CONSORTIUM AGREEMENT

This Agreement is made the 4th day of December 2003

BY AND BETWEEN

Commissariat à l'Energie Atomique, a public body organized under the laws of France and having its registered office 31/33 rue de la Fédération, 75015 Paris (France), represented by Mr François Gounand duly authorized for the purposes hereof,

hereinafter referred to as "**CEA**",

and

Université Catholique de Louvain, Institut de Physique Nucléaire, a public body organized under the laws of Belgium and having its registered office 1 Place de l'Université, 1348 Louvain-la-Neuve (Belgium), represented by Mr Marcel Crochet, its Rector, duly authorized for the purposes hereof,

hereinafter referred to as "**UCLN**",

and

Centre National de la Recherche Scientifique , a public research body organized under the laws of France and having its registered office 3 rue Michel-Ange, 75794 Paris (France), represented by Mr Bernard Larrou-Turou, Director of CNRS, duly authorized for the purposes hereof,

hereinafter referred to as "**CNRS**",

and

Gesellschaft für Schwerionenforschung mbH, a public research body organized under the laws of Germany and having its registered office Planckstrasse 1, 64291 Darmstadt (Germany), represented by Mr Helmut Zeitträger, Administrative Director, duly authorized for the purposes hereof,

hereinafter referred to as "**GSI**",

and

Johann Wolfgang Goethe Universtitaet, a public research body organized under the laws of Germany and having its registered office Senckenberganlage 31. 60054 Frankfurt (Germany), represented by its President, Prof. Rudolf Steinberg, duly authorized for the purposes hereof,

hereinafter referred to as "**IAP-FU**",

and

Stiftung Deutsches Elektronen-Synchrotron, a public research body organized under the laws of Germany and having its registered office Notkestrasse 85, 22607 Hamburg (Germany), represented by Mr Christian Scherf, Director Administration, duly authorized for the purposes hereof,

hereinafter referred to as "**DESY**",

and

Forschungszentrum Juelich GmbH, a national governmental organisation organized under the laws of Germany and having its registered office Leo-Brandt-Str., 52425 Juelich (Germany), represented by Dr. Wolfgang Jaek, Head Technology Transfer Department and Mr Reinhold Wagner, Administrative Officer, duly authorized for the purposes hereof,

hereinafter referred to as "**FZJ**",

and

Technische Universitaet Muenchen, a public research body organized under the laws of Germany and having its registered office James Franck Strasse 1, 85747 Muenchen (Germany), represented by Mrs Irene Fliesser, Head of the faculty administration, duly authorized for the purposes hereof,

hereinafter referred to as "**TUM**",

and

Forschungszentrum Rossendorf e. V., a public research body organized under the laws of Germany and having its registered office Bautzner Landstrasse 128, 01314, Dresden (Germany), represented by Mr Bernd Johannsen, Scientific Director and Mr Peter Joehnk, Administrative Director duly authorized for the purposes hereof,

hereinafter referred to as "**FZR**",

and

Istituto Nazionale di Fisica Nucleare, a gouvernmental organisation having its registered office via Enrico Fermi 40, 00044 Frascati, (Italy), represented by Enzo Jarocci, President, duly authorised for the purposes hereof,

hereinafter referred to as "**INFN**",

and

University of Twente, a public body organized under the laws of the Netherlands and having its registered office PO Box 217, 7500AE Enschede, (The Netherlands), represented by Mr Pim W.H. FiJ, Managing Director, duly authorized for the purposes hereof,

hereinafter referred to as "**TEU**",

and

Politechnika Lodzka, a public body organized under the laws of Poland and having its registered office Skorupki 6/8, 90-924 Lodz (Poland), represented by Mr Jan Krysinski, Rector, duly authorized for the purposes hereof,

hereinafter referred to as "**TUL**",

and

The Andrzej Soltan Institute for Nuclear Studies, a public body organized under the laws of Poland and having its registered office PL-05-400 Otwock-Swierk (Poland), represented by Mr Ziemowid Sujkowski, General Director, duly authorized for the purposes hereof,

hereinafter referred to as "**IPJ**",

and

Politechnika Warszawska, a public body organized under the laws of Poland and having its registered office Plac Politechniki 1, 00-661, Warszawa (Poland), represented by Mr Piotr Wolanski, Vice-Rector for Scientific Research, duly authorized for the purposes hereof,

hereinafter referred to as "**WUT ISE**",

and

Wroclaw University of Technology, a public body organized under the laws of Poland and having its registered office Wybrzeze Wyspianskiego 27, 50-370 Wroclaw (Poland), represented by Mr Tadeusz Wieckowski, Vice-Rector, duly authorized for the purposes hereof,

hereinafter referred to as "**WUT**",

and

Consejo Superior de Investigaciones Cientificas, a public body organized under the laws of Spain and having its registered office Serrano 117, 28006 Madrid (Spain), represented by Mr Emilio Lora-Tamayo, President, duly authorized for the purposes hereof,

hereinafter referred to as "**CSIC**",

and

The European Organization for Nuclear Research "CERN", an intergovernmental organisation, having its seat at Route de Meyrin, CH-1211 Geneva 23 (Switzerland), represented by Mr Carlo Wyss, Director of accelerators, duly authorized for the purposes hereof,

hereinafter referred to as "**CERN**",

and

Université de Genève, a public body organized under the laws of Switzerland and having its registered office 24 rue du Général Dufour, CH-1211 Genève (Switzerland), represented by Mr Peter Suter, Vice-rector, duly authorized for the purposes hereof,

hereinafter referred to as "**UNI-GE**",

and

Paul Scherrer Institut, a public body organized under the laws of Switzerland and having its registered office at CH-5232 Villigen PSI (Switzerland), represented by Mr Ralph Eichler, Director, duly authorized for the purposes hereof,

hereinafter referred to as "**PSI**",

and

Council for the Central Laboratory of the Research Councils, a public body organized under the laws of the United Kingdom and having its registered office Rutherford Appleton Laboratory, Chilton, Didcot, OX110QX Oxfordshire (United Kingdom), represented by Mr Tony Wells, Head of Sales Contracts, duly authorized for the purposes hereof,

hereinafter referred to as "**CCLRC**",

and

Imperial College of Science, Technology & Medicine, a public body organized under the laws of the United Kingdom and having its registered office South Kensington Campus, SW7 2AZ (United Kingdom), represented by John Sime, Director research support and development, duly authorized for the purposes hereof,

hereinafter referred to as "**ICL**",

and

The Victoria University of Manchester, a public body organized under the laws of the United Kingdom and having its registered office Oxford Road, M13 9PL Manchester (United Kingdom), represented by Mr Neil Ferguson, Head of the RGSU, duly authorized for the purposes hereof,

hereinafter referred to as "**UMA**",

Hereinafter referred to individually or collectively as the "Contractor" or the "Contractors"

PREAMBLE

WHEREAS, in consideration of :

- Decision No 1513/2002/EC of the European Parliament and of the Council of 27 June 2002 concerning the 6th framework programme of the European Community for research, technological development and demonstration activities, contributing to the creation of the European Research Area and to innovation,

and,

- Regulation No 2321/2002 of the European Parliament and of the Council concerning the Rules for the participation of undertakings, research centres and universities and for the dissemination of research results for the implementation of the European Community 6th framework programme 2002-2006,

the Contractors submitted, on 15 April 2003, a proposal for indirect RTD actions under the specific programme "**Structuring the European Research Area**", for the activity of "Support for research infrastructures", call title "Transnational Access and Integrating Activities" n° FP6-2002-Infrastructures-1, using the instrument of **Integrated Infrastructures Initiatives (I3)**.
WHEREAS the Contractors have agreed to perform the EC Contract for the Project called "Coordinated Accelerator Research in Europe" ("**CARE**").

WHEREAS the Contractors wish to specify or supplement, between themselves, the provisions of the EC Contract, with respect to the carrying out thereof.

The Contractors are willing to co-operate to provide an integrated service at the European level consisting in **joint research activities** and **networking activities** on Particle Accelerator Research and Development.

NOW THEREFORE IT IS HEREBY AGREED AS FOLLOWS:

PRELIMINARY ARTICLE

This Consortium Agreement is concluded subject to the condition that the Contract between the European Commission and the Contractors is signed.

Consequently:

- in the event of signature of the EC Contract, it will be appended to this Consortium Agreement, forming an integral part of it.

- in the event of non signature of the EC Contract, this Consortium Agreement shall automatically become null and void in its entirety.

- in the event that the EC Contract is not signed by a Contractor, this Consortium Agreement shall automatically become null and void in its entirety vis-à-vis this Contractor.

ARTICLE 1 - DEFINITIONS

1.1. General Definitions

The words bearing a capital letter in this Consortium Agreement shall have the same meaning as that defined in the second article of Regulation (EC) No 2321/2002 (OJEC L355) of the European Parliament and of the Council and the same definition and meaning as that contained in the Contract with the European Commission, including its Annex II General Conditions and Annex III unless otherwise defined herein.

1.2. Additional Definitions

"Associated Partners" shall designate the 46 organizations that are not Contractors but shall participate to the Project as associate of a Contractor; the list of the Associated Partners and the related Contractors is attached as **Appendix 2**.

"**Budget**" means the resources and expenditures of the Contractors as defined in the Description of Work and in the detailed Subproject budget attached as **Appendix 6**.

"Commission" or "EC" means the Commission of the European Communities.

"**Consortium**" means all the Contractors participating in the Project.

"EC Contract" means the Contract between the Contractors and the Commission regarding the performance of the Project.

"Implementation Plan" means the rolling plan that specifies the relevant milestones and the expected Project results. The Implementation plan for the first 18 month-period is included in the Description of Work; it shall be revised on a 12 months basis.

"Industrial Associated Partners" shall designate the 12 industrial companies that are not Contractors but shall participate to the Project as associate of a Contractor; the list of the Industrial Associated Partners and the related Contractors is attached as **Appendix 2**.

"Knowledge" means the results, including information, whether or not they can be protected, arising from the Project, as well as copyrights or rights pertaining to such results following applications for, or the issue of patents, designs, plant varieties, supplementary protection certificates or similar forms of protection.

"**Objectives**" means the objectives and expected outcome of the Project.

"Pre-existing Know-How" means the information which is held by Contractors prior to the conclusion of the EC Contract, or acquiring in parallel with it, as well as copyrights or rights pertaining to such information following applications for, or the issue of patents, designs, plant varieties, supplementary protection certificates or similar forms of protection.

"Description of Work" means the document attached as **Appendix 1** describing the actions to be taken by the Contractors to fulfill the EC Contract.

"Project Reports" means the documents, periodic reports and the final report to be delivered to the Commission.

"**Project**" means the **Integrated Infrastructures Initiatives** called "**CARE**" as set out in the Description of Work,

"Subcontract" means an agreement to provide services, supplies or goods concluded between a Contractor and one or more Subcontractors for the specific needs of the Project.

"Subprojects" means the seven (7) Subprojects to be carried out in the framework of the Project for the two types of activities: (i) Joint Research Activities and (ii) Networking Activities. The Subprojects are listed in article 4.5. Each Subproject is subdivided in Work packages.

"Use" means the direct or indirect utilisation of Knowledge in research activities or for developing, creating and marketing a product or process, or for creating and providing a service.

"**Work package**" means the activities to be carried out in the framework of each Subproject. They are defined in the Description of Work.

ARTICLE 2 - PURPOSE

The purpose of this Consortium Agreement is to specify the organisation of the work between the Contractors, to organise the management of the Project, to define the respective rights and obligations of the Contractors, supplementing but not conflicting with the provisions of the EC Contract.

ARTICLE 3 - SCOPE OF THE PROJECT

The scope and the schedule of the Project is set out in the Description of Work for the two types of activities.

(i) Networking Activities, and
(ii) Joint Research Activities

as they are described in the Description of Work.

The performance of the Project shall be shared between the Contractors in accordance with the Description of Work.

ARTICLE 4 - GOVERNANCE OF THE PROJECT

4.1. – THE CARE GOVERNING BOARD (hereinafter "CGB")

4.1.1. CGB Composition:

The CGB is composed of:

- one representative per Contractor, i.e. 22 members and
- 2 non voting members: the representative of the Coordinator (Roy Aleksan) and the Chairman of the European Committee for Future Accelerator (ECFA)

Membership in the CGB does not preclude being a member of the Care Steering Committee.

