LHC Availability for Post-LS1 operation

Availability is one of the key factors to be taken into account to improve the LHC performance after LS1 and for future LHC upgrades. A comprehensive view of LHC availability in 2012 is given in this paper, based on the analyses of the Availability Working Group. The main contributions to LHC unavailability for Post-LS1 operation are highlighted following the outcomes of the Dependability Workshop, held in November 2013. Goals and foreseen project stages of the Accelerator Fault Tracking (AFT) are presented. Integrated luminosity predictions and sensitivity analyses to relevant operational parameters are shown, as a function of possible future availability scenarios.