

# 1st Accelerators Technology Sector Workshop

Engineering Design Tools and Processes  
Project Management Methodologies and Tools

Chair: Mike Lamont

Interconnecting knowledge, experience, methods,  
people & data to foster learning & collaboration



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Accelerators and  
Technology Sector

# Project Management Methodologies and Tools - PM1

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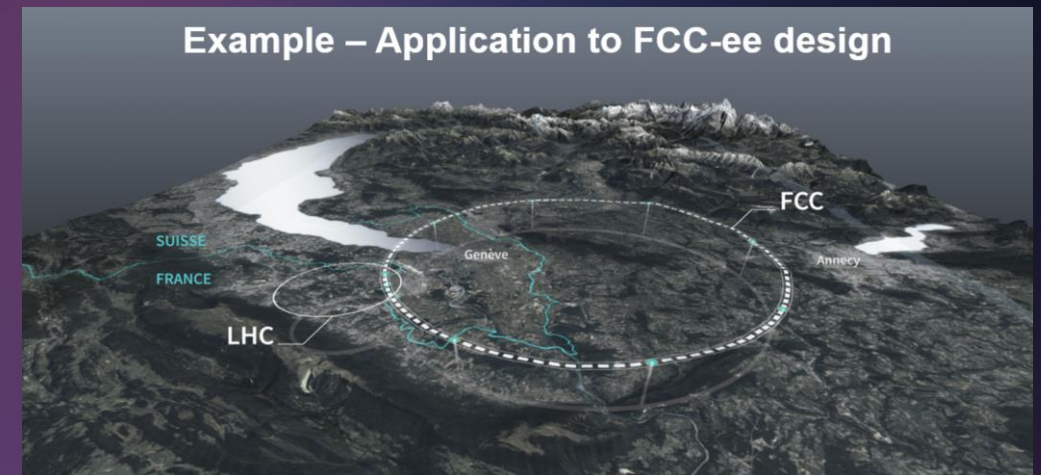
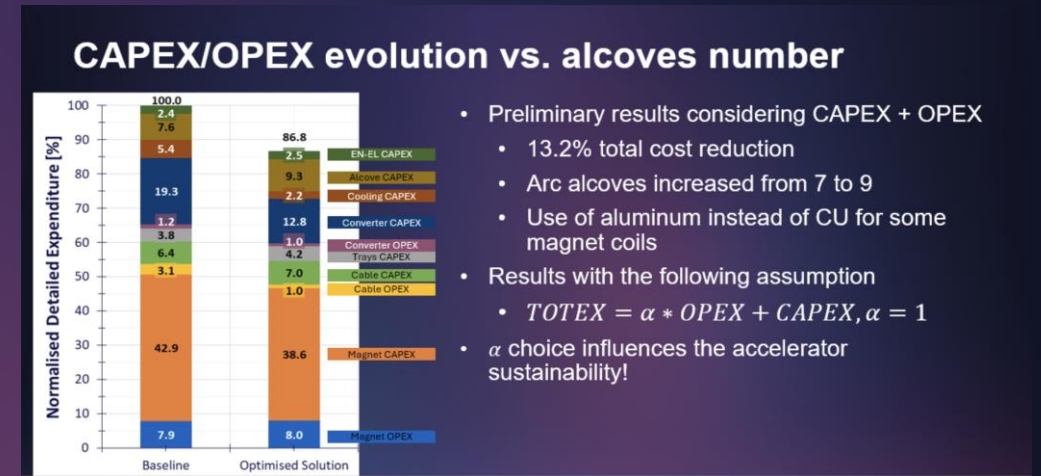


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# Enhancing Technical Project Management through System Optimisation – Application to FCC-ee design

- ❖ **Optimisation** - essential to cost savings and to streamline project priorities
- ❖ **Efficiently working together** - key to succeed in large projects
- ❖ **Gestalt** "the whole is greater than the sum of its parts"



