

**MEMORANDUM OF UNDERSTANDING
FOR A MULTI-LATERAL COLLABORATION**

between

**THE INSTITUTIONS AND FUNDING
AGENCIES OF THE CTF3 COLLABORATION**



For the construction of the Compact Linear Collider (CLIC)
Test Facility (CTF3) and the performance of Feasibility
Experiments to demonstrate the key issues of the CLIC
scheme

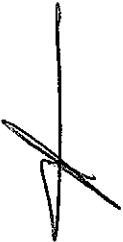


The Institutions (including the European Organization for Nuclear Research, "CERN", as the Host Laboratory) and the Funding Agencies of the CTF3 Collaboration

(the parties to this Memorandum of Understanding hereafter referred to collectively as "Parties" and separately as "Party"),

CONSIDERING THAT:

- (a) CERN has been engaged since 1986 in the study of a Compact Linear Collider ("CLIC") that would operate with electron and positron beams in the 0.5-5.0 TeV energy range for particle physics research;
- (b) In this pursuit CERN has proposed a new distributed, high-frequency power source, which when applied to accelerating a particle beam is known as the two-beam acceleration scheme;
- (c) The feasibility of this new distributed, high-frequency power source and other key feasibility issues of the CLIC scheme can be demonstrated by the Compact Linear Collider Test Facility (CTF3) whose basic design has been published under references CERN/PS 2002-08 (RF) and LNF-02/008 (IR), and for which further facilities and activities have been proposed and published under reference CERN/2552 published under reference CERN-AB-2005-003;
- (d) The CTF3 International Review Committee (3 October 2001) has strongly recommended the CTF3 project with a view to the development of CLIC and has declared that collaborations are vital for the project;
- (e) The CERN Council, in its special 129th Session held in Rome on 19 July 2004, has confirmed its endorsement of accelerated R&D activities to demonstrate the feasibility of key issues of the CLIC scheme, before 2010;



- (f) Construction of CTF3 at CERN has started using resources from CERN as well as Institutions and/or Funding Agencies forming part of the international scientific community;
- (g) Other Institutions have expressed their interest in joining the CLIC R&D programme;
- (h) The parties concerned have expressed their interest to set up a multilateral collaboration ("the Collaboration") for the construction of CTF3 and the performance of experiments to demonstrate the feasibility of key issues of the CLIC scheme ("the Feasibility Experiments");
- (i) The construction of CTF3 and the performance of the Feasibility Experiments require a wide range of technologies and expertise, which can be found among the Parties;

RECOGNIZING:


- (j) The wide interest in CTF3 and the CLIC scheme;
- (k) The more general interest in applications of the CLIC technology that may lie outside the field of high-energy physics,



HAVE AGREED AS FOLLOWS:

ARTICLE 1

Purpose

- 1.1 This Memorandum of Understanding ("MoU"), including its Addenda which shall form an integral part of this MoU, defines the framework under which the Parties shall define, distribute among themselves and execute the work programme, including the time scale, and the charges and responsibilities for the construction of
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CTF3 and the performance of the Feasibility Experiments. It cancels and replaces any previous agreement or understanding between any of the Parties with respect to the subject matter of this MoU.

- 1.2 This MoU shall be complemented by Addenda defining each contribution pledged to the Collaboration in terms of time schedule, money, facilities, equipment and other items as well as man-years, which shall be rated at 150 kCHF per man-year.
- 1.3 This MoU, including its Addenda, shall be signed by, as each Party shall determine at its own discretion, the Institutions and/or the Funding Agencies of the CTF3 Collaboration. Signature may be separate or in association with signature by any other Party or Parties.
- 1.4 The scientific and technical basis for the execution of this MoU shall be the CTF3 Design Report (CERN/PS 2002-008),
<http://doc.cern.ch/archive/electronic/cern/preprints/ps/ps-2002-008.pdf>

and the proposal for extended facilities and Experiments (CERN-AB-2005-003)


<http://clic-collaboration-meeting.web.cern.ch/clic-collaboration-meeting/documents/Clic%20accelerated%20programme.pdf>,

and such scientific and technical decisions as the Parties may take in the execution of this MoU.





