Open Symposium 2006
CERN Council Strategy Group

Personal Impressions
of the Orsay Meeting 30.1.-1.2.06
E. Elsen

Presentation at the LCD Meeting 2.3.2006
European Strategy...

• ECFA laid out a European Strategy in 2001

• LHC …

• the realisation, in as timely a fashion as possible, of a world-wide collaboration to construct a high-luminosity $e^+e^-$ linear collider with an energy range up to at least 400 GeV as the next accelerator project in particle physics; decisions concerning the chosen technology and the construction site for such a machine should be made soon;
European Strategy...

- OECD Ministerial Statement
  - The Consultative Group concurs with the world-wide consensus of the scientific community that a high-energy electron-positron linear collider is the next facility on the Road Map.
  - There should be a significant period of concurrent running of the CERN Large Hadron Collider (LHC) and the LC, requiring the LC to start operating before 2015. Given the long lead times for decision-making and for construction, consultations among interested countries should begin at a suitably chosen time in the near future.
  - The cost of the LC will be broadly comparable to that of the LHC, and can be accommodated if the historical pattern of expenditure on particle physics is maintained, taking into account the additional resources that the host country (or countries) will need to provide.
2. The Organization shall, in the collaboration referred to in paragraph 1 above, confine its activities to the following:

a. the construction and operation of one or more international laboratories (hereinafter referred to as "the Laboratories") for research on high-energy particles, including work in the field of cosmic rays; each Laboratory shall include:
   i. one or more particle accelerators;
   ii. the necessary ancillary apparatus for use in the research programmes carried out by means of the machines referred to in (i) above;
   iii. the necessary buildings to contain the equipment referred to in (i) and (ii) above and for the administration of the Organization and the fulfilment of its other functions;

b. the organization and sponsoring of international co-operation in nuclear research, including co-operation outside the Laboratories; this co-operation may include in particular:
   i. work in the field of theoretical nuclear physics;
   ii. the promotion of contacts between, and the interchange of, scientists, the dissemination of information, and the provision of advanced training for research workers;
   iii. collaborating with and advising other research institutions
   iv. work in the field of cosmic rays.
CERN Council

- Establishes a Strategy Group in June 2005
  - to produce a
    Draft Strategy Document
    1-2 pages summary
    25 pages details per topic
  - which is to be finalized in a meeting in
    Zeuthen, 2-6 May 2006
- Council Meeting in Lisbon, 14 July 2006
  aim for unanimous approval
Remit

• to enhance the visibility of existing European particle physics programmes;
• to foster increased collaboration among Europe's particle physics laboratories and institutes;
• to promote a coordinated European participation in world-wide projects;
• to reiterate the CERN Council's 2004 position on the European strategy for the International Linear Collider;
• to encourage knowledge transfer to other disciplines, industries, and society;
• to outline priorities, at least implicitly;
• to consider time scales;
• to follow a thematic or project approach, whichever is more appropriate.
Composition of Strategy Group

- Chairs
  - T. Åkesson (ECFA), K. Peach (CERN Council)

- Preparatory Group

- Proposed Members

- Directors

- Scientific Secretary
  - M. Mangano
Purpose of Open Meeting Orsay

• Solicit input from community

• 48 documents received to date
  http://council-strategygroup.web.cern.ch/council-strategygroup/SGcontrib.html

• Attendance; 389 registered participants
# Programme

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker(s)</th>
<th>Location</th>
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<tr>
<td>10:45-13:30</td>
<td>Overviews (Convener: B. Webber, Scientific secretary: B. Allanach)</td>
<td>Gian Giudice (CERN, PH-TH)</td>
<td>08:30</td>
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<tr>
<td>10:45</td>
<td>The physics landscape (40') (Slides, Video)</td>
<td>Gian Giudice</td>
<td>08:30</td>
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<tr>
<td>11:40</td>
<td>The infrastructure: present and future options (40') (Slides, Video)</td>
<td>John Womersley (RAL)</td>
<td>08:30</td>
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<td>12:35</td>
<td>LUNCH</td>
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<td>13:30-15:30</td>
<td>The High Energy Frontier, I (Convener: R. Heuer, Scientific secretary: G. Weiglein)</td>
<td>Klaus Desch (Freiburg Univ.)</td>
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<td>13:30</td>
<td>The Physics of the High Energy Frontier (40') (Slides, Video)</td>
<td>Klaus Desch</td>
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<td>14:10</td>
<td>Discussion (50') (Video)</td>
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<td>15:00</td>
<td>COFFEE</td>
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<td>15:30-17:00</td>
<td>The High Energy Frontier, II (Convener: R. Aleksan, Scientific secretary: A. Lombardi)</td>
<td>Pantaleo Raimondi (LNF)</td>
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<tr>
<td>15:30</td>
<td>Accelerators for the High Energy Frontier (40') (Slides, Video)</td>
<td>Pantaleo Raimondi</td>
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**Monday 30 January 2006**
- 08:30-10:30 Registration
- 10:30-10:45 Welcome (Convener: Aleks, T and Peach, K)
- 10:45-13:30 Overviews (Convener: B. Webber, Scientific secretary: B. Allanach)
- 15:30-17:00 The High Energy Frontier, II (Convener: R. Aleksan, Scientific secretary: A. Lombardi)
- 17:00-18:30 Theory and phenomenology (Convener: M. Mangano, Scientific secretary: S. Davidson)
- 18:30 Reception

**Tuesday 31 January 2006**
- 09:00-11:00 Flavour Physics (Convener: E. Rondio, Scientific secretary: U. Egede)
- 11:00-13:30 Physics using neutrinos (Convener: A. Blondel, Scientific secretary: M. Mezzetto)
- 15:30-17:00 Non-accelerator EPP and astrophysics (Convener: M. Cavalli Biafra, Scientific secretary: M. de Naurois)
- 17:00-18:30 QCD studies (Convener: S. Bertolucci, Scientific secretary: A. Polosa)

**Wednesday 01 February 2006**
- 08:30-12:00 Closing Session (Convener: Aleks, T and Peach, K)
- 12:00 Lunch break
- 13:30-16:00 Strategy Group Closed Session (Location: Room 101, Building 505, LAL)

The work ahead: plans for the Zwillen Workshop

More details at
http://indico.cern.ch/conferenceDisplay.py?confld=a056782
Some Comments

- Neutrino well prepared – Q&A show
- need for global strategy
- European role emphasized
- Non-Accelerator experiments
- Role of astrophysics
Contentious Points

• ILC - LHC link
• CLIC role
  • R1-3 criteria by 2009
  • several more years – or 5?
• Role of Council itself
  • European Representation of the field - somewhat questioned
Summary

- fruitful and open discussion
- no fundamentally new input

- Deliberations of Council will be very important
  - Council has political backing
  - ESFRI will listen
  - Financial impact