



A Global Initiative for an ILC

International Committee for Future Accelerators (ICFA) representing major particle physics laboratories worldwide.

- Chose ILC accelerator technology (SCRF)
- Determined ILC physics design parameters
- Formed Global Design Effort and Mandate 2006

Global Design Effort

– The Mission of the GDE

- Produce a design for the ILC that includes a detailed design concept, performance assessments, reliable international costing, an industrialization plan, siting analysis, as well as detector concepts and scope.
- Coordinate worldwide prioritized proposal driven R & D efforts (to demonstrate and improve the performance, reduce the costs, attain the required reliability, etc.)

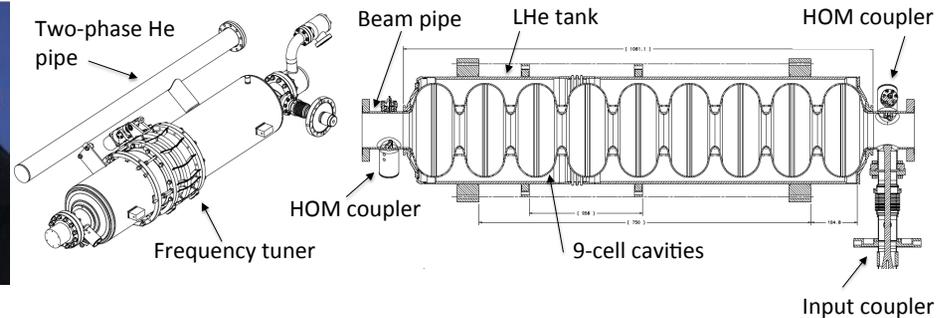
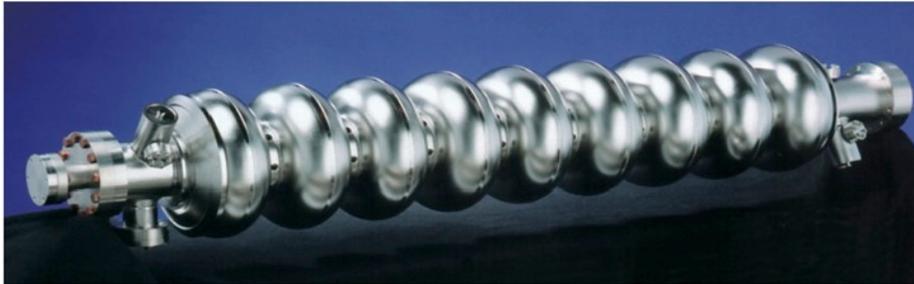
7-Feb-06

