

Status of J-PARC Project

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Director of J-PARC Center at KEK/JAEA

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Highlights during the Past One Year

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 - Peak in the construction budget in JFY2006 (good news to us).
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- An external review on the operational budget.
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- Birth of JAEA on October 1, 2005.
- Shutdown of KEK-PS from JFY2006.
- First call for proposals for 50 GeV. Three proposals out of 20 were on the Stage 2 full approval.
- J-PARC Major Review started.

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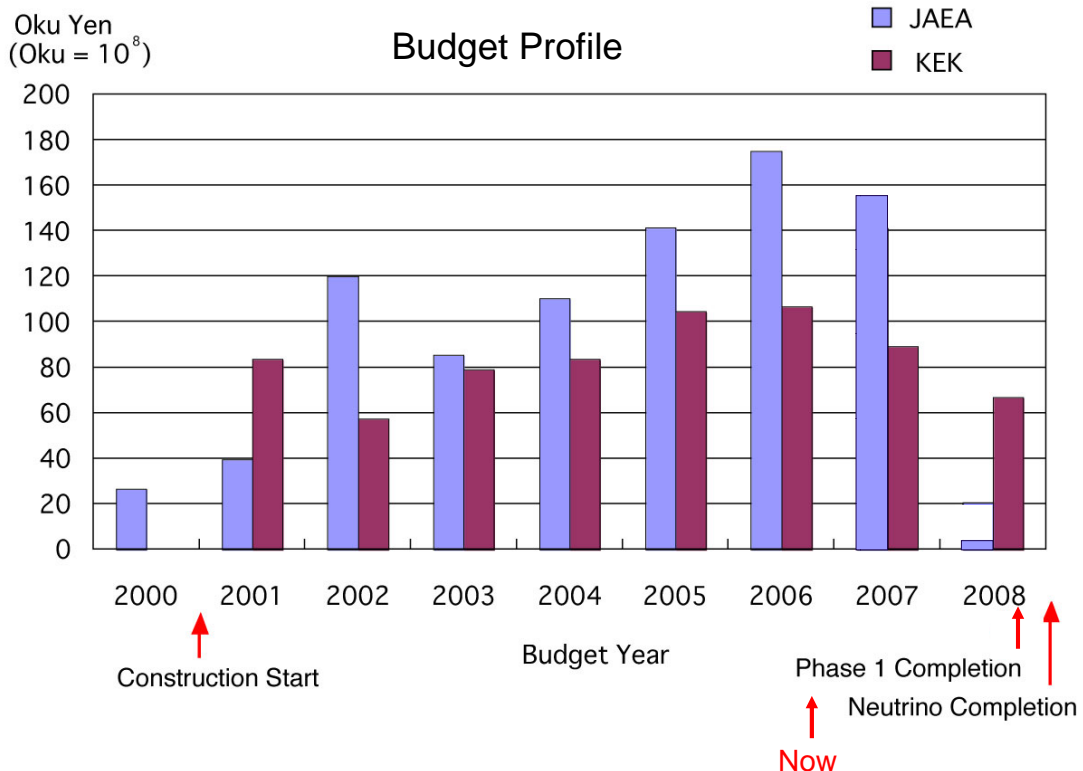
Budget Request for JFY2007



	JFY2006	JFY2007 Team→ MEXT	JFY2007 MEXT→ Financial Dept.	JFY2007 Final Answer
[JAEA]				
Construction	174	160	160	154.5
Neutron Equipment	7	7	7	0
Operational	10	26	26	21.5
[KEK]				
Construction (Equipment)	42.3	48.5	48.5	48.5
Construction (Civil Eng.)	64.3	40.6	40.6	40.6
Operational	33.4	68.5	68.5	43.0

