

Radiation Protection Constraints for the Operation of CERN's beam facilities

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In November 2006 the revised CERN radiation protection code F was released which brings CERN in line with European radiation protection legislation and regulations. As a consequence, several Safety Instructions had to be revised and new ones added such as the one on area classification and CERN's approach to the optimization of exposure of personnel and public.

The presentation will give an overview on the potential impact of these radiation protection rules on the operation of CERN's accelerators. Examples are limitations of beam intensities or improvement of shielding in order to meet exposure limits and constraints due to stray radiation and air releases, the need of protective measures for personnel in case of urgent accesses into high radiation areas during the operational period. Maintenance work in radiation areas requires appropriate job and dose optimization (ALARA).

A first "retour d'experience" from the 2007/2008 SPS shut-down will be presented for which CERN's new approach to ALARA has been already applied.