GDE Report to ILCSC

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SRF Linac Technology



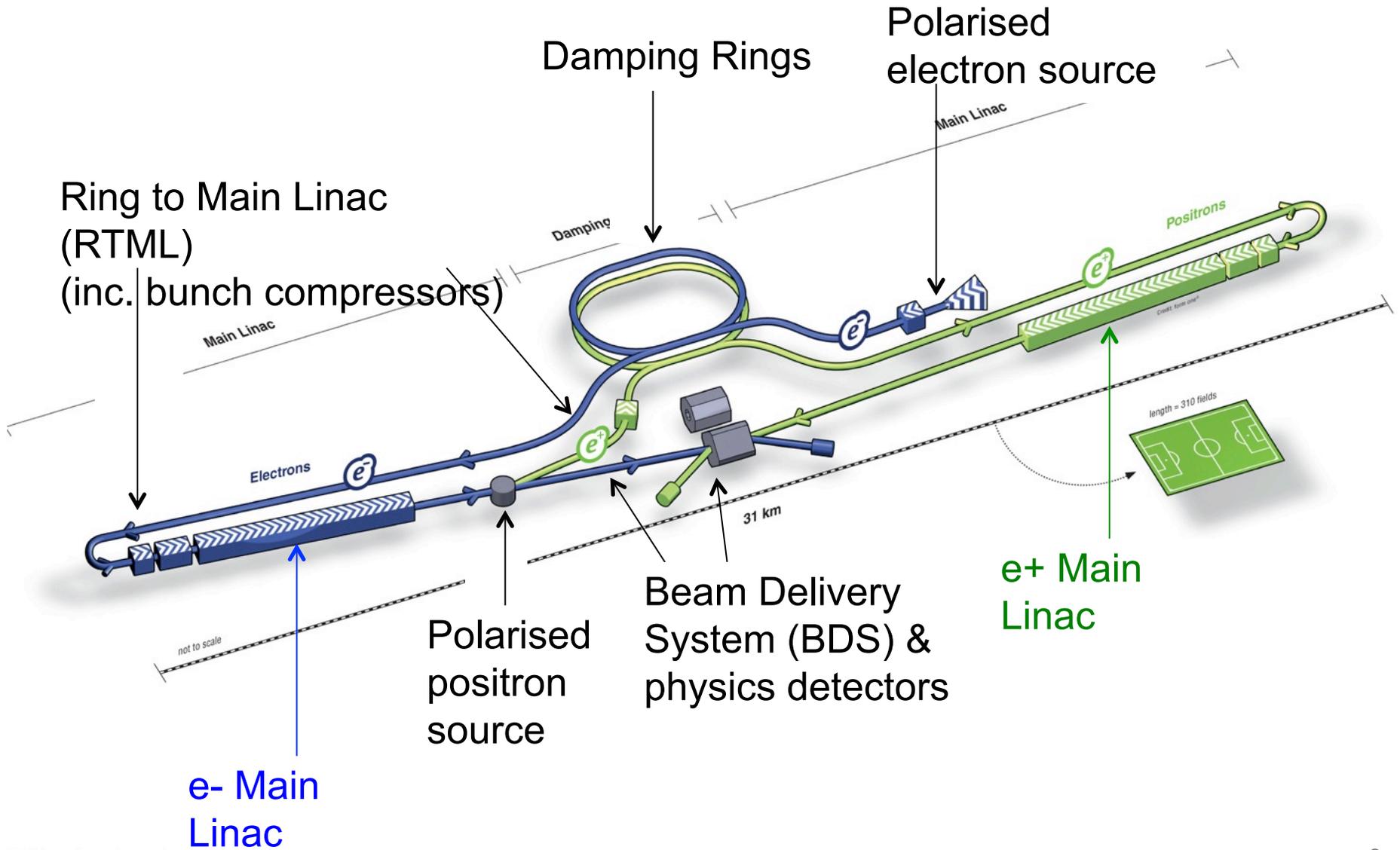
1.3 GHz Nb 9-cell Cavities	16,024
Cryomodules	1,855
SC quadrupole pkg	673
10 MW MB Klystrons & modulators	426 / 461 *

