

*- Asian Single Tunnel Design Review –*

# **A Review on Design Study of the ILC Conventional Facility in Mountain Region**

## **Review Organization and Requirements**

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(KEK: ILC-GDE and AAA)

To be presented at the Asian Single Tunnel Design Review  
held at KEK, June 1 – 2, 2010 (updated)

# Outline

- Objectives
- Organization
- Review Committee
- Agenda
- Summary
  - Tasks and Reports asked to the Committee

# Review Management

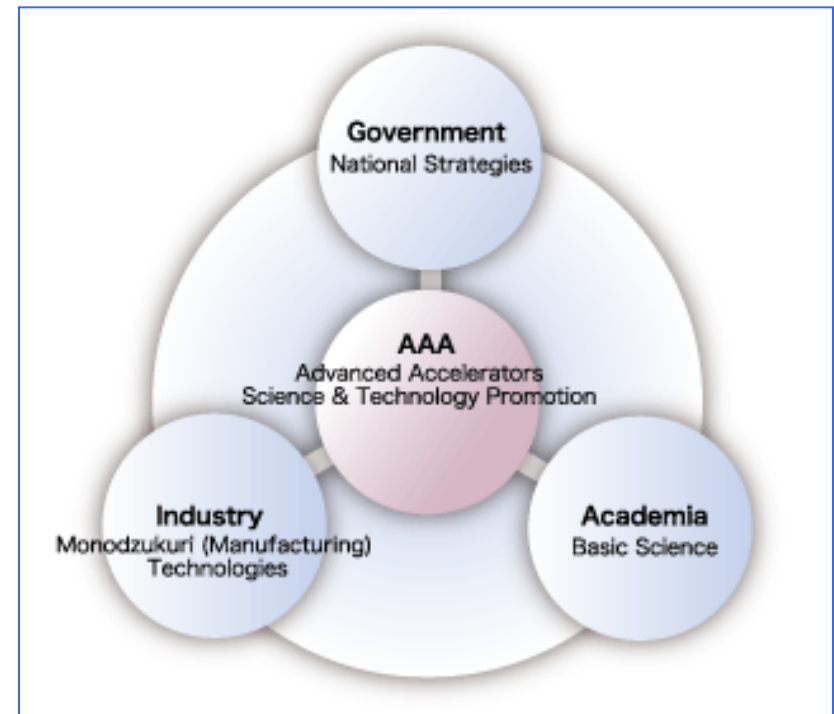
- A joint effort with ILC GDE CFS/GS and KEK LC Office led by
  - Marc Ross (Project Manager of ILC-GDE CFS/GS)
  - Seiya Yamaguchi (Head of KEK LC Office)
- The review results and recommendations are expected to be reported to both responsible persons

# Objectives

- To review and discuss:
  - **Conceptual design** of the ILC Conventional Facility (CF) in mountain regions in cooperation of **KEK-LC-CFS Group** and **AAA Conventional Facility Working Group (AAA-CF-WG)**
  - **Consistency** with the ILC-GDE CFS design guideline for SB2009 and TDP-2 R&D Plan
  - **Work-package plan** for conventional facility design to be executed at KEK since JFY2010.