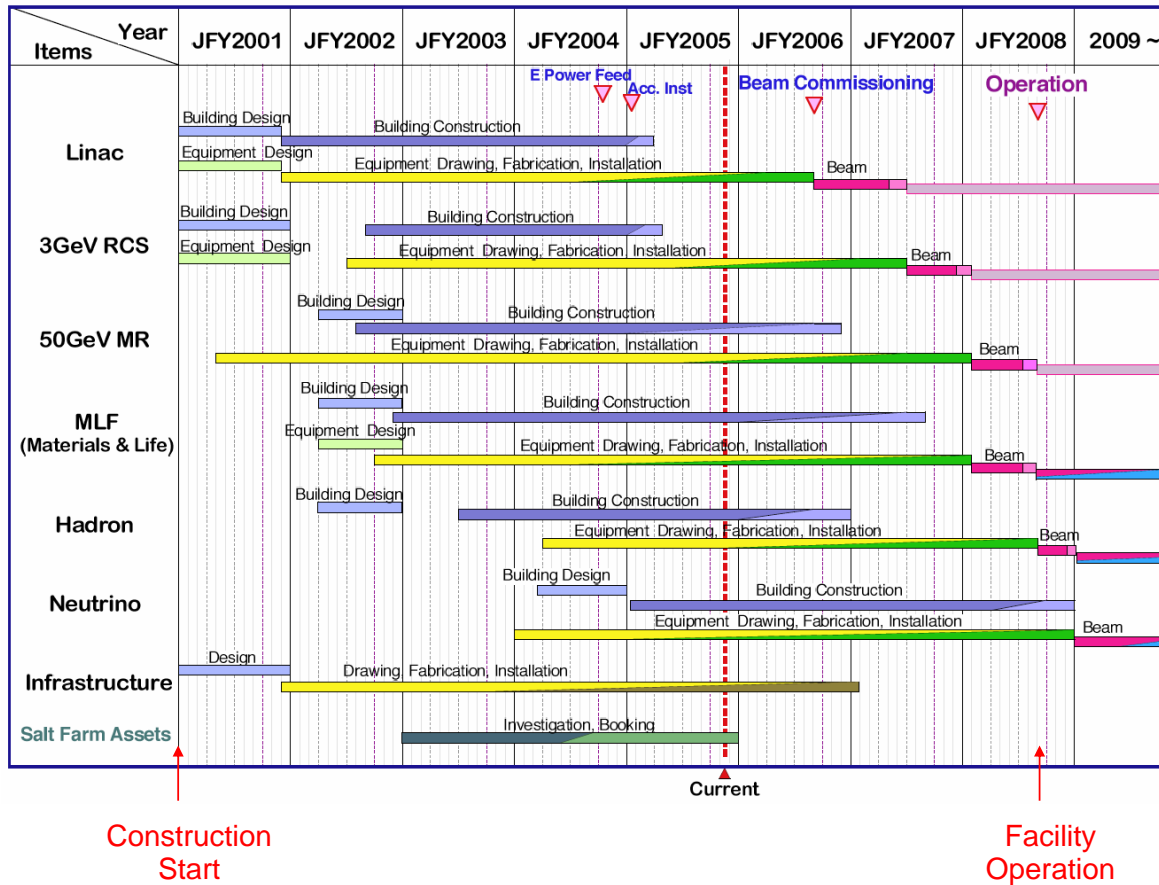
- All the requests to the Government are subject to the review of Council for Science and Technology Policy (CSTP)
 - J-PARC was ranked to "A".

