ORGANISATION EUROPÉENNE POUR LA RECHERCHE NUCLÉAIRE CERN EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH

COUNCIL

Hundred-and-fifty-seventh Session Geneva – 17 December 2010

OPEN SESSION

MINUTES

As the Draft Minutes (CERN/2955/Draft, dated 31 January 2011) were approved without amendment at the Hundred-and-fifty-eighth Session of the Council on 17 March 2011, the attached document can be regarded as the **final version**.

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DRAFT MINUTES

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LIST OF PARTICIPANTS

President: Prof. M. Spiro France

Participants: Prof. D.O. Riska (Vice-President of Council)

Finland

Prof. B. Sitar (Vice-President of Council)

Slovakia

France

Not represented Austria

Prof. W. Van Doninck Belgium

Not represented Bulgaria

Dr R. Leitner Czech Republic

Mr J. Stepanek

Prof. H. Bøggild Denmark

Mrs B. Sode-Mogensen

Dr P. Pulkkinen Finland

Mrs Ch. Chambellan-Le Levier

Dr C. Cesarsky

Prof. S. Bethke Germany

Mr A. Drechsler

Dr B. Vierkorn-Rudolph

Prof. E. Gazis Greece

Prof. G. Vesztergombi Hungary

Mrs B. Vizkelety

Not represented Italy

Prof. S. De Jong

Netherlands

Dr B. Jacobsen Norway

Prof. E. Osnes

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Prof. M. Waligorski Poland

Mrs L. Wiszcszor Prof. A. Zalewska

Prof. G. Barreira Portugal

Mr A. Fric Slovakia

Prof. L. Sandor

Prof. F. Del Aguila Spain

Prof. C. Pajares Vales

Prof. B. Åsman Sweden

Dr M. Johnsson Dr P. Karlsson

Mr B. Moor Switzerland

Mrs R. Oberholzer Prof. U. Straumann

Not represented United Kingdom

<u>CANDIDATE MEMBER STATE – ROMANIA</u>

Mr N. Zamfir

Mr L. Andrei

Mr F. Buzatu

OBSERVERS

Dr L. Karapiperis Representative of the European Commission

Mr A. Singh Gill Representatives of India

Mr Vipul

Prof. E. Rabinovici Representative of Israel

Mr T. Fujiyoshi Representatives of Japan

Mr H. Kamiyama Prof. K. Tokushuku

Mr D. Filatov Representatives of the Russian Federation

Prof. A.N. Skrinsky

Ms M.S. Sancar Representative of Turkey

Dr S. Gonzalez Representatives of the USA

Mr E. Legallais Dr M. Pripstein Dr M. Procario

Mrs K. Holst Representative of UNESCO

Also Present:

Prof. E. Fernandez Chairman of the Scientific Policy

Committee

Prof. T. Nakada Chairman of ECFA

Dr M. Steinacher Chairman of the Finance Committee

Prof. S. Stapnes Scientific Secretary

CERN Officials:

Prof. R-D. Heuer Director-General

Prof. S. Bertolucci Director for Research and Computing

Mr S. Lettow Director for Administration and

General Infrastructure

Dr S. Myers Director for Accelerators and Technology

Prof. F. Pauss Head of International Relations

CERN Services:

Dr E.M. Gröniger-Voss Legal Counsellor
Mrs L. Morris Minute-writers

Mr J. Pym

Mrs B. Van der Stichelen Council Secretariat

OPEN SESSION

The PRESIDENT opened the meeting in Open Session at 9.05 a.m. and welcomed Mr L. Andrei, Mr F. Buzatu and Mr N. Zamfir of Romania, the new Candidate for Accession to CERN.

Applause.

He further welcomed the observers Dr L. Karapiperis of the European Commission, Mr A. Singh Gill and Mr Vipul of India, Professor E. Rabinovici of Israel, Mr T. Fujiyoshi, Mr H. Kamiyama and Professor K. Tokusyuku of Japan, Mr D. Filatov and Professor A. Skrinsky of the Russian Federation, Ms S. Sancar of Turkey, Dr S. Gonzalez, Mr E. Legallais, Dr M. Pripstein and Dr M. Procario of the United States, and Mrs K. Holst of UNESCO. Apologies had been received from Minister A. Fursenko of the Russian Federation, H.E. Mr H. A. Rao of India, and Ms I. Bukova and Ms G. Kalonji of UNESCO.

