As the Draft Minutes (CERN/2101/Draft, dated 7 August 1995), were approved without amendment at the Hundred-and-third session of the Council on 15 December 1995, the attached document can be regarded as the final version.
ORGANISATION EUROPÉENNE POUR LA RECHERCHE NUCLÉAIRE
CERN EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH

COUNCIL
Hundred-and-second Session
Geneva - 23 June 1995

DRAFT MINUTES*

* These Draft Minutes are circulated without having been seen by the President of Council, but with his consent.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIST OF PARTICIPANTS</td>
<td>iii</td>
</tr>
<tr>
<td>1. REPORT OF THE CREDENTIALS COMMITTEE</td>
<td>1</td>
</tr>
<tr>
<td>2. APPROVAL OF THE DRAFT MINUTES OF THE HUNDREDTH (SECOND PART) AND HUNDRED-AND-FIRST SESSIONS</td>
<td>1</td>
</tr>
<tr>
<td>3. ADOPTION OF THE AGENDA</td>
<td>2</td>
</tr>
<tr>
<td>4. OBSERVER STATUS FOR JAPAN</td>
<td>2</td>
</tr>
<tr>
<td>5. JAPANESE CONTRIBUTION TO THE LHC</td>
<td>2</td>
</tr>
<tr>
<td>6. PRESIDENT'S REPORT</td>
<td>8</td>
</tr>
<tr>
<td>7. NON-MEMBER STATE MATTERS</td>
<td>9</td>
</tr>
<tr>
<td>8. PROGRESS REPORTS PRESENTED TO COUNCIL</td>
<td>12</td>
</tr>
<tr>
<td>9. ACCOUNTS FOR 1994</td>
<td>12</td>
</tr>
<tr>
<td>10. CERN PENSION FUND</td>
<td>13</td>
</tr>
<tr>
<td>12. PRELIMINARY INFORMATION ON THE COST-VARIATION INDEX FOR 1996</td>
<td>20</td>
</tr>
<tr>
<td>13. CONTRIBUTIONS OF THE CZECH REPUBLIC, HUNGARY, POLAND AND THE SLOVAK REPUBLIC</td>
<td>20</td>
</tr>
<tr>
<td>14. THE FELLOWS, ASSOCIATES AND STUDENTS PROGRAMMES</td>
<td>21</td>
</tr>
<tr>
<td>15. ELECTIONS</td>
<td>22</td>
</tr>
<tr>
<td>16. SENIOR STAFF APPOINTMENTS</td>
<td>23</td>
</tr>
<tr>
<td>17. REPORT ON THE CLOSED SESSION</td>
<td>24</td>
</tr>
<tr>
<td>18. OTHER BUSINESS</td>
<td>25</td>
</tr>
</tbody>
</table>
ANNEXES

Annex 1: Draft Agenda of the Hundred-and-second session of the Council

Annex 2: Composition of the Japanese Delegation

Annex 3: Japanese Contribution to the LHC
    (Director-General)

Annex 4: Statement by the Austrian Delegation concerning the Japanese Contribution to the LHC
    (A. Herdina)

Annex 5: Non-Member State Matters
    (Director-General)

Annex 6: Annual Report 1994 of the Pension Fund
    (C. Cuénoud)

    (Director-General)

Annex 8: The Fellows, Associates and Students Programmes
    (L. Foà)
# LIST OF PARTICIPANTS

**President:** Prof. H. Curien  
France

**Participants:**
- H.E. Mr W. Lang  
Austria
- Prof. W. Majerotto
- Mr A. Herdina*
- Ms H. Borns**
- Prof. J. Lemonne  
Belgium
- Mr P. Levaux
- Mrs M.J. Simoen**
- Prof. J. Niederle  
Czech Republic
- Mr Z. Venera
- Mr M. Beránek**
- Prof. H.H. Andersen  
Denmark
- Mrs H. Hämäläinen  
Finland
- Prof. J. Routti
- Prof. J. Perez y Jorba  
France
- Mr P. Vimont
- Dr H.C. Eschelbacher  
Germany
- Prof. V. Soergel
- Dr A. Freytag**
- Dr H. Schunck**
- Prof. M. Floratos  
Greece
- Mr L. Nyiri
- Prof. J. Zimányi
- H.E. Mr G. Boythia*
- Ms M. Hencsey**
- Prof. G. Pócsik**
- Dr G. Vesztergombi**
- H.E. Mr G. Baldocci  
Italy
- Prof. L. Maiani
- Prof. G. Castro**
- Prof. F. Menzinger**

* Alternate.
** Adviser.
<table>
<thead>
<tr>
<th>Name</th>
<th>Nationality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr J. Bezemer</td>
<td>Netherlands</td>
</tr>
<tr>
<td>Prof. B. de Wit</td>
<td></td>
</tr>
<tr>
<td>Mr S.J.H. Smits**</td>
<td></td>
</tr>
<tr>
<td>Prof. A. Graue</td>
<td>Norway</td>
</tr>
<tr>
<td>Mr T. Pedersen</td>
<td></td>
</tr>
<tr>
<td>Prof. J. Niewodniczanski</td>
<td>Poland</td>
</tr>
<tr>
<td>Prof. R. Sosnowski</td>
<td></td>
</tr>
<tr>
<td>H.E. Mr L. Dembinski**</td>
<td></td>
</tr>
<tr>
<td>Mr F.D. Bello</td>
<td>Portugal</td>
</tr>
<tr>
<td>Mr L. de Barros**</td>
<td></td>
</tr>
<tr>
<td>Mrs M. Krasnohorská</td>
<td>Slovak Republic</td>
</tr>
<tr>
<td>Dr L. Sándor</td>
<td></td>
</tr>
<tr>
<td>Mr V. Dovica**</td>
<td></td>
</tr>
<tr>
<td>Mr J. Pokorny**</td>
<td></td>
</tr>
<tr>
<td>Mr B. Sitár**</td>
<td></td>
</tr>
<tr>
<td>Prof. C. Lopez</td>
<td>Spain</td>
</tr>
<tr>
<td>Mrs B. López**</td>
<td></td>
</tr>
<tr>
<td>Dr C. Nordling</td>
<td>Sweden</td>
</tr>
<tr>
<td>Prof. Ö. Skeppstedt</td>
<td></td>
</tr>
<tr>
<td>Prof. G. Jarlskog*</td>
<td></td>
</tr>
<tr>
<td>Dr B. Brandt**</td>
<td></td>
</tr>
<tr>
<td>Dr J. Gustavsson**</td>
<td></td>
</tr>
<tr>
<td>Prof. M. Bourquin</td>
<td>Switzerland</td>
</tr>
<tr>
<td>Mr J. Vernet</td>
<td></td>
</tr>
<tr>
<td>Dr M. Gottret**</td>
<td></td>
</tr>
<tr>
<td>Mr J.-P. Ruder**</td>
<td></td>
</tr>
<tr>
<td>Mr A. Carter</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>Prof. D.H. Saxon</td>
<td></td>
</tr>
<tr>
<td>Mr W. Jones**</td>
<td></td>
</tr>
<tr>
<td>Mr J.D. Walsh**</td>
<td></td>
</tr>
</tbody>
</table>

** Adviser.
* Alternate.
Observers:

Mr N. Newman  Representative of the European Union
Dr S. Raither  Representative of UNESCO
Prof. G. Mikenberg  Representatives of Israel
Dr R. Schnitzer
Prof. A.N. Skrinsky  Representative of the Russian Federation
Dr J.R. O'Fallon  DOE, Washington

Japan:

H.E. Mr K. Yosano  Minister of Education, Science and Culture
Mr M. Honma  Director, International Affairs Division, Science and International Affairs Bureau
Ministry of Education, Science and Culture
Mr T. Koezuka  Counsellor, Permanent Mission of Japan, Geneva
Mr M. Inoue  Director, International Scientific Affairs Division
Science and International Affairs Bureau
Ministry of Education, Science and Culture
Mr M. Mizukami  Director, International Science
Cooperation Division
Foreign Policy Bureau
Ministry of Foreign Affairs
Mr K. Maekawa  Secretary to the Ministry of Education, Science and Culture
Mr K. Yoshio  Coordinator for International Science Programmes
International Scientific Affairs Division
Science and International Affairs Bureau
Ministry of Education, Science and Culture
Mr H. Takahashi  First Secretary
Permanent Mission of Japan, Geneva
Also Present:

Mr J.O. Jøranli                External Auditor
Dr M. Gigliarelli Fiumi       Chairman of the Finance Committee
Prof. G.E. Wolf               Chairman of the Scientific Policy Committee
Prof. G. Flügge               Chairman of ECFA

CERN Officials:

Prof. C.H. Llewellyn Smith    Director-General

Directors:

Dr L.R. Evans                 Director, LHC Project Leader
Prof. L. Foà                  Director of Research
Dr K. Hübner                  Director of Accelerators
Dr M. Robin                  Director of Administration
Dr H. Wenninger              Research/Technical Director

Mr J.-M. Dufour               Head, Legal Service
Dr M. Jacob                   Relations with Member States
Mrs H. Schmal                 Head, Council Secretariat
Miss L. Morris                Minute-writer

The Division Leaders concerned.

* * *

95/52/5/e
DRAFT MINUTES

The meeting was called to order at 10.05 a.m.

The PRESIDENT welcomed Dr H.C. Eschelbacher, the new German delegate to the Council and Committee of Council; Mr L. Nyiri, the new Hungarian delegate to the Council; Ms H. Borns, advisor to the Austrian delegation; and Professor D.H. Saxon of the United Kingdom delegation, representing Professor Pounds. He also welcomed as observers Dr S. Raither of UNESCO, replacing Professor Mayor Zaragoza; Mr N. Newman of the European Commission, replacing Mr Gerold; Dr R. Schnitzer and Professor G. Mikenberg of Israel, replacing Professor Horn; Professor A. Skrinsky of the Russian Federation; and Dr J. O'Fallon of the Department of Energy, the United States.

Apologies had been received from Professor K. Pounds of the United Kingdom, Mrs B. Sode-Mogensen of Denmark, Professors F. Mayor Zaragoza and A. Badran of UNESCO, Mr R. Gerold of the European Commission, Professor D. Horn of Israel and Minister B.G. Saltykov of the Russian Federation.

1. REPORT OF THE CREDENTIALS COMMITTEE
   (Item 1 of the Agenda)

   Dr ROBIN presented the report of the Credentials Committee.

   The Report of the Credentials Committee was approved.

2. APPROVAL OF THE DRAFT MINUTES OF THE HUNDREDTH (SECOND PART) AND HUNDRED-AND-FIRST SESSIONS
   (Item 2 of the Agenda) (CERN/2079/Draft)

   The Minutes of the Hundredth (second part) and Hundred-and-first Sessions (CERN/2079) were approved.
3. **ADOPTION OF THE AGENDA**  
(Item 3 of the Agenda) (CERN/2086/Rev.)

The Agenda (CERN/2086/Rev.)\(^1\) was adopted.

4. **OBSERVER STATUS FOR JAPAN**  
(Item 4 of the Agenda) (Oral)

On the proposal of the PRESIDENT, the Council *unanimously decided* to grant Observer status to Japan.

The Council then welcomed the representatives of Japan, headed by Minister K. Yosano of the Japanese Ministry of Education, Science and Culture (Monbusho).\(^2\)

Applause.

The PRESIDENT said that he greeted the Council's unanimous decision with great satisfaction.

