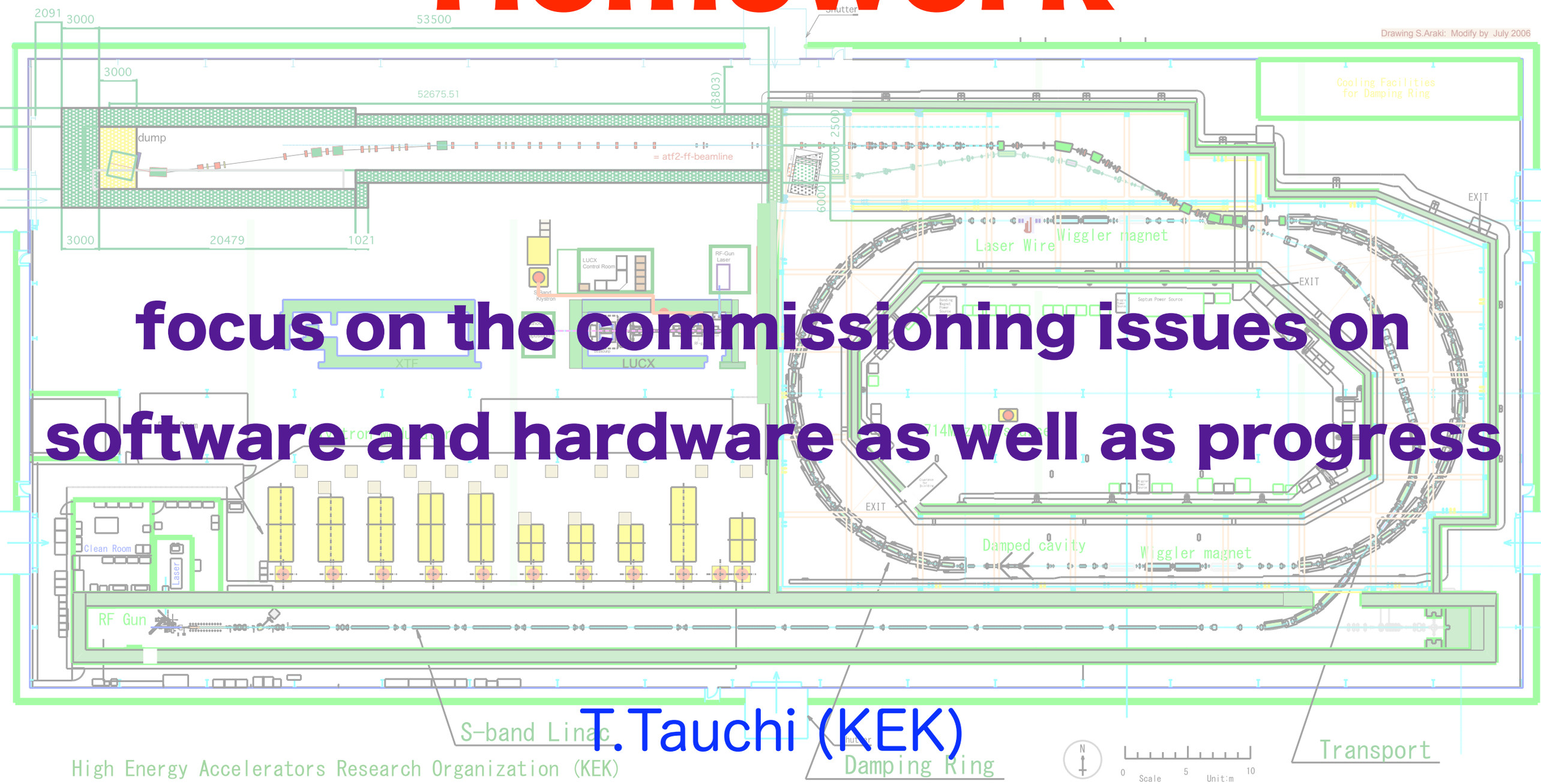
Introduction : Homework



focus on the commissioning issues on software and hardware as well as progress

T.Tauchi (KEK)

4th ATF2 Project Meeting, LCWS2007, May 31, DESY

Schedule of Installation (Tentative)