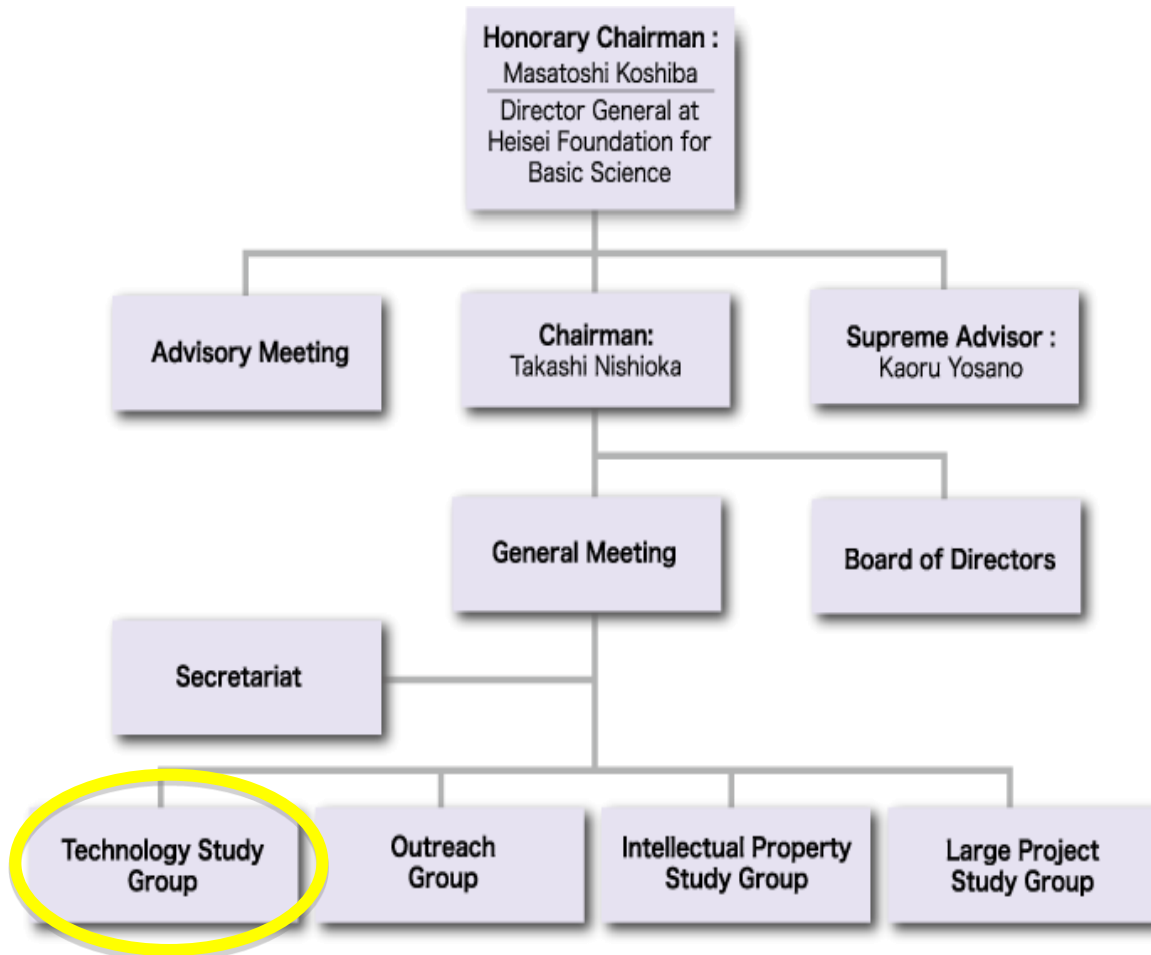
# AAA: Advance Accelerator Association

- Promote science and technology with joint effort with **Industries-Government-Academia cooperation**,
- Seek for and **create industrial applications** of advanced accelerator technologies, in such fields of
  - Advanced material, biotechnology, medical use, and various innovative applications



Established in 2008

# Organization and Activities



## Group Activities:

■ Technologies

■ Outreach

■ Intellectual Properties

■ Large Projects

# Conventional Facility WG

WG	#	Dates	Subjects
CF	WG1	08-10-08	WG Study subject discussed
	WG2	08-11-14	SNS, BNL, FNAL visiting and their reports
	WG3	09-01-16	Civil engineering, conventional facility subjects
	WG4	09-05-13	Study
	WG5	09-09-10	Study of mountain region (started
	WG6	09-10-23	Study
	WG7	09-11-30	Study
	WG8	10-02-01	Study and report.
	WG9	10-04-15	Report

Outlook from CF WG (report/recommendation) :  
**“Tunneling and CF design in mountain regions”**

# Review Committee

- **Review Chair:** Victor R. Kuchler (GDE-CFS: FNAL)
- **Reviewers:**
  - John A. Osborne (GDE-CFS: CERN)
  - Thomas W. Lackowski (GDE-CFS: FNAL)
  - Larry L. Hammond (GDE-CFS: FNAL)
  - Randal J. Wielgos (GDE-CFS: FNAL)
  - Tracy Lundin (Hanson Professional Service Inc.)
  - Wilhelm Bialowons (GDE-CFS/GS-APM: DESY)
  - Tomoki Shiotani (Kyoto U.)
  - Takafumi Seiki (Utsunomiya U.)
  - Hideaki Yasuhara (Ehime U.)
  - Satoru Yamashita (U. Tokyo)
- **Observer** Tomofumi Koyama (Kyoto U.)
- **Assistant/Secretary:** Akira Yamamoto (GDE/KEK/AAA)



# Agenda: June 1

08:30 Review Committee Closed session (30')

09:00 Welcome Address (15')

09:15 Review Work Requirements (15')

09:30 Introduction for CF Work in Mountain Regions (30')

10:00 Coffee Break (30')

10:30 Conceptual Design Study - CF Concepts in Mountain Region (30')

11:00 Conceptual Design Study - Cryomodule Requirements (30')

11:30 Conceptual Design Study - HLRF Requirements (30')

12:00 Conceptual Design Study - Cryogenic Requirements (30')

12:30 Lunch Break (1h00')

--- Working lunch with reviewers and organizer ---

13:30 Conceptual Design Work (2h00')

Working Group Manager -

K. Fukuda (AAA, SHIMIZU) )

General Civil Engineering Layout -

N. Shikama (AAA, KUMAGAI)

Accelerator Main Tunnel -

K. Ryoke (AAA, TAISEI)

Sub-Tunnel and Access -

H. Sasao (AAA, TEKKEN)

Detector Hall -

T. Akojima (AAA, KAJIMA)

Underground Water Handling -

K. Akiyoshi (AAA, OBAYASHI)

Cooling Water and Utilities -

T. Kokubo (AAA, TAKASAGO)

15:30 Coffee Break (30')