5. **JAPANESE CONTRIBUTION TO THE LHC**  
(Item 5 of the Agenda) (CERN/2093)

The DIRECTOR-GENERAL, presenting the document\(^3\), said that he was delighted to do so in the presence of the first delegation of Japanese observers to the CERN Council. The Organization had a long history of fruitful collaboration with Japan, the first Japanese physicist to spend an extended period of time at CERN having been Professor Yamaguchi in 1957, now a highly valued member of the Scientific Policy Committee. Japan's links with CERN had developed rapidly during the 1980s, and Japanese scientists were now involved in all of CERN's ongoing activities, particularly significant among which were the HELIUMTRAP experiment at LEAR, for which Professor Yamazaki from the Tokyo University Institute of Nuclear Studies was the spokesman, the CHORUS

---

1. See Annex 1.  
2. See Annex 2.  
3. See Annex 3.
neutrino oscillation experiment, in which the invention of automatic scanning
devices for emulsions by the Nagoya Group of Professors Niu and Niwa was of
key importance, and OPAL, where the Tokyo University Group led by Professor
Orito played a significant role. In addition, physicists from twelve Japanese
institutes led by Professor Kondo were involved in the ATLAS proposal for the
LHC.

CERN also enjoyed close links with the Japanese national laboratory, KEK,
and had followed the exciting Kamiokande, soon to be the Super Kamiokande,
underground cosmic ray and neutrino experiment with great interest, in
common with all the world's particle and astro-particle physicists. Furthermore,
it had watched with admiration the construction and operation of KEK's
TRISTAN Ring, the first collider to make large-scale use of superconducting RF
cavities, from which a number of important lessons had been learnt for the LEP
upgrade. KEK was now proceeding with the highly challenging construction of a
B factory and was one of the few laboratories in the world able to envisage
building a linear e+e− collider, which represented an even greater technical
challenge.

The Council's decision to grant Observer status to Japan and the latter's offer
of a generous contribution to speed up and improve the LHC project marked the
successful culmination of discussions between CERN and the Japanese
authorities first begun some five or six years previously, and he wished to take
the opportunity to thank the many Japanese officials and scientists who had been
involved in that achievement for their friendly and constructive approach,
including in particular Minister Yosano and his team, formerly led by Mr Sato
and now by Mr Akamura and Mr Inoue; Professor Mori, Scientific Adviser to the
Prime Minister of Japan; Professor Sugawara, Director of KEK; and Professor
Yamaguchi. He looked forward to the future presence of Japanese observers at the
CERN Council, which would further enhance the already excellent links and
exchange of information between CERN and Japan. The two events represented a
major step for inter-regional scientific co-operation, unprecedented in terms of
scale and importance, for the LHC and for CERN-Japan relations, and he hoped
that they would be followed soon by Japan's accession to the Associate status to be
discussed under a later item of the agenda. The Council was therefore invited to
confirm acceptance of Japan's offer of a contribution of 5 billion Yen under the
terms stated in his own letter to Monbusho dated 30 May 1995 (Annex II of
document CERN/2093) by adopting the Draft Resolution contained in Annex III of the document. Following the proposal's approval, a short ceremony would take place during the break in which, according to a traditional Japanese custom symbolising the launch of major collaborative projects, one eye of a "Daruma" doll would be painted in, leaving the other to be added at the end of the project. Inviting Minister Yosano to paint with him the first eye, he said that he looked forward to the painting-in of the second one in some ten years' time to mark the successful completion of the LHC.

Dr GIGLIARELLI FIUMI, Chairman of the Finance Committee, reported that the Finance Committee had examined document CERN/2093 at its meeting on 21 June 1995 and had unanimously recommended that the Council adopt the Draft Resolution set out in Annex III of the document.

Professor WOLF, Chairman of the Scientific Policy Committee, observed that the latter was highly appreciative of Japan's generous offer and was convinced that Japanese physicists would make an important contribution to the LHC experimental programme.

Mr LEVAUX said that Japan's momentous decision to participate in the LHC, the major High Energy Physics venture of the next decade, marked a significant step in its long-standing relations with CERN and for global collaboration in general. It was thanks both to the climate of confidence that had been built up between the Director-General and the Japanese authorities and to the efficiency and determination of the Japanese individuals involved that the negotiations had been brought to such a swift and gratifying conclusion.

Professor SOERGEL, associating himself with the remarks of the Belgian delegate, said that he also wished to congratulate Japan on its newly acquired Observer status. He was confident that in the future its closer links with the Organization would ensure further fruitful cooperation between European and Japanese physicists and that the LHC would greatly benefit from the extensive technical and technological expertise which had contributed to the great successes of Japanese elementary particle physics in recent years. The German delegation was particularly gratified that Minister Yosano had been able to attend the Council in person and extended its thanks to all those who had made the day's events possible.
Ambassador BALDOCCI, expressing the Italian delegation's satisfaction at the successful outcome of the negotiations regarding Japan's Observer status and Japanese participation in the LHC, extended his warmest wishes to Minister Yosano and the Japanese delegation. The Council's two decisions marked an important development in CERN-Japan relations and laid excellent foundations for further constructive international collaboration in a fundamental sector of science.

Dr HERDINA made the following statement:

"In the presence of, first, the Monbusho-Minister, the Honourable Mr Yosano, and the honourable members of the Japanese government delegation, I would like to make a short speech. Even though I have forgotten a lot of my Japanese I will give it a try.

"Today is a really festive day for our multinational organization. The decision of the Japanese government to support the LHC is, in our opinion, a most important step. The Austrian delegation would like to express its thanks for the generous Monbusho contribution. As from today, and for the purpose of CERN-Japan LHC collaboration, let us devotedly start, both in the scientific and in the industrial fields, and doing our utmost for a common effort, a mutual relationship. Merci, Monsieur le Président."

On behalf of the Polish delegation and the Polish scientific community, Professor NIEWODNICZANSKI congratulated Japan on its Observer status and expressed his appreciation for its generous contribution to the LHC programme, two events of major significance both for CERN and for the development of High Energy Physics and science as a whole.

Mr VIMONT, associating himself with the remarks of the previous speakers and thanking the Japanese authorities for their generous gesture, stressed that Japan's Observer status should open up a new, even more harmonious phase in the collaboration between CERN and Japanese scientists and help to further their mutual understanding in the framework of the LHC.

---

4 See Annex 4 for Japanese original.
Professor ANDERSEN said that, on behalf of all the Nordic Member States, he wished to express his appreciation for the Japanese contribution to the LHC and was confident that the swiftness and determination with which Japan had acted in the matter was a good omen for its future collaboration with CERN. It was not the first time that Japan had acted unselfishly to assist and improve a European-based international physics collaboration; when the Guest Programme at the Niels Bohr Institute in Copenhagen had faced serious economic problems some years previously, for example, a long-lasting Japanese contribution had enabled it to be extended for decades. Denmark was therefore delighted to approve the proposed Resolution and looked forward to the development of Japan's participation in LHC construction in a similar positive spirit. The PRESIDENT invited the Council to adopt the Draft Resolution set out in Annex III of the document.


Applause.

Mr YOSANO, Japanese Minister of Education, Science and Culture, made the following statement:

"Professor Hubert Curien, Professor Christopher Llewellyn-Smith, Honourable Members of the CERN Council, Ladies and Gentlemen: Both the Japanese government and scientific community are greatly pleased and honoured that the CERN Council has unanimously agreed to provide Japan with Official Observer Status and also to accept Japan's offer to contribute to the LHC Project. I am delighted to attend this memorable meeting of the Council and to have this most welcome opportunity to address this distinguished body of scientists and administrators.
"The LHC Project will explore the ultimate structure of matter, including the existence and nature of yet unknown subatomic particles, and the world's highest accelerated energy levels. As such, it is a project that holds great expectation for the world's scientists, while captivating the imagination of ordinary citizens as well. Japanese researchers appreciate the profound scientific significance of the LHC Project, and many of them strongly desire to take part in it or to participate in related joint experiments.

"Given the fact that the LHC Project will require wide trans-national intellectual cooperation as well as enormous funding, Monbusho's Science Council took some time in deliberating the feasibility of such a large-scale, collaborative international undertaking. It was my personal desire, however, to see Japan commit itself to the project as soon as possible.

"Last December, the CERN Council formally decided to construct the LHC system, and in March Professor Llewellyn Smith and his staff came to Japan to see me and make an official request for Japanese cooperation in the Project. Fortunately, we were able to gain the understanding of both the country's legislative and financial authorities in the importance of the Project as an international scientific endeavor and of Japan's contributing to it, and were able to obtain funding approval.

"Japanese researchers and Japan's scientific community at large welcome the government's decision to contribute to the LHC Project. I believe Japan's commitment will, in turn, offer a large inducement for them to take an active part in the Project. At the same time, I hope our contribution will help to hasten the completion of the construction and also to enhance the quality of the Project as a whole. I am looking forward to this Project opening up new frontiers in the field of particle physics, and advancing joint international efforts to pioneer these new domains.

"As you know, both close cooperation among scientists and vigorous competition between countries have been going on concurrently in the field of particle physics over recent years. Particularly since it became
the practice to use large accelerators in high-energy physics experiments, the countries of Europe and North America along with Japan have taken the leading role in this field.

"In the case of Japan, Monbusho's National Laboratory for High Energy Physics, or KEK, constructed the TRISTAN electron-positron colliding accelerator, which since 1986 has been advancing collaborative research among scientists from around the world. On another front, Japan and the United States have established a long-term cooperative relationship in the High Energy Physics field based on an inter-governmental agreement. Among the many fruits born through this relationship has been the observation of the previously hypothetical "Top Quark" at the Fermi National Accelerator Laboratory. In Europe, Japanese scientists have been actively participating in cooperative experiments here at CERN and at DESY. The establishment of the Standard Model of elementary particles through the detailed study of the $Z^0$ boson at LEP is one of the achievements crowning this co-operation.

"I am convinced that Japan's newly acquired Observer status along with its contribution to the LHC Project will serve to further strengthen the co-operative linkage between the Japanese and European scientific communities.

"Monbusho is currently proceeding with the construction of the B-factory Project at KEK. I hope this Project will provide a platform in Japan for advancing international co-operation through joint experiments by researchers from Europe, North America and the Asia-Pacific.

"Finally, I wish to express my sincere respects to the members of the CERN Council for your enlightened decision to go ahead with the LHC Project. I would also like to extend my appreciation to Professor Llewellyn Smith and his staff for their dedication and efforts in advancing this most promising Project."

Applause.

The meeting was adjourned at 10.45 a.m. and resumed at 11.10 a.m.
6. **PRESIDENT'S REPORT**  
(Item 6 of the Agenda) (Oral)

The President of Council did not make an oral report.

7. **NON-MEMBER STATE MATTERS**  
(Item 7 of the Agenda)

- **Associate Status at CERN for non-European States**  
(CERN/CC/2091)

The DIRECTOR-GENERAL, presenting document CERN/CC/2091 and providing additional information\(^5\), emphasised that the creation of a new Associate status was an important and historic step for CERN, which warranted careful and thorough discussion, including input from the Council Observers if appropriate. The Management would therefore welcome delegations' reactions to the document, and any detailed comments on the drafting should be submitted in writing for discussion at the September meetings of the Council's subsidiary bodies with a view to a decision in the matter at the Council in December.

Dr HERDINA said that the Austrian delegation would submit its written comments in good time for further discussion of the proposal in September.

Professor PEREZ Y JORBA agreed that the proposed Associate status, which was in some respects close to Member State status and would therefore be a significant step in the evolution of CERN with possible implications for its status, required thorough and extensive internal discussion. The French delegation therefore also reserved its comments for the September meetings. As a preliminary remark, however, he wished to stress that while the Council was naturally sovereign, it was desirable that the rules allowing non-Member States to register their interest in obtaining Associate status should be fairly flexible. Furthermore, the importance of the ratio between cash and in-kind contributions should be underlined, with Associate States making substantial cash contributions possibly being accorded greater rights than those contributing in kind only.

