost, and with users keeping some responsibility?

Presenter: ULRICI, Luisa (CERN)

Session Classification: Safety & RP Issues

Contribution ID: 6

Type: **not specified**

Update on beam parameters for LHC and other users

Wednesday 7 March 2012 14:00 (30 minutes)

Beam characteristics for HL-LHC [protons and ions (as far as possible)]
Time evolution (baseline plan): between LS1 and LS2, after LS2
Impact on other users.

Presenter: GAROBY, Roland (CERN)

Session Classification: LIU plans and the LHC Beams

Contribution ID: 7

Type: **not specified**

Linac4, Commissioning, back to Linac2, connection to PSB

Wednesday 7 March 2012 14:30 (30 minutes)

Update on Linac4 status and planning up to beam commissioning

Scenarios of connection: baseline plan, alternative scenarios (emergency replacement of Linac2 or

Connection to PSB delayed to LS2, Benefits/drawbacks of having LS1.5)

Presenter: LOMBARDI, Alessandra (CERN)

Session Classification: LIU plans and the LHC Beams

Contribution ID: 8

Type: **not specified**

PSB upgrade plans

Wednesday 7 March 2012 15:00 (30 minutes)

List of actions and planning of implementation (H- Injection, 2.0 GeV extraction...)
Studies
Impact on other users
PSB performance for LHC and other users in the different scenarios
Potential risks

Presenter: Dr HANKE, Klaus (CERN)

Session Classification: LIU plans and the LHC Beams

Contribution ID: 9

Type: **not specified**

PS upgrade plans

Wednesday 7 March 2012 16:00 (30 minutes)

List of actions and planning of implementation

Studies

Impact on other users

PS performance for LHC and other users in the different scenarios

Potential risks

Presenter: Dr GILARDONI, Simone (CERN)

Session Classification: LIU plans and the LHC Beams

Contribution ID: **10**

Type: **not specified**

SPS upgrade plans

Wednesday 7 March 2012 16:30 (30 minutes)

List of actions and planning of implementation

Studies

Impact on other users

SPS performance for LHC and other users in the different scenarios

Potential risks

Presenter: Dr GODDARD, Brennan (CERN)

Session Classification: LIU plans and the LHC Beams

Contribution ID: 11

Type: **not specified**

Ion sources, Linac3, LEIR

Wednesday 7 March 2012 17:00 (30 minutes)

List of actions and planning of implementation

Studies

Impact on other users

Performance for LHC and other users in the different scenarios

Potential risks

Presenter: MANGLUNKI, Django (CERN)

Session Classification: LIU plans and the LHC Beams

Contribution ID: 14

Type: **not specified**

MTE

Contribution ID: 15

Type: **not specified**

MTE

Thursday 8 March 2012 09:00 (30 minutes)

Status and outlook for 2012

What can (needs to) be done before LS1

Impact of studies and commissioning on classical CT or other hardware

Presenter: GIOVANNOZZI, Massimo

Session Classification: Future Beam Modes and Radiation Issues

Contribution ID: **16**

Type: **not specified**

CTF3

Thursday 8 March 2012 09:30 (30 minutes)

Status and plans
What in 2012?

Presenter: TECKER, Frank (CERN)

Session Classification: Future Beam Modes and Radiation Issues

Contribution ID: 17

Type: **not specified**

Controlling Operation Based On Average Losses

Thursday 8 March 2012 10:00 (30 minutes)

Can a super cycle be optimized with respect to losses ?

Ways to optimize losses/flux

Presenter: METRAL, Gabriel (CERN)

Session Classification: Future Beam Modes and Radiation Issues

Contribution ID: **19**

Type: **not specified**

SPS FT Beams

Thursday 8 March 2012 11:00 (30 minutes)

Compass +NA62 running together + other future experiments

Presenter: GATIGNON, Lau (CERN)

Session Classification: Future Beam Modes and Radiation Issues

Contribution ID: 20

Type: **not specified**

LHC Beams Production

Thursday 8 March 2012 12:00 (30 minutes)

Impact of LHC beams on global loss budget in PSB, PS and SPS
Impact of LHC filling on other programs (ISOLDE, n-TOF, EA, NA, CNGS)
Stability of booster rings
Splitting (stability)

Presenter: STEERENBERG, Rende (CERN)

Session Classification: Future Beam Modes and Radiation Issues

Contribution ID: **21**

Type: **not specified**

Ions in the SPS

Thursday 8 March 2012 11:30 (30 minutes)

Future beams for LHC

FT beams: primary beam interlock status, de-bunching, etc.