Construction Budget



J-PARC Construction Schedule

Feb. 27 2006



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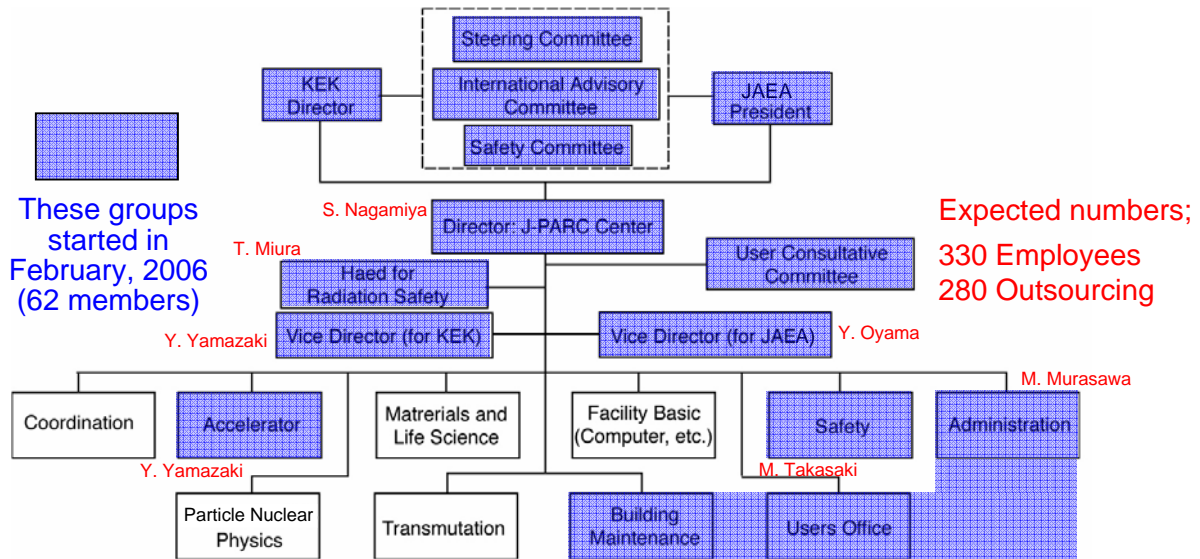
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J-PARC Center (Organization for Operation)

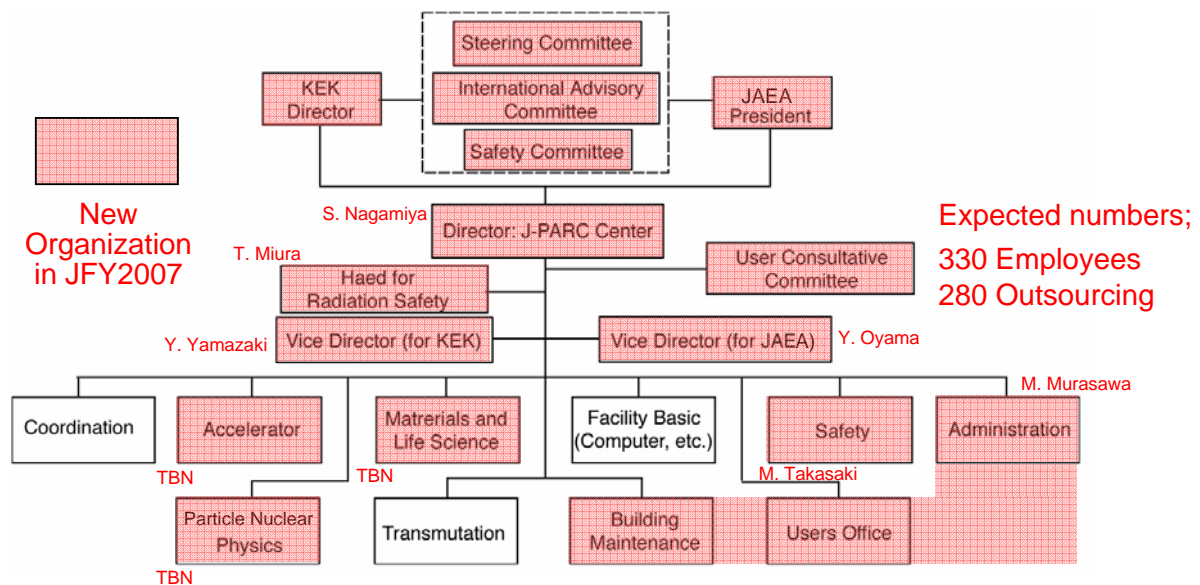


J-PARC Center: To operate the entire J-PARC by one responsible organization.
[Construction team: Two institutions carry full responsibilities for funded items.]