\(^5\) See Annex 5.
Replying to a question from Professor PEREZ Y JORBA, the DIRECTOR-GENERAL confirmed that although Associate status, as proposed, would entitle States to take part in the relevant parts of the discussions of the Council and its committees, voting rights would continue to be reserved to the Member States, who were making a much larger commitment to the project. As the majority of votes were related to issues that were not of direct relevance to the non-Member States, such as pensions, contracts, Member States' contributions, the Staff Rules and Regulations, etc., that should not present a significant obstacle to their full participation in the activities of the Organization.

Dr ESCHELBACHER observed that in view of its future role as a unique, world centre for High Energy Physics following LHC approval, CERN must be alert to its global responsibilities and that the changes proposed by the Management were therefore clearly needed. While certain points raised at the Committee of Council the previous day would require further precision - too great a diversity of the terms and conditions for Associate status would, for example, be undesirable - the German delegation in principle firmly supported the considerations presented in the document, and hoped that a revised proposal could be approved in December 1995.

Professor MAIANI, thanking the Director-General and the Management for their work in preparing the document, stressed the importance of agreeing on a clear and precise proposal concerning Associate Status as soon as possible so that concrete negotiations with non-Member States concerning their participation in the LHC programme could go ahead on a sound and common basis. Thorough reflection, taking account of the relative roles and expectations of Member- and non-Member States alike, would be needed to work out the appropriate terms and conditions of Associate membership, and the Italian delegation would therefore give the matter further consideration for September, when the discussion was to resume.

Professor SAXON observed that the Management's proposal was a positive step for the development of science and a fitting response to the need for a stable framework for CERN's ongoing partnership with countries making substantial contributions to the LHC. However, he wished to echo some of the concerns
voiced by the French delegation and stressed that care should be taken in formulating a durable framework, developing the ideas relating to issues such as the appropriate levels of posts and industrial participation.

Professor LOPEZ said that the creation of an associate status could be regarded as the first step to formalising CERN's role as a world laboratory, and that the coming months' discussions would therefore be of great importance for the future evolution of the Organization. In order to provide the Director-General with clear guidelines for his negotiations with potential Associate States it would be important to try to set minimum or boundary rights and obligations of Associate Membership, taking account of actual human and material contributions and the economic and scientific strength of the countries concerned.

Mr VERNET, agreeing that the new status would be a further step in the development of the Organization, said that the Swiss delegation fully supported the general outline of the Management's proposals. While Associate status should be granted by invitation not request, the appropriate diplomatic and scientific channels would naturally be there for use by countries who wished to be invited to participate in the Organization's activities on that basis. With regard to the content, while he was in favour of fairly wide access to CERN's various working and decision-making bodies, once the number of Observer and Associate states became significant it would be desirable to increase the frequency and scope of the closed sessions of those bodies devoted to discussion among the Member States only.

The PRESIDENT, echoing Mr Vernet's remarks concerning the Organization's future opening-up to countries outside Europe, concluded that the week's discussions at the Council and its committees had underlined the importance attached to the creation of an Associate status as a means of formalising CERN's increasingly international role and the need to exercise due care and attention in its formulation.

The Council took note of document CERN/CC/2091.

The PRESIDENT invited Member State delegations to submit written comments on the proposals set out in the document which the Management
would take into account in preparing a revised version to be examined by the Committee of Council at its September meeting with a view to a decision in the matter by the Council in December 1995.

8. **PROGRESS REPORTS PRESENTED TO COUNCIL**  
(Item 8 of the Agenda) (CERN/2094)

The DIRECTOR-GENERAL said that in view of the fact that the information contained in the progress reports presented to the Council each June was covered in the Annual Report and in the Scientific Activities and Budget document published simultaneously, he wished to propose that they be discontinued, particularly since their preparation placed considerable demands on the division leaders in terms of time and effort.

The Council took note of document CERN/2094 and, on the proposal of the Director-General, unanimously agreed that such progress reports would not be prepared in future as the information was already provided in other contexts.

9. **ACCOUNTS FOR 1994**  
(Item 9 of the Agenda)

- Accounts for the Financial Year 1994  
(CERN/2087 – CERN/FC/3775)

- Auditors' Report on the Accounts of the European Organization for Nuclear Research (CERN) for the Financial Year 1994  
(CERN/FC/3776)

- Auditors' Report for the Financial Year 1994 – Comments by the Management  
(CERN/FC/3777)

Dr GIGLIARELLI FIUMI reported that the documents had been extensively discussed both at the Finance Committee and at an informal meeting between delegations and the external auditors which had preceded it, and that the
Committee had unanimously recommended the Council to approve the Accounts for the 1994 financial year as set out in document CERN/2087 – CERN/FC/3775.

Mr JØRANLI, representing the external auditors, made the following statement:

"President, it is a pleasure for me to present to you the results of the Auditor's Report on the Accounts of CERN for the financial year 1994.

"The Audit has been carried out in compliance with the auditing standards accepted by our Office, and our examinations have been in accordance with the instructions given to us as regulated by the financial rules of CERN.

"As a result of our audit we have issued an Audit Certificate which certifies the correctness of the financial statements and verifies that the financial statements give a true and fair view of the state of the affairs of the Organization.

"The Auditor's Report contains no qualifying observations, and no deficiencies or defects in the accounts or in the accounting system have been revealed by the audit.

"We would like to express our appreciation and thanks to the CERN Management and staff for their cooperation and support to facilitate our audit work for CERN."

The Council took note of documents CERN/FC/3776 and CERN/FC/3777 and, on the recommendation of the Finance Committee, unanimously decided to approve the Accounts for the 1994 financial year set out in document CERN/2087 – CERN/FC/3775.
10. **CERN PENSION FUND**
   (Item 10 of the Agenda)

   - **Annual Report 1994 of the CERN Pension Fund**
     (CERN/2088 – CERN/FC/3778)

   - **Report on the Audit of the Accounts of the Pension Fund of the European Organization for Nuclear Research (CERN) for the Financial Year 1994**
     (CERN/FC/3779)

   - **Report on the Audit of the Accounts of the Pension Fund of the European Organization for Nuclear Research (CERN) for the Financial Year 1994 – Comments by the Administration of the Fund**
     (CERN/FC/3780)

   Mr CUÉNOUD introduced document CERN/2088 – CERN/FC/3778.  

   Dr GIGLIARELLI FIUMI reported that the Finance Committee had taken note of documents CERN/FC/3779 and CERN/FC/3780 and had unanimously decided to recommend the Council to approve the Annual Report of the Pension Fund for the 1994 financial year set out in document CERN/2088 – CERN/FC/3778.


   The PRESIDENT said that, on behalf of the Council, he wished to thank the members of the Audit Committee for their work on the Accounts of the Organization and of the Pension Fund.

---

6 See Annex 6.

(Item 11 of the Agenda) (CERN/SPC/701 - CERN/FC/3773)

The DIRECTOR-GENERAL presented the document\(^7\) and gave a detailed summary of CERN's scientific programme for the period concerned.

In his introductory remarks, he pointed out that the document had been drawn up on the basis of Council's decisions in December 1994 (document CERN/2075) that i) the overall cost-variation index to be applied to Member States' contributions would be zero in the period 1995-1997, and that ii) planning should proceed on the basis that inflation would be 2% and that Member States' contributions would be indexed by 1% from 1998 onwards. On the basis of the latter assumption, France and Switzerland had agreed to index their contributions by 2% from 1998 and that was included under "income" in Table 7 of his presentation. The additional contributions offered in kind by France and Switzerland would imply reductions in expenditure by CERN rather than additional income. Those contributions were not included as their use and timing were still under discussion.

Referring to the pressure from the scientific community to run LEAR for a further year in 1997, he informed the Committee that the Research Board had reluctantly concluded that the physics case, though excellent, was not commensurate with the considerable resources required. The Management had therefore decided to maintain its decision to close the facility at the end of 1996.

Concerning LEP2, he informed the Committee that strong arguments had emerged for a small additional upgrade to maximise LEP's full potential, involving running at higher energy in the last two years of scheduled operation. The LEP users, now supported by the Scientific Policy Committee, had urged the Management to find ways to complete the LEP2 project in that way. Such a step, which would require 32 additional superconducting cavities, had not been included in the long- or medium-term plans since the corresponding resources were not currently available. However, it was the Management's task to optimise the scientific programme continually within the overall financial resources made available by the funding agencies. He had therefore informed the Scientific Policy

\(^7\) See Annex 7.
Committee that, in response to the strong case put forward, the Management was prepared to review priorities and examine whether such an upgrade could be accommodated within the CERN programme, with the boundary condition that such a development should not affect either the financial or time schedule for the LHC. The Management would inform the Scientific Policy Committee in September what sacrifices would be needed to allow a further upgrade of LEP as a basis for their recommendation. Naturally, any extra contributions from Member States would greatly ease the situation.

Concerning the scientific case, the discovery and confirmation in recent months of the top quark by Fermilab and further precision measurements at LEP over the last year had greatly strengthened the physics interest in the energy range to which the further upgrade would give access. LEP2 had proved to be a challenging project with its share of difficulties and discussion of a further upgrade at an earlier stage would have been premature. The Management was now confident that the technical problems had been overcome. A further LEP upgrade would be complementary to and ensure an overlap with the LHC, thus ensuring extensive coverage of all the physics issues in a potentially exciting and difficult energy region. Major discoveries at the edge of a whole new region of physics would also permit optimisation of the LHC detectors. However, unless dramatic physics developments justified higher LEP energies, no further upgrade would be contemplated, largely owing to the much higher cost of a further step in energy.

The upgrade cost would be in the region of 10 MCHF per annum over three years. While the Management was not putting forward a specific proposal for the time being, a decision to go ahead would have to be taken in 1995 so that the increase in LEP energy could be fully exploited in 1998 and 1999 without affecting the LHC or the LEP timetable. Moreover, orders would have to be placed with industry in December 1995 to keep the production lines running and get the best possible price for the cavities. The Management would examine the matter with a view to further discussion later in the year. The Organization would naturally welcome cash or in-kind contributions from Member States towards the 36 MCHF needed for the upgrade, which would maximise the scientific return on the Member States' very substantial investment in LEP since 1981.
Professor WOLF stated that the Scientific Policy Committee supported the long-range plan and, in view of the personnel and Budget constraints imposed by the terms of LHC approval, also agreed with the decision to close the LEAR research programme at the end of 1996, in spite of its high quality and broad diversity.

Dr GIGLIARELLI FIUMI reported that the Finance Committee, having extensively discussed the document, had unanimously decided to recommend the Council to authorise the Management to draw up the Budget for 1996 on the basis of the overall figure for expected income contained in Table 7 on page 45 of the document and had taken note of the provisional determinations for the following three years.

The meeting was adjourned at 12.50 p.m. and resumed at 2.30 p.m.

Professor SOERGEL congratulated the Director-General on his report, which had confirmed CERN's lively scientific programme for the years prior to LHC operation. While he did not wish to contest the decision to close LEAR at the end of 1996, it was nevertheless a special facility offering unique physics opportunities. The German delegation therefore wished to know whether it could be brought back into operation at a later stage if needed.

The DIRECTOR-GENERAL replied that after its closure LEAR would be mothballed for some time, to be transformed eventually into a heavy ion accumulator for the LHC. To restart it at a later stage would therefore be very difficult. The overall cost of an additional year's operation of LEAR would have totalled some 16.5 MCHF, including the associated manpower which was very much needed for the PS upgrade.

Replying to further questions from Professor SOERGEL, he confirmed that if the further LEP upgrade were approved, the additional 32 cavities required could be installed during the 1997-1998 shutdown. In its current mode of operation with the multi-bunch scheme LEP has the potential to operate with a higher luminosity than under the old pretzel scheme and there were increasing grounds for confidence that it would be possible to achieve 150 pb⁻¹ per year.

