

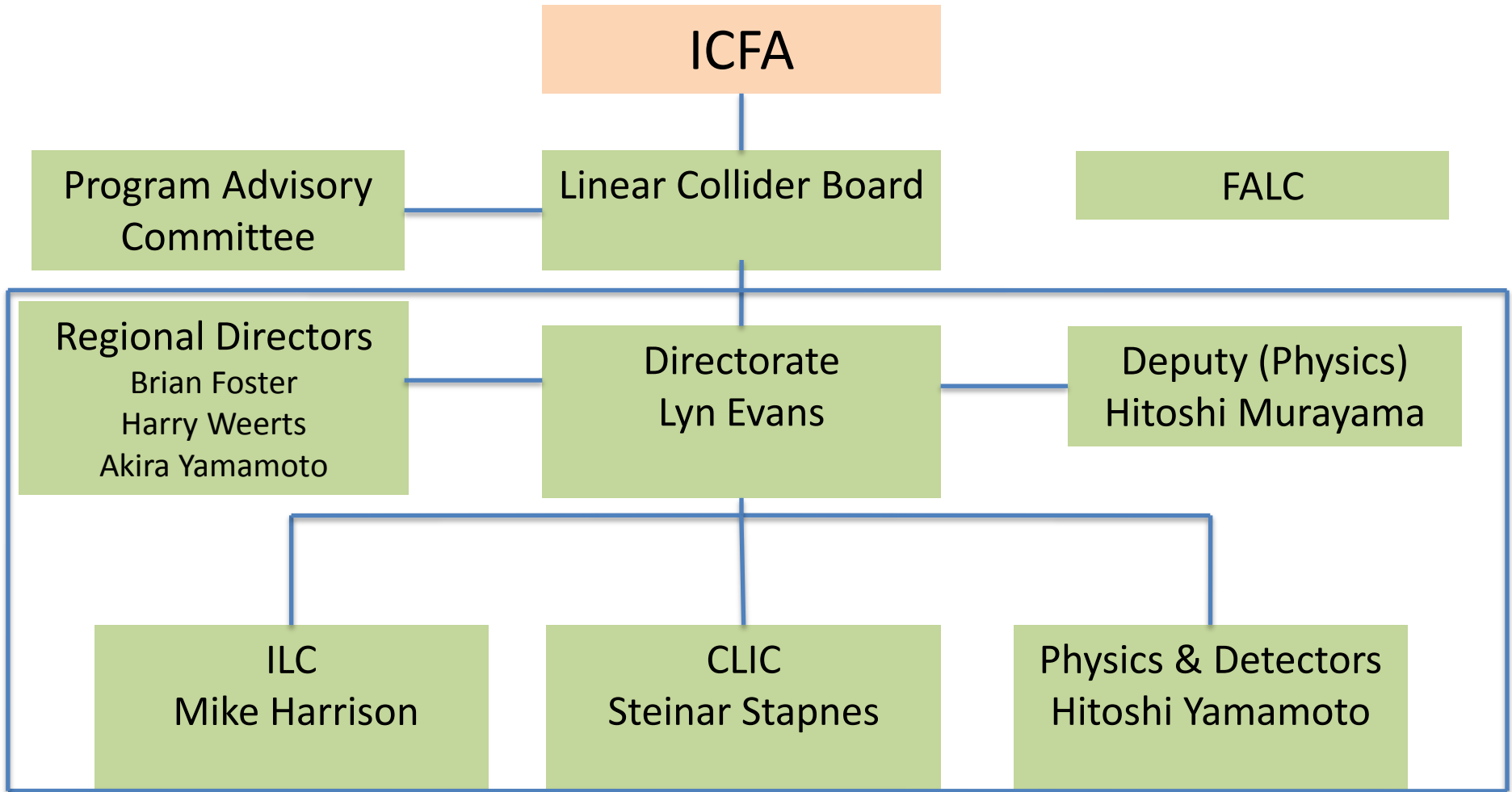


Linear Collider Collaboration Status

L. Evans



Organization





Visit to Japan, 25-27 March

Takeo Kawamura, former chief Cabinet Secretary and former MEXT Minister, chairman of Federation of Diet Members

S&T Minister Ichita Yamaoto.