1. STATUS OF THE LHC AND EXPERIMENTS

(Item 1 of the Agenda) (Oral)

- LHC Accelerator

On behalf of the LHC team from the BE-OP Group, S. REDAELLI presented a report on the performance of the LHC machine in 2010 and prospects for 2011¹.

Applause.

- TOTEM

On behalf of the TOTEM collaboration, S. GIANI presented a report on the results achieved by the TOTEM experiment during the first year of operation².

Applause.

¹ See Indico http://indico.cern.ch/event/114484

² See Indico http://indico.cern.ch/event/114484

- LHCf

On behalf of the LHCf collaboration, A. TRICOMI presented the experiment's 2010 end-of-year report³.

Applause.

- LHCb

On behalf of the LHCb collaboration, A. SCHOPPER presented a status report on the LHCb experiment⁴.

Applause.

- CMS

On behalf of the CMS collaboration, P. SCHIEFERDECKER presented the 2010 highlights from the CMS experiment and prospects for 2011⁵.

Applause.

- ATLAS

On behalf of the ATLAS collaboration, E. NURSE presented the ATLAS experiment, the results obtained in 2010 and the prospects for 2011⁶.

Applause.

- ALICE

J. SCHUKRAFT, ALICE spokesman, presented the experiment's achievements in 2010 and the goals for 2011^7 .

Applause.

The Council took note of the presentations by S. Redaelli (LHC accelerator), S. Giani (TOTEM), A. Tricomi (LHCf), A. Schopper (LHCb), P. Schieferdecker (CMS), E. Nurse (ATLAS) and J. Schukraft (ALICE).

³ See Indico http://indico.cern.ch/event/114484

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The Council <u>thanked</u> all the speakers, as well as the organisers, M. Ferro-Luzzi and M. Mangano, and <u>warmly congratulated</u> everyone concerned on the outstanding performance of the LHC machine, experiments and computing grid during the first year of operation.

The meeting adjourned at 11.40 a.m. and resumed at 12.20 p.m.

2. <u>STATUS REPORT BY THE DIRECTOR-GENERAL</u>

(Item 2 of the Agenda) (Oral)

The DIRECTOR-GENERAL presented a brief status report covering the following three items:

1) LHC Performance in 2010

As illustrated by the presentations during the morning session, the entire LHC accelerator chain performed extremely well in 2010, with excellent results achieved across the board. As mentioned in one of the slides shown by the Spokesman of ALICE, J. Schukraft, at the end of the morning, the versatility of the machine and the complementarity of its experiments made the LHC greater than the sum of its parts, and it was gratifying to note that the Viewpoint article "A little bang arrives at the LHC", featured in the December 2010 edition of the American Physical Society's Physical Review, related to papers published by not one but two of the LHC collaborations. He wished to take the opportunity to thank Dr Schukraft, who was attending his last Council session as ALICE Spokesman, for his highly efficient leadership of the experiment during the last two decades.

Applause.

He further informed the Council that a decision on the possible operation of the LHC in 2012, resulting in a postponement of the scheduled shutdown until 2013, would be taken following the LHC workshop to be held in Chamonix at the end of January 2011.

Professor RABINOVICI said that the Israeli delegation wished to express its appreciation for the work of the experimentalists, the Management and the staff during what had been an outstanding year.

Mr FUJIYOSHI remarked that he had been greatly impressed by the recent developments at the LHC and, on behalf of the Japanese delegation, wished to congratulate everyone who had contributed to the achievements.

Dr KARAPIPERIS, echoing the previous speakers' appreciation, conveyed the European Commission's congratulations to CERN on the results obtained and, in particular,

on the rapid recovery from the September 2008 incident. He looked forward to learning of even more exciting developments in 2011.

Mr SINGH GILL said that he wished to join his fellow Observers in congratulating CERN on the achievements in 2010 and that his delegation, like others, looked forward to an exciting 2011.