Regarding non-Member State participation in ATLAS and CMS, where the involvement of US physicists represented some 18% for the two experiments
combined, he explained that while as far as the machine was concerned details of the available resources would be required by the 1997 review, a final decision on the overall scale of the experiments would have to be taken by the beginning of 1996 at the latest. That implied that, in the case of the United States, an assumption would have to be made that the contributions corresponding at least pro rata to that percentage would be available, and if there were serious doubts in that regard a decision would have to be taken whether to scale down the experiments, which would be highly regrettable given that they would be the world's last large experiments in that area. Once the overall scale had been fixed, the experiments could begin to be designed to budget. The financing of the experiments was a complex issue given the timing of the decisions, the difficulty for funding agencies to make very long-term commitments and the large number of different funding sources involved. Some kind of approval was needed, however, in order for the funding agencies to make the necessary resources available so that money could start to be spent, but at the same time it was desirable to retain a degree of flexibility for the remaining technical choices to be made in order to take account of any future improvements in the associated technology. The Management therefore proposed that formal approval in principle be given later that year and that provisional memoranda of understanding be drawn up for the period to the 1997 review, when the full technical proposal would be approved.

Professor WOLF added that the signing of interim memoranda of understanding between CERN and the relevant funding agencies was particularly important so that the necessary resources could be released to enable work on prototype construction to begin.

Professor SOERGEL remarked that it had been hoped that when the decision on the LHC experiments and the associated non-Member State participation was taken there would also be some clarification on the participation of the non-Member States in the machine, for which a reasonable contribution was also expected.

Professor MAIANI said that while the scheduled cuts in the experimental programme, such as the closure of LEAR at the end of 1996, were highly regrettable, it was understood that they were unavoidable given the very strict Budget conditions linked to LHC approval, and the scientific activities presented
by the Director-General were still an excellent programme. However, it was to be hoped that the further small upgrade of LEP to which the Director-General had referred in his presentation and for which there was a very good physics case, could be achieved without further curtailment of the experimental programme. To that end it might be appropriate for the Director-General to draw up a list of the associated requirements in order to determine whether the upgrade could be financed through small voluntary contributions from several Member States without having to touch the existing experimental budget. Finally, with regard to the neutrino programme, he wished to point out that Italy was discussing with CERN the possibility of a long baseline neutrino experiment involving the Gran Sasso Laboratory which, if approved, would be a natural and exciting completion of the highly successful neutrino programme carried out at CERN over the last twenty years.

The DIRECTOR-GENERAL, thanking the Italian delegate for his remarks concerning the funding of part or all of the further LEP extension through voluntary contributions, confirmed that a list would be drawn up and circulated to interested delegations as proposed.

Dr O'FALLON said that he welcomed the earlier decision concerning Japan's participation in LHC as an important step in ensuring the project's early completion and hoped that it could be used to good effect in the United States as an example of how important decisions could be taken rapidly. As delegations were aware, negotiations had taken place between the CERN Management and the US Department of Energy and the National Science Foundation in Washington in April 1995, following which, in its report on the meeting, the HEP Advisory Panel to the DoE had reaffirmed its strong support for US participation in LHC. The DoE's 1996 High Energy Physics budget was currently undergoing review and approval by the new Congress, where the overall budget climate was severe. Although the signals concerning the LHC were mixed, there were grounds for cautious optimism. The House Appropriations Committee had appropriated a very favourable budget to High Energy Physics, and a statement had been made by the important House Authorisation Committee instructing the DoE's Secretary to enter negotiations with CERN concerning US participation in the planning and construction of the LHC project. If approved by the Senate, that would constitute a very important step. Further discussions between CERN and the DoE were scheduled for late August, by which time he hoped that
Congress's intentions in that respect would be clear. The Administration continued its strong support for US participation in LHC and he looked forward to intensive and profitable discussions later in the year.

Mr NEWMAN, associating himself with previous speakers' congratulations concerning Japanese participation in the LHC, observed that it augured well for the further contributions that were needed to enable the project to be built on the faster track. Although the European Commission was regrettably unable to make its own financial contribution to the project, it would welcome proposals within its framework programmes, whose purpose was to help with the infrastructure and the general industrial and research climate of projects such as CERN's, to which end a number of facilities were currently being introduced within the Fourth Framework Programme. He looked forward to active participation from other non-European countries in LHC and considered that the European Commission and other fields of activity had much to learn from the model of global collaboration that was being set up at CERN.

The Council took note of document CERN/SPC/701 - CERN/FC/3773 and of the presentation of the Director-General and, on the recommendation of the Finance Committee, unanimously decided to authorize the Management to draw up the 1996 Budget on the basis of the overall figure for expected income for 1996 proposed in Table 7 of document CERN/SPC/701 - CERN/FC/3773 and took note of the provisional determinations for 1997, 1998 and 1999 set out in that document.

12. PRELIMINARY INFORMATION ON THE COST-VARIATION INDEX FOR 1996  
(Item 12 of the Agenda) (CERN/FC/3781)

Dr ROBIN introduced the document.

The Council took note of the preliminary information set out in document CERN/FC/3781.
13. CONTRIBUTIONS OF THE CZECH REPUBLIC, HUNGARY, POLAND AND THE SLOVAK REPUBLIC
(Item 13 of the Agenda) (CERN/2096)

The DIRECTOR-GENERAL introduced the document.

Dr GIGLIARELLI FIUMI reported that the Finance Committee had unanimously decided to recommend the Council to approve the proposal set out in the document, namely that, for the purposes of calculating the annual contributions, the net national incomes for the Czech Republic, Hungary, Poland and the Slovak Republic would be assumed to be equal to 76.6% of each country's gross domestic product until such time as data on their respective net national incomes became available.

The Council unanimously decided to follow the recommendation of the Finance Committee.

14. THE FELLOWS, ASSOCIATES AND STUDENTS PROGRAMMES
(Item 14 of the Agenda) (CERN/SPC/704 - CERN/2089)

Professor FOÀ presented the document.8

Professor WOLF stated that the Scientific Policy Committee strongly urged the Council to increase the number of fellowships at CERN, by some 20% if possible, and recommended that the increase be financed from within the Fellowship Programme allocation in view of prevailing Budget constraints.

Dr GIGLIARELLI FIUMI reported that the Finance Committee had unanimously supported the structural changes and the increase in the number of fellowships proposed in the document. While expressing the wish that such an increase be funded within the present Budget allocation, it had agreed that the financial implications of the increase should be considered carefully at a later stage taking into account the outcome of TREF's ongoing work on the five-yearly remuneration review.

---

8 See Annex 8.
The PRESIDENT added that the Committee of Council had fully endorsed the Finance Committee's conclusions.

Professor FLÜGGE, referring to the 10 or 15 per cent increase in CERN users in recent years, observed that the European Committee for Future Accelerators (ECFA), which represented the user community, had always stressed the importance of the Fellowship Programme and therefore fully supported the Management's timely initiative to enlarge it.

Dr ESCHELBACHER, expressing appreciation for Professor Foà's convincing report and agreeing with the Chairman of the Finance Committee that the proposals must be re-examined at the end of the year in the light of the outcome of the remuneration review, asked whether there was any provision for the participation of Associate States in the Fellowship Programme.

The DIRECTOR-GENERAL replied that in the framework of the ongoing review of the Staff Rules and Regulations it was proposed to amend an article which at present effectively restricted fellowships to the Member States only. However, the Management was not at present recommending that the Programme should be opened up to non-Member State nationals, a step which would require a separate decision by the Council and would have to be examined in the context of the discussions on Associate Status and the negotiations with the individual countries concerned.

Professor SKEPPSTEDT stressed that the Fellowship Programme was of great importance to the Swedish scientific community, and his delegation therefore enthusiastically welcomed the proposal for an increase in the number of fellowships.

The Council took note of document CERN/SPC/704 - CERN/2089 and unanimously approved the proposals contained therein on the understanding that the Finance Committee, while recognizing that an increase in the number of fellowships appeared fully justified, had agreed to consider carefully the financial implications of the proposed increase at a later stage, taking into account the outcome of the work at present under way in TREF concerning the five-yearly remuneration review.
The meeting was adjourned in open session at 3.25 p.m. and resumed immediately in closed session.

CLOSED SESSION

15. ELECTIONS
(Item 15 of the Agenda) (Closed Session)

- Composition of the Scientific Policy Committee
  Re-Appointment of one Member
  (CERN/2084) (Confidential)

The Council unanimously decided, on the recommendation of the Scientific Policy Committee, to re-appoint:

- Professor G. Bellettini member of the Scientific Policy Committee for a period of three years from 1st July 1995;

- Professor Y. Yamaguchi member of the Scientific Policy Committee for a period of six months from 1st January 1996.

- Election of one New Member

The Council took note that the Scientific Policy Committee would make a recommendation for the election of one member to the Committee at its September meeting for approval by the Council in December 1995.

- Election of one Vice-President of Council

In Closed Session, the Council unanimously decided to elect Professor J. Niederle Vice-President of Council for a period of one year from 1st July 1995.

- Appointment of the Chairman and Vice-Chairman of the Tripartite Employment Conditions Forum (TREF)

The Council unanimously decided to appoint Mr J. Bezemer, the current ad interim Chairman, Chairman of the Tripartite Employment Conditions Forum (TREF) and Dr L. Westgaard Vice-Chairman of TREF.
- Pension Fund:
  Re-appointments to the Governing Board and the Investment Committee
  (CERN/2095) (Confidential)

The Council unanimously decided to re-appoint Mr. J. Vernet member of the Governing Board of the Pension Fund representing the CERN Council and Dr. M. Gigliarelli Fiumi and Dr. M. O. Ottosson alternate members representing the CERN Council for a period of three years from 1st July 1995.

The Council also unanimously decided to re-appoint Mr. J. Bezemer member of the Investment Committee of the Pension Fund for a period of three years from 1st July 1995.

16. SENIOR STAFF APPOINTMENTS
   (Item 16 of the Agenda) (Closed Session) (CERN/SPC/705 – CERN/CC/2090) (Confidential)

The Council unanimously agreed to endorse the proposal contained in document CERN/SPC/705 – CERN/CC/2090 to transform the existing Accelerator Technologies Division (AT) into the LHC Division from 1st January 1996.

The Council also unanimously decided:

- to appoint Dr. J.-P. Gourber Leader of the LHC Division for a period of three years from 1st January 1996;

- to re-appoint Mr. J. Ferguson Leader of the AS Division for a period of three years from 1st July 1995;

- to re-appoint Mr. A. J. Naudi Leader of the Finance Division for a period of three years from 1st July 1995;

- to re-appoint Dr. W. Middelkoop Leader of the Personnel Division until 31st December 1995;
to appoint Mr B. Angerth Leader of the PE Division for a period of three years from 1st January 1996.

The meeting was adjourned in closed session at 3.35 p.m. and resumed immediately in open session.

17. REPORT ON THE CLOSED SESSION
(Item 17 of the Agenda)

The PRESIDENT reported on the results of the elections held during the closed session (see Item 15).

The DIRECTOR-GENERAL, reporting on senior staff appointments (see Item 16), added that under the line management of the LHC Project Leader, Dr Evans, the new LHC Division headed by Dr Gourber would group together the key activities related to the LHC, in particular the superconducting magnets and cryogenics, although many other parts of the project would be distributed among the other divisions, including ST, PS, SL and MT. Following those changes, a proposal concerning the future structure of MT Division and a successor to Dr Bachy, its present leader, who was due to join the LHC Project Team when his term of office expired at the end of 1995, would be submitted later in the year.

18. OTHER BUSINESS
(Item 18 of the Agenda)

- Constitution and Terms of Reference of the Scientific Policy Committee

The DIRECTOR-GENERAL explained that, in view of the central importance of the LHC to the scientific future of the Organization, he considered that it would be appropriate to make the Chairman of the LHC Machine Advisory Committee currently being set up an ex-officio member of the Scientific Policy Committee, so that he could provide the latter with expert advice and information on progress with the accelerator. A similar arrangement had been set up in the past during construction of the SPS. It was therefore proposed to
amend the existing terms of ex-officio membership set out in the Constitution and Terms of Reference of the Scientific Policy Committee accordingly (see document CERN/1057, dated 30 May 1972 [CERN/SPC/313/, dated 17 May 1972]), by replacing "the Chairman of the 300 GeV Machine Committee" with "the Chairman of Machine Advisory Committee for the LHC".