ARTICLE 2 Membership

The status of "Member of the CTF3 Collaboration" shall be granted to each Party, it being understood however that where a contribution is pledged through a joint commitment by two or more Parties, they shall together constitute a single Member.



ARTICLE 3

Co-ordination and decision mechanism

- 3.1 A CTF3 Co-ordination Committee shall be set up. Each Member shall be entitled to appoint one (1) representative to the CTF3 Co-ordination Committee and to invite a second person to attend the Committee meetings as advisor.
- 3.2 The CTF3 Co-ordination Committee shall elect the Chairman and the Spokesperson, define the work programme of the Collaboration, co-ordinate the Collaboration's activities, resolve disputes, decide on proposals for accession as Member of the Collaboration, propose amendments to this MoU where required, propose the closure of the Feasibility Experiments to the Director-General of CERN, and decide on any other matter that may arise. As it is intended that the CTF3 Co-ordination Committee shall operate in a "scientific spirit", for all normal business each Member shall have one vote, regardless of the financial value of its contributions. For all normal business, the Chairman shall strive at decision-making by consensus but where that is not feasible, decisions shall be taken by a simple majority of votes cast.
- 3.3 In circumstances declared exceptional by the Chairman of the CTF3 Co-ordination Committee, or by CERN as the Host Laboratory, or by consensus or simple majority vote by the CTF3 Co-ordination Committee, the Committee shall be entitled to decide that a matter is not considered "normal business" and that a special vote shall be held in order to come to a decision on that matter.
- 3.4 In case of a special vote, each Member shall be attributed voting rights in proportion to the total estimated value of its contributions, on the basis of the cumulative contributions actually committed and put at the disposal of the Collaboration until/inclusive 31 December of the year preceding the year in which the special vote shall be held. To this end, each Member shall provide the Chairman of the CTF3 Co-ordination Committee before 31 January of each year with the total estimated value of its contributions and the Chairman shall then inform the Members before 31 March of each year of the cumulative contributions actually committed by them. Decisions shall be taken by a simple majority of (weighted) votes cast.
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- 3.5 Notwithstanding any other provision of this MoU, where in his view so required by his statutory duties as Chief Executive of the Host Laboratory, the Director-General of CERN may decide not to accept a new Member of the Collaboration as well as to reject any other decision or proposal by the CTF3 Co-ordination Committee.

ARTICLE 4
Responsibilities of CERN
in its capacity as the Host Laboratory


- 4.1 In its capacity as the Host Laboratory, CERN shall in addition to the responsibilities defined in this MoU be entrusted with the daily management of the Collaboration and shall provide on an as-available basis: (i) office space, equipped with standard infrastructure facilities; (ii) assistance with the installation and removal of equipment; (iii) local infrastructure for the supply of mains electricity, raw cooling water, and standard connections to the CERN accelerator control system.
- 4.2 Except if a Member gives CERN prior written notice that it wishes to retain ownership, ownership in equipment and other items supplied by the Members of the Collaboration shall automatically transfer to CERN upon the completion of their safe delivery to the CERN site, it being understood however that the Members shall be entitled to remove such equipment and items upon the closure of the Feasibility Experiments, whereupon ownership shall revert to the Member. If a Member has retained ownership, it may be required by CERN to remove the equipment and other items from the CERN site upon the closure of the Feasibility Experiments

ARTICLE 5
Responsibilities of the Members of the Collaboration

Each Member supplying equipment or other items to the CERN site shall ensure their safe delivery to the CERN site according to the time schedule given in the relevant Addendum, and their conformity, upon such delivery, with the CERN safety rules, regulations and standards. To this end, it shall familiarize itself with such rules, regulations and standards.


