

Welcome and Mandate to the committee

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Present status

1. Budget

- Supplementary budget for recovery and replacements of old components in the facility
 - ~70 oku¥
- FY 2012 budget has been determined
 - 66 oku¥ same as FY2011 (intended for ~ 6months operation)
 - we want to have 9 months operation
- Setting priority and post-poning some of the new constructions

2. 5 year review on J-PARC

- Review by MEXT on
 - Achievements
 - ~5 year mid-term plan
- Must reflect discussions at PAC
 - Additional PAC in March

Need evaluation

1. Accelerator recovery / improvements
 - Power upgrade scenario
 - Possible high power tests in the coming run period
2. Evaluation of on-going experiments and beam time allocation
 - T2K (FX)
 - Penta-quark search (K1.8)
 - KOTO (KL)
 - E15/E17 (K1.8BR)
3. 5 year mid-term plan

Quote from the last PAC

- The PAC reiterates that the two issues with the highest priority are: 1) a timely delivery of neutrino beam at the highest intensity (integrated POT) to the T2K experiment and 2) the delivery of improved slow extraction beam to the hadron hall experiments. After the observations of 6 electron-neutrino event candidates in the previous runs of T2K, the most urgent physics goal of the J-PARC is to substantiate and more accurately measure the size of θ_{13} .
- For the experiments in the hadron hall after commissioning, the priority set in the previous PAC meeting was as follows. For the K1.8 line, a pilot run for E27 and the second run of E19 with a 2GeV/c pion beam are scheduled. In addition, beam tuning for E15/E17 in the K1.8BR line and the beam extinction test led by the MTF group should be arranged. In the K0 beam line, the PAC strongly supports the calibration the CsI calorimeter by the KOTO experiment.

E15/E17

For the proposed working run plan, recognizing the particular discovery potential of E15 in kaon-nuclear physics, the PAC advises that the plan be revised such that the E15 running time is maximized as soon as it is ready for tests and physics runs. The PAC will assess the running plan of the E15 and E17 experiments in the next meeting.

