

HL-LHC industrialization and procurement. Lessons learnt

Friday 6 July 2018 14:00 (30 minutes)

The High-Luminosity LHC (HL-LHC) is a major upgrade of the Large Hadron Collider (LHC) that aims increasing the number of proton-proton collisions, boosting our chances of coming across new and rare physics phenomena. In order to do that, several new technologies will be introduced and heavy civil engineering work is required. Overall, more than 1.2 km of the current LHC ring will need to be replaced with new components. The engineering concepts behind most part of these components come from our latest R&D and only a few units will be required for each type. From one side producing them at CERN or in the laboratories collaborating in HL-LHC would be nearly impossible considering the production time frame. From the other side, the industry considers that the series are too short, the tolerances too tight and the development too risky to get interested. How to solve this situation?

The talk will give an overview of the sourcing strategy that was put in place for HL-LHC and the results obtained. Particular emphasis will be put on what we think were key success factors and could be useful for other construction projects facing the same challenges.

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