2) Fixed-Target Experiments

The DIRECTOR-GENERAL remarked that 2010 had been an exciting year not only for LHC physics but also for the fixed-target experiments, to which more protons had been delivered on target than originally hoped at the beginning of the year. The undisputed highlight had been the success of the ALPHA experiment at the Antiproton Decelerator in trapping and storing 38 atoms of antihydrogen for about 170 ms for the first time. That achievement, together with the major breakthrough towards creating a beam of antihydrogen suitable for spectroscopic studies announced by the ASACUSA group a few weeks later, had been awarded the Physics World 2010 Breakthrough of the Year prize. The two projects were excellent examples of the healthy and unique programme of experiments being carried out at CERN in parallel with the LHC programme.

3) Improvements to On-site Services

The DIRECTOR-GENERAL announced that several innovations designed to enhance the quality of life on the CERN site for users and staff had been implemented during the year, including the extension of Restaurant No. 1, the introduction of a new shuttle service linking CERN to Geneva's Cointrin airport, and the expansion of the on-site shuttle service, which had transported some 40,000 people since February. With the inauguration of the new tram line from CERN to Geneva scheduled for April 2011 and the planned development of the recently introduced car-sharing scheme, he hoped to see a reduction in the number of cars being brought onto the CERN site in the future, helping to make the Laboratory more environmentally friendly. Additional measures to enhance on-site services, including improvement of the quality of the food served in Restaurants 2 and 3, were planned for 2011.

The Council <u>took note</u> of the oral status report by the Director-General.

3. <u>REPORT ON THE DECISIONS TAKEN AT THE RESTRICTED, CLOSED AND</u> EUROPEAN STRATEGY SESSIONS

(Item 3 of the Agenda) (Oral)

The PRESIDENT presented his report on the decisions taken at the Restricted, Closed and European Strategy Sessions of the Council in September and December 2010⁸.

The Council took note of the report by the President of Council.

4. REPORT BY THE CHAIRMAN OF THE FINANCE COMMITTEE

(Item 4 of the Agenda) (Oral)

Dr STEINACHER presented his report on the items discussed at the Finance Committee's meetings in August, September, November and December 2010⁹. In his concluding remarks he said that, on the occasion of his last Council meeting as Chairman of the Finance Committee, he wished to thank the Delegations for the confidence they had placed in him and for their continuous support throughout his term of office. It had been an honour and a pleasure to chair both the Finance Committee and the SACA in such an inspiring Organization and he wished the two bodies much success under the chairmanship of his successor, Dr Jacobsen, in the years to come.

The DIRECTOR-GENERAL expressed appreciation to Dr Steinacher for the admirable way in which he had steered the Finance Committee's discussions on difficult issues during his four-year term of office, culminating in good decisions and recommendations serving the interests of the Organization and the Member States alike.

Applause.

The Council <u>took note</u> of the report by the Chairman of the Finance Committee and <u>extended thanks</u> to him for his work over the past four years.

⁸ See Annex 1

⁹ See Annex 2

5. REPORT BY THE CHAIRMAN OF THE SCIENTIFIC POLICY COMMITTEE (Item 5 of the Agenda) (Oral)

Professor FERNANDEZ presented his report on the items discussed at the Scientific Policy Committee's meetings in August, September and December 2010¹⁰.

He observed that, since his last report to the Council in June 2010, the SPC had held a special meeting at the end of August to discuss the Medium-Term Plan, which had subsequently been approved by the Council in September. During its ordinary September and December meetings, the SPC had examined various standing items such as the status of the LHC machine, experiments and computing, as well as, in particular, reports on the summer conferences (the 35th International Conference on High Energy Physics held in Paris in July and the XXIV International Conference on Neutrino Physics and Astrophysics held in Athens in August), presentations on ATLAS, CMS, LHCb and ALICE, details of the proposal for ELENA (the Extra Low Energy Antiproton Ring at the AD accelerator), the review of the Fellows, Associates and Students Programme, and a report from the Working Group on the Scientific and Geographical Enlargement of CERN.

On behalf of the SPC, he wished to thank the Council members for their questions and comments during the year and to extend special appreciation to the minute-writers and the Council Secretariat for their excellent work.