Mid-term plan

accelerator

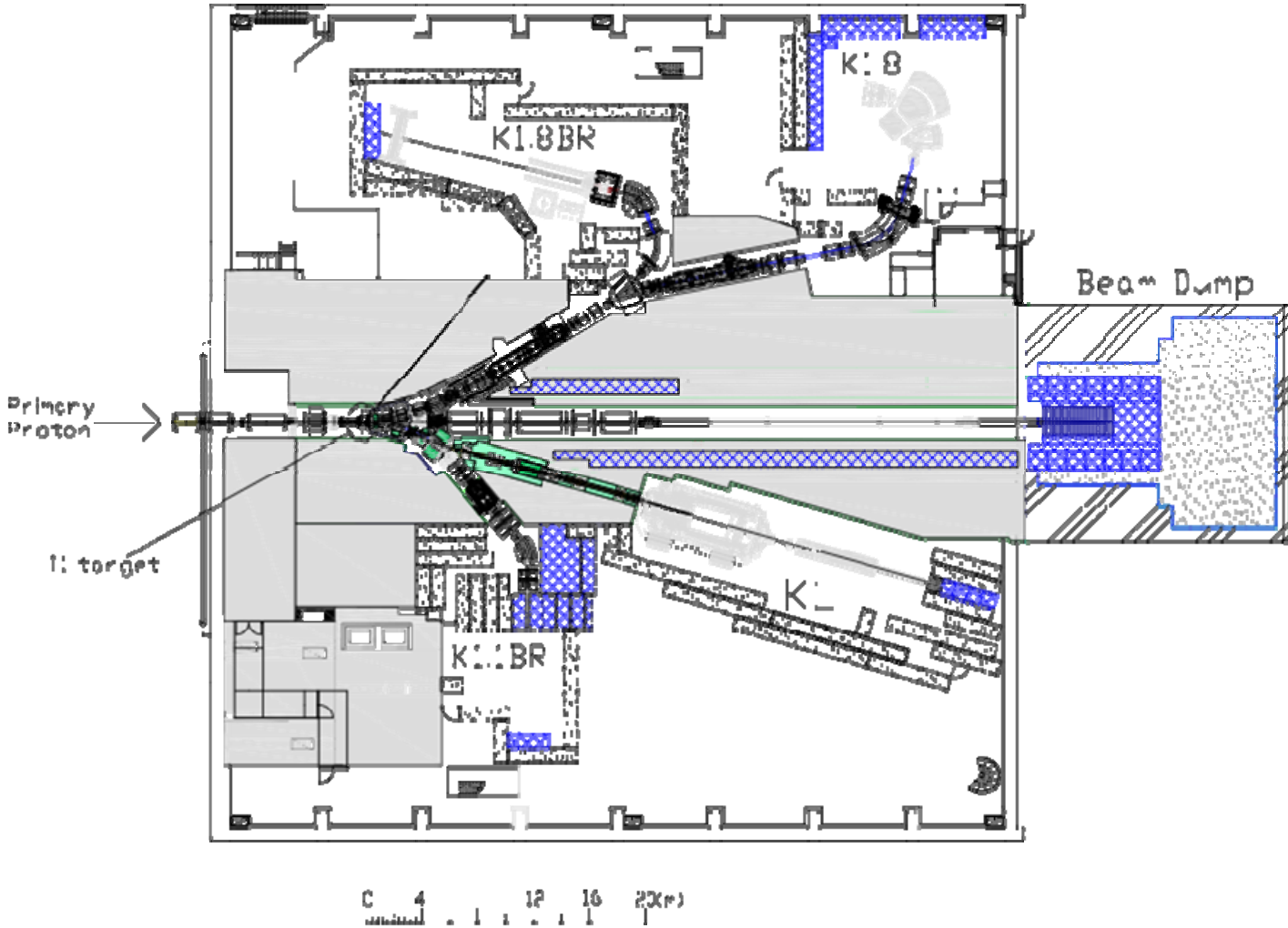
hadron hall beam-right side

hadron hall beam-left side

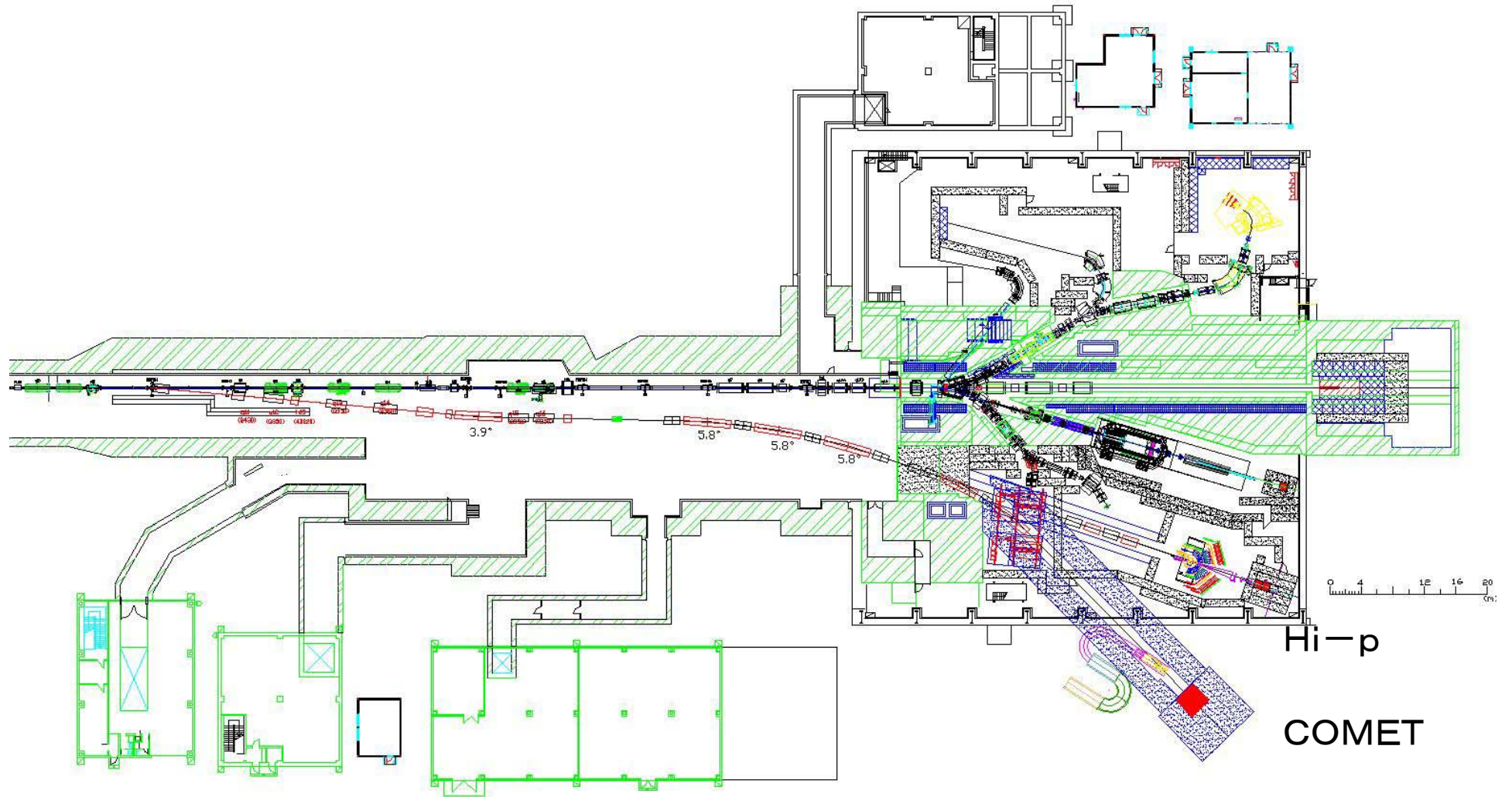
Accelerator

- Upgrade scenario of MR
 - Space charge #protons/bunch
 - Repetition rate
 - RF power
 - power supply
 - Spill structure improvement in SX
 - Item should / can be tested in coming run period