Any expert or qualified person may be invited by the Chairperson to attend meetings of the CGB with a role of advisor.

At the first meeting of the CGB, a Chairperson shall be designated, for a two-year period, among its members, upon the simple majority of the vote of its members present or represented.
At the end of the first two-year period, a new Chairperson shall be designated under the same conditions and for the same duration.

The Chairperson shall:

- Organize and chair the CGB meetings;
- Set the agenda for meetings of the CGB;
- Ensure the secretariat of the CGB.

4.1.2 CGB Role:

The CGB is the decision-making and arbitration body of the Consortium. Within the framework of the Description of Work, the CGB is responsible for the following decisions:

- political and strategic orientation of the Project;
- approval of significant modifications to the Description of Work proposed by the Care Steering Committee;
- approval of the annual rolling 18-month “Implementation Plan” including, but not limited to, decisions to abandon a research programme, to reduce the budget allocated to it or to reschedule an activity;
- approval of the Consortium’s budget and the financial allocation of the EU’s contribution between the various activities on the one hand, and between the various Contractors on the other;
- annual validation of the realized expenditure in accordance to the Budget;
- approval of the Project Reports;
- the CGB may require, at any time without prior notice, to the entity entrusted as Coordinator to appoint a new representative.
- The CGB may request at any time to the Coordinator to provide a full review and a written report on any decision or action taken within the Consortium by any body, for which it deems an explanation to be necessary.
- The CGB may authorize, by **unanimous vote**, minus that of the Contractor concerned:
    - the inclusion of a new Contractor upon proposal of the Care Steering Committee pursuant to the terms set forth in Article 6 : “Inclusion of a new Contractor";
    - the withdrawal of a Contractor, pursuant to the terms set forth in Article 6 : “Withdrawal of a Contractor";
    - the exclusion of a Contractor pursuant to the terms set forth in Article 6 : “Exclusion of a Contractor”;
- the CGB shall monitor the implementation by the Care Steering Committee of the CGB decisions;

the CGB shall decide, in conjunction with the Contractors involved in the manufacturing, on terms and conditions of exploitation of the equipment (prototypes, …) which will be manufactured within the Project.

- the CGB shall decide on terms and conditions of access to Knowledge and Pre-Existing Know-How by new Contractor,

- the CGB is the arbitration body for all decisions taken within the Consortium. Thus, any Contractor may submit for arbitration by the CGB any decision taken by the Care Steering Committee or any other body, it deems to be violating the provisions of this Consortium Agreement.

4.1.3. CGB quorum requirements:

The CGB may validly meet if 1/2 of its members are present or represented and account for 2/3 of the votes. In case quorum is not met, the CGB will be convened once again within no more than three (3) weeks from this date, and may validly deliberate even in the absence of the required quorum.
All of the members of the CGB may grant a power of attorney to other members to represent them as their proxies, with a limit of one (1) proxy per member.

4.1.4. CGB Voting rules:

Each CGB member shall have the number of vote(s) specified in **Appendix 5**.

The distribution of votes shall be reconsidered by the CGB in the event of substantial changes in numbers of Contractors or their contribution to this Project.

Subject to the cases set forth above expressly requiring a unanimous vote, all attempts should be made to make decision on the basis of a large consensus. Should such a consensus not be reached, decisions by the CGB shall be taken upon the simple majority of the votes of the members present or represented.

4.1.5. CGB Meetings:

The Chairperson shall convene the CGB as often as the interests of the Consortium so require, and at least once a year.

The Chairperson shall also convene meetings:

- upon request by half of its members,
- upon request by the Coordinator.

The Chairperson shall give each of the Contractors at least 3 months written notice of such meetings.

Any decision requiring a vote at a CGB meeting must be identified as such on the notice of meeting.

Should a Contractor suggest adding a discussion point/resolution to the proposed agenda, it shall be given written notice thereof to all other Contractors at least 15 calendar days prior to the meeting date.

However, any decision of the CGB may be taken in accordance with the above (i) in meetings via teleconference (ii) without a vote, if a written consent, setting forth the decision so taken, is signed, even electronically, by representatives of the Contractors having at least the minimum number of votes that would be necessary to take such decision.

In case of written consultation, the letter of the Chairperson is required to specify the deadline for response imparted. Failure to respond within this deadline shall be deemed a non-vote for the application of the quorum and majority vote requirements.

4.1.6. CGB Minutes:

The Chairperson of the CGB shall draft the minutes of the meeting and dispatch them to all Contractors within fifteen (15) calendar days of the concerned meeting.
The minutes shall be considered as accepted by the Contractors if, within fifteen (15) calendar days from receipt thereof, no Contractor present or represented at the said meeting has objected in writing to the Chairperson of the CGB.

4.2 – THE CARE STEERING COMMITTEE (hereinafter "CSC")

4.2.1. CSC Composition:

The CSC is composed of the following 11 members:

- the Coordinator who is the head of the CSC
- the Deputy Coordinator for technical and administrative matters
- the 8 Subprojects Coordinators (one per Subproject, except JRA 1 which has 2 coordinators)
- the Head of the Dissemination Board

4.2.2. Head of the CSC: the Coordinator

In his role of CSC head, the Coordinator shall:

- set the agenda for meetings of the CSC;
- organize and chair the CSC meetings. In his absence, the Deputy Coordinator will chair the meeting;
- if deemed necessary, invite with a role of advisor any additional person;
- in emergency situation, take any decision required by the circumstances, which must then be validated by the CSC.

4.2.3. CSC Role:

The CSC is responsible for reviewing and ensuring the implementation of the Project in accordance with the decisions of the CGB.

More specifically, the CSC is responsible, with the assistance of the Management Team, for the following tasks:

Concerning the Project :

- implement the scientific, political and strategic orientations decided on by the CGB,
- monitor the implementation of its decision by the Subprojects,
- nominate new Subproject Coordinators, when necessary,
- implement the competitive selection procedure for new Contractors with the assistance of the Management Team,
- ensure the communication, in due time, of all information and reports to the Coordinator,
- prepare and submit to the CGB all documents requiring its approval (Consortium's Budget, allocation of funding between the Contractors; significant modification of Description of Work, Projects Reports, realized expenditures …),

- make proposals to the CGB to suspend all or part of the Project or to terminate all or part of the EC Contract, or to request the Commission to terminate the participation of one or more Contractors,

- prepare proposals to the CGB, on measures to be taken against a defaulting Contractor, including through a request to the Commission for an audit, and assignment of the Defaulting Contractor's tasks, a staggered payment of the financial part of this Contractor's contribution,

- prepare proposals to the CGB, on measures to be taken in case of default by the Coordinator in the performance of its tasks as Coordinator, and on the possible appointment of a new Coordinator;

- approve the subcontracting in accordance with provisions of article 5.4 (vii);

- in case of a deadlock situation within a Subproject or between a Subproject and a Work package, the CSC shall be the arbitration body. Upon referral of a request for arbitration, the CSC shall have two (2) weeks in which to make known its decision;

- the CSC shall more generally take any and all decisions required for the proper conduct of the Project.

Concerning Intellectual Property :

- recommend to CGB on terms and conditions of ownership or joint ownership of the equipment (prototypes, …) which will be manufactured within the Project.

- recommend to CGB on terms and conditions of Access Rights to Pre-Existing Know-How not listed prior to the signature of the EC Contract;

- recommend to CGB on terms and conditions of access to Knowledge and Pre-Existing Know-How by new Contractor,

- in collaboration with the Dissemination Board, ensure, the review of Knowledge and take measures in connection with their industrial protection, defence and use;

- decide on the acquisition of rights from third parties.

4.2.4. CSC Quorum requirements:

The CSC may validly meet if 2/3 of its members are present or represented. In case quorum is not met, the CSC will be convened once again within no more than fifteen (15) days from this date, and may validly deliberate even in the absence of quorum.

All of the members of the CSC may grant a power of attorney to other members of the CSC or as follows:

- the Subproject Coordinators to its deputy or to a Work package leader
- the Head of the CDB to a member of its Board

4.2.5. CSC Voting rules:

Each member of the CSC has one (1) vote and decisions shall be taken upon a simple majority of members present or represented.

The decision to propose to the CGB to remove the Coordinator representative shall be taken upon a majority of 3/4 of members present or represented, excluding the Coordinator.

4.2.6. CSC Meetings:

The Coordinator shall convene the CSC as often as the interests of the Consortium so require and at least three (3) times a year.

The Coordinator shall also convene meetings:

- upon request of any Subproject Coordinator in case of duly justified emergency,
- upon request of 1/3 of the members of the CSC

Subject to the above, the Coordinator shall schedule the CSC meetings for a full year period and shall send confirmation to each CSC member at least 21 calendar days prior to any meeting.

Any decision requiring a vote at a CSC meeting shall be identified as such on the notice of meeting.

Should a member of the CSC suggest adding a resolution point to the proposed agenda, it shall be given written notice thereof to all other members of the CSC at least seven (7) calendar days prior to the meeting date.

However, any decision of the CSC may be taken in accordance with the above (i) in meetings via teleconference (ii) without a vote, if a written consent, setting forth the decision so taken, is signed, even electronically, by the members of the CSC having at least the minimum number of votes that would be necessary to take such decision.

In case of written consultation, the letter of the Coordinator is required to specify the deadline for response imparted. Failure to respond within this deadline shall be deemed a non-vote for the application of the quorum and majority vote requirements.

4.2.7. CSC Minutes:

The Coordinator shall ensure the draft of the minutes of the meeting and dispatch it to the CSC members and to the Contractors within fifteen (15) calendar days of the concerned meeting.

The minutes shall be considered as accepted by the Contractors if, within fifteen (15) calendar days from receipt thereof, no members presented or represented at the said meeting has objected in writing to the Coordinator.

A Contractor that is not member of the CSC may also object on the ground that such Contractor' rights or obligation are impacted, provided always that the objections are made within fifteen calendar days of receipt of the minutes.

4.3 - THE COORDINATOR

The Coordinator is the scientific and administrative representative of the Project vis à vis the Commission
It is responsible for carrying out the specific co-ordination tasks provided for in the EC Contract with the Commission on behalf of the Contractors in the scientific, technical, organizational and financial field. He shall be assisted by a Management Team to perform his duties.

The Contractors have appointed CEA, represented by Roy Aleksan, as Coordinator.

With due respect of the EC Contract, the Coordinator's duties are:

- To ensure the signature, by all Contractors, of the EC Contract;

- To be the intermediary between the Contractors and the Commission and forward to the Commission, or to the Contractors as the case may be, all requested information and documents related to the Project,

- To receive the entire financial contribution from the Commission and to allocate it to the Contractors in accordance with the Description of Work and with the decisions taken by the appropriate bodies,

- To prepare annual accounts and, upon request of the Commission or of any Contractor, to inform them of the distribution of funds, the amounts allocated and the dates of payment to each Contractor,

- To collect from the Subprojects and the CDB all information and reports and to consolidate them in the Project Reports,

- To collect from the Contractors the audit certificates,

- To address the Project Reports and the audit certificates to the Commission, after prior validation by the CGB.

Except in the Coordinator's capacity as representative of the Contractors as defined in the EC Contract and for any mandate duly given by the CGB, the Coordinator shall not be entitled to legally bind the other Contractors.

4.4 - THE MANAGEMENT TEAM

To perform his duties the Coordinator shall be assisted by a Management Team composed of :

- a Deputy Coordinator for technical and administrative matters, assisted by an accounting team,
- a Deputy Coordinator for dissemination matters,
- a webmaster specialist,
- a legal advisor,
- a secretary,

all designated by the Coordinator.

Under the control of the Coordinator, the Management Team shall:

- manage the administrative, legal, financial and other aspects of the Project;

- prepare for the CSC progress reports on the Objectives and on the Implementation Plan, the supporting documents and audit certificate to be provided by the Contractors;

- follow-up the planning schedules, issue reminders for task initiation or completion, etc;

- assist the CSC in implementing the competitive selection procedure for new Contractors pursuant to article 6.1.1.

