

ISTITUTO NAZIONALE DI FISICA NUCLEARE

CONSIGLIO DIRETTIVO

DELIBERAZIONE N. 13611

Il Consiglio Direttivo dell'Istituto Nazionale di Fisica Nucleare, riunito a Roma in data 26 marzo 2015 alla presenza di n. 32 dei suoi componenti su un totale di n. 34;

- premesso che l'INFN e la Nagoya University collaborano dal 2008 all'esperimento OPERA presso i Laboratori Nazionali del Gran Sasso e che, attualmente, è in corso la fase di decommissioning dell'apparato sperimentale;
- considerato l'interesse delle Parti a recuperare alcune componenti messe a disposizione della collaborazione al fine di un loro riutilizzo e dell'estrazione dei materiali contenuti all'interno delle emulsioni dei "bricks";
- ritenuto di dover procedere alla stipula di un Accordo tra le Parti che regoli la distribuzione dei costi relativi allo smontaggio e allo stoccaggio temporaneo dei "bricks" in attesa del loro definitivo trasferimento in Giappone;
- preso atto che il 5 marzo u.s. presso la Presidenza INFN si è tenuto un incontro con una delegazione della Nagoya University e che, con l'occasione, è stato firmato un Accordo relativo a "Cost Sharing Agreement for ECC Bricks";
- **preso atto che l'approvazione di tale documento comporta per l'Istituto una entrata finanziaria per un importo di Euro 112.285,00 (anticipo del 40% sul totale) come rimborso dei costi sostenuti dall'INFN per lo smontaggio dei "bricks", che sarà accertata con successiva deliberazione di questo Consiglio Direttivo;**
- su proposta della Giunta Esecutiva;
- con n. 32 voti favorevoli;

DELIBERA

Di approvare l'Accordo relativo a "Cost Sharing Agreement for ECC Bricks" firmato dal Prof. Antonio Masiero, a ciò delegato dal Presidente in data 3 marzo u.s., allegato alla presente deliberazione e di essa facente parte integrante.

Cost Sharing Agreement for ECC Bricks

THIS AGREEMENT ("Agreement") is made this 5th day of March 2015, by and between the Istituto Nazionale di Fisica Nucleare for Italy ("INFN") and Nagoya University, Japan

THE PARTIES ENTER THIS AGREEMENT on the basis of the following facts, understandings and intentions:

1. Purpose

ECC Bricks are the most important materials for OPERA experiment, which has been financially supported by INFN and Nagoya University and conducted as international collaboration research since 2008.

This agreement is to clarify the cost sharing of all the expenses for disassembly of the ECC Bricks in order to reuse materials, and for extraction of resources which both parties had invested.

Details are as follows: ECC Bricks shall be transferred to the temporary storage site after disassembly of the OPERA detector, and shall be dismantled at the worksite designated by INFN to separate the lead and emulsion films.

Per both parties' investments, the leads shall be given to INFN, while the company assigned by Nagoya University shall receive the emulsion films. The transportation to the final destination of both parties shall be excluded from the agreement. The waste materials occurred after disassembly of the ECC Bricks shall be disposed of according to the instruction of INFN.

2. Term

Disassembly and extraction of ECC Bricks shall take place at the temporary storage site after the disassembly of the OPERA detector.

From March 1, 2015 to August 31, 2016

3. Cost

400,160 Euro (including tax)

4. Cost Sharing

The cost mentioned above shall be shared according to the following rules:

- (1) Regarding the resources of lead and silver (from emulsion films) invested by both parties, costs will be divided in proportion with the ratio of each total amount that multiplied collection quantity per ECC Brick by London market transaction price (unit price).

(2) The followings are costs calculated by London market transaction price.

(a) Market transaction price (unit price) is the closing price on the day (February 6, 2015) when both parties agreed with this Agreement. Normally the lead is measured by US\$ /ton and the silver is measured by US\$ /troy ounce, but Euro/g will be used in order to compare those by the same unit. 1 troy ounce is calculated as 31.1035 g.

Lead transaction price = 0.0021 Euro/g

Silver transaction price = 0.6344 Euro/g

(b) The ideal value, which is the amount collected per box, will be used as the collection quantity.

Collection quantity of lead = 7,940.00 g

Collection quantity of silver = 61.75 g

(c) The sharing cost ratio, which is market transaction price multiplied by collection amount, is as follows:

INFN = 16,674 Euro/g (29.85 %)

Nagoya University = 39,174 Euro/g (70.15 %)

(d) The total sharing costs are as follows:

INFN = 119,447 Euro (including tax)

Nagoya University = 280,713 Euro (including tax)

5. Change of Costs

Regarding the total amount of cost described in 3, in the case that it is increased or decreased exceeding the expected cost, at the time of the work period, both parties shall have to confirm its cause on paper, and adjust payment in accordance with the cost sharing ratio mentioned in 4.