Thus, the relevant paragraph on page 1 of the document in question would read:

"The Committee shall consist of the following members:

(a) Elected members: These shall be individuals chosen for their scientific standing and without reference to nationality. They act "ad personam" and not as representatives of their countries. The number of elected members shall not be limited.

(b) Ex officio members: These shall be the Chairmen of the Experiments Committees, the Chairman of the Machine Advisory Committee for the LHC and the Chairman of the European Committee for Future Accelerators. They act "ad personam" and not as representatives of their committees nor of their countries."

Professor WOLF said that as a significant part of its future discussions would focus on the LHC experiments and machine, the Scientific Policy Committee considered that it would derive much benefit from the direct contact with the Chairman of the LHC Machine Advisory Committee afforded by his ex-officio membership.

On the proposal of the Director-General, the Council unanimously agreed that the Chairman of the Machine Advisory Committee for the LHC should become an ex-officio member of the Scientific Policy Committee and, to that end, further unanimously decided to revise the existing terms of reference for ex-officio membership (CERN/1057, dated 30 May 1972 [CERN/SPC/313/Rev.4, dated 17 May 1972]) by replacing "the Chairman of the 300 GeV Machine Committee" with "the Chairman of Machine Advisory Committee for the LHC".
- **Successful outcome of negotiations with Japan**

Professor SOERGEL said that he wished to take the opportunity to thank and congratulate the Director-General and all those involved in the successful outcome of the negotiations with Japan on its new Observer Status and major contribution to the LHC project.

- **Departure of three Member-State delegates**

The PRESIDENT said that he wished to thank and bid farewell to Mrs B. Sode-Mogensen, who was leaving the Danish delegation to the CERN Council to take up a new post within the Ministry of Research. Mrs Sode-Mogensen had been a very active and efficient member of the Committee of Council and Council and of various other CERN committees and, in her absence, he asked Professor Andersen to convey to her, on the Council's behalf, his warmest thanks and best wishes.

The DIRECTOR-GENERAL added that he had received a letter from Mrs Sode-Mogensen in which she extended her best wishes to the CERN staff and wished the Organization a glorious future. It had been a pleasure to work with her in her capacity as Danish delegate.

The PRESIDENT also expressed thanks and appreciation to Dr L. Sándor, who was leaving the Slovak delegation to the Committee of Council and Council to take up a position as scientific associate at CERN from September 1995.

Dr SÁNDOR, thanking his fellow delegates and all those concerned for their co-operation and support, said that he was honoured to have been a member of the Council during the exciting period of LHC approval and now looked forward to his scientific work at CERN.

The PRESIDENT further thanked and bade farewell to Ambassador Boytha who, in his capacity as a representative of Hungary since its accession to CERN in 1992, had been a valuable and highly constructive participant at the Council.
Election of one of the Vice-Presidents

The PRESIDENT said that, finally, he wished to congratulate Professor J. Niederle on his election as Vice-President to the Council.

Professor NIEDERLE replied that he was greatly honoured by the Council's decision and hoped to be worthy of the confidence thus placed in him.

The meeting rose at 3.50 p.m.

* * *
DRAFT AGENDA
HUNDRED-AND-SECOND SESSION OF THE COUNCIL
HUNDRED-AND-SECOND SESSION OF THE COUNCIL
Geneva - 23 June 1995 - 10.00 a.m.

Council Chamber

DRAFT AGENDA

1. Report of the Credentials Committee

2. Approval of the Draft Minutes of the Hundredth (second part) and Hundred-and-first Sessions

3. Adoption of the Agenda

4. Observer Status for Japan

5. Japanese Contribution to the LHC

- BREAK -

6. President's Report

7. Non-Member State Matters:
   - Associate Status at CERN for non-European States
8. Progress Reports presented to Council

9. Accounts for 1994:
   - Accounts for the Financial Year 1994
   - Auditors' Report on the Accounts of the European Organization for Nuclear Research (CERN) for the Financial Year 1994
   - Auditors' Report for the Financial Year 1994 - Comments by the Management

10. CERN Pension Fund:
    - Annual Report 1994 of the CERN Pension Fund
    - Report on the Audit of the Accounts of the Pension Fund of the European Organization for Nuclear Research (CERN) for the Financial Year 1994
    - Report on the Audit of the Accounts of the Pension Fund of the European Organization for Nuclear Research (CERN) for the Financial Year 1994 - Comments by the Administration of the Fund

11. The Scientific Activities of CERN and Budget Estimates for the Years 1996-1999

12. Preliminary Information on the Cost Variation Index for 1996

13. Contributions of the Czech Republic, Hungary, Poland and the Slovak Republic
14. The Fellows, Associates and Students Programmes

15. Elections:

- Composition of the Scientific Policy Committee
- Re-Appointment of one Member
- Election of one New Member

Election of one Vice-President of Council
Appointment / Re-appointment of the Chairman and of the Vice-Chairman of TREF

Pension Fund:
- Re-appointments to the Governing Board and the Investment Committee

16. Senior Staff Appointments

17. Report on the Closed Session

18. Other Business.

** ** **
COMPOSITION OF THE JAPANESE DELEGATION

(Item 4 of the Agenda)
## COMPOSITION OF THE JAPANESE DELEGATION

<table>
<thead>
<tr>
<th>Name</th>
<th>Position and Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>H.E. Mr K. Yosano</td>
<td>Minister of Education, Science and Culture</td>
</tr>
<tr>
<td>Mr M. Honma</td>
<td>Director, International Affairs Division, Science and International Affairs Bureau, Ministry of Education, Science and Culture</td>
</tr>
<tr>
<td>Mr T. Koezuka</td>
<td>Counsellor, Permanent Mission of Japan, Geneva</td>
</tr>
<tr>
<td>Mr M. Inoue</td>
<td>Director, International Scientific Affairs Division, Science and International Affairs Bureau, Ministry of Education, Science and Culture</td>
</tr>
<tr>
<td>Mr M. Mizukami</td>
<td>Director, International Science Cooperation Division, Foreign Policy Bureau, Ministry of Foreign Affairs</td>
</tr>
<tr>
<td>Mr K. Maekawa</td>
<td>Secretary to the Ministry of Education, Science and Culture</td>
</tr>
<tr>
<td>Mr H. Takahashi</td>
<td>First Secretary, Permanent Mission of Japan, Geneva</td>
</tr>
</tbody>
</table>

***
JAPANESE CONTRIBUTION TO THE LHC

(Item 5 of the Agenda)

by

the Director-General
JAPANESE CONTRIBUTION TO THE LHC

Offer of 5 billion Yen (approx. 68 MCHF) from supplementary 1995 budget is a major step for LHC, for CERN-Japan relations, and for interregional scientific co-operation

- **Japan's proposal** (letter from Monbusho dated 25/5/95) i) entrusts to CERN an amount of 5 billion Yen to be devoted to the construction of specific parts of the LHC; ii) requests that these resources be put in a special Fund, to be established by CERN and accounted separately from CERN's budget; iii) asks CERN to take the relevant steps for the implementation of the proposal

- **CERN's response proposes** i) a commitment by CERN to create and manage under its responsibility a "Japanese Fund-in-Trust for the LHC Programme" for the deposit of the Japanese contribution, the purpose of the Fund being to speed up and improve the LHC project; ii) a procedure for defining projects to be implemented by means of these resources, and for their ratification by Monbusho; iii) that the use of interest produced by the investment of the available funds should be decided by the Parties; iv) that CERN should report to Monbusho on the projects implemented and the management of the Fund

Council - June 1995
• Council is asked to

i) confirm acceptance of the Japanese offer on the terms given in the DG's letter, and

ii) agree to the proposal to set up a Fund-in-Trust for the LHC Programme by adopting a proposed Resolution,

to which the letters exchanged between Monbusho and the DG of CERN would be annexed, which would then constitute an international agreement between CERN and Monbusho
DRAFT RESOLUTION

THE COUNCIL,

CONSIDERING

The long-lasting and fruitful scientific co-operation between Japan and CERN,

The offer of Japan to contribute financially to the LHC project,

CONSIDERING ALSO

The Convention, in particular its Article V, 2 (g), Article 6 of the Financial Protocol annexed thereto and CERN’s Financial Rules;

Article 1

ACCEPTS with gratitude the offer of the Japanese Government, expressed in its letter dated 25 May 1995 (Annex I), "to entrust to CERN an amount of 5 billion yen, in the form of a Fund-in-Trust, for the construction of the specific parts of the LHC machine and specific activities related to it during the 1995 Japanese fiscal year (1 April 1995-31 March 1996)."

Article 2

APPROVES the acceptance of this offer as set out in the letter from the Director-General to Monbusho (Annex II) and DECIDES to create a "Japanese Fund-in-Trust for the LHC Programme" in accordance with the same letter.

Council - June 1995
STATEMENT BY THE AUSTRIAN DELEGATION
CONCERNING THE JAPANESE CONTRIBUTION TO THE LHC

(Item 5 of the Agenda)

by

Dr Herdina
文部大臣与謝野先生を始め、日本政府の代表の皆様を前にちょっと小さな演説をしたいんです！私は日本語を大分忘れましたが、頑張らせて頂きます。

本日は我々の多国間の組織にとって記念すべき日ですよ。日本政府のLHCを支援する決心は非常に大切な一歩だと存じます。オーストリアの代表団は文部省の多大な拠出に感謝したいと存じます。

本日から、CERNと日本はLHC協力のため、科学の面でも産業の面でも、一緒に全力を尽くして、お互いの関係の強化に専心しましょう！
NON-MEMBER STATE MATTERS

(Item 7 of the Agenda)

by

the Director-General
NON-MEMBER STATE MATTERS

A large number of NMS physicists work at CERN and the percentage will be even larger at the LHC, which – in terms of use – will be a global project

• Member State physicists benefit from collaboration with NMS physicists at CERN because –
  
  i) their human and material contributions to experiments allow a richer programme (MS physicists alone could not mount such a balanced LHC programme)

  ii) they bring intellectual input (e.g. ATLAS and CMS improved by input from ex-SSC physicists)

• Nevertheless Council's statement that usage of the LHC on a significant scale by a NMS should involve the contribution of resources seems reasonable/fair, and

it would be better if Non-Member States with large user communities were involved in the project as a whole, with a role in the construction of the machine and a voice in policy decisions related to the project
The CERN Management is therefore continuing to develop new ways to involve Non-Member States with significant involvement and contributions with the endorsement of ICFA.

1) Develop new ways to involve Non-Member States with proposed LHC Board and Associate Status.

2) Talk to Non-Member States with significant involvement, seeking collaboration and contributions with the endorsement of ICFA.
STATEMENTS BY ICFA AND DIRECTORS OF WORLD'S MAJOR PARTICLE PHYSICS LABS

January 1994

"... ICFA notes the world-wide interest in participation in LHC and that the CERN Council wishes to bring non-member states into the project. ICFA urges that appropriate mechanisms and means be found to allow this to happen and that the LHC be available for research by the world particle physics community. ..."

