



Contribution ID: 1204 Contribution code: TUPA155

Type: **Poster Presentation**

Budget, procurement and risk management for the HL-LHC project

Tuesday, 9 May 2023 16:30 (2 hours)

The HL-LHC project covers the upgrade of the LHC, aiming at collecting an integrated luminosity of 3000 fb⁻¹ equal to a 10-fold increase of the nominal LHC performance. Approved in 2016 for a 950 MCHF budget, the project is shaped by 19 work-packages, covering all expertise areas, from beam dynamics to technical infrastructures. A truly international effort is deployed, where 38 institutes collaborate to supply key technologies, equipment, and manpower. Compensating overcost with saving and descoping, Budget-at-completion has been limited within ~10%. The Make or Buy plan drives procurement, ensuring optimal and timely acquisition conditions through transparency, equality, and competitiveness in accordance with CERN Procurement Rules. Differently from US DoE projects, HL-LHC features no risk contingency, whilst being a technology driver, hence exposed to non-negligible intrinsic risk. Risks are catalogued and followed up, aiming at building resilience, supporting decision making, and applying appropriate cost and schedule risk mitigation measures. The paper describes the methods used in cost, procurement, and risk management, as well as the evolution and challenges in these areas.

Funding Agency

Footnotes

I have read and accept the Privacy Policy Statement

Yes

Primary author: VANDONI, Giovanna (European Organization for Nuclear Research)

Co-authors: AUGIER, Alexia (European Organization for Nuclear Research); GARCIA GAVELA, Hector (European Organization for Nuclear Research); JENSEN, Lars (European Organization for Nuclear Research); MARTINS ROCHA DE ALMEINA CARLOS, Laura (European Organization for Nuclear Research); BROZDA, Lidia (European Organization for Nuclear Research); QUAIN SOLIS, Lorcan (European Organization for Nuclear Research); ZERLAUTH, Markus (European Organization for Nuclear Research); RODRIGUEZ PEREZ, Marta (European Organization for Nuclear Research); BRÜNING, Oliver (European Organization for Nuclear Research); GUILLEN HUMBRIA, Victor (European Organization for Nuclear Research)

Presenter: VANDONI, Giovanna (European Organization for Nuclear Research)

Session Classification: Tuesday Poster Session

Track Classification: MC4: Hadron Accelerators: MC4.A04: Circular Accelerators