East Area Renovation Project

EATM Status Report

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Worksite news

• The B.157 civil engineering works are completed
• Cloud has successfully completed its run in 2019
• The dismantling activities are over, except the CLOUD area in progress
• Re-installation has started
  • Dump F6D and F61 beam line on-going
  • Primary area & shielding walls
  • B251 false-floor and service installation
Worksite news: Primary area

today

Courtesy of A. Ebn Rahmoun
Worksite news: B.352

- Dump F6D installed
- TE/MSC Magnets installation ongoing
- All support are installed
- CR-200(13), QFL(21), QFS(30), installed
- Bending magnet waiting for installation @b157
- Preparation of last magnets ongoing
- Q74L rescheduling done
- Needed to close vacuum sector of PS
- Installation fence door before end of February, DSO test
- EN/CV, installation of water pipe for the magnets, done

Courtesy of A. Ebn Rahmoun
Worksite news: B.251

Current situation

Courtesy of G. Dogru
Safety issue: B.157 ground loads

• Meetings held every two weeks with all stakeholders
• Good progress of SMB studies
• 2 concepts for HSE approval: Validation (compliance to standards, new installation) and Authorization (safe, existing installation)
• approval points (jointly agreed by SMB & HSE):
  • Check the assumptions of the model
  • Get the worst case model
  • Get the test results of the samples (report needed)
  • If available check the geotechnical data (original reports)
  • Safety factors on materials and loads
• Concrete beam design completed
• Follow-up (and final ?) meeting on Feb. 4th.

Courtesy of L-F Andre
Schedule

- Slight delay on Cloud facility modifications
- Challenging for EN/EL involved in 3 buildings at the same time in the coming weeks → close monitoring

Courtesy of B. Rae
Critical items: Magnets

- All refurbished magnets are ready for installation (MCB, …)
- Manufacture of new laminated magnets in full swing
- Delays on Q74 (required to close vacuum in PS ring)
- Delays on Q120C (primary area, late readiness)

Q74  Q120C

Courtesy of R. Lopez
Critical items: Magnets

- Within schedule for Q100L - Q200L
- Within schedule for M100L – M200L

Courtesy of R. Lopez
Optimization of magnet installation/removal

Access to below and magnet connection easier

Cast iron shielding reconfiguration to access the below

Target Zone

Mixed Zone

300 mm
Optimization of magnet installation/removal

Intervention simulations by Virtual Reality

Big Thank to F. Soriano de EN-ACE!
Optimization of magnet installation/removal

Intervention simulations by Virtual Reality
CSR 3 outcome

- **Major progress** has been made since the last review, with only minor delays, mainly due to co-activities.
- The review committee **congratulates the team** for the work accomplished.
- The review panel recommends to **implement a formal risk register** with a quantitative estimate (schedule and cost) of the remaining activities. **Mitigation actions** shall be studied to be ready for a prompt implementation.
- In order to minimise the risk of delay for the availability for operation, the review panel also recommends to **detail further the individual system tests, the commissioning**, and the availability of resources and to align the beam commissioning with the LS2 master schedule.
- The review panel **warmly welcomes and congratulates the initiative** to obtain and secure incentives and revenues to cover project overcost.
- The estimated Material CtC for the project is 25.9 MCHF against an available budget of 24.6 MCHF. An expected 1.3 MCHF of revenues and incentives from OFEN and OCEN need still to be secured and formally implemented.
- Out-of-scope activities represent an additional 1.4 MCHF due to the missing air cooling, of infrastructure and components in building 251.
- The review panel recommends to include these activities in the scope and increase the budget accordingly by an overall amount of 2.7 MCHF.
**Budget**

(Situation on January 7\(^{th}\), 2020)

**Material Budget**

in kCHF 24,631

- **Changes:** CtC+267k
  - Sales: +174k
  - CVI 2020: +93k
  - 83 % committed
  - 54 % charged

**East Area Renovation Material Expenses**

- Charges
- Commitments
- MTP budget

![Graph showing budget usage and not committed by year](image_url)

**Courtesy of E. Delachenal**
Conclusions

• The project has made very good progress in the last 6 months with only minor delays, mainly due to co-activities

• The issue on B.157 admissible ground loads is being solved

• Next important step is to detail further the individual system tests & the commissioning phase and secure resource accordingly

• Good feedbacks and support received from CSR3
Thank you !