16:00 Further CF Engineering Study at KEK - Engineering Plan for TDP-2 (30')

Atsushi Enomoto (KEK)

16:30 Further CF Engineering Study at KEK - Working Plan in JFY2010 (30')

Masanobu Miyahara (KEK)

17:00 Questions and Discussion (30')

17:30 Review Committee Closed Session (30')

18:00 Reception and Dinner

--- Everyone welcome

# Agenda: June 2

- 08:30 Review Committee Closed Session (30')
- 09:00 Questions and Discussion Continued (1h00')
- 10:00 Coffee Break (30')
- 10:30 Review Committee Closed Session
  - Preliminary Report Writing (1h30')
- 12:00 Review Close-out (1h00')
- 12:30 Adjourn
- 
- 13:30 Depart for JPARC Tour

# Summary

## - Review Work Requested -

- Based on the review of:
  - Conceptual design of the ILC Conventional Facility (CF) in mountain regions in cooperation of KEK-LC-CFS Group and AAA Conventional Facility Working Group (AAA-CF-WG)
  - Consistency with the ILC-GDE CFS design guideline for SB2009 and TDP-2 R&D Plan
  - Work-package plan for conventional facility design to be executed at KEK since JFY2010.
- To evaluate and advise/recommend:
  - Technical feasibility/reality, and consistency with the GDE design guideline
  - Further work required in the CF design work with the necessary priority with limited resource and time in TDP-2

# Asian Single Tunnel Design Review

## Logistics Information

June1-2, 2010

KEK

LC Office/ GDE

# Wireless LAN Network

If your computer (MAC address) has been registered to KEK.  
Please use the access with:

SSID ... **tsubaki**

WEP ... to be given on a whiteboard in the meeting room,

Just in case, the following access is only available  
in this meeting room, during today and tomorrow:

SSID ... to be given on a whiteboard in the meeting room,  
WEP ... to be given on a whiteboard in the meeting room,

# Presentation Documents

Please prepare and upload your presentation files with the **PDF** (or **PPT**) format at the following address for the Indico Agenda site:

<http://ilcagenda.linearcollider.org/conferenceDisplay.py?confId=4613>

or

please accept the review scientific secretary/assistant to collect your presentation files before (or after, just in case) your presentations.

# Reception and Dinner (懇親会)

Everyone welcome to joint a Reception and Dinner right after the session, today (June 1):

Place; KEK Restaurant,

Time: 18:00 ~ 20:00

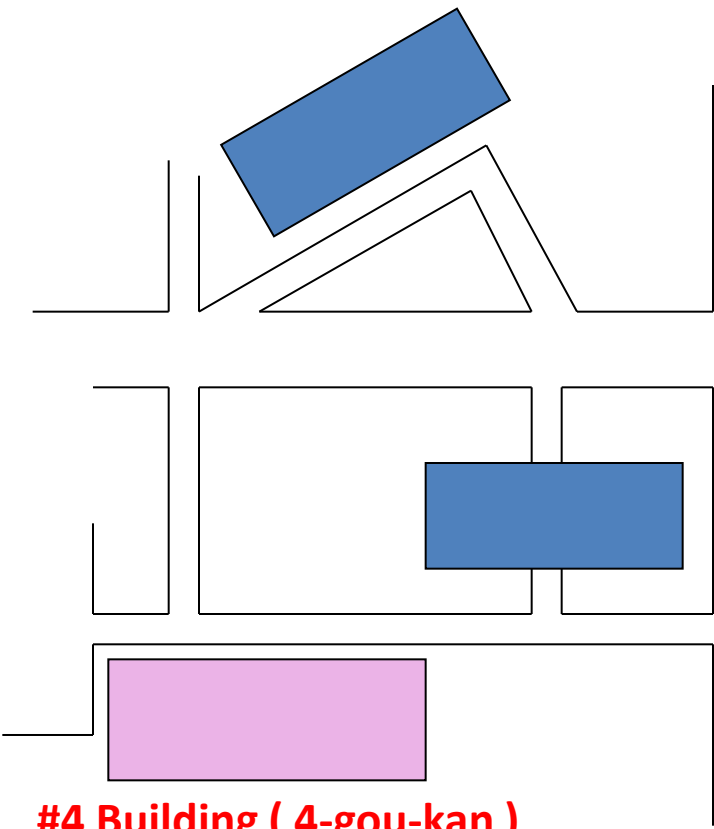
Fee: 3,000 yen (except for review committee members)

Please pay for it at the registration desk.

*Please join it and have various discussions between the reviewer and presenters/participants.*

# Useful MAP and Information and TAXI 029-864-

0301



#4 Building ( 4-gou-kan )

We are here !

KEK grocery store  
open ; 9:00-19:00