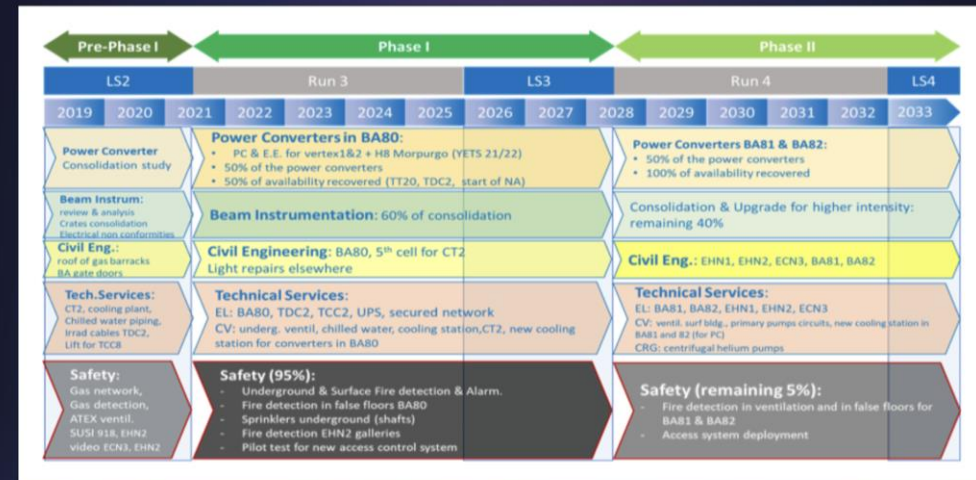
# Showcasing North Area consolidation project management and its evolution

- ❖ Extensive scope & high complexity
- ❖ Coordination
- ❖ Tools: EVM, PLAN, MS Office

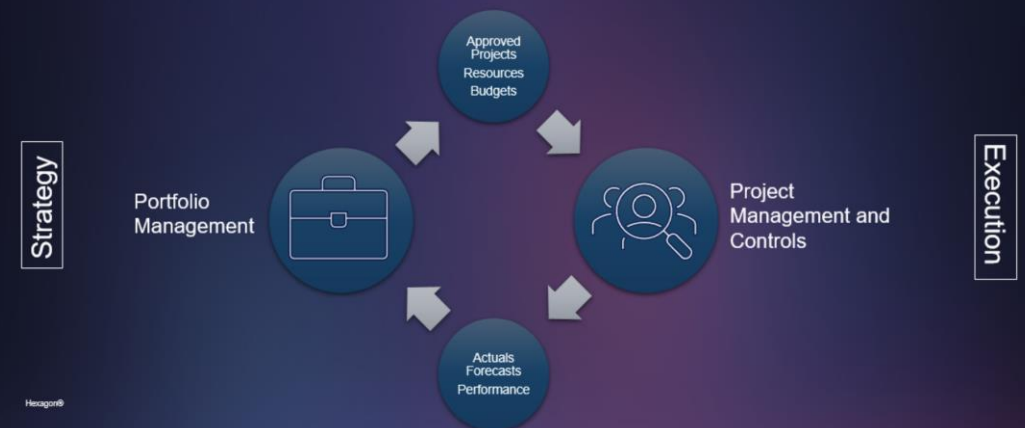
## Way Forward

- Enhanced PM by an integrated solution
- Opportunity – EVM replacement initiative

## NA-CONS Roadmap



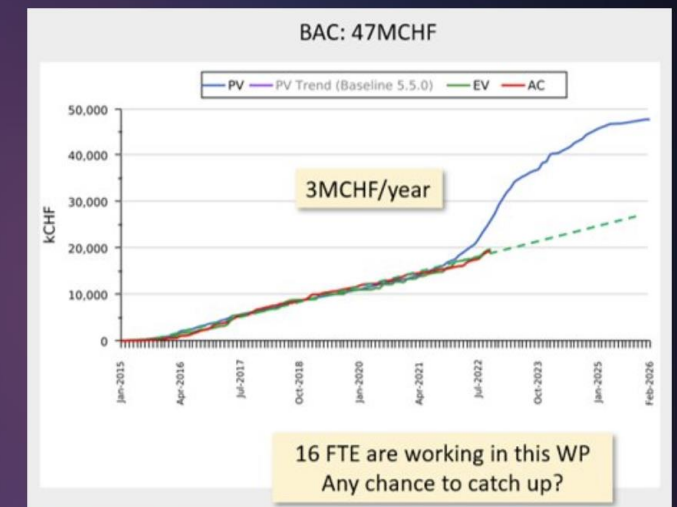
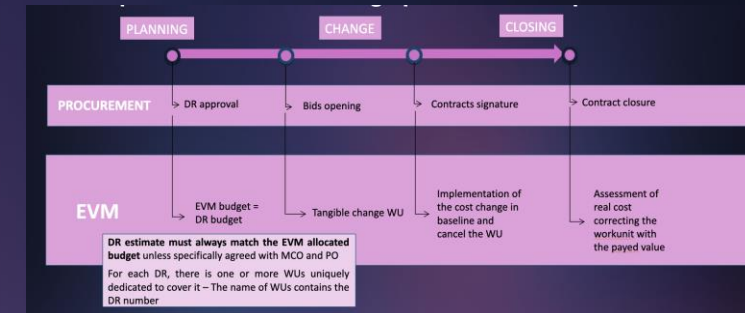
## Enterprise Project Performance