January 1995

"... We look forward to inter-regional participation in the LHC for three basic reasons:

1) our common interest in having LHC reach its fullest scientific potential;

2) the experience it will provide for future efforts that will require an even greater degree of inter-regional collaboration; and

3) our general goal of promoting international collaboration in all phases of construction and experimentation involving high energy accelerators."
In terms of numbers of physicists currently associated with CMS and ATLAS, the significant (>12) NMS users of LHC would be: USA (507), Russia (362), Canada (60), India (42), Japan (38), China (34), Georgia (31), Belarus (28), Israel (22), Bulgaria (22)

- **Canada** – Government has announced that Canada will make an in-kind contribution to LHC through TRIUMF, but this has not yet been discussed with CERN
- **China** – Serious discussion should start soon
- **India** – Basis for an agreement accepted by CC: protocol almost ready to be signed
- **Israel** – Israelis proposing that existing Protocol should be renewed at level of 20% of contribution as a Member (1.7MCHF/year initially, to be recalculated every two years), but with higher fraction in cash
Offer of 5B Yen (approx. 68MCHF) from supplementary 1995 budget = major step for LHC, for CERN-Japan relations, and for interregional scientific cooperation in discussion.

Basis for an agreement accepted by CC protocol now under discussion.

Discussions going on, but slowed down by budgetary uncertainties and proposal to abolish DOE.

[Note: significant past and present MS use of US facilities]
**ASSOCIATE STATUS**

- In terms of use LHC will be a global project

- CERN considers it desirable/healthy for Non-Member States with large user communities to be involved in the project as a whole, with a role in the construction of the machine and a "voice" in policy decisions related to the project [If constructed by a global partnership, LHC would be the first global megascience project, and thus an important model for other projects]

- Physicists from Non-Member States may be involved *ad personam* in LHC related decisions, as members of the LHCC, the Machine Advisory Committee or the Scientific Policy Committee. Institutions which take responsibility for machine components will be represented on the LHC Board (which will be advisory to the DG and provide a mechanism for co-ordination and exchange of information)
• However, CERN wishes to go further and offer partnership, as Associates, to Non-Member States that make substantial contributions to the LHC, or other CERN activities. With the encouragement of Council, and following a detailed discussion in March by the Committee of Council, the Management now presents a proposal for Associate Status, which, if supported, will be submitted, revised as necessary, via the SPC, FC and CC for approval by Council in December.
PROPOSAL FOR ASSOCIATE STATUS

DEFINITION:

• Associate State - new position, to be distinguished from Member, Observer, Co-operation

• Purpose of the Status - to offer participation, in a spirit of partnership, in a CERN activity or activities* on the basis of a firm long-term commitment

• Conditions for eligibility - a) non-European State, represented by a governmental body

b) substantial contribution to a CERN activity (or activities); magnitude** and nature (cash/in-kind) to be agreed by Council case by case when granting (or renewing) Associate Status

• Approval of the Status - by a unanimous Council decision (Resolution stating particular conditions)

• Instrument - international Agreement between CERN and the State concerned, containing the conditions already approved by Council (if requested, the Agreement could be registered with UNESCO in order to underline the international commitment of this association with CERN)

• Duration - up to ten years (renewable).

---

* The word activity is used, rather than programme, because following the definition in the Convention, CERN currently has only one - basic - programme

** Criteria: cost of activity, share of cost which Associate State would bear if a Member, number of users, reciprocal use of facilities by MS physicists, level of rights
CONTENT OF THE ASSOCIATE STATUS:

- **Participation** by right in the CERN activity or activities specified in the Agreement

- **Attendance at Council**, with right to speak on any issue connected to the specified activity(ies)

- **Attendance at Committee of Council** for specified parts of meetings devoted to discussion of the specified activity(ies), with the right to contribute to the discussions. Such sessions would be scheduled at least twice a year

- **Attendance of Scientific Delegates at SPC** for specified parts of meetings, by agreement with the Chairman

- Participation in the **CERN Fellowship programme** and eligibility of nationals of the Associate State for appointment to **limited duration posts**, if and as specified in the Agreement

- **Industrial participation** could be negotiated with States making substantial cash contributions

- **Legal aspects** - participation in CERN's activities would be subject to the Organization's rules. If the Associate State fails to fulfill its obligations, the Associate Status could be terminated by Council, subject to notice (one year). Disputes/litigation to be settled by international arbitration.

Council - June 1995
ANNUAL REPORT 1994 OF THE PENSION FUND

(Item 10 of the Agenda)

by

Mr C. Cuénoud
Chairman,

On Wednesday I presented the Annual Report of the Pension Fund to the Finance Committee, which recommends that you approve it. I can therefore be very brief in my presentation now.

As in previous years, the first few pages of the Annual Report provide you with a detailed overview of what happened during 1994 at the various levels of the Pension Fund. The following pages contain information relating to benefits, while the final part of the report deals with assets management.

On the benefits side, I would like to draw attention to one point only, which concerns the members and pensioners: on the one hand, one should note that benefits paid out continued to rise - amounting to 92 million Swiss francs at the end of 1994 - while, on the other hand, the contributions paid to the Fund have levelled out at about 115 million francs. In principle, in a capitalised scheme like ours, the fact that in two years' time benefits paid out will be as high as contributions paid in and will thereafter exceed them is not a source for concern since the assets and income from them are specifically there to meet the increase in the number of pensioners and the amount to be paid out in pensions. However, as part of the three-yearly actuarial review, the Fund wished to examine the impact of this rapid change in financial and demographic parameters which are the result, in particular, of a particularly tight recruitment policy coupled with encouragement for early departures.

Concerning assets management, as you know, Chairman, 1994 was, to say the least, a difficult year, closing with an overall moderately negative performance of - 0.9%.

I should like to remind you that since 1956, the year in which the Fund was set up, i.e. in 38 years of existence, this is the sixth time that a negative performance has unfortunately been recorded. During the 1970s, which were particularly devastating, the Fund had four years of negative performance. There was also one year of negative performance during the 1980s. The current decade is proving to be more unstable than foreseen, with results going up and down like a yo-yo from year to year.
If one compares the Fund's results with the various market indicators, it can be seen that it has been able to attenuate the effects of the slump in the markets considerably. This result is attributable to various factors, including the Fund's claim on the Organization, which is a strongly stabilising influence for the Fund, the real estate market, whose fall was less pronounced than the average, and prudent management of liquid assets, which remained high despite the fact that last year we transferred 300 million francs to outside fund managers.

It is of course too soon to make an overall assessment of the results of the investment policy of the external fund managers. I should like to point out that the Governing Board, and especially the Investment Committee, are kept regularly informed using highly sophisticated methods of comparing the performance of these international fund managers.

Chairman, I can assure you that we remain constantly vigilant with regard to the safety and yield of the funds entrusted to us.

Two years ago, we decided to conduct a more active fund management policy and we have increased the proportion of variable return assets in the portfolio, essentially in the form of shares. It is recognized that the benefits expected from the strategy introduced will only emerge in the long term. In principle, these measures, coupled with the increase in contributions which have now reached 30% which the Council fixed in 1990, should make it possible to ensure the financial stability of the CERN Pension Fund. Of course, this presupposes favourable economic and financial conditions (in the first case, low inflation in particular, and in the second, market growth).

I shall end my presentation here, having drawn attention to some of the salient points of the past year; you will find the others in the Annual Report. Thank you Chairman.
THE SCIENTIFIC ACTIVITIES OF CERN
AND BUDGET ESTIMATES 1996-1999

(Item 11 of the Agenda)

by

the Director-General
THE SCIENTIFIC ACTIVITIES OF CERN
AND BUDGET ESTIMATES 1996-1999

1) Development of the Plan
   – Budgetary and Planning Assumptions

2) Overview of Scientific Programme

3) Planned Spending

4) Income vs. Expenditure
DEVELOPMENT OF THE 1996-1999 PLAN


1994 - plan modified by introducing cut-backs and stretching LHC timetable (keeping total man-years of effort constant) ⇒

Dec 1994 - outline plan, approved by Council, to construct LHC in two stages in framework of freeze in MS contributions 1995-1997, and 1% indexation from 1998, with assumption of 2% inflation

Dec 1994 - reoptimization of use of resources under conditions agreed by Council

June 1995 ⇒ substantiation of December 1994 outline plan
⇒ little change from June 1994 plan for 1995-1998

Finance Committee/Council - June 1995
BUDGETARY & PLANNING ASSUMPTIONS

- **Indexation and Inflation**
  
  **Past Plans** - all costs in prices as at date when plan was submitted: full indexation assumed
  
  **This plan** - all costs in current (i.e. future) prices, on hypothesis of 2% inflation (materials and personnel): assume zero indexation 1996-1997, and 1% indexation of Member State contributions from 1998 onwards

- **Special contributions**
  
  **Host States** - 2% indexation of contributions from 1998 onwards assumed, on basis of above hypothesis; use/timing of additional 25MCHF promised by Switzerland and 64.5MCHF promised by France, still under discussion
  
  **Other Member and Non-Member States**
  
  - use of Japanese contribution (5BYen) under discussion
• **Planning Procedure** - start from December 1994 plan (developed step wise from December 1993 plan without overall reoptimization):

   In-depth analysis / revision of staff plan
   → affordable materials & expenditures*
   ⇒ iterate

* try to minimise ⇒ maximise payment appropriations to be carried forward to peak LHC-spend years (following strategy developed in December 1994 plan)
MODEL FOR THE SCIENTIFIC PROGRAMME

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PS-AREA</td>
<td>Isolde</td>
<td>Lear</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPS-FT/WA</td>
<td>H1-Omega</td>
<td>N1- Neutrino</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPS-FT/NA</td>
<td>EHN1</td>
<td>EHN2</td>
<td>ECN3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEP100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEP200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LHC Prep. &amp; Constr.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LHC base progr.</td>
<td>2 Gen.purpose detec.</td>
<td>Heavy ions</td>
<td>b-experiment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Exp./Initiatives</td>
<td>Non-LHC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LHC (incl. ep)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 1 - Direct support for the experimental programme
Staff (man-years) and Materials costs (MCHF, current prices)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>STAFF MAN-YEARS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experiments operation</td>
<td>338</td>
<td>311</td>
<td>279</td>
<td>250</td>
</tr>
<tr>
<td>ISOLDE</td>
<td>277</td>
<td>261</td>
<td>229</td>
<td>200</td>
</tr>
<tr>
<td>LEAR</td>
<td></td>
<td></td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>SPS-FT</td>
<td></td>
<td></td>
<td>20</td>
<td>12</td>
</tr>
<tr>
<td>LEP and areas</td>
<td></td>
<td></td>
<td>87</td>
<td>82</td>
</tr>
<tr>
<td>Theory</td>
<td></td>
<td></td>
<td>155</td>
<td>152</td>
</tr>
<tr>
<td>R&amp;D, new initiatives</td>
<td></td>
<td></td>
<td>149</td>
<td>145</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>26</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>35</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td><strong>MATERIALS COSTS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experiments operation</td>
<td>25.5</td>
<td>24.1</td>
<td>19.2</td>
<td>16.2</td>
</tr>
<tr>
<td>ISOLDE</td>
<td>16.6</td>
<td>16.6</td>
<td>14.6</td>
<td>12.1</td>
</tr>
<tr>
<td>LEAR</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>SPS-FT</td>
<td>0.7</td>
<td>0.6</td>
<td>0.2</td>
<td>-</td>
</tr>
<tr>
<td>LEP and areas</td>
<td>4.0</td>
<td>3.9</td>
<td>3.0</td>
<td>3.0</td>
</tr>
<tr>
<td>Theory</td>
<td>10.8</td>
<td>11.0</td>
<td>10.3</td>
<td>8.0</td>
</tr>
<tr>
<td>Consolidation &amp; other non-recurrent</td>
<td>1.4</td>
<td>1.4</td>
<td>1.4</td>
<td>1.4</td>
</tr>
<tr>
<td></td>
<td>7.5</td>
<td>6.1</td>
<td>3.2</td>
<td>2.7</td>
</tr>
</tbody>
</table>
### Table 2 - Accelerator operation and improvement
Staff (man-years) and Materials costs (MCHF, current prices)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>STAFF MAN-YEARS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PS Complex</td>
<td>743</td>
<td>680</td>
<td>625</td>
<td>580</td>
</tr>
<tr>
<td>LEAR</td>
<td>142</td>
<td>150</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>SPS Complex</td>
<td>35</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEP Complex</td>
<td>148</td>
<td>133</td>
<td>130</td>
<td>120</td>
</tr>
<tr>
<td>Control and operation</td>
<td>321</td>
<td>290</td>
<td>260</td>
<td>230</td>
</tr>
<tr>
<td>R&amp;D, new initiatives</td>
<td>62</td>
<td>62</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>35</td>
<td>30</td>
<td>25</td>
<td>20</td>
</tr>
<tr>
<td><strong>MATERIALS COSTS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accel. operation</td>
<td>101.9</td>
<td>95.9</td>
<td>95.9</td>
<td>87.7</td>
</tr>
<tr>
<td>PS Complex</td>
<td>71.5</td>
<td>72.0</td>
<td>72.0</td>
<td>72.0</td>
</tr>
<tr>
<td>LEAR</td>
<td>2.0</td>
<td>0.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPS Complex</td>
<td>15.0</td>
<td>15.0</td>
<td>15.0</td>
<td>15.1</td>
</tr>
<tr>
<td>LEP Complex</td>
<td>37.7</td>
<td>39.5</td>
<td>40.0</td>
<td>39.5</td>
</tr>
<tr>
<td>Control and operation</td>
<td>7.8</td>
<td>7.8</td>
<td>7.8</td>
<td>7.9</td>
</tr>
<tr>
<td>LEP2 project</td>
<td>15.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consolidation &amp; other non-recurrent</td>
<td>15.4</td>
<td>23.9</td>
<td>23.9</td>
<td>15.7</td>
</tr>
</tbody>
</table>