4.5 –SUBPROJECTS COMMITTEES

Seven (7) Subprojects are set up to carry out the Project in the 2 categories of activities (i) Joint Research Activities and (ii) Networking Activities :

- Joint Research activities are composed of 4 Subprojects:
  - JRA 1 : « **SRF** – Super conducting radio frequence» whose Coordinators are D. Proch (DESY) and T. Garvey (CNRS-IN2P3).
  - JRA 2: « **PHIN** – Photo-injector » whose Coordinator is A. Ghigo (INFN-LNF)
  - JRA 3: « **HIPPI** – High Intensity Proton Pulsed Injector » whose Coordinator is R. Garoby (CERN)
  - JRA 4 : « **NED** – Next European Dipole » whose Coordinator is A. Devred (CEA)
- Networking activities are composed of 3 Subprojects:
  - N1: "**ELAN** – Electron Linear Accelerator Network "whose Coordinator is F. Richard (CNRS-IN2P3)
  - N2: "**BENE** – Beams in Europe for Neutrino Experiments High" whose Coordinator is V. Palladino (INFN-NA).
  - N3: "**HEHIHB** - High Energy High Intensity Hadron Beams" whose Coordinator is H. Haseroth (CERN)

Each Subproject has a Committee and monitors several Work packages with specific tasks as described in the Description of Work.

Subproject Coordinators shall designate a Deputy to assist them.
In case of dismissal of any Subproject Coordinator, the Work package Leaders of the concerned Subproject shall designate a new one.

4.5.1. Subproject committee composition:

Subproject committee is composed of

- the Subproject Coordinator,
- its Deputy
- the Work packages leaders of the relevant Subproject.

The Coordinator as well as any other third party may be invited by the Subproject Coordinator to participate in meetings of the Subproject committee, with an advisory role.

4.5.2. Subproject Committee Meetings:

The Subproject Coordinator shall convene meetings of the Subproject Committee at least four (4) times a year.

The Subproject Coordinator shall also convene meetings upon request of any of its members.

The Subproject Coordinator shall give each of the members at least ten (10) calendar days' written notice of such meetings or seven (7) calendar days notice in case of an emergency situation.

Any decision requiring a vote at the Subproject committee meeting shall be identified as such on the notice of meeting.

Should a member of the Subproject committee suggest adding a discussion point/resolution to the proposed agenda, it shall given written notice thereof to all other members at least two (2) calendar days prior to the meeting date.

However, any decision of the Subproject committee may be taken in accordance with the above (i) in meetings via teleconference, and/or (ii) without a vote, if a written consent, setting forth the decision so taken, is signed, even electronically, by members of the Subproject committee having at least the minimum number of votes that would be necessary to take such decision.

Subproject Committee members may grant a power of attorney to other members to represent them as their proxies.

The Subproject Coordinator shall draft the minutes of each meeting to formalise in writing all decisions taken and shall dispatch them to all members of Subproject committee within fifteen (15) calendar days of the concerned meeting.

The minutes shall be considered as accepted by the members of Subproject committee if, within fifteen (15) calendar days from receipt thereof, none of them has objected in writing to the Subproject Coordinator.

4.5.3. Quorum and voting rules:

The Subproject committee may validly meet if 2/3 of its members are present or represented. In case quorum is not met, the Subproject committee will be convened once again within no more than two (2) weeks from this date, and may validly deliberate even in the absence of quorum.

Decisions are adopted on a unanimous basis of its members present or represented. In case of a deadlock, the Subproject Coordinator shall submit the relevant decision to the CSC for arbitration. The CSC has fifteen (15) days in which to make known its decision.

4.5.4. Subproject Committee Role:

Vis-à-vis the CSC and the Coordinator:

- present progress reports on the state of advancement of the Subproject;
- make proposals on programmes to be conducted and the arrangements for performance, the orientations of the Subproject and of the Description of Work;
- make proposals on the allocation of Subproject tasks, financial needs and allocation among the Contractors, the need to bring in new Contractors, need for subcontractors to fulfil the Objectives;
- draft and validate Project Reports on the Subproject to be submitted to the Coordinator;
- identify Contractors presenting financial or technical risks and inform the CSC;
- inform the CSC of any other difficulty arising in connection with the conduct of the Subproject.

Vis-à-vis the Subproject members:

- ensure the scientific monitoring and coordination of the Subproject through the Work packages and ensure its implementation;
- determine the Work packages and study phases and appoint Work package Leaders;
- approve the subcontracting in accordance with provisions of article 5.4 (vii);
- forward to the Care Dissemination Board a copy of its activity reports.

4.6 – WORK PACKAGES

The Subproject Committees shall designate their corresponding Work package Leaders.

The organization of the Work packages by Subprojects and their respective scheduled tasks are set in the Description of Work.

4.7 – THE CARE DISSEMINATION BOARD (hereinafter "CDB")

4.7.1. Composition of the CDB

The CDB is composed of nine (9) members :

- the Head of the CDB
- the 7 Deputies of Subproject Coordinators,
- the Coordinator

The Care Consortium Council appoints the head of the Dissemination Board among the Contractors and the Associated Partners

The Dissemination Board shall meet at least three (3) times a year.

The Head of the Dissemination Board shall schedule the regular meetings of the CDB for any 6-month period and shall convene it at the request of any member of the CDB.

The head of CDB shall draft the minutes of each meeting and shall dispatch them to its members and to any Contractor within fifteen (15) calendar days of the concerned meeting.

The minutes shall be considered as accepted by the CDB members and by the Contractors if, within fifteen (15) calendar days from receipt thereof, none of them has objected in writing to the head of Dissemination Board.

Role :

The CDB shall be responsible for the dissemination of Knowledge and more particularly for:

- ensuring the quality and the distribution of publication papers, proceeding, reports, books, …

- advertising widely the consortium meetings electronically (building a database of e-mail);

- ensuring the availability and maintenance of information related to the Project in the web, including postdoctoral and thesis opportunities;

- promoting actively talk and contribution at conferences and workshops, including the collection of documents for reporting activities at a higher level (ECFA, ICFA, EPS, …);

- monitoring the world-wide activities related to the work carried out in the Project

- assisting the CSC in the implementation of measures in connection with publications, the protection of Knowledge and their dissemination. More particularly, it shall draft the publication policy and regularly update the list of eligible authors for any scientific documents (papers, reports, …),

- proposing to the CSC the updating of the Pre-Existing Know-How list.

The CDB identifies Knowledge that could be the subject matter of protection, use or dissemination by decision of the CSC, based on contemplated publications and activity reports issued by Subproject committees.

The CDB shall submit a proposal to the CSC on the allocation of co-ownership shares over Knowledge obtained by several Contractors for decision by the CSC.

At the request of the CSC, it shall conduct freedom to operate studies, negotiate access rights and propose solutions to any issue with regard hereto.

The CDB shall submit an annual report to the CSC and to the CGB .

It shall validate communication actions carried out in the name of the Consortium and, in case of any problem, refer it to the CSC for arbitration.

Quorum and voting rules:

The CDB may validly meet if 3/4 of its members are present or represented. In case quorum is not met, the CDB will be convened once again within no more than two (2) weeks from this date, and may validly deliberate even in the absence of quorum.

The CDB issues opinions and takes decisions upon a majority of 2/3 of the votes of its members.

4.8 – CARE COLLABORATION COUNCIL (hereinafter "CCC")

4.8.1. CCC composition:

The CCC is composed of all the participants involved in the Project, the Contractors, the Associated Partners and the Industrial associated Partners The Chairperson of the CGB shall convene the CCC at least once a year and chairs the CCC meetings.

4.8.2. CCC Role:

The CCC is a consultative body on organizational and scientific matters :

- it may advise the CGB and the CSC on Project orientations,
- it may evaluate the Description of Work, the results obtained and the Project Deliverables,
- it may also evaluate the management of the Project;
- it may be consulted by the CGB as well as by the CSC on any scientific and organizational issues,
- it may make any proposal or transmit any information it deems useful to the CGB and to the CSC.

The CCC shall also designate the Head of the CDB, among the Contractors, upon the simple majority of the votes of the members present.

For meeting organisation purposes, the CCC shall be assisted by the CDB.

ARTICLE 5 - CONTRACTORS' OBLIGATIONS

5.1. The Contractors agree to co-operate pursuant to the terms of this Consortium Agreement and to perform in due time all their obligations so that the Project is carried out in accordance with the terms and conditions of the EC Contract and this Consortium Agreement.

5.2. The Contractors undertake to refrain from any collaboration between themselves or with any third party likely to compete directly with the Project.

5.3. The Contractors shall provide the Coordinator, via the Subproject Coordinators asthe case may be, with the deliverables, information and report as they require in order to perform their duties under this Consortium Agreement and under the EC Contract or as the Commission may request.

The Contractors shall advise the Coordinator and/or the Subproject Coordinator of any request from the Commission.

Deliverables, information and reports shall include, inter alia, the supporting documents evidencing expenditures incurred by the Contractors for the purposes of the Project.

Each Contractor shall address to the Coordinator an audit certificate in accordance with the relevant article of the EC Contract no later than thirty (30) days after the expiry of each certification period.

5.4. Each Contractor undertakes:

i. to promptly notify, to the appropriate body, any delay in performance or any event that may impact the Project;

ii. to inform the appropriate body of relevant communications it receives from third parties in relation to the Project;

iii. to ensure the accuracy of any information or materials it supplies to the other Contractors or under the EC Contract and to promptly correct any error therein of which it is notified. The recipient Contractor shall be responsible for the use to which it puts such information and materials;

iv. not to use knowingly any proprietary rights of a third party for which he has not acquired the corresponding right of use and/or to grant licences;

v. to act at all times in good faith and in a manner that reflects the good name, goodwill and reputation of the other Contractors and in accordance with good business ethics;

vi. to participate in a cooperative manner to the meetings of the different bodies under this Consortium Agreement;

vii. if recourse to a Subcontract is not provided for in the Description of Work, the Contractor shall obtain the prior approval of the CSC for any Subcontract of an amount greater than 10 000 €.

viii. to submit to the CSC the terms and conditions of any Subcontract of an amount greater than 10 000 €.

ARTICLE 6 - CHANGE TO THE CONSORTIUM

6.1. Inclusion of a new Contractor

6.1.1. Inclusion of new Contractors

The EC Contract determines the changes to the composition of the Consortium requiring a competitive selection procedure. In all other cases, without contrary decision of the CGB , no competitive selection procedure shall apply.

6.1.2. Conditions of participation in the Project by the new Contractors

By joining the Project a new Contractor agrees to participate (through human, material and/or financial means) to the Objectives and to pay an entrance fee, the amount to be determined by the CGB.

The entrance into the Project of a new Contractor becomes effective on the date it adheres to the EC Contract by the signature of form B and to the Consortium Agreement by the signature of an amendment.

Access Rights:

The new Contractor shall have access to the Pre-Existing Know-How of the other Contractors for the purposes of execution of its own part of the Project and Use upon written request pursuant to the terms set forth in Article 9 "Intellectual property rights".

Nevertheless, any Contractor pursuant to the provisions of EC Regulation n° 2321/2000 article 25.3 shall have the right to exclude some of its Pre-Existing know how from the new Contractor access rights.

The new Contractor has access to the Knowledge produced in the scope of the Project prior to its arrival for the purposes of execution of its own part of the Project and Use at market conditions.

6.2. Withdrawal, exclusion of a Contractor

6.2.1. Withdrawal of a Contractor

Any Contractor may request to terminate its participation in the EC Contract and the Consortium Agreement, by giving three (3) months written notice to the other Contractors, by registered mail with acknowledgement of receipt, indicating the reasons for termination.

The CGB may object to such termination by unanimous vote minus the vote of the withdrawing Contractor, indicating the reasons for objection, within a period of forty-five (45) days from receipt of notification.

If the CGB agrees, the Coordinator shall inform the Commission by means of registered mail with acknowledge receipt in accordance with the EC Contract. The withdrawal shall be effective at the end of the notice period, subject to the agreement of the Commission in accordance with the EC Contract.

Where the Consortium disagrees, the Coordinator shall submit to the Commission a request for assistance, in accordance with the EC Contract.

Consequences of withdrawal :

1- **Access Rights**:

Any Contractor withdrawing from the Consortium :

- loses Access Rights to Knowledge produced and Pre-Existing Know-How identified, after its withdrawal;
- keeps Access Rights to Pre-Existing Know-How and to the Knowledge of the other Contractors (in the state existing on the date of withdrawal), provided that (i) it is required, for the use of the Knowledge of which it is the owner or co-owner and (ii) such Access Rights are requested at least within two years after its withdrawal;
- keeps its entitlement to royalties generated by the use by the other co-owners or third parties of the Knowledge produced in the scope of the Project of which it is the owner or co-owner. Royalties will be calculated proportionally to its co-ownership share, or pursuant to the co-ownership agreement(s) or licence(s) concluded prior to its withdrawal.

