

P074/LHC/CTF-3/M.1

ADDENDUM No. CTF-3/M.1

to

THE PROTOCOL DATED 15 February 2006,

to

THE 1991 CO-OPERATION AGREEMENT, AS EXTENDED IN 2001

between

**THE EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH
(CERN)**

and

**THE DEPARTMENT OF ATOMIC ENERGY (DAE)
OF THE GOVERNMENT OF INDIA**

concerning

**JOINT PARTICIPATION IN CTF-3 UNDER THE NOVEL
ACCELERATOR TECHNOLOGIES PROJECT (NAT)**

This Addendum defines the collaboration between CERN and the Department of Atomic Energy (DAE) of the Government of India for the provision of expert support for the commissioning and operation of CTF3 at CERN.

September 2006

The European Organization for Nuclear Research (CERN), hereafter called "CERN", an Intergovernmental Organization having its seat at Geneva, Switzerland, represented by Dr. R.Aymar, Director General of CERN,

on the one hand,

and

The Department of Atomic Energy (DAE) of the Government of India, hereafter called "DAE", represented by Dr. V. C. Sahni, Director, Raja Ramanna Centre for Advanced Technology (RRCAT) and Co-Chairman, DAE-CERN Joint Committee for Collaboration with CERN in the LHC,

on the other hand,

hereafter collectively referred to as "the Parties" and individually as "the Party";

CONSIDERING:

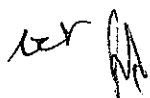
The Co-operation Agreement, signed by the Parties on 28 March 1991, as extended in 2001;

The Statement of Intent, signed by the Parties on May 25, 2005; and

The Protocol to the Co-operation Agreement, signed by the Parties on 15 February 2006;

TAKING INTO ACCOUNT:

That India has been highly successful in the production of a wide range of LHC equipment and in providing support for the magnetic tests and measurements of the



superconducting LHC magnets, make it natural for CERN to invite India to participate in the CTF3 commissioning;

That in response to an invitation by CERN to participate in the CTF3 commissioning, DAE has conveyed its readiness to provide expert support on the CERN site, under the overall guidance and supervision of CERN,

HAVE AGREED AS FOLLOWS:

Article I Scope of the Addendum

- 1.1 Under the terms of this Addendum, DAE shall contribute manpower support to the commissioning and operation of the control systems of the CTF3, with special emphasis on developments for the control system and applications programming, through the provision of DAE expert support on the CERN site ("the Contribution"). The organizational details of the Contribution are given in Annex 1, which forms an integral part of this Addendum.
- 1.2 The detailed tasks to be performed by the DAE experts and the skills required from them shall be decided jointly by CERN and DAE, taking into account the CTF3 commissioning requirements.
- 1.3 The overall envelope for the deployment of the DAE experts shall be 5 man-months, through two experts deployed at CERN for a minimum period of two and half months, extending from October 2006 through December 2006.

Article II Technical Responsibility and Co-ordination

CERN and DAE shall each nominate a Technical Co-ordinator, who shall coordinate the execution, including the timetable, of the detailed tasks.

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Article III

Value of the Contribution

The maximum value of the Contribution is 20'000 CHF (twenty thousand Swiss Francs). The basis for the standard CERN prices on which this value has been calculated is given in Annex 1.

Article IV

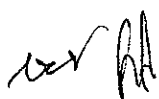
Payment

- 4.1 In consideration of the Contribution, CERN shall pay into the the Novel Accelerator Technologies Fund ("the NAT Fund"), which has been created by the 2006 Protocol, a maximum amount of 10'000 CHF (ten thousand Swiss Francs), representing half of the maximum value stated in Article III of this Addendum, in accordance with the following provisions:
- 10 % following the signature of this Addendum;
 - thereafter, payments shall be made at the beginning of each quarter, taking into account the DAE expert support provided in the previous quarter, at 90 % of the rate specified in Annex 1. The aggregate of all quarterly payments shall not exceed 9'000 CHF (nine thousand Swiss francs).
- 4.2 CERN shall effect payment into the NAT Fund, in accordance with the terms stipulated in Article 4.1 of this Addendum, within 30 working days following receipt and acceptance by the CERN Technical Co-ordinator of the corresponding financial statements submitted by DAE.