Present hadron hall beam lines



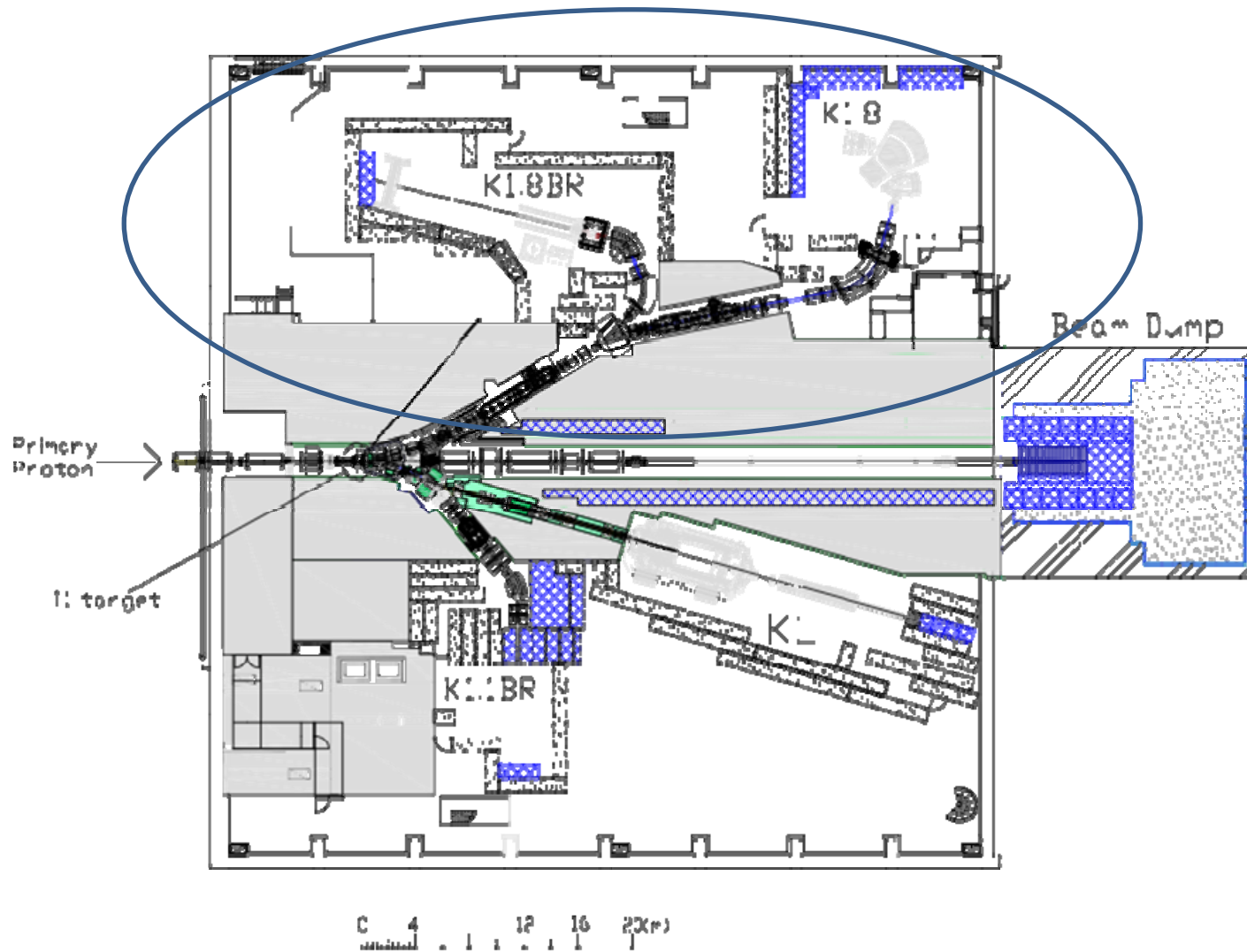
Mid-term plan of the Hadron Hall



Conflict in mid-term plan in hadron hall

1. E16 (Electron pair spectrometer to explore the chiral symmetry in QCD)
 - High P beam line
 2. E21 COMET / Report from Muon Task Force
 - Can share upstream part of beam line
 - Dee-Mee at RCS
 3. P36: Measurement of $\Gamma(K \rightarrow e \nu)/\Gamma(K \rightarrow \nu \mu)$ and Search for heavy sterile neutrinos using the TREK detector
 4. TREK
 - K1.8BR
- 1,2 and 3,4 will be mutually exclusive
 - **Physics evaluation of high-p line**
 - **K rare decay experiments**
 - **Technical feasibilities in various aspects of COMET**

Present beam lines



K1.8 planning

- E05 run plan (possible new magnet, which replace SKS)
- E13 Revised Run Plan (Gamma-ray spectroscopy of light hyper nuclei)
- E18 Status (Coincidence measurement of the weak decay of $^{12}\text{LambdaC}$) E13 Revised Run Plan (Gamma-ray spectroscopy of light hyper nuclei)
- E18 Status (Coincidence measurement of the weak decay of $^{12}\text{LambdaC}$)
- P42 Search for H-Dibaryon with a Large Acceptance Hyperon Spectrometer

- **K1.8/K1.8BR plan should be re-examined**
- **Need to be clarified in the next PAC**
- **May need home works**

Proposal seeking stage-1 approval

- g-2/edm measurement at RCS
 - physics case
 - technical soundness
- Already need non-negligible R&D money to study the feasibility
 - #muonium
 - high precision magnet
 - muon acceleration
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Need evaluations on

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 - T2K (FX)
 - Penta-quark search (K1.8)
 - KOTO (KL)
 - E15/E17 (K1.8BR)
3. New experiments in next phase