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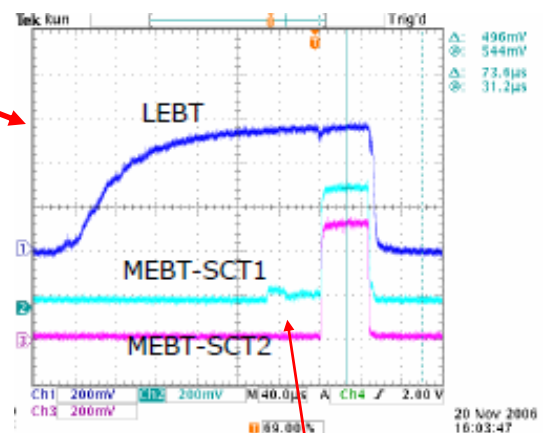
Examples of Recent Actions

- J-PARC Center Expansion
 - Expansion of the J-PARC Center is planned next year.
 - Discussions are in progress at many places on how to grow the J-PARC Center.
- Beamtime Fee
 - Free when the research results are published. Fee is charged when the results are kept confidential (mostly for industrial usage).
 - J-PARC Center is making efforts along this line to convince JAEA, KEK, and the Government.
- Radiation Safety
 - J-PARC Center is responsible to it. It took, however, long time to obtain a consensus from JAEA, KEK, and the Government.
- Contract with the Third Party
 - For example, the Ibaraki-Prefecture will contract with the J-PARC Center instead of JAEA and KEK individually. The arrangement of the contract with a third party is now conducted by the J-PARC Center.

To obtain all these small agreements, an enormous amount of our time has been used.

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- At the beginning of October, the Linac area was closed for radiation safety.
 - First beam injection through RFQ on November 20th of 2006.
 - Successful operation up to 50 MeV on December 20th of 2006 through DTL1, DTL2 and DTL3.

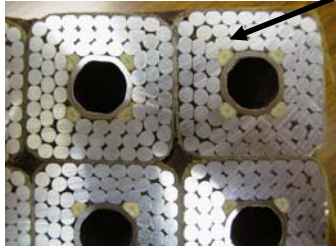


- RF (Finemet)
 - Problems due to electric shortage seem to be solved now.
- Ceramic Beam Pipes
 - Significant problems in 2005, but most of the problems are now solved.

Examples of New Inventions at J-PARC

New wires strong for rapid cycle current change

Ceramic vacuum pipe



■ Magnetic alloy (Finemet)