Article V

Status of the DAE Experts whilst at CERN

- 5.1 Whilst at CERN, the DAE experts shall be given the status of "Unpaid Associates" participating in CERN's research and development activities in the framework of a team.
- 5.2 DAE shall ensure that the experts shall remain employed by it for the entire duration of their deployment at CERN. In its capacity as employer, DAE



shall ensure that, either directly or through the DAE experts themselves, there shall at all times during their deployment at CERN be insurance against the economic consequences of illness (including maternity) and accidents, whether professional or non-professional for the DAE experts and the accompanying members (if any) of their family, valid in Switzerland and France, and of disability and death resulting from professional illness and accidents for the DAE experts. DAE shall be liable to CERN for any cost and expense resulting from the situation where any part of such insurance cover is not in place.

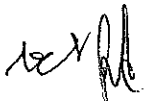
- 5.3 DAE shall ensure compliance with the organisational details given in Annex I and with instructions by CERN, including in particular for the integration of the Contribution into the CTF-3 commissioning programme.

Article VI Modifications

- 6.1 Whenever a Party considers that a modification of this Addendum is necessary, it shall inform the other Party and they shall agree on the measures to be adopted.
- 6.2 Any modification of this Addendum is subject to written confirmation by the authorized representatives of the Parties.

Article VII Cancellation

- 7.1 In the event of a breach by DAE of its obligations under this Addendum, CERN reserves the right to cancel this Addendum in whole or in part by issuing a formal letter indicating the reasons and giving three months, from the date of receipt by DAE of such letter, notice of cancellation. If no corrective action satisfactory to CERN is taken by DAE within that period, the termination will take effect and DAE shall refund to CERN the amounts already paid by CERN into the NAT Fund.



- 7.2 In the event of a breach by CERN of its obligations under this Addendum, DAE reserves the right to cancel this Addendum in whole or in part by issuing a formal letter indicating the reasons and giving three months, from the date of receipt by CERN of such letter, notice of cancellation. If no corrective action satisfactory to DAE is taken by CERN within that period, the termination will take effect and DAE reserves the right to claim reimbursement by CERN of any costs and expenses necessarily incurred by DAE prior to the date of termination, it being understood that its total amount shall in no event exceed the unpaid part of the amount payable by CERN under this Addendum.

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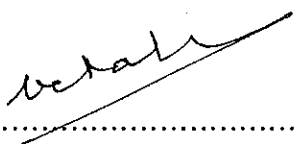
Article VIII Final Provisions

This Addendum shall form an integral part of the 2006 Protocol to the 1991 Co-operation Agreement, as extended in 2001.

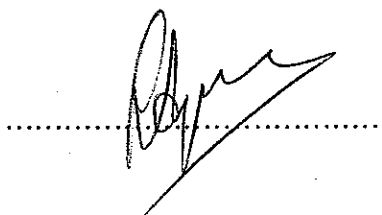
Done at Indore/Geneva onOct. 5, 2006....., in two copies in the English language.

For the Department of Atomic Energy
(DAE) of the Government of India

For the European Organization for
Nuclear Research
(CERN)



Dr. V.C. Sahni
Co-Chairman, DAE-CERN Joint
Coordination Committee for
Collaboration with CERN in the LHC
Project and Director, RRCAT



Dr. R. Aymar
Director General

ANNEX 1

- A period of 6 working days of paid leave, which may be grouped into a period of 8 calendar days, shall be accorded by DAE in addition to the annual Christmas shut-down of two weeks and the other official CERN holidays.
- The commissioning tasks may operate around-the-clock on a seven days a week basis. The work shall take place in the CTF3 buildings and control rooms.
- The overall budget corresponds to 5 man-months.
- The estimated costs are based on the subsistence which CERN pays to Unpaid Scientific Associates. This amounts to 4'000 CHF per month per engineer/physicist.

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