The PRESIDENT said that, on the occasion of Professor Fernandez' last Council meeting as Chairman of the Scientific Policy Committee, he wished to thank him for his work in that capacity and for the valuable advice and recommendations the Committee had given both the Council and the CERN Management under his chairmanship. Noting that he was ending his term of office on a note of significant optimism for the Organization's scientific future, he wished him all the best in his future career in cosmology.

Applause.

The Council <u>took note</u> of the report by the Chairman of the Scientific Policy Committee, Professor Fernandez, and thanked him for his work over the past three years.

¹⁰ See Annex 3

6. REPORT BY THE SCIENTIFIC SECRETARY

(Item 6 of the Agenda) (Oral)

Professor STAPNES presented his oral report on European Strategy matters¹¹, covering:

• the main issues examined at the September European Strategy Session of the Council,

- the status of the European Strategy for Particle Physics and of preparations for its update in 2012,
- progress towards a CERN ApPEC work plan of common activities for the period until the update of the European Strategy for Particle Physics in 2012,
- FP7 projects in 2009-2011,
- the fruitful first annual meeting between CERN and the European Commission held on 6 September 2010.

In response to a request from Mrs SODE-MOGENSEN, the PRESIDENT agreed that copies of the presentation should be made available as soon as possible to ensure that Delegations had all the necessary information at their disposal ready to discuss the process for updating the European Strategy for Particle Physics during the next Council week in March 2011.

In response to Mr SINGH GILL, who welcomed the intention to consult partners outside Europe during the process of defining the future Strategy and enquired about the associated timeline, the PRESIDENT remarked that the details had yet to be defined but that the intention was to make sure that the process was conducted under less pressure of time than the initial elaboration and adoption of the Strategy in 2006.

Professor STAPNES observed that the procedure for interaction with other world regions would be one of the priority issues to be addressed by the European Strategy Group, whose composition and remit was due to be examined by the Council in March 2011 and finalised the following June. Plans for inter-regional consultation could then be submitted to the Council in September in the framework of the final overall implementation plan. It was important that, as soon as the Preparatory Group had held its initial meeting in July 2011, it be ready to receive input from the international community. The global consultation procedure would be facilitated by the ICFA seminar to be held at CERN from 3 to 6 October 2011.

¹¹ See Indico http://indico.cern.ch/event/114484

The DIRECTOR-GENERAL added that the October 2011 ICFA seminar would provide an ideal opportunity for global discussion of the different regions' respective roadmaps and avenues for harmonisation between them.

Dr KARAPIPERIS said that the first annual meeting between CERN and the European Commission held in Brussels on 6 September 2010 had been highly constructive, affording the opportunity for the CERN Management to discuss key topics with three EC Directors-General closely involved in defining the future of pan-European research, R.-J. Smits (DG Research), J. Truszczyński (DG Education and Culture) and R. Madelin (DG Information Society), as well as the Commissioner for Science, Research and Innovation, M. Geoghegan-Quinn. Such exchanges were of particular importance at a time when both parties were expanding the global dimension of their activities, on the EC's side in the context of preparations for the next framework programme and of participation in the G8, for example, and on CERN's side through geographical enlargement. The Commission had appreciated CERN's focussed and constructive input to the evaluation of the 7th framework programme and looked forward to its participation in the broad consultation procedure on the 8th framework programme, on which the Commission was due to publish general orientations shortly. For its part, the Commission would be happy to play an active role in the various phases of the update of the European Strategy for Particle Physics, including through participation in the European Strategy Group, and looked forward to hosting the special Council session for the adoption of the Strategy update in autumn 2012.

The Council took note of the report by the Scientific Secretary, Professor Stapnes.

7. REPORT BY THE CHAIRMAN OF ECFA

(Item 7 of the Agenda) (Oral)

Professor NAKADA presented his oral report on the activities of Plenary and Restricted ECFA in 2010¹², covering:

- RECFA's visits to Belgium, Bulgaria and Finland in March, May and October, respectively,
- the main issues examined at the meetings of Plenary ECFA,
- various decisions taken by ECFA during the year, including the creation of review panels concerning the EUROnu FP7 project, detector R&D activities for future projects, and the LHeC CDR,
- the latest ECFA survey of the activities of the particle physics community,

¹² See Annex http://indico.cern.ch/event/114484

- the issues examined at recent meetings of ICFA,
- the forthcoming joint ECFA-EPS session to be held during the Europhysics Conference on High Energy Physics (ICHEP) in Grenoble in July 2011,

• the 2011 Plenary and Restricted ECFA meeting schedule.