The other Contractors keep, for the purposes of the carrying out the Project, Access Rights pursuant to the terms set forth in Article 9 : “Intellectual property rights” to the Pre-Existing Know-How (in the state existing on the date of withdrawal) of the

withdrawing Contractor and to the Knowledge produced by it in the scope of the Project pursuant to the terms set forth in Article 26 and 27 of the Regulation concerning the rules for participation.

A withdrawing Contractor shall return all documents, equipments or materials provided by the other Contractors, or destroy them upon their written request.

2- **Financial**.

The withdrawing Contractor shall be liable to the other Contractors for all costs arising as a consequence from such withdrawal in relation to the Project.

The withdrawing Contractor shall fulfil all its commitments contracted prior to the effective date of its withdrawal.

The Contractor is required to refund all advances paid to it from the EC contribution except the amount spent for the performance of the Project, with appropriate justifications.

6.2.2. Exclusion of a Contractor

The exclusion of a Contractor may be decided by the CGB by unanimous vote minus the vote of the concerned Contractor, pursuant to the terms set forth in the EC Contract.

The exclusion of a Contractor has the same consequences as a withdrawal.

ARTICLE 7 - CONSORTIUM RESOURCES

7.1. Financial means

7.1.1. Budget

The budget comprises the resources and expenses of the Consortium. Resources comprise the financial contribution from the Community and the resources allocated by the Contractors.

The amount of the Community's financial contribution is set in the EC Contract and may be reviewed annually by the Commission.

The Consortium's Budget and the rolling forecasted budget established annually for an 18-month are part of the Description of Work.

7.1.2. Criteria for allocation of the Community's financial contribution

The CGB shall periodically review the Budget and its allocation between the Contractors, proportionally to their respective contributions to the Project.

No distribution of funds to Contractor may take place prior to the signature of the Consortium Agreement and of the EC Contract by the said Contractor.

7.1.3. Payment of the Community's financial contribution

The Coordinator shall distribute to the Contractors the first amount of the European financial contribution as soon as possible, from the receipt thereof from the European Commission.

The Coordinator shall notify each Contractor promptly of the date and amount transferred to its respective bank account.

The Coordinator shall distribute the subsequent parts of the European financial contribution to the Contractors upon receipt of the payment from the Commission and subject to having received the related Project Reports.

In case a Contractor has not provided the Coordinator with its Project Reports or has provided them late or provided non-compliant Project Reports, such Contractor shall not receive its concerned contribution allocation, until it remedies such a breach or unless the Coordinator, decides otherwise.
The Coordinator may also decide on staggered payments of the contribution to any defaulting Contractor.

The CGB and the CSC shall be kept informed under all circumstances and may decide on additional appropriate measures with respect to the concerned Contractor.

7.1.4. Management of Community's financial contribution

The Coordinator, in accordance with the applicable rules, shall make all financial management and accounting acts in connection with the Community's contribution.

The Coordinator shall identify in its accounts the Community's contribution to the Description of Work and provide all required justifications upon the release of the funds.

7.2. Material resources

7.2.1. Access to pre-existing equipment

A Contractor may grant to other Contractor access to its facilities and equipment by the signature of a use agreement that shall be negotiated between the interested Contractors.

7.2.2. Equipment manufactured within the Project

The Consortium, which is not a legal entity, shall not own any assets.

Therefore, terms and conditions of ownership or joint ownership of the equipment (prototypes, …) which will be manufactured within the Project shall be set by the Contractors involved in the manufacturing, provided however that the CGB shall set with them the terms and conditions of the exploitation of the equipment by the other Contractors.

7.3. Human resources

Each Contractor shall ensure the coverage of its employees in accordance with the legislation applicable to social security coverage, work-related accidents and occupational diseases and shall carry out all legal or regulatory requirements incumbent upon it.

Employees of a Contractor working for the Project in the premises of another Contractor are required to comply with the internal policies as well as with all general or special rules of health and hygiene applicable on the premises of the host Contractor.

Each of the Contractors shall make the arrangements in connection with the hosting of third-party employees within the scope of the Project its personal business.

ARTICLE 8 - LIABILITY/INSURANCE

8.1. General Principles

The Contractors agree to assume all the financial consequences of their liability in all cases their liability is asserted on the basis of damage caused to one of them or to a third party in the scope of the performance of this Project.

8.2. Liability towards the Commission

In accordance with the participation rules, Public bodies shall only assume their own debts and shall not bear the debts of any other Contractor.

Each Contractor, that are not public bodies, shall be collectively liable towards the others for any losses or damages suffered by the Commission, as a consequence of any failure to perform all or part of its obligations under the EC Contract or under this Consortium Agreement.

Should the Commission, in accordance with the provisions of the EC Contract, claim any reimbursement, indemnity or payment of damages from one or more Contractors, non public body, the Contractors agree that:

i. each Contractor whose default has caused or contributed to cause such claim shall indemnify each of the other Contractors against such claim. and
ii. in the event it is not possible to attribute the default to any Contractor, the amount claimed by the Commission shall be apportioned between all the Contractors which are not public body, proportionally to their Project Shares.

8.4. Liability for Subcontractors

Each Contractor shall remain fully responsible for the performance of any part of its work by its Subcontractor(s).

Therefore said Contractor shall ensure that (i) such subcontract fully complies with the requirements of the EC Contract; (ii) the other Contractors' Access Rights are fully preserved; and (iii) the third party shall have no access to any other Contractor's Knowledge or Pre-Existing Know-How without the latter's prior written consent.

ARTICLE 9. INTELLECTUAL PROPERTY RIGHTS

9.1. Confidentiality

During the term of the Project and for a period of ten (10) years thereafter, the Contractors shall treat as confidential any information, which is designated as proprietary and confidential by the disclosing Contractor by an appropriate stamp, legend or any other notice in writing.

Accordingly, each Contractor agrees the following:

i. the receiving Contractor shall not use any such confidential information for any purpose other than the Project, and

ii. the receiving Contractor shall not disclose any such confidential information to any third party except with the disclosing Contractor's prior written consent, and,

iii. such information shall neither be copied, nor otherwise reproduced nor duplicated in whole or in part where such copying, reproduction or duplication have not been specifically authorised in writing by the disclosing Contractor.

The Contractors shall impose the same obligations on all their employees who may have access to confidential information.

The confidentiality obligation does not extend to information for which the receiving Contractor can prove:

- was in the public domain prior to its communication by the disclosing party or fell within the public domain after its communication by the disclosing party but though not fault of its own;
- was already in its possession at the date of disclosure;
- it received from a third party without any breach of any confidentiality obligation;
- it is legally obliged to disclose, providing always that the disclosing party is given prior notification of such disclosure and the receiving party uses all reasonable endeavours to minimise such disclosure

9.2. Publication

In accordance with the EC Contract, any proposed publication or communication in connection with Knowledge shall be submitted for the prior written consent of the Contractors and the Commission

To this end, any Contractor shall submit the proposed publication or communication, or a summary, to the CDB that will inform the Commission and the other Contractors of the proposed publication/communication.

The Contractors shall have one (1) calendar month from the date of receipt of the proposed publication or communication to make known their decision to the CDB.

Beyond this period, consent shall be deemed to have been given.

This decision may consist in:

a) acceptance of the proposed publication/communication; or

b) a request for modifications, specifically if certain pieces of information contained in the proposed publication are likely to impair the industrial and commercial use of Knowledge; or

c) request that the publication or communication be postponed, for a maximum period of 18-months, if real and serious reasons require this, especially if the information contained in the proposed publication or communication should be the subject matter of industrial property protection.

The terms of the above paragraph may not however defeat the obligation for the scientists involved in the Project to produce their activity report to the research organisation to which they report and to submit their thesis.

All authors are required to indicate their membership in the CARE Project in all publications made by them.

9.3. Pre-Existing Know-How (PEKH)

9.3.1. Ownership

Each Contractor is and remains the sole owner of its intellectual and industrial property rights over its Pre-Existing Know-How.

9.3.2. The Pre-Existing Know-How

The Contractors have identified and listed in **Appendix 3** the Pre-Existing Know-How explicitly excluded from any communication and Access Rights.

The Contractors agree that the Pre-Existing Know-How of their laboratories, departments or services, which are not part of the Project, shall be considered as unnecessary for the implementation of the Project and automatically excluded from any communication and Access Rights.

9.4. Ownership and protection of Knowledge

Knowledge shall be the property of the Contractor generating it.

Where several Contractors have jointly carried out work generating Knowledge, and where their respective share of the work cannot be ascertained, they shall have joint ownership of such Knowledge. They shall agree among themselves, subject to CSC recommendation, on the allocation and terms of exercising the ownership and they shall jointly apply to obtain the property rights. The share of each of the Contributors to the Knowledge shall be defined proportionally to the resources implemented by each, whether human, financial or intellectual.

In case a Contractor ("Originator") decides not to seek protection over its Knowledge issuing from the Project, he shall inform in writing the other Contractors, through the CDB. Any Contractor interested in applying to obtain such protection shall advise the other Contractors through the CDB, within one (1) month of receipt of relevant notice.

In case several Contractors are interested in so applying, they shall strive to set up amongst themselves and with the Originator appropriate agreements to this end.

Should no other Contractor show an interest in so applying, the CDB shall inform accordingly the Commission in accordance with Annex II General Conditions - Part B, Article II.16.

The foregoing shall be without prejudice to the Access Rights of all Contractors that will remain unaffected.

In case of a deadlock situation, the issue shall be submitted to the CDB for arbitration.

9.5. Access Rights

9.5.1. General principles

Each Contractor shall ensure that he can grant Access Rights and fulfil its obligations under the EC Contract and this Consortium Agreement.

If any Access Rights are required, the Contractors agree that they will :

- be granted on a non-exclusive basis,
- not include the right to grant sublicenses
- not include access to source code when applied to Software Access Rights,

Needed Access Rights shall be granted in accordance with articles 9.3.2. and 9.5.3 and with the EC Contract.

9.5.2. Affiliates

The Contractors have agreed to exclude any Access Rights to their Affiliates with the exception for :

- the “Central Laboratory Innovation and knowledge transfer Ltd” “CLIK” which is a wholly owned subsidiary of CCLRC.

9.5.3. Access Rights for execution of the Project

With the exception with the Pre-Existing Know-How listed in **Appendix 3,** the Contractors agree to provide access to all Pre-Existing Know-How, limited to the Pre-Existing Know-How held by their laboratories, departments or services involved in the Project, at the conditions provided for by articles 26 and 27 of the Regulation No 2321/2002 of the European Parliament and by the EC Contract.

In particular, the Access Rights to the Pre-existing Know-How needed for carrying out the work under the Project shall be granted on a royalty-free basis.

The Access Rights to the Knowledge needed by a Contractor for carrying out the work under the Project shall be granted on a royalty-free basis, except for a new Contractor joining the Project, who shall have access to the Knowledge obtained prior to its joining the Project at the conditions fixed by the CDB.

In case of a deadlock situation, the issue shall be submitted to the CDB for arbitration.

9.5.4. Access Rights for Use of Knowledge

The Contractors agree that the Access Rights to

- the Pre-Existing Know-How needed for **use in research activities** or/and
- to the Knowledge needed for **use in research activities**

shall be granted on a royalty-free basis.

In case of Access Rights to the Pre-Existing Know-How or to the Knowledge for Use in the development, creation and marketing of a product or process, or for creation and provision of a service, Access Rights shall be granted on fair and non discriminatory conditions and the CDB shall be informed of the content of the contract

ARTICLE 10. MISCELLANEOUS PROVISIONS

10.1. Entire agreement

This Consortium Agreement and its Appendices constitute the entire agreement between the Contractors in respect of the Project, and supersede all previous negotiations, commitments and documents concerning the Project.