Japanese Fiscal year		JFY2007												JFY2008												
		2007												2008											2009	
Activity	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
ATF Beam operation																							ATF2 Commissionin					
Reconfiguration of extraction line		preparation					partial recons												New ext. line									
Conventional Facilities																												
detailed floor planning					bid						New floor constructed																	
re-location/ site preparation		X-band, Crab																										
floor refurbishment							Floor																					
construction of extended area											side wall and roof																	
utilities; water, AC power													cable, pipe															
construction at ATF-EXT		clean-u		partial constrruction															reconfiguratio									
laser huts for BSM and LW													BSM				LW											
Installation																												
beam dump											DMP																	
magnets & supports & vacuum pipes								magne			magnets									magnets								
cooling pipes																												
cable tray installation											c. tray										c.tray							
large DC cable installation												power cables									p.cable							
small cable installation														cables							cables							
power supply system															PS													
new stable FD system															FD													
Shintake monitor with IPBPM													BSM															
Laser wire															light path				1 LW , detector									
wire scanners, screen mon. etc.															wire scanners, screen monito													

Hardware preparation

(1) 2006

Q magnets (4 in 2006, 24 in 2005, 28 in total); 27 to be used

Support-concrete bases;

type : 1(Q+Qk+ZV),2A(Q+ZH), 2B(Q+ZV),3(Q+Sx+Q) and 4(Q)

no. : 3, 3, 1, 3 and 14 ,respectively ; so 24 in total

QBPMs (28 in 2006, 11 in 2005, 39 in total) - 33 to be used

HA power supply system

(2) 2007-2008

Conventional facility (including beam dump)

Bending(3), sextupole(5), skew(2?) and steering(5) magnets

QC3 (2) modification for QC0,QF1

S-band BPMs (4)

IPBPM with Shintake monitor

Rigid supports(FD system, Shintake monitor)

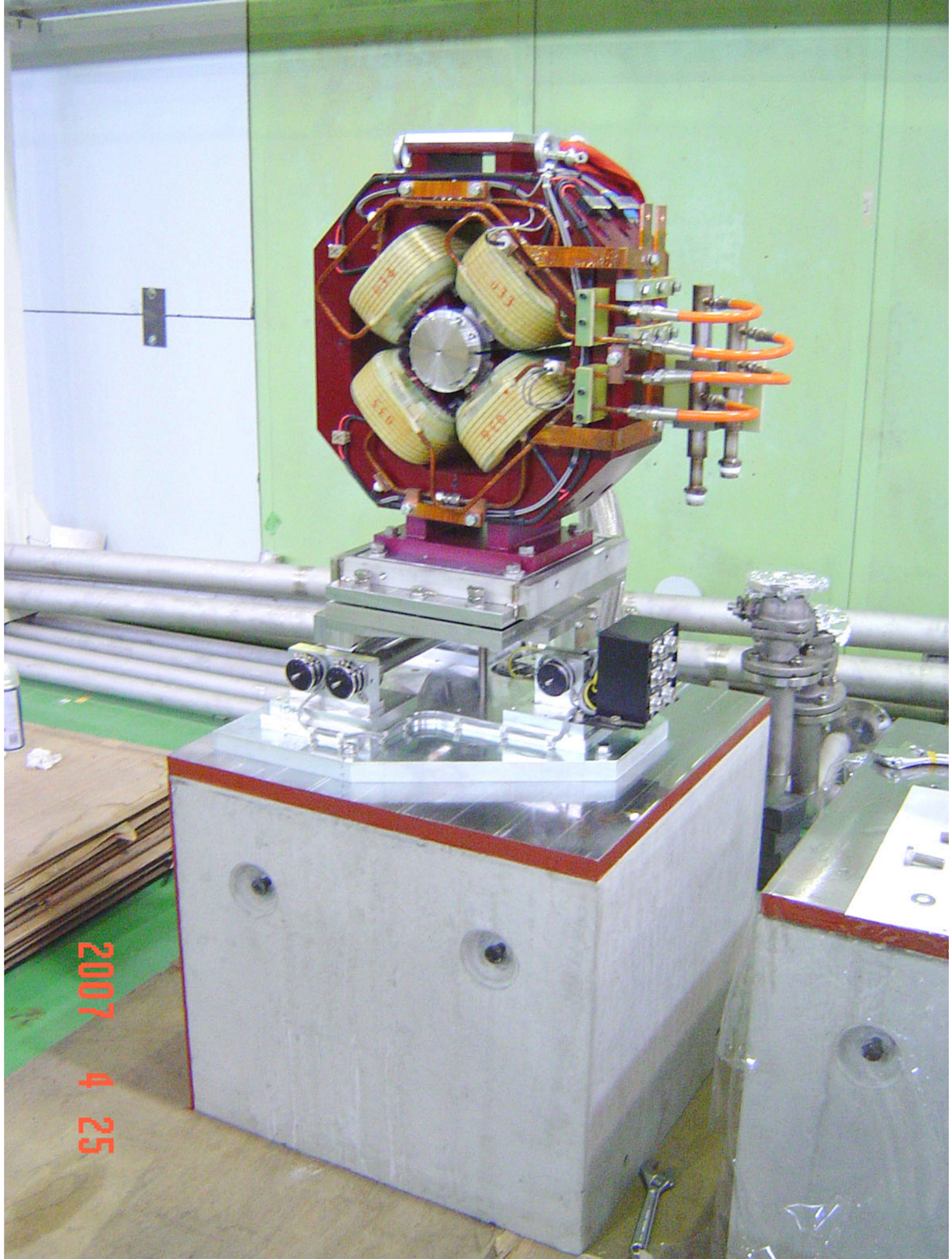
Honda monitor, FONT, feedforward, laserwire, Monalisa etc.