# Tracking budget, procurement and risk for High Luminosity LHC

## EVM:

- ❖ **essential** in planning, monitoring, management of change and activities close out
- ❖ **effective** in analyzing and reporting – anticipating problems
- ❖ **Cons:**
  - ❖ requires **good input data**. **Correcting** - time and resource consuming
  - ❖ EVM & CET link is not optimised: laborious manual process
  - ❖ Strong WPs and the MCO team collaboration to ensure **effective operation and accurate results**.



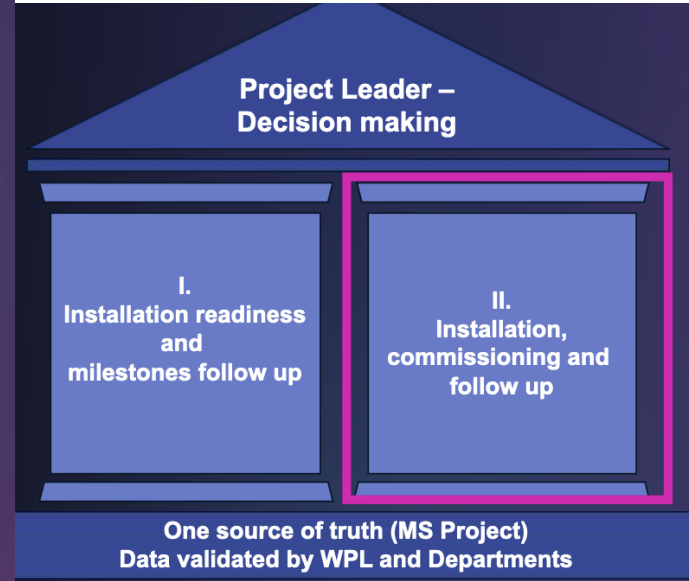
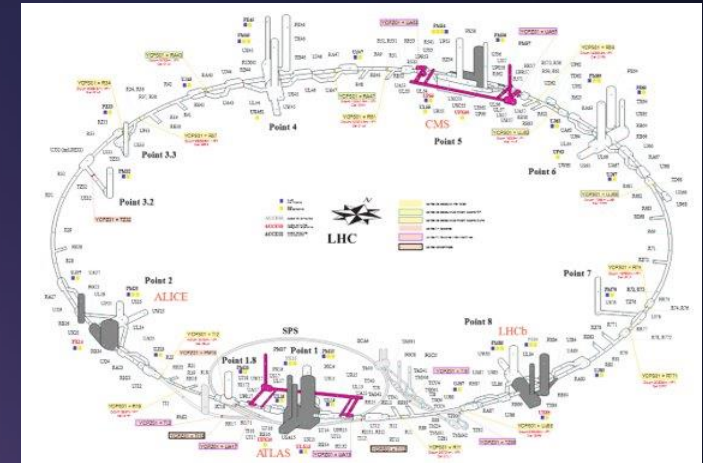
# Coordinating the High Luminosity LHC project

- ❖ **Sophisticated** integration of systems, equipment, and services within the **LHC**
- ❖ Significant **step forward** for the LHC coordination
- ❖ **Reliable methodology** and **specialized tools** for large-scale scientific projects

## Lessons learnt from Long Shutdowns

Expertise, flexibility, accountability and communication

*Together is better.*





# Summary of Project Management Methodologies and Tools, part 1

- ❖ **Large projects - key to success**  
system optimisation, effective coordination, team collaboration
- ❖ **Methodology and Tools** available (EVM, PLAN and MS Office)
  - EVM planned to be discontinued – opportunity for an integrated tool
  - Quality of data impacts the quality of decisions

**Gestalt** *"the whole is greater than the sum of its parts"*