Radiation hazard with new ion species (all machines)

Presenter: MANGLUNKI, Django (CERN)

Session Classification: Future Beam Modes and Radiation Issues

Contribution ID: 22

Type: **not specified**

Secondary Beams and Areas: Status and Plans

Thursday 8 March 2012 14:00 (30 minutes)

Outcome of the East Area Day:

- Updated user requests
- New (final) layout in view of DIRAC dismantling
- Irradiation facility in view of AIDA project
- Project structure, cost, schedule, plans for LS1

North Area renovation:

- Status of the renovation activities: EL, CV, magnets
- Schedule and foreseen activities during LS1
- Priority list to assure operations and restart in 2014

Presenter: GATIGNON, Lau (CERN)

Session Classification: Experimental Areas, Consolidation and New Projects

Contribution ID: 23

Type: **not specified**

AD and ELENA Status and Plans

Thursday 8 March 2012 15:00 (30 minutes)

- ELENA project status and plans
- Consolidation project for AD (machine) and hall. What is done in 2011 and plans/activities for 2012.
- Status of the AD target consolidation

Presenter: Mr MAURY, Stephan (CERN)

Session Classification: Experimental Areas, Consolidation and New Projects

Contribution ID: 24

Type: **not specified**

ISOLDE and HIE-ISOLDE Status and Plans

Thursday 8 March 2012 17:00 (30 minutes)

- Status and plans for 2012 experiments
- HIE-ISOLDE status and plans
- Foreseen activities for LS1

Presenter: CATHERALL, Richard (CERN)

Session Classification: Experimental Areas, Consolidation and New Projects

Contribution ID: 25

Type: **not specified**

The nTOF 2nd Experimental Area

Thursday 8 March 2012 16:30 (30 minutes)

- Design of new area
- Timeline of activities

Presenter: CHIAVERI, Enrico (CEA - Centre d'Etudes de Saclay (FR))

Session Classification: Experimental Areas, Consolidation and New Projects

Contribution ID: 26

Type: **not specified**

Future Projects

Thursday 8 March 2012 16:00 (30 minutes)

- Plasma Wakefield acceleration: new beam line and experimental area in TT61/West Area
- Neutrino facilities under study in LAGUNA-LBNO
- New short-baseline neutrino beam in PS or SPS
- Status and plans, impact to existing machines and experimental areas

Presenter: Dr GODDARD, Brennan (CERN)

Session Classification: Experimental Areas, Consolidation and New Projects

Contribution ID: 27

Type: **not specified**

A global view of the LS1 timeline in the injector chain

Friday 9 March 2012 09:00 (40 minutes)

Booster, PS, AD, SPS

Planning must take into account that in some cases the same teams will be working on the LHC as well as the SPS.

Presenter: MCFARLANE, David (CERN)

Session Classification: LONG SHUTDOWN in 2013 in the LHC Injectors and Experimental area

Contribution ID: 28

Type: **not specified**

What is foreseen to be operational during LS1

Friday 9 March 2012 09:40 (20 minutes)

LINAC3? CTF3? LINAC4 commissioning? (check on ISOLDE stable beam run??)

What services must be available and when in order for them to run?

Presenter: Dr CHOHAN, Vinod (CERN)

Session Classification: LONG SHUTDOWN in 2013 in the LHC Injectors and Experimental area

Contribution ID: 29

Type: **not specified**

Access system upgrade in the PS complex

Friday 9 March 2012 10:00 (30 minutes)

Planning for the project and how access will be handled while the work is being done

Presenter: SANCHEZ-CORRAL MENA, Eva (CERN)

Session Classification: LONG SHUTDOWN in 2013 in the LHC Injectors and Experimental area

Contribution ID: **30**

Type: **not specified**

RF Systems

Friday 9 March 2012 11:00 (30 minutes)

PS and SPS Complex: What is to be done?, Why do we need to do it?, What are the requirements from other groups and priorities for:

- i) Maintenance work
- ii) Consolidation
- iii) Upgrade related work

Presenter: Dr JENSEN, Erk (CERN)

Session Classification: LONG SHUTDOWN in 2013 in the LHC Injectors and Experimental area

Contribution ID: **31**

Type: **not specified**

Magnet activities

Friday 9 March 2012 11:30 (30 minutes)