The annexes to this Consortium Agreement, which form an integral part thereof are:

Appendix 1 : List of Associated Partners
Appendix 2: Description of Description of Work
Appendix 3 : Excluded Pre-Existing Know-How
Appendix 4: EC Contract
Appendix 5 : CGB Members Votes
Appendix 6 : Detailed Subproject budget

10.2. Controlling provisions

In case of inconsistency between any provisions of the Consortium Agreement and those of the EC Contract, the latter shall prevail over those of this Consortium Agreement, which shall themselves prevail over any special contract or agreement signed for its application.

10.3. Transfer or Assignment

No Contractor shall, without the prior written consent of the CGB assign or otherwise transfer partially or totally any of its rights or obligations under this Consortium Agreement.

10.4. Entry into force – Term of the Consortium Agreement

1. This Consortium Agreement shall enter into force following its signature by all Contractors.
2. All of the Contractors have signed this Consortium Agreement.

10.5. Language

This Consortium Agreement is drawn up in English, which shall govern all documents, notices and meetings for its application and/or extension, or in any other way relative thereto.

10.6. Applicable Law

This Consortium Agreement shall be construed according to and governed by the Belgian law.

10.7. No partnership or agency

Nothing in this Consortium Agreement shall create a partnership or agency between the Contractors or any of them.

10.8. Settlement of disputes

All disputes or differences arising in connection with this Consortium Agreement, which cannot be amicably settled within the CGB, shall be finally settled through arbitration in Paris under the Rules of the International Chamber of Commerce (ICC).

Arbitration shall be conducted in English. Three Arbitrators shall be selected under the Rules of the International Chamber of Commerce.

The arbitration award, if providing for damages, shall include interest from the date of any breach or other violation of this Consortium Agreement.

The arbitration award shall be final and binding upon the Contractors or parties, not subject to appeal, and honoured by the Contractors or parties without having resort to any court; however, if the award is not carried out voluntarily and without delay, it shall be referred to and enforced by any court having jurisdiction over the subject matter or any of the parties or their assets.

Each Contractor or party bear its own expenses incurred in utilising arbitration and the fees for arbitration shall be borne equally between the Contractors or parties.

10.9. Amendments

Amendments or changes to this Consortium Agreement shall be valid only if made in writing and signed by an authorised signatory of each of the Contractors.

10.11. Severability

Should any provision of this Consortium Agreement prove to be invalid or incapable of fulfilment, or subsequently become invalid or incapable of fulfilment, whether in whole or in part, this shall not affect the validity of the remaining provisions of this Consortium Agreement. In such a case, the Contractors shall be entitled to demand that a valid and practicable provision be negotiated which most nearly fulfils the purpose of the invalid or impracticable provision.

10.13. General provisions relating to termination

The provisions of this Consortium Agreement relating to liability, confidentiality, intellectual property rights and publications shall survive the term or termination of this Consortium Agreement for any reason whatsoever to the extent needed to enable the Contractors to pursue the rights and remedies provided for therein.

For the avoidance of doubt, termination or withdrawal shall not affect any rights or obligations incurred prior to the date of the termination.

IN WITNESS WHEREOF, the Contractors have executed this Consortium Agreement in … original copies.

Authorised to sign on behalf of _____
By (signature):
Name (block letters):
Position:
Date:

Authorised to sign on behalf of _____
By (signature):
Name (block letters):
Position:
Date:

APPENDIX 1 to the consortium agreement CARE

Description of Work: see attached

APPENDIX 2 to the consortium agreement CARE

List of Associated Partners and Industrial Associated Partners

Participant number	Organisation (name, city, country)	Short name	Short description (i.e. fields of excellence) and specific roles in the consortium (* indicates work package responsibilities)	Associated to
Associated Partners				
1	**Helsinki Institute of Physics, Helsinki, Finland**	**HIP**	***Fields of excellence***: Beam diagnostics tools and instrumentation. HEPH is assisted by a consortium of Finnish institutes and industry with expertise in RF measurements, automation and vacuum related mechanics and welding. **Specific participation** *in:* ***N1***	CERN
2	**European Synchrotron Radiation Facility, Grenoble, France**	**ESRF**	***Fields of excellence****:* Beam dynamics and beam instrumentation expertise **Specific participation** *in:* ***N3***	CERN
3	**RWTH, Aachen, Germany**	**RWTH**	***Fields of excellence***: High energy experiments, beam instrumentation **Specific participation** *in:* ***N1***	DESY
4	**Max Born Inst Berlin, Germany**	**MBI**	***Fields of excellence***: Laser, RF gun **Specific participation** *in:* ***N1***	DESY

Participant number	Organisation (name, city, country)	Short name	Short description (i.e. fields of excellence) and specific roles in the consortium (* indicates work package responsibilities)	Associated to
Associated Partners				
5	**Technical Univ. Berlin Berlin, Germany**	**TUBE**	***Fields of excellence***: High frequency planar RF cavities, beam position monitors, wake field calculations **Specific participation** *in:* ***N1, N3***	CERN
6	**TEMF/ Tech. Univ. Darmstadt, Darmstadt, Germany**	**TEMF**	***Fields of excellence***: Simulation code for machine modelling, RF gun **Specific participation** *in:* ***N1, N3***	DESY
7	**Institiut für Theoretische Physik Düsseldorf, Germany**	**UDUSS**	***Fields of excellence***: Novel methods of acceleration, simulation of particle acceleration in plasma using PIC (particle in cell) codes **Specific participation** *in:* ***N1***	CERN
8	**Max-Planck-Institut für Quantumnoptik, Garching, Germany**	**MPQ**	***Fields of excellence***: High intensity laser technology, relativistic plasma and electron generation and acceleration with laser-produced plasma, associated diagnostics **Specific participation** *in:* ***N1***	CERN
9	**Forschungszentrum, Karlsruhe, Karlsruhe, Germany**	**FZK**	***Fields of excellence***: SMES, modulator, pulsed power sources **Specific participation** *in:* ***N1, N3***	DESY

Participant number	Organisation (name, city, country)	Short name	Short description (i.e. fields of excellence) and specific roles in the consortium (* indicates work package responsibilities)	Associated to
Associated Partners				
10	**University of Rostock, Rostock, Germany**	**UROS**	***Fields of excellence***: Space charge simulation, code development, HOMs **Specific participation** *in:* ***N1***	DESY
11	**University of Wuppertal, Wuppertal, Germany**	**UWUP**	***Fields of excellence***: High gradient cavities, field emission control **Specific participation** *in:* ***N1***	DESY
12	**Ente per le Nuove Tecnologie l'Energia e l'Ambiente Roma, Italy**	**ENEA**	***Fields of excellence****:* Long experience in using tools capable to determine the nuclear responses in different components of magnetic fusion reactors. Those has been used (Monte Carlo methods mainly) to optimise the shields necessary to protect from the nuclear radiation the Superconducting Coils used to sustain the plasma in magnetic fusion reactors. Relevant work and contracts for ITER (International Thermonuclear Experimental Reactor). **Specific participation** *in*: ***N3***	CERN
13	**University of Osaka**, **Osaka, Japan**	**UnO**	***Fields of excellence***: Neutrino and muon physics, accelerators, experiments, theory. Leading institution in the NuFACTJ Collaboration **Specific participation** *in:* ***N2***	CERN

Participant number	Organisation (name, city, country)	Short name	Short description (i.e. fields of excellence) and specific roles in the consortium (* indicates work package responsibilities)	Associated to
Associated Partners				
14	**KEK, High Energy Accelerator Research Organization Tsukuba, Japan**	**KEK**	***Fields of excellence***: Expertise in Sc magnets for Accelerators and detectors and SC accelerator integration. Development of design and constructing techniques for super conducting magnets, development of special conductors. Experience in the operation of storage rings with electron cloud effects and development of electron cloud simulation tools, design studies on linear colliders, development of klystrons, modulators and normal conducting RF cavities. **Specific participation** *in:* ***N3***	CERN
15	**Institute of Physics, University of Latvia, Latvia,**	**IPUL**	***Fields of excellence***: IPUL has many years of expertise in designing and operating liquid metal loops and in developing necessary equipment and technologies. **Specific participation** *in:* ***N2***	FZJ
16	**NRG Petten Netherlands**	**NRG**	***Fields of excellence***: NRG is experienced in fluid dynamics, structural mechanics and thermal hydraulics calculations and in developing suitable computer software. **Specific participation** *in:* ***N2***	FZJ
17	**Eindhoven University of Technology Eindhoven, Eindhoven, Netherlands**	**TUE**	***Fields of excellence***: Photo-injectors and photo-guns. High brightness electron beams for FEL, colliders and laser wakefield accelerators. **Specific participation** *in:* ***N1***	CERN

Participant number	Organisation (name, city, country)	Short name	Short description (i.e. fields of excellence) and specific roles in the consortium (* indicates work package responsibilities)	Associated to
Associated Partners				
18	**Group of Lasers & Plasmas of the Inst Sup Tecnico Lisboa, Lisboa, Portugal**	**GOLP**	***Fields of excellence***: Simulation and experiments on laser-plasma interactions and accelerators. **Specific participation** *in:* ***N1***	CERN
19	**Joint Institute of Nuclear Research, Dubna, Russia**	**JINR**	***Fields of excellence*****:** Expertise in accelerator magnets and integration. Design capability and studies on synchrotron radiation effect. Very special expertise in fast cycled magnets at low temperature. FEM produced power pulses and cavity-cell heating-tests. **Specific participation** *in:* ***N3***	CERN
20	**Institute for High Energy Physics, Moscow, Russia**	**IHEP**	***Fields of excellence*****:** Radiation and shower calculations. **Specific participation** *in:* ***N3***	CERN
21	**University of Uppsala, Uppsala, Sweden**	**UPSA**	***Fields of excellence***: CTF3 commissioning. Tests of optics, modelling, and development of beam monitoring equipment. **Specific participation** *in:* ***N1***	CERN
22	**Université Bern, Bern, Switzerland**	**UNI-Bern**	***Fields of excellence:*** Experimental neutrino physics. **Specific participation** *in:* ***N2***	UNI-GE

Participant number	Organisation (name, city, country)	Short name	Short description (i.e. fields of excellence) and specific roles in the consortium (* indicates work package responsibilities)	Associated to
Associated Partners				
23	**Université de Neuchâtel, Neutchâtel, Switzerland**	**UNI-Neuchatel**	***Fields of excellence*:** Experimental neutrino physics. **Specific participation** *in:* ***N2***	UNI-GE
24	**Ecole Polytechnique Fédérale de Lausanne Centre de Recherches en Physique des Plasma Lausanne, Switzerland**	**CRPP**	***Fields of excellence**:* Design and characterization of high current carrying superconductors (both low and high Tc). Experiments and analyses in the field of ac losses, quench and stability. Fusion magnets. World largest test facility for low temperature, short length superconductors (SULTAN). **Specific participation** *in:* ***N3***	CERN
25	**Eidgenossiche Technische Hochscule, Zurich, Switzerland**	**ETHZ**	***Fields of excellence***: Very high frequency oscillators with applications to CTF3, fast optics, short pulse and survey and detector alignment. **Specific participation** *in:* ***N1, N3***	CERN
26	**Physik-Institut Universitat Zurich Zurick, Switzerland**	**PIUZ**	***Fields of excellence***: Muon beams and muon experiments. High power beams and targets. **Specific participation** *in:* ***N2***	UNI-GE
27	**University of Bath, Bath, U.K.**	**BAT**	***Fields of excellence**:* Electromagnetic levitation. **Specific participation** *in:* ***N2***	ICL

Participant number	Organisation (name, city, country)	Short name	Short description (i.e. fields of excellence) and specific roles in the consortium (* indicates work package responsibilities)	Associated to
Associated Partners				
28	**Brunel University, Uxbridge, U.K.**	**BRU**	***Fields of excellence***: Particle Physics experiments, computing and software, ionisation cooling studies. **Specific participation** *in:* ***N2***	ICL
29	**University of Cambridge, Cambridge, U.K.**	**CAM**	***Fields of excellence***: Particle Physics experiments, neutrino physics studies. **Specific participation** *in:* ***N2***	ICL
30	**University of Abertay, Dundee, U.K.**	**UAD**	***Fields of excellence***: Ultra short electron bunch measurements with ultra fast lasers for LC. **Specific participation** *in:* ***N1***	UMA
31	**University of Durham, Durham, UK**	**DUR**	***Fields of excellence***: Neutrino physics studies. **Specific participation** *in:* ***N2***	ICL
32	**University of Edinburgh, Edinburgh, U.K.**	**EDIN**	***Fields of excellence:*** Particle Physics experiments, computing and software, ionisation-cooling studies. **Specific participation** *in:* ***N2***	ICL
33	**University of Glasgow, Glasgow, U.K.**	**GLA**	***Fields of excellence***: Particle Physics experiments, computing and software, ionisation cooling studies **Specific participation** *in:* ***N2***	ICL