Agilent Technologies

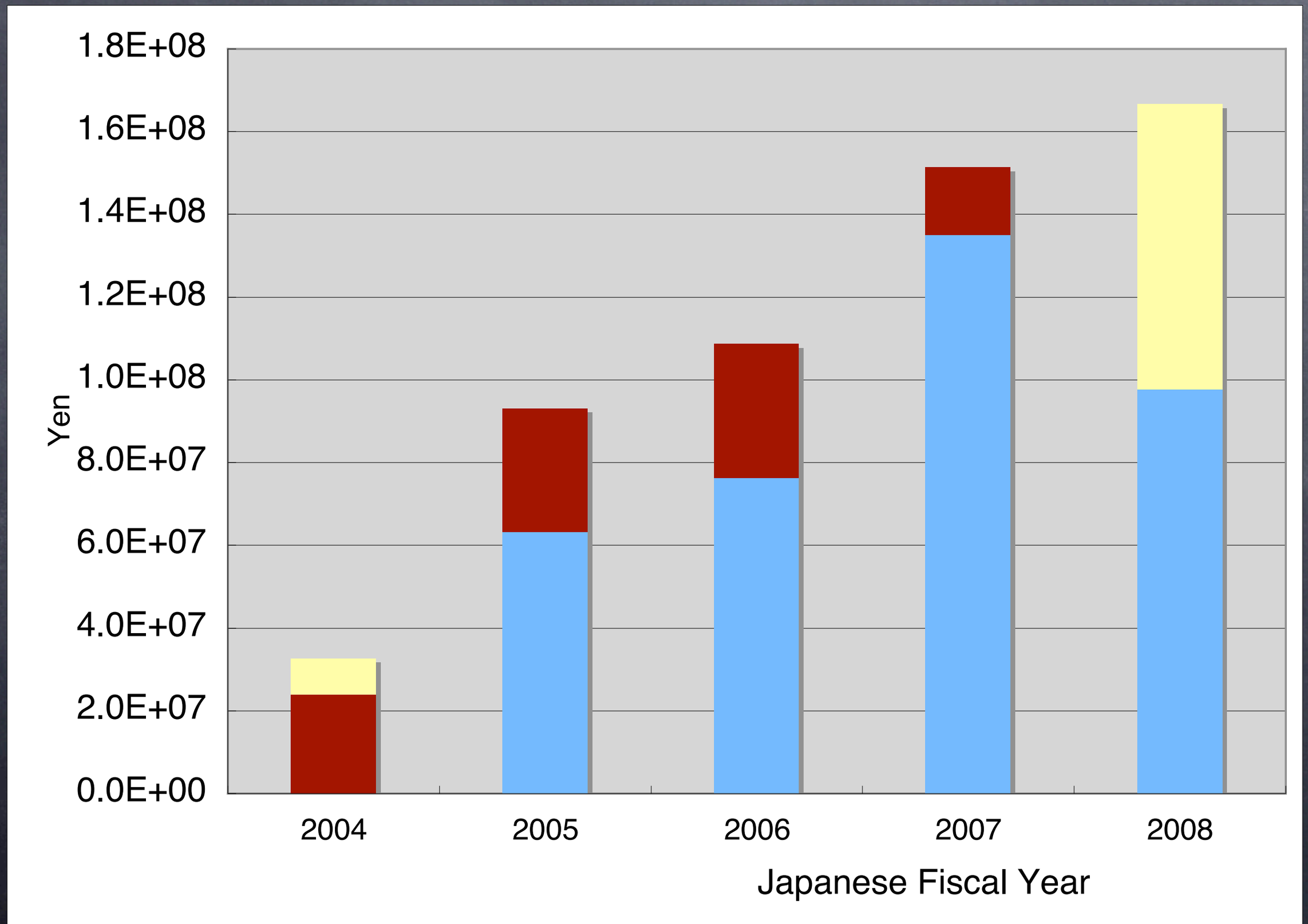
QEA magnet system
Build up trial

April 24th, 2007

Magnet
|
Position adjuster
|
Mover
|
Concrete base block



Budget Profile



Conventional Facilities and Construction Schedule

(1) Floor refurbishment:
bid 22 May, construction 18 June - 30 September

(2) Re-configuration of extraction line
in summer shutdown in 2008

(3) Major components will be installed by end of January 2008 in order to prepare the official inspection as a radiation controlled facility and to prepare heavy work at the reconfiguration in Summer 2008.

(4) Commissioning in October 2008


Clean up soon
24th May, 2007

Optics and Commissioning

(1) Update of the device list, M.Woodley

(2) Relocation of kicker power supplies, N.Terunuma

(3) One more sextupole(FFTB “1.38S3.00”) ?
First optimize the skew Qs, then decision.
Study on roll errors of sextupoles, G.Whilte

(4) Two skew quadrupoles for coupling correction
Locations of 6 skews in total ?

(5) Septum: alignment and feasibility study, S. Kuroda
Field cal., perfomance studies, SLAC

(6) IP detailed configuration, T.Okugi

(7) Dynamic tuning with ATF-GM, G.White

(8) Carbon wire scanner, D. McCormick
- under negatiation with LCLS group

(9) New GM measurement on floor and new quad-bpm-suppor in summer shutdown, A. Seryi

(10) Task force on “abnormal emittance growth”, S.Kuroda ,F.Zimmermann, P.Bambade, A.Seryi

(11) Nomenclature of ATF/ATF2 magnets, S.Kuroda

FD support

(1) Stiff table with no resonance < 50Hz, LAVISta/LAPP

