

## **LBDS Performance**

### *Abstract:*

The performance of the LHC Beam Dump system during Run II beam operations are presented in terms of rate and type of failures of the extraction (MKB) and dump (MKD) kickers. New faults were also identified and they are extensively described together with their impact on the beam distribution at the dump protection elements and the TDE assembly. Foreseen and proposed mitigations, on the MKB/MKD magnets, generators, and controls, in order to minimise possible beam intensity and brightness limitations, are addressed. The reasons and functionality of the BETS TCDQ are reminded together with the present operational constraints, which will still hold in Run III. Main changes and issues encountered with the XPOC analysis and acknowledgment procedure are treated. Updates are given on the operational experience with the variable AGK after the accidental injection of bunches in the abort gap in 2017. The evolution of the execution and validation procedure for the asynchronous beam dump test and the further planned improvements are covered. Finally, recommendations are given for a proper scheduling of the LBDS commissioning time after LS2.