Participant number	Organisation (name, city, country)	Short name	Short description (i.e. fields of excellence) and specific roles in the consortium (* indicates work package responsibilities)	Associated to
Associated Partners				
34	**University of Lancaster, Lancaster, UK**	**LANC**	***Fields of excellence***: RF component design and simulation. **Specific participation** *in:* ***N1***	UMA
35	**Queen Mary, Univ. of London, London, U.K.**	**QMUL**	***Fields of excellence***: Luminosity optimisation, simulation of beam transportation, prototype for fast feedback, neutrino physics studies. **Specific participation** *in:* ***N1, N2***	UMA
36	**Royal Holloway, Univ. of London, London, U.K.**	**RHUL**	***Fields of excellence***: Geant4 simulation of beam line, laserwire R&D, collimation, luminosity spectrum. **Specific participation** *in:* ***N1***	UMA
37	**University College London, London, U.K.**	**UCL**	***Fields of excellence***: Laserwire R&D, Shintake monitor, luminosity spectrum. **Specific participation** *in:* ***N1***	UMA
38	**University of Liverpool, Liverpool, U.K.**	**ULI**	***Fields of excellence***: Simulation of beam delivery spectrum, positron undulator source, neutrino physics studies, ionisation muon cooling studies. **Specific participation** *in:* ***N1, N2***	UMA

Participant number	Organisation (name, city, country)	Short name	Short description (i.e. fields of excellence) and specific roles in the consortium (* indicates work package responsibilities)	Associated to
Associated Partners				
39	**University of Oxford Oxford, U.K.**	**UOX**	***Fields of excellence***: Particle Physics experimentation, neutrino physics studies, ionisation cooling studies, instrumentation for beam alignment, diagnostics, beam profile, beam delivery. Plasma for novel acceleration**.** RF power supply technology. **Specific participation** *in:* ***N1, N2***	ICL
40	**University of Sheffield, Sheffield, U.K.**	**SHEF**	***Fields of excellence***: Particle physics experimentation, neutrino physics studies, mechanical aspects of targetry, ionisation muon cooling studies. **Specific participation** *in:* ***N2***	ICL
41	**University of Southampton, Southampton, U.K.**	**SOTON**	***Fields of excellence***: Neutrino physics studies. **Specific participation** *in:* ***N2***	ICL
42	**Univ. of Strathclyde Glasgow, U.K.**	**USTRAT**	***Fields of excellence***: Laser plasma interactions and FEL, RF engineering for accelerators. **Specific participation** *in:* ***N1***	UMA
43	**University of Sussex, Sussex, U.K.**	**SUSS**	***Fields of excellence****:* Particle Physics experimentation, neutrino physics studies. **Specific participation** *in:* ***N2***	ICL

Participant number	Organisation (name, city, country)	Short name	Short description (i.e. fields of excellence) and specific roles in the consortium (* indicates work package responsibilities)	Associated to
Associated Partners				
44	**Fermi National Accelerator Laboratory Batavia**, **U.S.A.**	**FNAL**	***Fields of excellence***: Expertise in SC hadron collider integration and operation. Design and construction of accelerator magnets, test of magnets. Specific experience in high field A15 accelerator magnets R&D, design of innovative solution of VLHC (like the handling of synchrotron radiation). Radiation shielding calculations. Design work on linear colliders of SC and NC technology. **Specific participation** *in:* ***N3***	CERN
45	**Lawrence Berkeley National Laboratory, Berkeley, U.S.A.**	**LBNL**	***Fields of excellence:*** Expertise in SC magnets for accelerators and wide experience in very high field design and construction technique. Test of SC magnets. Reference centre for cabling of Rutherford cable and of A15 and HTS development and test for accelerators. **Specific participation** *in*: ***N3***	CERN
46	**Brookhaven National Laboratory U.S.A.**	**BNL**	***Fields of excellence***: Expertise in SC hadron collider integration and operation, Accelerator Magnets design and construction, cable design, and test; recent development for cycling SC magnets and HTS special designed magnets. **Specific participation** *in:* ***N3***	CERN
Associated industrial partners				
47	**Alsthom MSA Belford, France**	**ALS**	***Fields of excellence***: Design and manufacture of superconducting wire and cable, design and manufacture of superconducting magnet. **Specific participation** *in:* ***JRA4***	CERN

Participant number	Organisation (name, city, country)	Short name	Short description (i.e. fields of excellence) and specific roles in the consortium (* indicates work package responsibilities)	Associated to
Associated industrial partners				
48	**ACCEL Instruments GmbH, Bergisch-Gladbach Germany**	**ACCEL**	***Fields of excellence***: Design and fabrication of complete accelerating systems (normal- and superconducting), design and fabrication of superconducting cavities, infrastructure for chemistry and clean-room work, EB welding facility. **Specific participation** *in:* ***N1, JRA1***	DESY
49	**WSK Messtechnik GmbH, Hanau, Germany**	**WSK**	***Fields of excellence***: Design and fabrication of analytic equipment for material analysis, development of a SQUID scanner for examination of sputter targets. **Specific participation** *in:* ***N1, JRA1***	DESY
50	**European Advanced Superconductors GmbH, Hanau, Germany**	**EAS**	***Fields of excellence***: Design and manufacture of superconducting wires. **Specific participation** *in:* ***JRA4***	CERN
51	**Henkel Lohnpoliertechnik GmbH Neustadt-Glewe, Germany**	**HLT**	***Fields of excellence***: chemical and electrochemical surface treatment of steel and special alloys for pharma, biotech. and semiconductor industry. **Specific participation** *in:* ***JRA1***	DESY

52	**E. Zanon S.P.A., Schio**, **Italy**	**ZANON**	***Fields of excellence***: Design and fabrication of Nb cavities, infrastructure for chemistry, EB welding facility. **Specific participation** *in:* ***N1***, ***JRA1***	DESY
Participant number	**Organisation (name, city, country)**	**Short name**	**Short description (i.e. fields of excellence) and specific roles in the consortium** (* indicates work package responsibilities)	**Associated to**
Associated industrial partners				
53	**ShapeMetal Innovation BV, Enschede, Netherlands**	**SMI**	***Fields of excellence***: Design and manufacture of Nb3Sn wires by the powder-in-tube technique. **Specific participation** *in:* ***JRA4***	CERN
54	**Kriosystem Ltd. Poland**	**KRIO**	***Fields of excellence***: Design and manufacture of helium cryostats. **Specific participation** *in:* ***JRA4***	WUT
55	**e2v Technologies Ltd, Chelmsford, UK**	**E2V**	***Fields of excellence***: Design and manufacture of RF, microwave and switching devices, sensors, power supplies, etc. **Specific participation** *in:* ***N1***	CCLRC
56	**TMD Technologies Ltd, Hayes, UK**	**TMD**	***Fields of excellence***: Design and manufacture of microwave tubes, high voltage power supplies, transmitters and receivers. **Specific participation** *in:* ***N1***	CCLRC

Participant number	Organisation (name, city, country)	Short name	Short description (i.e. fields of excellence) and specific roles in the consortium (* indicates work package responsibilities)	Associated to
Associated industrial partners				
57	**Oxford Danfysik Ltd, Oxford, UK**	**DAN**	***Fields of excellence***: Design, production and installation of synchrotron beam lines. **Specific participation** *in:* ***N1***	CCLRC
58	**Technical Systems Ltd, Reading, UK**	**TECUK**	***Fields of excellence***: Design and manufacture of electron beam linear accelerators for industrial and scientific uses. **Specific participation** *in:* ***N1***	CCLRC

APPENDIX 3 to the consortium agreement CARE

Excluded Pre-existing Know how of FZJ

Patent pending under no. DE 103 31 897.6

Submitted to DPMA on July, 15th, 2003

Method for Welding of Niobium

According to the present state of the art the welding of ultra pure niobium using the electron beam welding technique needs substantial effort for achieving sufficient vacuum quality, if the properties of the weld shall be not significantly worse than the bulk properties. To achieve such a good quality of the weld and of the surrounding heat affected zone (HAZ) the vacuum pressure usually has to be less than 10^{-5} mbar. The invention shows a method for welding niobium allowing higher vacuum pressures.

Excluded Pre-existing Know how of CEA

DAPNIA/SACM is developing an innovative electrical insulation that can sustain the high-temperature heat treatment (in the 600 to 700 C range) that is necessary to precipitate various types of superconductors (such as the niobium-tin compound Nb3Sn).

The conductors are wrapped with glass or ceramic fiber tapes pre-impregnated with precursors, which react during the heat treatment so as to form the electrical insulation and confer a rigid shape to the coils. The use of such insulation is expected to greatly simplify the manufacturing of superconducting magnets by eliminating the most risky and delicate steps.

2 Patents :

"Procédé de fabrication d'une gaine électriquement isolante et mécaniquement structurante sur un conducteur électrique"

- French patent application n° 01 09741 of 20 July 2001 / international aplication n° PCT/FR 02/ 02562.
- French patent application n° 03 50158 of 19 May 2003.

APPENDIX 4 to the consortium agreement CARE

EC Contract : see attached

APPENDIX 5 to the consortium agreement CARE

CGB Members Votes

CEA: 5

UCLN: 1

CNRS: 5

GSI: 1

IAP-FU: 1

DESY: 5

FZJ: 2

TUM: 1

FZR: 1

INFN: 7

TEU: 1

TUL: 1

IPJ: 1

WUT ISE: 1

WUT: 1

CSIC: 1

CERN: 5

UNI-GE: 1

PSI: 1

CCLRC: 3

ICL: 2

UMA: 1

APPENDIX 6 to the consortium agreement CARE

Detailed subproject budget

The following tables show the details of the expected costs and the EU contribution for each contractor for the management, the networking and the joint research activities. These tables are used to determine the financial information in the document "description of work". Contrary to the management and the joint research activities, several associated partners are participating to the three networking activities, as can be seen in the section list of participants in the document "description of work". For the sake of simplicity in the financial reporting, the expected costs for these activities do not include the travel costs, which are additional to the EU contribution. However, it is expected that substantial additional support for travel will be provided by the contractors and their associated partners.