Finance Committee/Council - June 1995
Table 3 - General support services and infrastructure
Staff (man-years) and Materials costs (MCHF, current prices)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>STAFF MAN-YEARS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scientific support</td>
<td>1321</td>
<td>1284</td>
<td>1232</td>
<td>1192</td>
</tr>
<tr>
<td>Accelerator support</td>
<td>337</td>
<td>327</td>
<td>316</td>
<td>306</td>
</tr>
<tr>
<td>Techn. support, health &amp; safety</td>
<td>207</td>
<td>195</td>
<td>182</td>
<td>170</td>
</tr>
<tr>
<td>Administration</td>
<td>474</td>
<td>459</td>
<td>432</td>
<td>417</td>
</tr>
<tr>
<td></td>
<td>303</td>
<td>303</td>
<td>302</td>
<td>299</td>
</tr>
<tr>
<td><strong>MATERIALS COSTS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scientific support</td>
<td>192.0</td>
<td>185.6</td>
<td>186.0</td>
<td>182.6</td>
</tr>
<tr>
<td>Accelerator support</td>
<td>27.1</td>
<td>22.9</td>
<td>22.8</td>
<td>22.6</td>
</tr>
<tr>
<td>Techn. support, health &amp; safety</td>
<td>23.1</td>
<td>22.2</td>
<td>21.9</td>
<td>21.6</td>
</tr>
<tr>
<td>Administration</td>
<td>33.3</td>
<td>31.0</td>
<td>31.6</td>
<td>31.7</td>
</tr>
<tr>
<td>Scientific support equipment</td>
<td>24.0</td>
<td>23.0</td>
<td>23.5</td>
<td>24.0</td>
</tr>
<tr>
<td>Consolidsation infrastructure</td>
<td>9.4</td>
<td>9.5</td>
<td>9.8</td>
<td>10.0</td>
</tr>
<tr>
<td>Energy and fluids</td>
<td>57.4</td>
<td>57.2</td>
<td>56.2</td>
<td>50.9</td>
</tr>
<tr>
<td>Year</td>
<td>Machine construction</td>
<td>Infrastructure and safety</td>
<td>Experimental areas</td>
<td>Materials costs</td>
</tr>
<tr>
<td>------</td>
<td>----------------------</td>
<td>--------------------------</td>
<td>--------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>1996</td>
<td>330</td>
<td>406</td>
<td>209</td>
<td>274</td>
</tr>
<tr>
<td>1997</td>
<td></td>
<td></td>
<td></td>
<td>261</td>
</tr>
<tr>
<td>1998</td>
<td></td>
<td></td>
<td></td>
<td>305</td>
</tr>
<tr>
<td>1999</td>
<td></td>
<td></td>
<td></td>
<td>327</td>
</tr>
</tbody>
</table>
### Table 5 - CERN share of LHC detector construction

<table>
<thead>
<tr>
<th>Year</th>
<th>Staff Man-Years</th>
<th>Materials Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>153</td>
<td>11.0</td>
</tr>
<tr>
<td>1997</td>
<td>180</td>
<td>14.6</td>
</tr>
<tr>
<td>1998</td>
<td>211</td>
<td>15.4</td>
</tr>
<tr>
<td>1999</td>
<td>229</td>
<td>16.7</td>
</tr>
</tbody>
</table>

### Table 6 - Tests and pre-operation Materials costs (MCHF, current prices)

<table>
<thead>
<tr>
<th>Year</th>
<th>Detectors</th>
<th>Machine</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>7.1</td>
<td>2.0</td>
</tr>
<tr>
<td>1997</td>
<td>10.0</td>
<td>4.3</td>
</tr>
<tr>
<td>1998</td>
<td>11.6</td>
<td>5.3</td>
</tr>
<tr>
<td>1999</td>
<td>15.2</td>
<td>6.5</td>
</tr>
</tbody>
</table>
Table 8 - Budget estimates\(^1\)
(MCHF, current prices)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>STAFF MAN YEARS</strong></td>
<td>2885</td>
<td>2861</td>
<td>2825</td>
<td>2773</td>
</tr>
<tr>
<td><strong>PERSONNEL BUDGET</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff expenditure</td>
<td>508.0</td>
<td>516.5</td>
<td>525.5</td>
<td>532.5</td>
</tr>
<tr>
<td>Basic salaries &amp; allowances</td>
<td>477.0</td>
<td>485.0</td>
<td>493.2</td>
<td>499.5</td>
</tr>
<tr>
<td>Social contributions</td>
<td>350.6</td>
<td>358.5</td>
<td>364.3</td>
<td>369.2</td>
</tr>
<tr>
<td>Centralised cost</td>
<td>95.0</td>
<td>96.8</td>
<td>98.5</td>
<td>99.8</td>
</tr>
<tr>
<td>Fellows &amp; Associates expenditure</td>
<td>31.4</td>
<td>29.7</td>
<td>30.4</td>
<td>30.5</td>
</tr>
<tr>
<td><strong>MATERIALS BUDGET</strong></td>
<td>414.0</td>
<td>427.5</td>
<td>450.5</td>
<td>453.5</td>
</tr>
<tr>
<td>LHC construction</td>
<td>85.5</td>
<td>109.9</td>
<td>135.9</td>
<td>149.8</td>
</tr>
<tr>
<td>LHC tests and pre-operation</td>
<td>7.1</td>
<td>10.0</td>
<td>11.6</td>
<td>15.2</td>
</tr>
<tr>
<td>Other CERN programme operation</td>
<td>197.0</td>
<td>189.1</td>
<td>187.7</td>
<td>185.4</td>
</tr>
<tr>
<td>Energy</td>
<td>57.4</td>
<td>57.2</td>
<td>56.2</td>
<td>50.9</td>
</tr>
<tr>
<td>Consolidation, Non-recurrent invest.</td>
<td>65.0</td>
<td>59.3</td>
<td>57.1</td>
<td>50.2</td>
</tr>
<tr>
<td>Debt reimbursement</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
</tr>
<tr>
<td><strong>Total Personnel and Materials</strong></td>
<td>922.0</td>
<td>944.0</td>
<td>976.0</td>
<td>986.0</td>
</tr>
</tbody>
</table>

\(^1\) All costs are expressed in current prices, i.e. they include an assumed inflation of 2% p.a.
The table below gives the distribution of the 1996 Materials budget estimates, presented in tables 1 to 6, into the standard budget headings (Areas and programme). Lines capture the entries of tables 1 to 6; columns give the figures due to appear in the 1996 Budget document.

1996 Materials costs by Areas and programme
(MCHF, 1996 prices)

<table>
<thead>
<tr>
<th>Research area</th>
<th>Accelerators area</th>
<th>Technical support area</th>
<th>Comm. adm. support area</th>
<th>GRAND TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Particle Physics</td>
<td>Data Handling</td>
<td>Scientific Support</td>
<td>R&amp;D Total</td>
</tr>
<tr>
<td>Tab.1- Direct supp. for the exp. progr.</td>
<td>25.5</td>
<td>24.0</td>
<td>1.5</td>
<td>25.5</td>
</tr>
<tr>
<td>Experiments Operation</td>
<td>16.6</td>
<td>16.6</td>
<td>1.5</td>
<td>16.6</td>
</tr>
<tr>
<td>Theory</td>
<td>1.4</td>
<td>1.4</td>
<td>1.4</td>
<td>1.4</td>
</tr>
<tr>
<td>Consolidation, other non-recurrent</td>
<td>7.5</td>
<td>6.0</td>
<td>1.5</td>
<td>7.5</td>
</tr>
<tr>
<td>Tab.2- Accel. operation &amp; improvement</td>
<td>101.9</td>
<td>71.5</td>
<td>9.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Accelerator operation</td>
<td>71.5</td>
<td>67.0</td>
<td>4.5</td>
<td>71.5</td>
</tr>
<tr>
<td>PS Complex</td>
<td>9.0</td>
<td>8.5</td>
<td>0.5</td>
<td>9.0</td>
</tr>
<tr>
<td>LEAR</td>
<td>2.0</td>
<td>1.7</td>
<td>0.3</td>
<td>2.0</td>
</tr>
<tr>
<td>SPS Complex</td>
<td>15.0</td>
<td>12.0</td>
<td>3.0</td>
<td>15.0</td>
</tr>
<tr>
<td>LEP Complex</td>
<td>37.7</td>
<td>37.7</td>
<td>37.7</td>
<td>37.7</td>
</tr>
<tr>
<td>Control and Operation</td>
<td>7.8</td>
<td>7.8</td>
<td>7.8</td>
<td>7.8</td>
</tr>
<tr>
<td>LEP 2 project</td>
<td>15.0</td>
<td>15.0</td>
<td>15.0</td>
<td>15.0</td>
</tr>
<tr>
<td>Consolidation, other non-recurrent</td>
<td>15.4</td>
<td>10.0</td>
<td>0.8</td>
<td>15.4</td>
</tr>
<tr>
<td>Tab.3- General supp. serv. &amp; infrastr.</td>
<td>192.0</td>
<td>23.2</td>
<td>12.0</td>
<td>35.2</td>
</tr>
<tr>
<td>Scientific support</td>
<td>27.1</td>
<td>15.8</td>
<td>10.0</td>
<td>25.8</td>
</tr>
<tr>
<td>Accelerator support</td>
<td>22.6</td>
<td>22.6</td>
<td>22.6</td>
<td>22.6</td>
</tr>
<tr>
<td>Technical support, health &amp; safety</td>
<td>33.8</td>
<td>33.8</td>
<td>33.8</td>
<td>33.8</td>
</tr>
<tr>
<td>Administration</td>
<td>24.0</td>
<td>24.0</td>
<td>24.0</td>
<td>24.0</td>
</tr>
<tr>
<td>Scientific support equipment</td>
<td>9.4</td>
<td>9.4</td>
<td>9.4</td>
<td>9.4</td>
</tr>
<tr>
<td>Consolidation infrastructure</td>
<td>17.7</td>
<td>17.7</td>
<td>17.7</td>
<td>17.7</td>
</tr>
<tr>
<td>Energy and fluids</td>
<td>57.4</td>
<td>57.4</td>
<td>57.4</td>
<td>57.4</td>
</tr>
<tr>
<td>Table Debt Reimbursement</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Tab.4- LHC machine &amp; exp. areas</td>
<td>74.5</td>
<td>69.4</td>
<td>5.1</td>
<td>74.5</td>
</tr>
<tr>
<td>Prototypes, general preparation</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
</tr>
<tr>
<td>Machine construction</td>
<td>65.4</td>
<td>65.4</td>
<td>65.4</td>
<td>65.4</td>
</tr>
<tr>
<td>Experimental areas</td>
<td>5.1</td>
<td>5.1</td>
<td>5.1</td>
<td>5.1</td>
</tr>
<tr>
<td>Tab.5- CERN share of LHC detect. constr.</td>
<td>11.0</td>
<td>11.0</td>
<td>11.0</td>
<td>11.0</td>
</tr>
<tr>
<td>pp experiments</td>
<td>10.0</td>
<td>10.0</td>
<td>10.0</td>
<td>10.0</td>
</tr>
<tr>
<td>ions experiment</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>B experiment</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Table 6 LHC Tests &amp; pre-operation</td>
<td>7.1</td>
<td>5.1</td>
<td>5.1</td>
<td>7.1</td>
</tr>
</tbody>
</table>
Table 7 - Expected income from Member States
(MCHF, current prices)