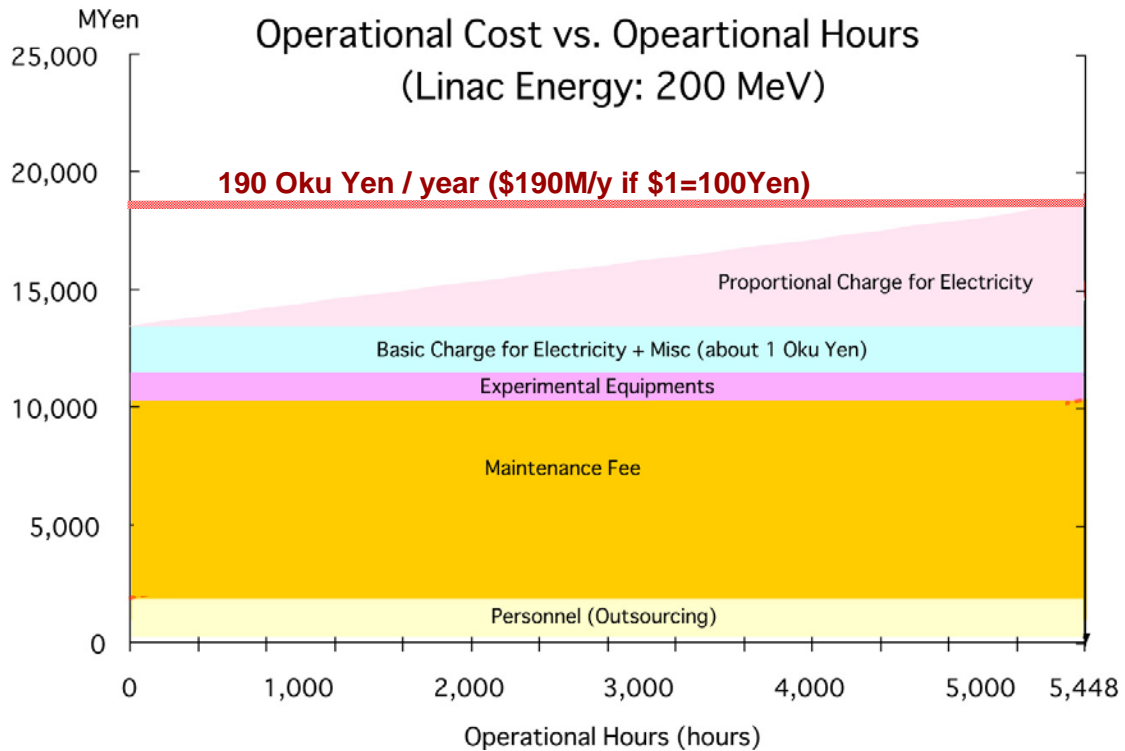
High Field gradient

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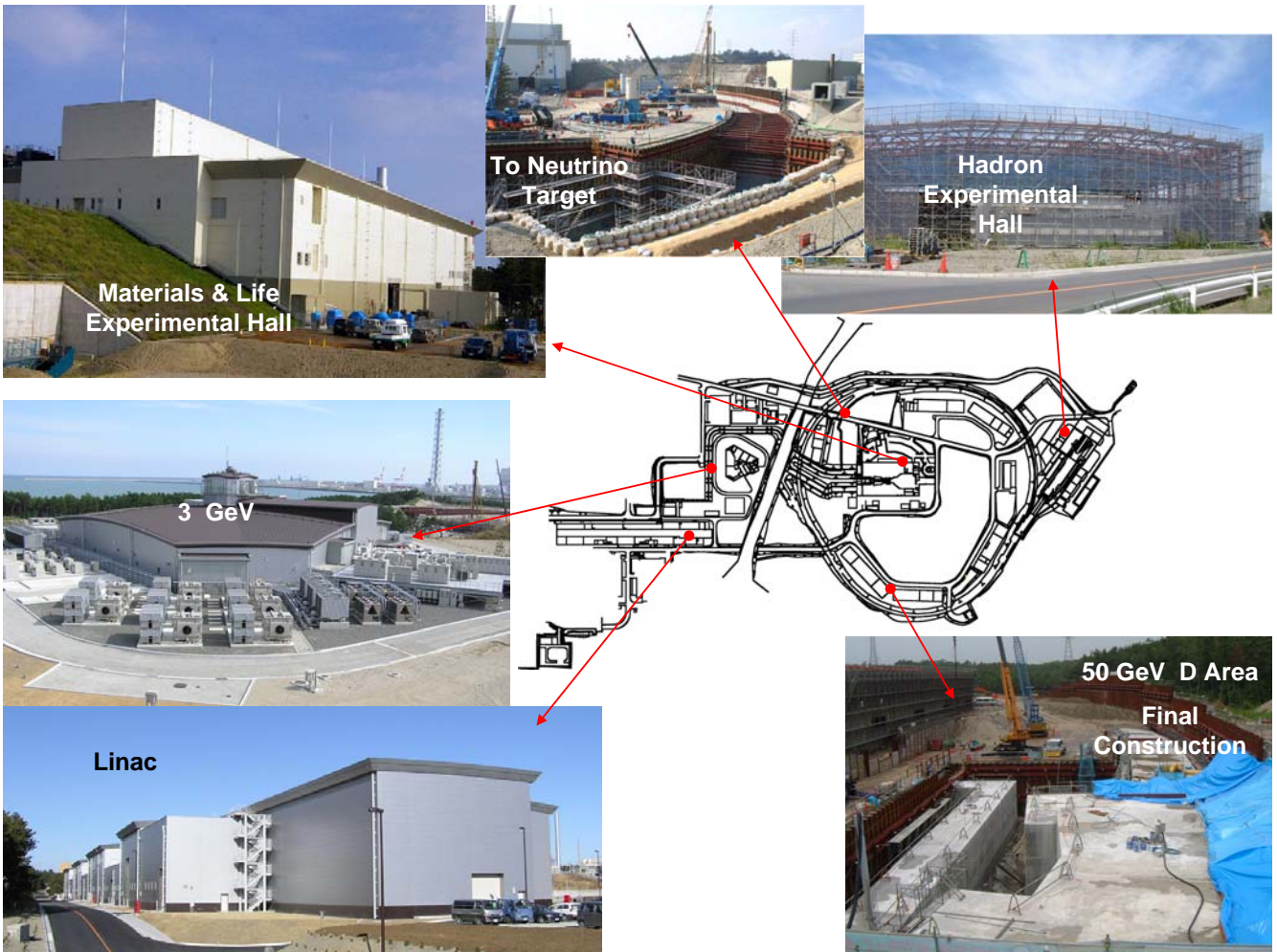
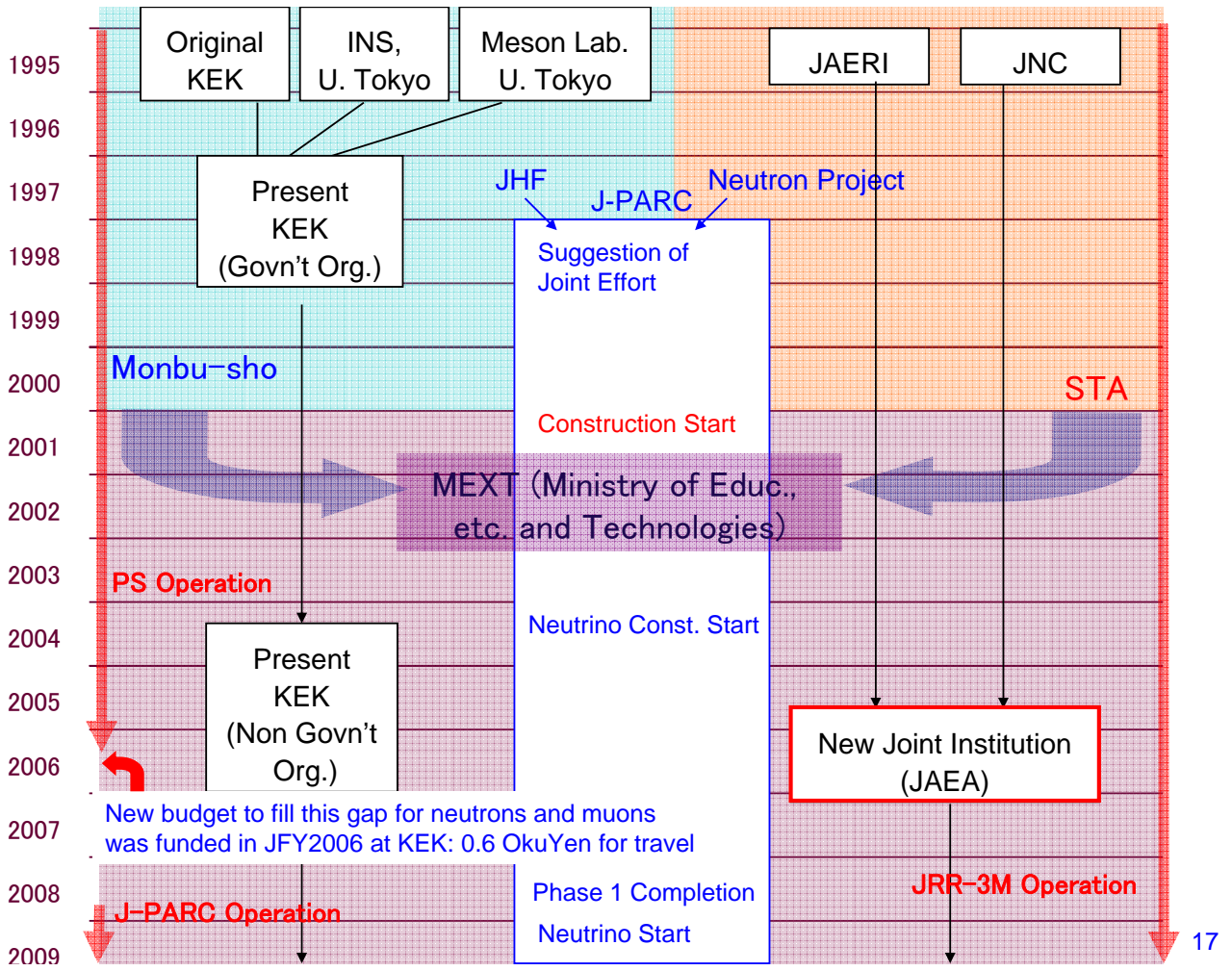
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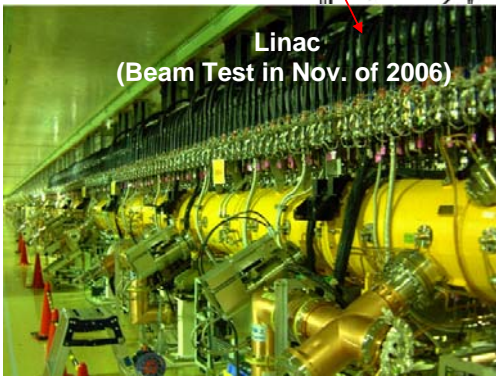
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Over 70% Completed