(2) Rigid support of Shintake monitor, KEK

(3) A measurement of Shintake monitor displacement with respect to the final doublet by Compact Straightness Monitor(CSM), MONALISA, D.Urner

This proposal was reviewed at 4th TB/SGC meeting.

Hardware commissioning

- Magnet, Mover and Power supply

(1) Two QC3 modification with shimming for 50mm aperture by this September. These magnets can be sent to LAPP for stabilization study. SLAC

(2) Five sextupoles by end of 2007, SLAC

(3) HA power supply system to be delivered to KEK late January – early February 2008

- Instrumentation

(1) FONT will demonstrate 1-d FB in ATF, 2007

(2) Laserwire : staged approach; (a) 3-angle scans possibly with integrated wire scanner, (b) micron-scale system and (c) BPM integrated system

(3) NanoBPM : beam test for the first pulse calibration scheme, May 2007

(4) IPBPM : R&Ds until December 2007

(5) Shintake monitor : pulsed high power laser test and gamma detector, University of Tokyo

(6) Honda monitor : responsibility, KEK?

(7) S-band BPMs : responsibility, RHUL, KNU

- Re-location of laserwire, nano-BPM (SLAC/LLNL), IPBPM and FONT

(1) The beam optics by each group

(2) Space clearance including girders

(3) Procedure to move the devices.

Summary

At this meeting, we would like to focus on commissioning strategy and hardware such as configuration, installation and schedule for coordination among them as wel as progress reports.

The R&D status (progress reports) will be presented at LCWS/ILC2007, too.