1. Financial information for the whole duration of the CARE project

1.1 Management budget for the whole duration of the project.

Management	Participant (cost model)	Permanent Staff (Euros)	Additional Staff (Euros)	Durable Equipment (Euros)	Consumables and Prototyping (Euros)	Travel (Euros)	Expected costs (Euros)	Direct cost	Sub-contract	Indirect cost	Requested funding (Euros)
1	CEA (FC)	1 425 000	0	5 000	25 000	37 000	1 492 000	844 500	0	647 500	624 200
	Grand total	**1 425 000**	**0**	**5 000**	**25 000**	**37 000**	**1 492 000**	**844 500**	**0**	**647 500**	**624 200**

1.2 Budget for the N1-ELAN network for the whole duration of the project.

N1	Participant (cost model)	Permanent Staff (Euros)	Additional Staff (Euros)	Durable Equipment (Euros)	Consumables and Prototyping (Euros)	Travel (Euros)	Expected costs (Euros)	Direct cost	Sub-contract	Indirect cost	Requested funding (Euros)
1	CEA (FC)	0	0	0	0	25 000	25 000	25 000	0	0	25 000
3	CNRS(FCF)	0	0	0	0	126 000	126 000	105 000	0	21 000	126 000
6	DESY(AC)	0	0	0	0	190 000	190 000	158 333	0	31 667	190 000
7	FZJ(FC)	0	0	0	0	6 000	6 000	6 000	0	0	6 000
9	FZR(AC)	0	0	0	0	22 000	22 000	18 333	0	3 667	22 000
10	INFN (AC)	0	0	0	0	71 000	71 000	59 167	0	11 833	71 000
11	TEU(FC)	0	0	0	0	6 000	6 000	6 000	0	0	6 000
12	TUL(AC)	0	0	0	0	10 000	10 000	8 333	0	1 667	10 000
13	IPJ(AC)	0	0	0	0	10 000	10 000	8 333	0	1 667	10 000
14	WUT-ISE(AC)	0	0	0	0	8 000	8 000	6 667	0	1 333	8 000
16	CSIC(FC)	0	0	0	0	9 000	9 000	7 500	0	1 500	9 000
17	CERN(AC)	0	0	0	0	102 000	102 000	85 000	0	17 000	102 000
19	PSI(FC)	0	0	0	0	30 000	30 000	30 000	0	0	0
20	CCLRC(FC)	0	0	0	0	37 000	37 000	37 000	0	0	37 000
21	ICL(AC)	0	0	0	0	15 000	15 000	12 500	0	2 500	15 000
22	UMA(AC)	0	0	0	0	39 000	39 000	32 500	0	6 500	39 000
	Grand total	**0**	**0**	**0**	**0**	**706 000**	**706 000**	**605 666**	**0**	**100 334**	**676 000**

1.3 Budget for the N2-BENE network for the whole duration of the project.

N2	Participant (cost model)	Permanent Staff (Euros)	Additional Staff (Euros)	Durable Equipment (Euros)	Consumables and Prototyping (Euros)	Travel (Euros)	Expected costs (Euros)	Direct cost	Sub-contract	Indirect cost	Requested funding (Euros)
1	CEA(FC)	0	0	0	0	47 500	47 500	47 500	0	0	47 500
2	UCLN(AC)	0	0	0	0	6 200	6 200	5 167	0	1 033	6 200
3	CNRS(FCF)	0	0	0	0	33 000	33 000	27 500	0	5 500	33 000
4	GSI(FC)	0	0	0	0	10 300	10 300	10 300	0	0	10 300
7	FZJ(FC)	0	0	0	0	33 000	33 000	33 000	0	0	33 000
8	TUM(FC)	0	0	0	0	10 300	10 300	8 583	0	1 717	10 300
10	INFN(AC)	0	0	0	0	92 900	92 900	77 417	0	15 483	92 900
16	CSIC(FC)	0	0	0	0	37 200	37 200	31 000	0	6 200	37 200
17	CERN (AC)	0	0	0	0	57 800	57 800	48 167	0	9 633	57 800
18	UNI-GE(AC)	0	0	0	0	93 000	93 000	77 500	0	15 500	0
19	PSI(FC)	0	0	0	0	17 400	17 400	17 400	0	0	0
20	CCLRC(FC)	0	0	0	0	43 300	43 300	43 300	0	0	43 300
21	ICL(AC)	0	0	0	0	74 300	74 300	61 917	0	12 383	74 300
	Grand total	**0**	**0**	**0**	**0**	**556 200**	**556 200**	**488 751**	**0**	**67 449**	**445 800**

1.4 Budget for the N3-HEHIHB network for the whole duration of the project.

N3	**Participant (cost model)**	**Permanent Staff (Euros)**	**Additional Staff (Euros)**	**Durable Equipment (Euros)**	**Consumables and Prototyping (Euros)**	**Travel (Euros)**	**Expected costs (Euros)**	**Direct cost**	**Sub-contract**	**Indirect cost**	**Requested funding (Euros)**
1	CEA(FC)	0	0	0	0	17 500	17 500	17 500	0	0	17 500
4	GSI(FC)	0	0	0	0	16 500	16 500	16 500	0	0	16 500
6	DESY(AC)	0	0	0	0	23 000	23 000	19 167	0	3 833	23 000
10	INFN(AC)	0	0	0	0	36 500	36 500	30 417	0	6 083	36 500
11	TEU(FC)	0	0	0	0	12 500	12 500	12 500	0	0	12 500
15	WUT(AC)	0	0	0	0	5 000	5 000	4 167	0	833	5 000
16	CSIC(FC)	0	0	0	0	4 000	4 000	3 333	0	667	4 000
17	CERN(AC)	0	60 000	0	0	155 500	215 500	179 583	0	35 917	182 500
19	PSI(FC)	0	0	0	0	6 000	6 000	6 000	0	0	0
20	CCLRC(FC)	0	0	0	0	2 500	2 500	2 500	0	0	2 500
	Grand total	**0**	**60 000**	**0**	**0**	**279 000**	**339 000**	**291 667**	**0**	**47 333**	**300 000**

1.5 Budget for the JRA1-SRF joint research activities for the whole duration of the project.

JRA1	Participant (cost model)	Permanent Staff (Euros)	Additional Staff (Euros)	Durable Equipment (Euros)	Consumables and Prototyping (Euros)	Travel (Euros)	Expected costs (Euros)	Direct cost	Sub-contract	Indirect cost	Requested funding (Euros)
1	CEA(FC)	1 388 000	350 000	0	845 000	40 000	2 623 000	1 424 491	0	1 198 509	565 000
3	CNRS(FCF)	1 585 000	215 000	30 000	445 000	40 000	2 315 000	1 929 167	0	385 833	730 000
6	DESY(AC)	0	525 000	0	885 000	171 000	1 581 000	1 365 833	290 000	215 167	1 581 000
10	*INFN-LNL*	*0*	*180 000*	*10 000*	*220 000*	*0*	*410 000*	341 667	*0*	68 333	*410 000*
	INFN-LNF	*0*	*140 000*	*10 000*	*20 000*	*35 000*	*205 000*	170 833	*0*	34 167	*205 000*
	INFN-Mi	*0*	*190 000*	*0*	*120 000*	*25 000*	*335 000*	279 167	*0*	55 833	*335 000*
	INFN-Ro2	*0*	*191 000*	*40 000*	*100 000*	*38 000*	*369 000*	307 500	*0*	61 500	*349 000*
	INFN(AC)	0	701 000	60 000	460 000	98 000	1 319 000	1 099 167	0	219 833	1 299 000
12	TUL(AC)	0	100 000	0	121 000	32 000	253 000	210 833	0	42 167	253 000
13	IPJ(AC)	0	150 000	90 000	130 000	30 000	400 000	333 333	0	66 667	235 000
14	WUT-ISE(AC)	0	100 000	0	250 000	20 000	370 000	308 333	0	61 667	370 000
19	PSI(FC)	0	210 000	0	140 000	10 000	360 000	325 000	0	35 000	0
	Grand total	**2 973 000**	**2 351 000**	**180 000**	**3 276 000**	**441 000**	**9 221 000**	**6 996 157**	**290 000**	**2 224 843**	**5 033 000**

1.6 Budget for the JRA2-PHIN joint research activities for the whole duration of the project.

JRA2	**Participant (cost model)**	**Permanent Staff (Euros)**	**Additional Staff (Euros)**	**Durable Equipment (Euros)**	**Consumables and Prototyping (Euros)**	**Travel (Euros)**	**Expected costs (Euros)**	**Direct cost**	**Sub-contract**	**Indirect cost**	**Requested funding (Euros)**
3	*CNRS-Orsay*	*1 230 000*	*200 000*	*250 000*	*410 000*	*25 000*	*2 115 000*	*1 762 500*	*0*	*352 500*	*755 000*
	CNRS-LOA	*570 000*	*100 000*	*0*	*325 000*	*15 000*	*1 010 000*	*841 667*	*0*	*168 333*	*440 000*
	CNRS(FCF)	1 800 000	300 000	250 000	735 000	40 000	3 125 000	2 604 167	0	520 833	1 195 000
9	FZR(AC)	0	200 000	0	190 000	20 000	410 000	341 667	0	68 333	380 000
10	*INFN-LNF*	*0*	*150 000*	*0*	*85 000*	*40 000*	*275 000*	229 167	*0*	45 833	*275 000*
	INFN-Mi	*0*	*150 000*	*0*	*65 000*	*10 000*	*225 000*	187 500	*0*	37 500	*225 000*
	INFN(AC)	0	300 000	0	150 000	50 000	500 000	416 667	0	83 333	500 000
11	TEU(FC)	0	293 000	0	50 000	5 000	348 000	174 000	0	174 000	174 000
17	CERN(AC)	0	246 000	0	0	15 000	378 000	166 000	0	212 000	115 000
20	CCLRC(FC)	117 000	**1 414 000**	**250 000**	**2 260 000**	**160 000**	**6 001 000**	**4 735 834**	**0**	**1 265 166**	**3 542 000**
	Grand total	**1 917 000**									

1.7 Budget for the JRA3-HIPPI joint research activities for the whole duration of the project.

JRA3	**Participant (cost model)**	**Permanent Staff (Euros)**	**Additional Staff (Euros)**	**Durable Equipment (Euros)**	**Consumables and Prototyping (Euros)**	**Travel (Euros)**	**Expected costs (Euros)**	**Direct cost**	**Sub-contract**	**Indirect cost**	**Requested funding (Euros)**
1	CEA (FC)	1 635 000	200 000	1 065 000	924 000	11 000	3 835 000	2 685 000	0	1 150 000	980 000
3	*CNRS-IN2P3*	*120 000*	*15 000*	*0*	*130 000*	*7 000*	*272 000*	226 667	*0*	45 333	*70 000*
	CNRS-LPSC	*675 000*	*65 000*	*0*	*55 000*	*11 000*	*806 000*	671 667	*0*	134 333	*60 000*
	CNRS(FCF)	795 000	80 000	0	185 000	18 000	1 078 000	898 333	0	179 667	130 000
4	GSI(FC)	558 000	987 000	110 000	0	26 000	1 681 000	1 476 000	0	205 000	363 000
5	IAP-FU(AC)	0	540 000	0	450 000	14 000	1 004 000	836 667	0	167 333	420 000
7	FZJ(FC)	1 696 000	304 000	0	245 000	30 000	2 275 000	1 421 000	0	854 000	527 000
10	INFN-Mi(AC)	0	40 000	0	123 000	30 000	193 000	160 833	0	32 167	80 000
17	CERN (AC)	0	810 000	0	660 000	65 000	1 535 000	1 279 167	0	255 833	635 000
20	CCLRC (FC)	1 779 000	788 000	0	550 000	15 000	3 132 000	1 635 000	0	1 497 000	465 000
	Grand total	**6 463 000**	**3 749 000**	**1 175 000**	**3 137 000**	**209 000**	**14 733 000**	**10 392 000**	**0**	**4 341 000**	**3 600 000**

1.8 Budget for the JRA4-NED joint research activities for the whole duration of the project.

JRA4	**Participant (cost model)**	**Permanent Staff (Euros)**	**Additional Staff (Euros)**	**Durable Equipment (Euros)**	**Consumables and Prototyping (Euros)**	**Travel (Euros)**	**Expected costs (Euros)**	**Direct cost**	**Sub-contract**	**Indirect cost**	**Requested funding (Euros)**
1	CEA (FC)	492 000	50 000	0	95 000	8 000	645 000	417 000	0	228 000	100 000
10	INFN (AC)	0	15 000	0	40 000	11 000	66 000	55 000	0	11 000	55 000
11	TEU (FC)	199 000	0	0	65 000	8 000	272 000	172 000	0	100 000	108 000
15	WUT (AC)	0	48 000	0	0	8 000	56 000	54 667	48 000	1 333	56 000
17	CERN (AC)	0	0	0	630 000	0	630 000	625 000	600 000	5 000	600 000
20	CCLRC (FC)	201 000	154 000	0	60 000	9 000	424 000	223 000	0	201 000	60 000
	Grand total	**892 000**	**267 000**	**0**	**890 000**	**44 000**	**2 093 000**	**1 546 667**	**648 000**	**546 333**	**979 000**

2. Financial information for the reporting period 1 and the first six months of reporting period 2

2.1 Management budget for the reporting period 1 and the first six months of reporting period 2.

Management	Participant (cost model)	Permanent Staff (Euros)	Additional Staff (Euros)	Durable Equipment (Euros)	Consumables and Prototyping (Euros)	Travel (Euros)	Expected costs (Euros)	Direct cost	Sub-contract	Indirect cost	Requested funding (Euros)
1	CEA (FC)	427 500	0	1 500	7 500	11 100	447 600	253 350	0	194 250	187 260
	Grand total	**427 500**	**0**	**1 500**	**7 500**	**11 100**	**447 600**	**253 350**	**0**	**194 250**	**187 260**