Linac beam injection in Nov. of 2006





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50 GeV PAC

- Nuclear and Particle Physics
 - PAC meeting: June 30 - July 2, 2006. The results was sent first to the Director of IPNS at KEK and then to the J-PARC Director.
 - The J-PARC Director informed the results to individual experimental groups.
 - 20 proposals were discussed. Two proposals for slow-extracted beams and one proposal for fast-extracted beams obtained full approval.

P05	T.Nagae	KEK	Spectroscopic Study of Ξ -Hyper nucleus, ^{12}Be , via the $^{12}\text{C}(K^-, K^+)$ Reaction	Stage 2
P11	K.Nishikawa	KEK	Tokai-to-Kamioka (T2K) Long Baseline Neutrino Oscillation Experimental Proposal	Stage 2
P13	T.Tamura	Tohoku U.	Gamma-ray spectroscopy of light hypernuclei	Stage 2

- Technical reviews were requested to the neutrino experiment.
- The next PAC meeting will be held in early January of 2007.

- A big review by the Committee (appointed by the Government) started in early December of 2006..
 - Review items
 - Linac Energy Recovery, Priority of Phase 2 projects
 - Organizational Structure at the Operational Stage (J-PARC Center)
 - Operational Budget
 - PAC, Beam-Time Fee, Commitment by the Government for Neutron Beam Lines
 - Internationalization of the J-PARC
 - Research Buildings, Lodging, etc.
 - Meeting: Once per three weeks, from early December through May.
 - The report will be produced to meet with the budget deadline for JFY2008.

- Timely completion of the construction.
- How to grow the organizational structure at the operational stage (J-PARC Center)?
- Realistic operational budget.
- PAC (time and place), Budget for experimental facilities, Beamtime Fee, etc.
- Linac energy recovery, Phase 2 funding, etc.
 - Funding of 85 Oku Yen has to be secured for the Linac energy recovery.
- Internationalization of the J-PARC Project.
 - Research support (internationalization of the infra structure).
 - Internationalization of the environment for lodging, life, etc.
 - Discussions with Asian countries.