In response to a question from Dr PRIPSTEIN concerning the division of responsibilities between ECFA and the European Strategy Group, Professor STAPNES explained that the activities of ECFA and RECFA were an important element of the Strategy follow-up process and that their meetings frequently served as the basis for consulting the particle physics community on Strategy-related issues, given that the Strategy Secretariat, of which the ECFA Chairman was one of the four members, did not organise large-scale meetings and conferences itself. As an example of ECFA's involvement in the Strategy follow-up, the ECFA neutrino panel set up to review the EUROnu project would provide important input for developing the future neutrino physics programme in Europe. The primary role of the Secretariat was to act as an interface between the European Strategy Session of the Council and the European particle physics community for all matters relating to the update and follow-up of the implementation of the Strategy.

The PRESIDENT added that, whereas the Scientific Secretary was appointed by the Council at its European Strategy Session, the Chairman of ECFA was appointed by Plenary ECFA to represent the high-energy physics community at large.

Professor NAKADA observed that, in the framework of monitoring the ongoing implementation of the European Strategy for Particle Physics in the CERN Member States, ECFA served as a two-way source of information, presenting the corresponding status reports to the European Strategy Session of Council but also keeping the particle physics community abreast of the activities of the Strategy Secretariat.

The Council took <u>note</u> of the report by the Chairman of ECFA, Professor Nakada.

8. OTHER BUSINESS

(Item 8 of the Agenda)

- <u>Creation of an Asia-Pacific/European School of Particle Physics</u>

The DIRECTOR-GENERAL reported that, following the success of the CERN – Latin-American School of High-Energy Physics, which had been held every two years since 2001, CERN, in conjunction with physicists in Asia and France, was planning to set up a similar two-yearly Asia-Pacific/European School of High-Energy Physics. Fruitful discussions earlier that week suggested that it should be possible to organise the first of such Schools as early as

2012, subject to securing the necessary human and financial resources. On the European side, France had already pledged its support, and he encouraged any other countries or individual laboratories interested in making an active contribution to the new School to come forward.

- <u>Departure of Professor F. Ferrini as Italian delegate and end of his term of office as</u> Chairman of the Pension Fund Governing Board

The PRESIDENT requested Professor Riska, who was due to take over the chairmanship of the Governing Board of the Pension Fund on 1st January 2011, to convey the Council's thanks to his predecessor, Professor Ferrini.

- End of the term of office of one Vice-President of Council

The PRESIDENT said that, on behalf of the Council, he wished to thank Professor B. Sitar for his work as Vice-President of the Council over the last three years, in particular for his active participation in the preparation of the Council's sessions as a member of the President's Group.

Professor SITAR said that it had been an honour and a pleasure to take part in the work of the President's Group and that he looked forward to continuing to attend the Council's sessions as a member of the Slovak Delegation.

Applause.

- Departure of the President of the Staff Association

The PRESIDENT requested the new President of the Staff Association, Dr M. Goossens, to convey the Council's thanks to the outgoing President, Mr G. Deroma.

Finally, on behalf of the Council, he expressed appreciation to the Translation and Minutes Service, the Legal Service and the Council Secretariat for their contributions to the efficient functioning of the Council and its sessions.

Applause.

The PRESIDENT extended best wishes for a happy New Year to all those present.

The meeting rose at 2.15 p.m.

CERN/2955/Draft Annex 1

REPORT ON THE DECISIONS TAKEN AT THE RESTRICTED, CLOSED AND EUROPEAN STRATEGY SESSIONS

by

The President of Council, Prof. M. Spiro

CERN/2955/Draft Annex 2

REPORT BY THE CHAIRMAN OF THE FINANCE COMMITTEE Dr M. Steinacher

CERN/2955/Draft Annex 3

SPC CHAIRMAN's SUMMARY OF CONCLUSIONS Prof. E. Fernandez