ARTICLE 6

Status at CERN

- 6.1 If and in so far as they are required to perform work on the CERN site in the execution of this MoU, the personnel of the Members of the Collaboration (other than those employed by CERN) shall be granted the status of Associated Member of the Personnel of CERN. They shall be subject to the Staff Rules and Regulations of CERN and the employing Member herewith accepts the consequences of their application.
- 6.2 While on the CERN site, the personnel shall be subject to the authority of the Director-General of CERN, in its capacity as the Host Laboratory, and shall comply with the rules of conduct and safety in force on the CERN site.
- 6.3 The personnel shall at all times during his/her association with CERN remain employed by, and receive a salary from, the employing Member.
- 6.4 The employing Member shall ensure that, through itself or directly by its personnel, there shall at all times during the latter's association with CERN be insurance cover against the economic consequences of illness (and maternity) and accidents, whether professional or non-professional, for the personnel and the accompanying members of their family, valid in Switzerland and France, and against the economic consequences of disability and death resulting from professional or non-professional illness and accidents of the personnel. The employing Member shall be liable to CERN for any cost or expense resulting from the situation where any part of such insurance cover is not in place.
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ARTICLE 7

Intellectual property rights

- 7.1 Proprietary information, including any information protected by trademark, patent or copyright, whether pre-existing or developed in the execution of this MoU, contributed to the Collaboration by a
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Member in the execution of this MoU, shall not create any right in respect of that information for the other Members, other than a free, irrevocable and non-exclusive licence to use (which term in this Article 7 shall include any integration, modification, enhancement and redistribution) such information in so far as required for the execution of this MoU and of any future CLIC project forming part of the scientific programme of CERN.

- 7.2 A Member contributing proprietary information to the Collaboration in the execution of this MoU shall warrant and ensure that it has or has procured the rights to contribute such proprietary information for the use defined in Article 7.1 above. Where the use of such proprietary information is subject to restrictions, the contributing Member shall disclose them in writing prior to making its contribution available to the Collaboration.
- 7.3 Without prejudice to Articles 7.1 and 7.2 above, the Members shall strive to agree to publish and make all proprietary information contributed to the Collaboration in the execution of this MoU publicly available. In particular, they shall consider making any software available under Open Source licence conditions.
- 7.4 Except as provided in Article 7.2, the Members provide no warranties or representations of any kind to each other. They shall have no liability to each other with respect to the subject matter of this Article 7 and each Member shall be exclusively liable for the consequences of its use of proprietary information contributed to the Collaboration.



ARTICLE 8 Liability

Except as provided in Article 6.4 above, the Members shall have no liability to each other in the execution of this MoU.




ARTICLE 9

Entry into force

- 9.1 This MoU shall enter into force upon its signature by the first of the Institutions and/or Funding Agencies after CERN to sign. It shall remain in force until the Feasibility Experiments are declared closed.
- 9.2 Members may withdraw from the Collaboration by giving six (6) months prior written notice to the Chairman of the CTF3 Co-ordination Committee.
- 9.3 Save for Articles 6, 7, 8, and 10, which are binding and which shall continue to bind a Member after its withdrawal from the Collaboration, and the Members after the Feasibility Experiments are declared closed, this MoU is not binding, it being understood however that, through their signature of this MoU, the Members recognize that the success of the Collaboration depends on each Member adhering to its provisions.

ARTICLE 10

Dispute resolution




Any dispute between any of the Members which cannot be resolved within three (3) months by the CTF3 Co-ordination Committee shall be submitted to the President of the CERN Council, whose decision shall be binding and final and there shall be no recourse against it.

ARTICLE 11

Amendment

Any amendment of this MoU is subject to agreement and signature by the Parties, upon proposal by the CTF3 Co-ordination Committee.



Done in two originals in English.

For the University of Vigo
The Chancellor,
Professor Salustiano Mato de la Iglesia



Date: 21.12.2011
Signed on

For CERN
The Linear Collider Study Leader,
Prof. Steinar STAPNES

A handwritten signature in black ink, consisting of a large, stylized initial 'S' followed by a surname.

Date: 21.12.2011
Signed on