What is to be done? Why do we need to do it? What are the requirements from other groups and priorities for:

- i) Maintenance activities
- ii) Replacing week/faulty SPS magnets
- iii) Installing magnets with coated vacuum chambers in the SPS

Presenter: BAUCHE, Jeremie (CERN)

Session Classification: LONG SHUTDOWN in 2013 in the LHC Injectors and Experimental area

Contribution ID: **32**

Type: **not specified**

Beam Transfer Systems

Friday 9 March 2012 12:00 (30 minutes)

What is to be done? Why do we need to do it? What are the requirements from other groups and priorities for:

- i) Maintenance work
- ii) Consolidation
- iii) Upgrade related work

Presenter: DUCIMETIERE, Laurent (CERN)

Session Classification: LONG SHUTDOWN in 2013 in the LHC Injectors and Experimental area

Contribution ID: 33

Type: **not specified**

TCC2/TDC2 Shutdown Activities and Consolidation Plans

Thursday 8 March 2012 14:30 (30 minutes)

- Planned works for TAX repair
- Other activities in the caverns: targets, splitters, infrastructure improvements
- Where do we stand in terms of operations for 2012? Critical items?
- List of activities for LS1 in view of operation in 2014

Presenter: EVRARD, Sebastien (CERN)

Session Classification: Experimental Areas, Consolidation and New Projects

Contribution ID: 34

Type: **not specified**

Vacuum systems

Friday 9 March 2012 14:00 (30 minutes)

What is to be done? Why do we need to do it? What are the requirements from other groups and priorities for:

- I) Maintenance work
- II) Consolidation
- III) Upgrade related work
- IV) List of activities generated by other groups

Presenter: FERREIRA SOMOZA, Jose Antonio (CERN)

Session Classification: LONG SHUTDOWN in 2013 in the LHC Injectors and Experimental area (Part 2)

Contribution ID: 35

Type: **not specified**

Survey

Friday 9 March 2012 14:30 (30 minutes)

What is to be done? Why do we need to do it? What are the requirements from other groups and priorities for:

- I) Maintenance work
- II) Consolidation
- III) Upgrade related work
- IV) List of activities generated by other groups

Presenter: MISSIAEN, Dominique (CERN)

Session Classification: LONG SHUTDOWN in 2013 in the LHC Injectors and Experimental area (Part 2)

Contribution ID: 36

Type: **not specified**

Power converters : SPS Transformers and any other major works

Friday 9 March 2012 15:00 (30 minutes)

What is to be done? Why do we need to do it? What are the requirements from other groups and priorities for:

- I) Maintenance work
- II) Consolidation
- III) Upgrade related work

Presenters: LE GODEC, Gilles (CERN); KAHLE, Karsten (CERN)

Session Classification: LONG SHUTDOWN in 2013 in the LHC Injectors and Experimental area (Part 2)

Contribution ID: 37

Type: **not specified**

Cooling and Ventilation activities

Friday 9 March 2012 16:00 (30 minutes)

What is to be done? Why do we need to do it? What are the requirements from other groups and priorities for:

- i) Maintenance work
- ii) Consolidation
- iii) Upgrade related work
- iv) List of activities generated by other groups

Presenter: BATTISTIN, Michele (CERN)

Session Classification: LONG SHUTDOWN in 2013 in the LHC Injectors and Experimental area (Part 2)

Contribution ID: **38**

Type: **not specified**

Electrical distribution activities

Friday 9 March 2012 16:30 (30 minutes)

What is to be done? Why do we need to do it? What are the requirements from other groups and priorities for:

- i) Maintenance work
- ii) Consolidation
- iii) Upgrade related work
- iv) List of activities generated by other groups

Presenter: DUVAL, Francois (CERN)

Session Classification: LONG SHUTDOWN in 2013 in the LHC Injectors and Experimental area (Part 2)

Contribution ID: 39

Type: **not specified**

Cabling activities

Friday 9 March 2012 17:00 (30 minutes)

What is to be done? Why do we need to do it? What are the requirements from other groups and priorities for:

- i) New Installations
- ii) Cabling clean-up in SPS (and PSB?)

Presenter: RICCI, Daniel (CERN)

Session Classification: LONG SHUTDOWN in 2013 in the LHC Injectors and Experimental area (Part 2)

Contribution ID: 40

Type: **not specified**

SUMMARY (from IEFC meeting 23 March 2012)

Primary author: MERTENS, Volker (CERN)