* site dependent

Approximately 20 years of R&D worldwide



ILC Schematic



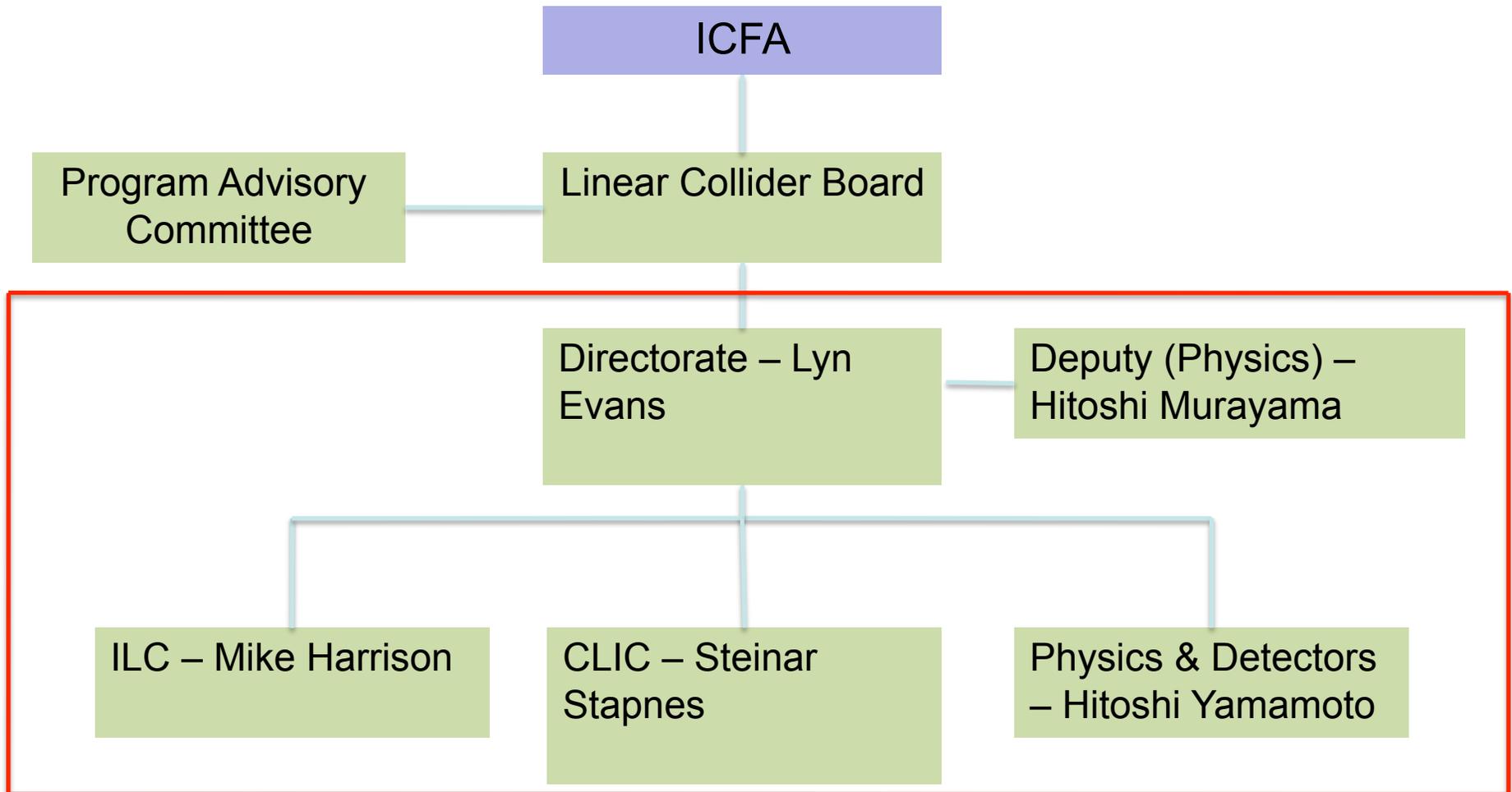


Technical Design Completed Dec 2012

- Technical design completed and reviewed (PAC Dec 2012). TDR completed.
- Value cost estimate of \$7.6B based on TDR + 22.4M man-hrs of explicit labour (~\$2B). Value estimate does not cover US specific cost elements such as escalation, contingency, pre-ops, etc.
- Generic site(s): flat terrain & mountainous
- Using “reasonable” assumptions, ~9 years from ground breaking to start of beam commissioning