On basis of zero index 1995-97 + 1% index (2% for France and Switzerland) from 1998 (as agreed on hypothesis of 2% inflation)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>14 Member States</td>
<td>937.5</td>
<td>937.5</td>
<td>937.5</td>
<td>946.9</td>
<td>956.3</td>
</tr>
<tr>
<td>- Reduction granted to Germany</td>
<td>-23.4</td>
<td>-23.4</td>
<td>-23.4</td>
<td>-23.6</td>
<td></td>
</tr>
<tr>
<td>- Reduction granted to Spain</td>
<td>-20.2</td>
<td>-13.3</td>
<td>-10.0</td>
<td>-6.8</td>
<td></td>
</tr>
<tr>
<td>+ Portugal (to the Budget)</td>
<td>3.4</td>
<td>6.0</td>
<td>6.7</td>
<td>6.8</td>
<td>6.8</td>
</tr>
<tr>
<td>+ Finland</td>
<td>9.4</td>
<td>9.6</td>
<td>9.6</td>
<td>9.7</td>
<td>9.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contribution to the Budget from:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poland</td>
</tr>
<tr>
<td>Czech Republic</td>
</tr>
<tr>
<td>Slovak Republic</td>
</tr>
<tr>
<td>Hungary</td>
</tr>
</tbody>
</table>

| Other income | 8.2  | 7.8  | 8.1  | 8.7  | 8.3  |

| Additional indexation for F and CH | 2.0  | 4.1  |

| Total | 918.7 | 929.0 | 935.0 | 953.0 | 998.1 |

2 Namely: Austria, Belgium, Denmark, France, Germany, Greece, Italy, Netherlands, Norway, Portugal (special), Spain, Sweden, Switzerland, United Kingdom

Finance Committee/Council - June 1995
INCOME VS. EXPENDITURES

• Total income 1996-1999 = 3815MCHF + (part of) 25MCHF from Switzerland + (part of) 64.5MCHF from France + 68MCHF from Japan + ... ?

• Total expenditures 1996-1999 = 3828MCHF (28MCHF less than in December 1994 plan)

⇒ It will be possible (starting in 1995) to make payment appropriations (provisions) for future LHC expenditure, as proposed in December 1994, leaving CERN on track for commissioning stage 1 of the LHC in 2004 (with part of the funds needed to construct LHC in a single stage already accumulated).
CONCLUSIONS

• Present plan for 1996-1998 expected to be followed closely (1999 will change if LHC built in one stage), except for changes required (if it is possible) to implement stage IV of LEP, in response to request from SPC (nevertheless plan is an intermediate step to new comprehensive long-term plan to be presented in 1997)

• Finance Committee and Council are asked
  - to approve the proposals for 1996 in order that the 1996 Draft Budget can be prepared
  - to take note of the provisional determinations for 1997-1999
THE FELLOWS, ASSOCIATES AND STUDENTS
PROGRAMMES
(Item 14 of the Agenda)

by
Professor Foà
FIVE YEARLY REVIEW

OF

FELLOWS

ASSOCIATES

PROGRAMMES

STUDENTS

COUNCIL - JUNE 1995
FELLOWS, ASSOCIATES AND STUDENTS

PROGRAMMES

1. FELLOWS
   20 HSF/Y
   \{ PARTICLE PHYSICISTS (FREE TO CHOOSE) 
   (~2 YEARS)
   APPLIED PHYSICISTS (CHOSEN FOR JOBS) 
   (~2 YEARS)

2. H.S. ASSOCIATES
   7 HSF/Y (~1 YEAR)

3. N.H.S. ASSOCIATES
   \{ DG ~4.7 HSF/Y (~1 YEAR)
   DIV 1.3 "
   SEED + PROJ. 1.8 "

4. TECHNICAL STUDENTS
   \{ TECH. STUD. (~6-12 MONTHS) ~4 HSF
   DOCTORAL STUD. (~2 YEARS)

5. SUMMER STUDENTS (~8-19 WEEKS) ~0.7 HSF
Figure 1

Fellows, Associates and Students receiving financial support from CERN or via CERN as described in paragraph 6 (in person-years)
Figure 4

Total CERN expenditure on Fellows, Associates and Students
(in kCHF and at 1994 prices)
SELECTION PROCEDURE

SELECTION COMMITTEES:

1 - FELLOWS (+ CORRESP. FELL.) AND ASSOCIATES (QUERCIG)
   1 MEMBER FOR EACH DIVISION
   1 EXTERNAL EXP. PHYSICIST

   IT USES RANKING ORDER IN M.S. BY FELL. DELEGATIONS
   FOR PARTICLE PHYSICISTS

   FOR APPLIED SCIENCE RANKING IS DONE BY \{ CERN
   + ERT. MEMBER
   POSSIBLE NEWS?

2 - TECHNICAL + DOCTORAL STUDENTS (SCHINDL)
   1 MEMBER FOR EACH DIVISION (-TH)

3 - SUMMER STUDENTS

   • PRESELECTION BY SENIOR STAFF (RES. + ACC.)
   • FINAL SELECTION BY GROUPS
DEVELOPMENT AND FUTURE OF FELLOWSHIPS

- **STEADY**: SHALL INCREASE WITH TIME
  - AT THE EXPENSES OF
  
  \{ OTHER PROGRAMMES + H.B. \\
  \} SALARY LEVEL

- **INCREASING PRESSURE**

  i) FROM NEW MEMBER STATES

  (FINLAND, POLAND, HUNGARY, CZECH, SLOVAK REP.)

  (SUGGESTION OF PREVIOUS REVIEW
  AGREED BUT NOT IMPLEMENTED)

  ii) APPLIED PHYSICISTS SELECTION PROCEDURE

  BETTER QUALITY

  LARGER INTEREST
Figure 2

DGP quotas for Fellowships by Division

NB. For nomenclature of Divisions see Table II
PROPOSAL:

- INCREASE THE NUMBER OF FELLOWSHIPS BY \( \sim 10\% \)

**THIS MEANS:**

i) 10 ADDITIONAL FELLOWS EVERY YEAR  
ii) 20 FELLOWS/YEAR MORE  
iii) \( \sim 2.5 \) MSF/YEAR

**HOW?**

FROM THE CERN BUDGET  
(FELLOWS AND ASSOCIATES + CERN BUDGETS)

- FIVE YEARLY STAFF SALARY REVIEW  
  (DUE 1984)

EXTENDED TO FELLOW STIPENDS

THE SOLUTION CAN BE DEFINED ONLY IN THIS FRAME.
IN ADDITION:

- APPLIED SCIENCE, TECHNOLOGY AND COMPUTING
  Fellows should be increased by:

  OUTSIDE BODIES
  i) MEMBER STATES AGENCIES
  ii) INDUSTRIES
  iii) PRIVATE SECTOR
  iv) EUROPEAN COMMISSION

  (EXIST ALREADY EXIST: COMPUTER INDUSTRIES, ETC.)

2 - CONTINUE THE CORRESPONDING FELLOWS PROGRAM.
   (SMAWL WEIGHT: FEW AWARDS/YEAR ~ 250 KSE/Y
   INTERESTING FOR SMALL COUNTRIES)
   RELABEL "CORRESPONDING ASSOCIATES"
   FOR ADMINISTRATIVE REASONS

3 - SUPPRESS THE TRAVELLING FELLOWS (USSR)
   AT MORE REQUESTED
ASSOCIATES

1- MEMBER STATES (UNCHANGED)

- VERY IMPORTANT PROGRAMME TO ALLOW PHYSICISTS WITH TEACHING DUTIES TO SPEND ONE YEAR AT CERN
- PRESSURE INCREASING WITH LHC
- STILL ACCEPTABLE (FACTOR $\frac{3}{4}$) \textbf{FIG}

2- NON MEMBER STATES (UNCHANGED)

- PROGRAMME BORN TO TAKE ADVANTAGE OF PARTICULAR COMPETENCES
- VERY LARGE PRESSURE (U.S.A. AND RUSSIA) (CONTINUOUSLY INCREASING) (FACTOR $>5$) \textbf{FIG}
- MAINTAIN AT THE $1\%$ LEVEL OF PERS. BUDGET
- WAIT FOR AGREEMENTS WITH N.H.S.
Figure 5

Number of Member State Scientific Associateship applications and appointments
(Selection Committee for Scientific Associates)

NB. Since 1990 short-term appointments are made outside the Selection Committee - see CERN/1801
Figure 6

Number of Non-Member State Scientific Associateship applications and appointments
(Selection Committee for Scientific Associates)

NB. Since 1990 short-term appointments are made outside the Selection Committee - see CERN/1801
TECHNICAL STUDENTS

* UP TO 1990 ONLY FOR STUDENTS (UNBERGRADUATES) NOT STUDYING PHYSICS (HEP)
* FROM 1990 EXPERIMENTAL EXTENSION TO DOCTORAL STUDENTS
  (COME TO CERN TO PREPARE THEIR PhD'S (NOT IN HEP))
  EXCEPTIONAL SUCCESS (INSIDE AND OUTSIDE)

* VERY HIGH PRESSURE
  (LARGE INTEREST FROM INDUSTRIAL WORLD IN THE MEMBER STATES)

PROPOSAL: SEPARATE THE TWO PROGRAMMES
  (SAME SELECTION COMMITTEE)

* MAINTAINING THE TECHNICAL STUDENTS (~ 90/YEAR)
* ASYMPTOTICALLY GOING TO 18 DOCT. STUD./YEAR INSIDE THE LINE OF BUDGET (LESS SUBSISTANCE 4500 → 14000 SF/HALF)
Figure 8
Number of Technical Studentship applications and appointments

- Applications TECH
- DOCT
- Appointments TECH
- DOCT
SUMMER STUDENTS

- VERY SUCCESSFUL PROGRAMME

i) NOT VERY EXPENSIVE

ii) STRONG CORRELATION WITH APPLICATIONS FOR FELLOWSHIPS

iii) DIRECT LINK/FEED BACK WITH UNIVERSITIES

UNCHANGED

COOPERANTS

STUDENTS WHO COME TO CERN INSTEAD THAN TO ARMY

FRANCE: VERY RIGOROUS SELECTION

EXTEND TO OTHER COUNTRIES?
CONCLUSIONS

- The "Fellows and Associates Programmes are the vital links between CERN and member states.
- The interest of these Programmes increases with the increasing success of CERN.
- The importance of the technological level and the developments going on at CERN.
- The expansion of the community, inside several member states, new member states.
- New, fully international, status of CERN.

A small, careful increase of fellows and the establishment of a "Doctoral Students" programme are justified.