2.2 Budget for the N1-ELAN network for the reporting period 1 and the first six months of reporting period 2.

N1	Participant (cost model)	Permanent Staff (Euros)	Additional Staff (Euros)	Durable Equipment (Euros)	Consumables and Prototyping (Euros)	Travel (Euros)	Expected costs (Euros)	Direct cost	Sub-contract	Indirect cost	Requested funding (Euros)
1	CEA (FC)	0	0	0	0	8 000	8 000	8 000	0	0	8 000
3	CNRS(FCF)	0	0	0	0	42 000	42 000	35 000	0	7 000	42 000
6	DESY(AC)	0	0	0	0	63 000	63 000	52 500	0	10 500	63 000
7	FZJ(FC)	0	0	0	0	2 000	2 000	2 000	0	0	2 000
9	FZR(AC)	0	0	0	0	7 000	7 000	5 833	0	1 167	7 000
10	INFN (AC)	0	0	0	0	24 000	24 000	20 000	0	4 000	24 000
11	TEU(FC)	0	0	0	0	2 000	2 000	2 000	0	0	2 000
12	TUL(AC)	0	0	0	0	3 000	3 000	2 500	0	500	3 000
13	IPJ(AC)	0	0	0	0	3 000	3 000	2 500	0	500	3 000
14	WUT-ISE(AC)	0	0	0	0	3 000	3 000	2 500	0	500	3 000
16	CSIC(FC)	0	0	0	0	3 000	3 000	2 500	0	500	3 000
17	CERN(AC)	0	0	0	0	34 000	34 000	28 333	0	5 667	34 000
19	PSI(FC)	0	0	0	0	10 000	10 000	10 000	0	0	0
20	CCLRC(FC)	0	0	0	0	12 000	12 000	12 000	0	0	12 000
21	ICL(AC)	0	0	0	0	5 000	5 000	4 167	0	833	5 000
22	UMA(AC)	0	0	0	0	13 000	13 000	10 833	0	2 167	13 000
	Grand total	**0**	**0**	**0**	**0**	**234 000**	**234 000**	**200 666**	**0**	**33 334**	**224 000**

2.3 Budget for the N2-BENE network for the reporting period 1 and the first six months of reporting period 2.

N2	**Participant (cost model)**	**Permanent Staff (Euros)**	**Additional Staff (Euros)**	**Durable Equipment (Euros)**	**Consumables and Prototyping (Euros)**	**Travel (Euros)**	**Expected costs (Euros)**	**Direct cost**	**Sub-contract**	**Indirect cost**	**Requested funding (Euros)**
1	CEA(FC)	0	0	0	0	14 200	14 200	14 200	0	0	14 200
2	UCLN(AC)	0	0	0	0	1 900	1 900	1 583	0	317	1 900
3	CNRS(FCF)	0	0	0	0	9 900	9 900	8 250	0	1 650	9 900
4	GSI(FC)	0	0	0	0	3 100	3 100	3 100	0	0	3 100
7	FZJ(FC)	0	0	0	0	9 900	9 900	9 900	0	0	9 900
8	TUM(FC)	0	0	0	0	3 100	3 100	2 583	0	517	3 100
10	INFN(AC)	0	0	0	0	27 900	27 900	23 250	0	4 650	27 900
16	CSIC(FC)	0	0	0	0	11 100	11 100	9 250	0	1 850	11 100
17	CERN (AC)	0	0	0	0	17 300	17 300	14 417	0	2 883	17 300
18	UNI-GE(AC)	0	0	0	0	27 900	27 900	23 250	0	4 650	0
19	PSI(FC)	0	0	0	0	5 200	5 200	5 200	0	0	0
20	CCLRC(FC)	0	0	0	0	13 000	13 000	13 000	0	0	13 000
21	ICL(AC)	0	0	0	0	22 300	22 300	18 583	0	3 717	22 300
	Grand total	**0**	**0**	**0**	**0**	**166 800**	**166 800**	**146 566**	**0**	**20 234**	**133 700**

2.4 Budget for the N3-HEHIHB network for the reporting period 1 and the first six months of reporting period 2.

N3	**Participant (cost model)**	**Permanent Staff (Euros)**	**Additional Staff (Euros)**	**Durable Equipment (Euros)**	**Consumables and Prototyping (Euros)**	**Travel (Euros)**	**Expected costs (Euros)**	**Direct cost**	**Sub-contract**	**Indirect cost**	**Requested funding (Euros)**
1	CEA(FC)	0	0	0	0	5 200	5 200	5 200	0	0	5 200
4	GSI(FC)	0	0	0	0	5 000	5 000	5 000	0	0	5 000
6	DESY(AC)	0	0	0	0	6 900	6 900	5 750	0	1 150	6 900
10	INFN(AC)	0	0	0	0	11 000	11 000	9 167	0	1 833	11 000
11	TEU(FC)	0	0	0	0	3 750	3 750	3 750	0	0	3 750
15	WUT(AC)	0	0	0	0	1 500	1 500	1 250	0	250	1 500
16	CSIC(FC)	0	0	0	0	1 200	1 200	1 000	0	200	1 200
17	CERN(AC)	0	0	0	0	54 700	54 700	45 583	0	9 117	54 700
19	PSI(FC)	0	0	0	0	1 800	1 800	1 800	0	0	0
20	CCLRC(FC)	0	0	0	0	750	750	750	0	0	750
	Grand total	**0**	**0**	**0**	**0**	**91 800**	**91 800**	**79 250**	**0**	**12 550**	**90 000**

2.5 Budget for the JRA1-SRF joint research activities for the reporting period 1 and the first six months of reporting period 2.

JRA1	Participant (cost model)	Permanent Staff (Euros)	Additional Staff (Euros)	Durable Equipment (Euros)	Consumables and Prototyping (Euros)	Travel (Euros)	Expected costs (Euros)	Direct cost	Sub-contract	Indirect cost	Requested funding (Euros)
1	CEA(FC)	768 170	182 000	0	376 430	11 130	1 337 730	726 475	0	611 255	293 800
3	CNRS(FCF)	637 000	128 000	30 000	230 800	20 210	1 046 010	871 675	0	174 335	379 600
6	DESY(AC)	0	233 000	0	460 200	88 920	782 120	675 933	145 000	106 187	782 120
10	*INFN-LNL*	*0*	*88 800*	*10 000*	*114 400*	*0*	*213 200*	*177 667*	*0*	*35 533*	*0*
	INFN-LNF	*0*	*68 000*	*10 000*	*10 400*	*18 200*	*106 600*	*88 833*	*0*	*17 767*	*0*
	INFN-Mi	*0*	*98 800*	*0*	*62 400*	*13 000*	*174 200*	*145 167*	*0*	*29 033*	*0*
	INFN-Ro2	*0*	*80 120*	*40 000*	*41 600*	*19 760*	*181 480*	*151 233*	*0*	*30 247*	*0*
	INFN(AC)	0	335 720	60 000	228 800	50 960	675 480	562 900	0	112 580	675 480
12	TUL(AC)	0	52 000	0	62 920	16 640	131 560	109 633	0	21 927	131 560
13	IPJ(AC)	0	48 400	90 000	46 000	15 600	200 000	166 667	0	33 333	122 200
14	WUT-ISE(AC)	0	52 000	0	130 000	10 400	192 400	160 333	0	32 067	192 400
19	PSI(FC)	0	40 000	0	140 000	0	180 000	170 000	0	10 000	0
	Grand total	**1 405 170**	**1 071 120**	**180 000**	**1 675 150**	**213 860**	**4 545 300**	**3 443 616**	**145 000**	**1 101 684**	**2 577 160**

2.6 Budget for the JRA2-PHIN joint research activities for the reporting period 1 and the first six months of reporting period 2.

JRA2	Participant (cost model)	Permanent Staff (Euros)	Additional Staff (Euros)	Durable Equipment (Euros)	Consumables and Prototyping (Euros)	Travel (Euros)	Expected costs (Euros)	Direct cost	Sub-contract	Indirect cost	Requested funding (Euros)
3	*CNRS-Orsay*	*636 000*	*100 000*	*250 000*	*262 000*	*8 000*	*1 256 000*	*1 046 667*	*0*	*209 333*	*755 000*
	CNRS-LOA	*157 000*	*50 000*	*0*	*110 000*	*5 000*	*322 000*	*268 333*	*0*	*53 667*	*440 000*
	CNRS(FCF)	793 000	150 000	250 000	372 000	13 000	1 578 000	1 315 000	0	263 000	655 000
9	FZR(AC)	0	100 000	0	100 000	5 000	205 000	170 833	0	34 167	190 000
10	*INFN-LNF*	*0*	*65 000*	*0*	*55 000*	*15 000*	*135 000*	112 500	*0*	22 500	*0*
	INFN-Mi	*0*	*75 000*	*0*	*36 000*	*4 000*	*115 000*	95 833	*0*	19 167	*0*
	INFN(AC)	0	140 000	0	91 000	19 000	250 000	208 333	0	41 667	250 000
11	TEU(FC)	117 000	83 000	0	48 000	2 000	250 000	125 000	0	125 000	125 000
17	CERN (AC)	0	25 000	0	795 000	10 000	830 000	691 667	0	138 333	790 000
20	CCLRC-RAL (FC)	31 000	227 000	0	0	5 000	263 000	116 000	0	147 000	80 000
	Grand total	**941 000**	**725 000**	**250 000**	**1 406 000**	**54 000**	**3 376 000**	**2 626 833**	**0**	**749 167**	**2 090 000**

2.7 Budget for the JRA3-HIPPI joint research activities for the reporting period 1 and the first six months of reporting period 2.

JRA3	Participant (cost model)	Permanent Staff (Euros)	Additional Staff (Euros)	Durable Equipment (Euros)	Consumables and Prototyping (Euros)	Travel (Euros)	Expected costs (Euros)	Direct cost	Sub-contract	Indirect cost	Requested funding (Euros)
1	CEA (FC)	526 000	100 000	250 000	400 000	4 000	1 280 000	910 000	0	370 000	320 000
3	*CNRS-IN2P3*	*36 000*	*0*	*0*	*22 000*	*2 000*	*60 000*	50 000	*0*	10 000	*0*
	CNRS-LPSC	*184 000*	*18 000*		*15 000*	*3 000*	*220 000*	183 333	*0*	36 667	*0*
	CNRS(FCF)	220 000	18 000	0	37 000	5 000	280 000	233 333	0	46 667	22 000
4	GSI(FC)	160 000	310 000	110 000	0	10 000	590 000	522 000	0	68 000	170 000
5	IAP-FU(AC)	0	150 000	0	195 000	5 000	350 000	291 667	0	58 333	145 000
7	FZJ(FC)	479 000	85 000	0	90 000	9 000	663 000	415 000	0	248 000	154 000
10	INFN-Mi(AC)	0	20 000	0	50 000	10 000	80 000	66 667	0	13 333	30 000
17	CERN (AC)	0	190 000	0	252 000	20 000	462 000	385 000	0	77 000	130 000
20	CCLRC (FC)	503 000	220 000	0	180 000	5 000	908 000	474 000	0	434 000	128 000
	Grand total	**1 888 000**	**1 093 000**	**360 000**	**1 204 000**	**68 000**	**4 613 000**	**3 297 667**	**0**	**1 315 333**	**1 099 000**

2.8 Budget for the JRA4-NED joint research activities for the reporting period 1 and the first six months of reporting period 2.

JRA4	Participant (cost model)	Permanent Staff (Euros)	Additional Staff (Euros)	Durable Equipment (Euros)	Consumables and Prototyping (Euros)	Travel (Euros)	Expected costs (Euros)	Direct cost	Sub-contract	Indirect cost	Requested funding (Euros)
1	CEA (FC)	199 000	5 000	0	65 000	8 000	277 000	179 000	0	98 000	43 000
10	INFN (AC)	0	15 000	0	7 000	11 000	33 000	27 500	0	5 500	22 000
11	TEU (FC)	36 000	0	0	5 000	4 000	45 000	28 000	0	17 000	18 000
15	WUT (AC)	0	0	0	48 000	4 000	52 000	51 333	48 000	667	52 000
17	CERN (AC)	0	0	0	400 000	0	400 000	400 000	400 000	0	400 000
20	CCLRC (FC)	135 000	138 000	0	40 000	4 000	317 000	167 000	0	150 000	45 000
	Grand total	**370 000**	**158 000**	**0**	**565 000**	**31 000**	**1 124 000**	**852 833**	**448 000**	**271 167**	**580 000**