MEXT Minister Hakubun Shimomura

Chairman of AAA and former President Mitsubishi Heavy Industries Takahashi Nikiyoshi

Chairman of Japan Chamber of Commerce and former CEO of Toshiba Tadashi Okamura



Japan visit continued

Japan Productivity Center Masayoshi Matsukawa.

Federation of Diet Members (150-strong)

Prime Minister Abe

Yasushi Furukawa, Governor of Saga Province

Japan Association of Corporate Executives Kiyohiko Ita.



Prime Minister Abe 27th March 2013





**Japan Science Council
Fast track review of the ILC.
Still waiting for an official approved
translation of the executive summary.**



Federation of Diet Members meeting

16th October 2013

MEXT

Mr Yoshida DG Research promotion bureau

Mr Ikukawa Director of Promotion policy division

Mr Ando Director basic research division

Mr Odoi Director of particle and nuclear physics

Mr Narai Accelerator expert in Particle and nuclear division

Cabinet Office

Mr Morimoto Deputy DG for science and technology

Mr Matsui Council for Science and Technology Policy



Federation (continued)

Ministry of Foreign Affairs

Mr Takahashi Director, International Science Cooperation

Mr Ikeda International Science cooperation division

METI

Dr Tokumasu Director International affairs office

MLIT (ministry of construction and transport)

Mr Yamamoto Director for environment and engineering

Plus many senior Diet members.



Two Candidate Sites in Asia/Japan

- Japanese Mountainous Sites -





International review of Japanese candidate site

Review Committee members

Eckhard Elsen (DESY)

Lyn Evans (Chairman, Imperial College, London)

Mike Harrison (BNL)

Alain Herve (University of Wisconsin)

Vic Kuchler (FNAL)

Hitoshi Murayama (LBL/IPMU)

John Osborne (CERN)

Steinar Stapnes (University of Oslo/CERN)

Daniel Schulte (CERN)

Harry Weerts (ANL)

Akira Yamamoto (KEK)



Conclusions and recommendations

The Committee is convinced that the site presented has been chosen with great care. More than 300 hours of meetings of the Japanese Site Evaluation Committee have been necessary to reach this conclusion.

The proposed site is in good geological conditions for tunnelling and stability with no active fault zones and low seismic noise. Most of the geological investigation has been made with non-destructive methods with only five core samples taken. This is adequate for the present purpose but should be considerably augmented during Project preparation.

The possibility of adding a Free Electron Laser Facility at a later date should be kept in mind. This would require that the laboratory for photon physics should be in a location that is not too deep.

Although the recommended site offers good conditions for the installation of the collider it could present logistic difficulties for the installation, maintenance and possible upgrade of the experiments due to the side access. The needed logistics should be developed early before finalizing the region of the interaction region.



Conclusions and recommendations (2)

Other issues such as transport and the provision of primary services have been thoroughly studied. The possibility of powering the site through two independent power lines to ensure base services in any situation should be investigated.

Clear criteria must be developed for the design of the machine and detectors under worst-case earthquake scenarios.

Social infrastructure for international staff in Sendai is probably adequate although the commute is quite long. Access for international travellers through Tokyo/Narita airport takes about 4 hours and the recent expansion of international routes from Tokyo/Haneda airport, which has a direct link with Sendai provides another alternative.

Development of the social environment for non-Japanese in cities close to the central campus, particularly Ichinoseki should be discussed with the local authorities once the site is formally decided.



Test Facilities around the world

Test facility	Used by	Purpose
Facet-SLAC	CLIC	Beam-based alignment
CTF-CERN	CLIC	Two beam acceleration
ATF2-KEK	ILC/CLIC	Low emittance, final focus
STF-KEK	ILC	High gradient acceleration
FLASH-DESY	ILC	High gradient, high current
NML	ILC	Complete cryomodules
CesrTA	ILC	Electron cloud



Production facilities

Production Facilities		
Cavities and cryomodules	KEK	Cavity R&D
Cavities	DESY	24 cavities from XFEL production
Cavities	JLAB	High-gradient cavities
XFEL	DESY	Industrial production



Common working groups

- **Damping rings**
- **Sources (positrons)**
- **Beam delivery system, MDI**
- **Beam dynamics**
- **Conventional facilities**
- **Power couplers**
- **Tuners**