The Linear Collider Collaboration



The LCC will start to operate after the Board meeting on February 21/22

The GDE will close-out TDR related business – formal end in June

Towards ILC construction: Japan – Suzuki to EU

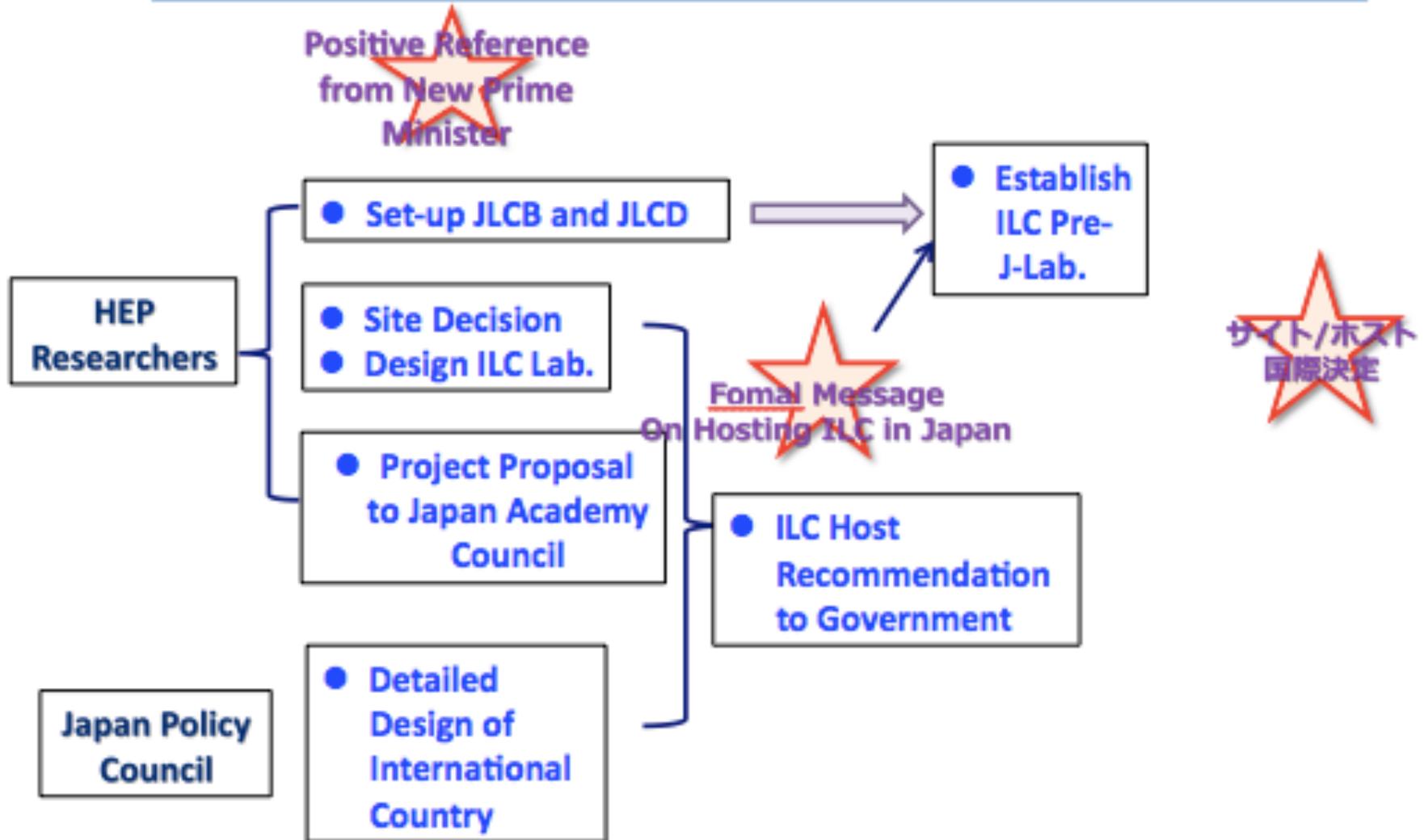
strategy mid December 2012

2012

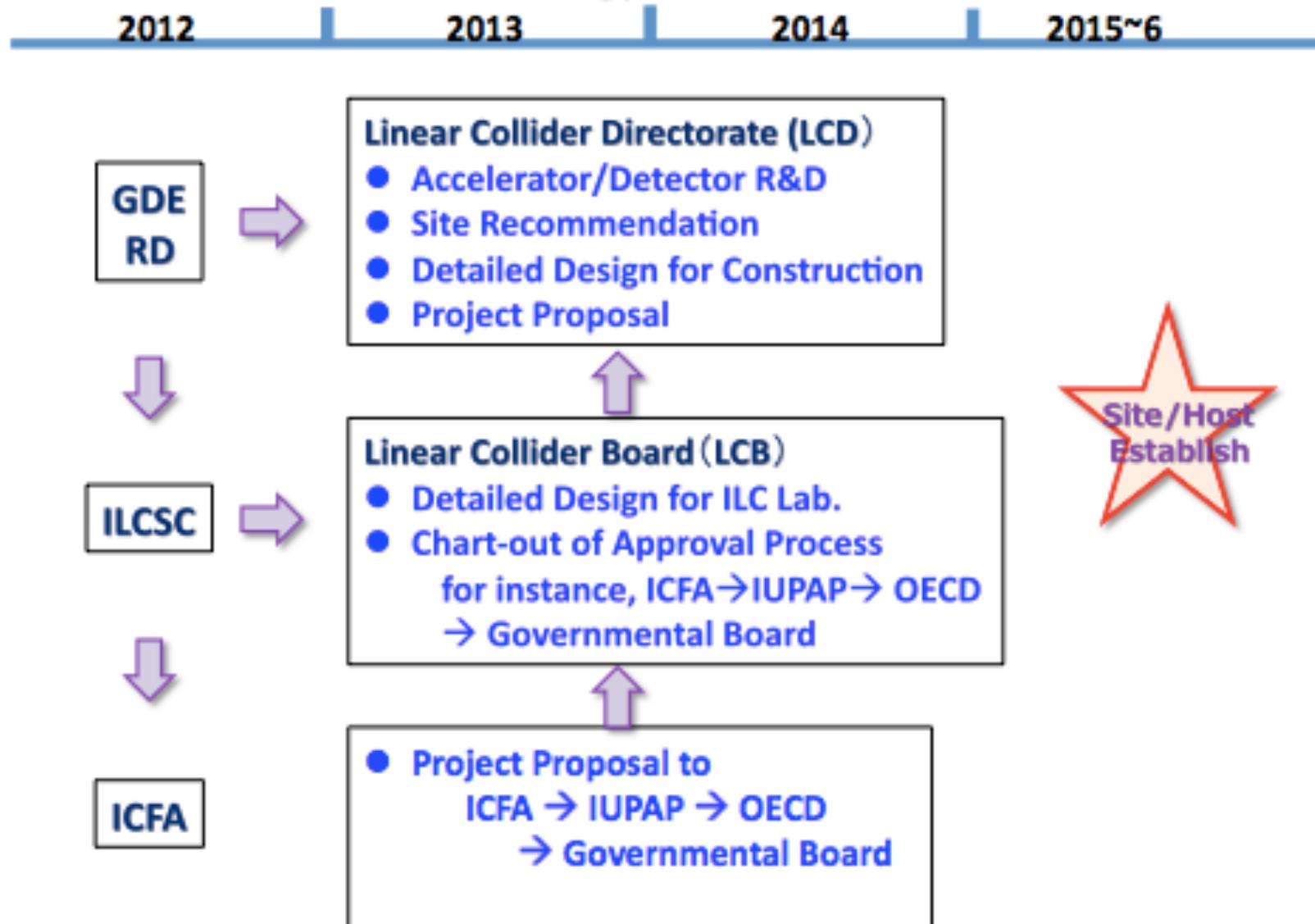
2013

2014

2015~6



Towards ILC construction: International – Suzuki to EU strategy mid December 2012





Japan – Jan 18 Press Conference

On Friday, 18 January, Hakubun Shimomura, Japan's Minister of MEXT (Ministry of Education, Culture, Sports, Science and Technology), the funding agency for Japan's high-energy physics programme, stated Japan's intention to invite the ILC in the regular press conference after the cabinet meeting, responding to a question from the press about the government's standpoint to the ILC project.

Shimomura said that the local government officials and economic leaders from Tohoku, one of the two ILC candidate sites in Japan, visited the Minister three times already to make representations for inviting ILC to Japan, and he is expecting the visits of representatives from another candidate site, Kyushu. **“However, ILC is such a big project that could not be realised by Japan only. I wish to carry forward to cooperate with countries concerned, and hopefully to invite it to Japan,”** he said.

Shimomura said Japanese government would start a preparation to start discussion, including the distribution of the construction cost, with countries concerned in the first half of 2013.



EU Strategy – draft for the CERN Council

Recommendation e) There is a strong scientific case for an electron-positron collider, complementary to the LHC, that can study the properties of the Higgs boson and other particles with unprecedented precision and whose energy can be upgraded. The Technical Design Report of the International Linear Collider (ILC) has been completed, with large European participation. *The initiative from the Japanese particle physics community to host the ILC in Japan is most welcome, and European groups are eager to participate. Europe looks forward to a proposal from Japan to discuss a possible participation.*