



18 June 2013

### **Justification for the delay in WP4 on Milestones MS44, MS45, MS46**

MS44 and 45 were expected in M6, but their full delivery was delayed to M19. Simultaneously, MS46 has been delayed from M12 to M19.

Draft concepts to address each of the milestones were presented on time, but the final versions were delayed due to several recent technical and organizational reasons. Due to the rapid evolution in both the cavity technology and RF systems, a delay in finalizing the milestone objectives was imperative. The additional time was essential to acquire the input on the final layout, technology limits and machine protection aspects in the HL-LHC era from the other work packages, HiLumi collaborations and the CERN machine protection panel. Information exchange during several critical meetings in 2012 and 2013 was important to converge to the final outcome.

No other tasks of WP4 and of other WPs have been affected by this delay.