6. Range of Work and Costs

(1) The range of work is as follows.

(a) Transportation of the ECC Bricks from the temporary storage site to the worksite, for the disassembly of the OPERA detection

(b) Disassembly of the ECC Bricks at the worksite

(c) Extraction of leads and emulsion films by disassembly and sorting of the waste

(d) Loading of leads and emulsion films to the containers, etc. or packing

(e) Temporary storage of packed emulsion films

(f) Transfer of leads (to INFN)

(g) Transfer of emulsion films (to the company designated by Nagoya University)

(h) Disposal of the waste generated and cleaning of the worksite

(2) The range of costs is as follows.

(a) Transportation cost for the OPERA detection disassembly from the temporary storage site to the worksite

(b) Personnel expenses for disassembly, extraction and sorting (site managers, workers)

(c) Personnel expenses for packing work (however, boxes (container, etc.) necessary for leads and emulsion films should be prepared by each party separately.)

(d) Temporary storage fee of boxed emulsion film

(e) Disposal fee of the waste

(f) Cleaning fee of workplace

7. Inspection

INFN shall receive the work record showing the amount of ECC Bricks extracted by the disassembly of the OPERA detector, from the transportation company when they carry the ECC Bricks to the temporary storage site. Soon after INFN receives the work record, a copy (PDF file) of the work record shall be sent to Nagoya University by email. In addition, after disassembling of the ECC Bricks at the worksite, a copy (PDF file) of the work record describing the numbers of disassembled parts shall be sent to Nagoya University by email.

Leads and emulsion films extracted after disassembly shall be managed by the number of each resource. When those resources are transferred, the company assigned to work at the worksite shall have to report on paper to INFN about the numbers of resources recorded when they are loaded to the containers or packed.

INFN shall send a copy (PDF file) of the report to Nagoya University by email at the time INFN receives the report. If Nagoya University confirms that the reported number of the emulsion films is much less than the previous number of the emulsion films, the University shall inform INFN of the additional payment for the difference.

8. Payment Method and Time

INFN shall pay all the expenses on dissembling work to the work company on Nagoya University's behalf. According to the legitimate invoice issued after the date both parties signed this Agreement, Nagoya University shall make remittances twice to INFN: 112,285 Euro (including tax) in advance, and 168,428

Euro (including tax) of the remaining payment after finishing all the work. (Please refer to 4-(2)-(d) on the total sharing cost.) The University shall remit Euro money to the bank account designated by INFN (see the "international bank account information"). The University shall report to INFN on the payment after completing each remittance.

9. Force Majeure

A party affected by an event of Force Majeure shall notify as soon as practicable the other party of occurrence of such event and afterwards of restoration of normal conditions. Neither party shall be liable for failure or delay in performance of any obligation, or in satisfying any of the terms and conditions under of this Agreement, if such failure or delay in performance arises from Acts of God, war, strikes or other labor disputes, terrorist activity, accident in transportation or weather, provided, however, that the party having so failed or delayed in work shall exercise its best efforts to remove the cause, and after the cause has been removed, shall immediately rectify such failure or delay.

In the event that additional expenses are incurred by such failure or delay in work due to Force Majeure, both parties shall share the expenses upon the consultation of both parties; however, if additional expenses are incurred by the fault of either party, such as loss or damage of disassembly instrument/equipment, the party at fault shall bear all the additional expenses relating to the work failure or delay.

10. Arbitration

The parties shall endeavor to resolve any dispute, claim or controversy which may arise out of or in connection with this Agreement, implementation, validity, breach or termination thereof through friendly consultations between them. Such consultations shall commence upon the written notification to that effect by one party to the other party.

11. Revision and Modification

Both parties shall abide by the Agreement and refrain from revising or modifying the Agreement. The Agreement shall not be revised or modified except by written instrument executed by both parties. Before both parties have reached a consent, the Agreement shall be strictly observed.


12. Others

In the event that any other matter which is not described in this agreement occurs, both parties shall mutually discuss a solution to the problem.

IN WITNESS WHEREOF, the parties here to have executed this Agreement.

For: Istituto Nazionale di Fisica Nucleare (INFN)

For: Nagoya University



Signature

Signature

ISTITUTO NAZIONALE DI FISICA NUCLEARE
IL PRESIDENTE

Print Name

Print Name

Title of Representative

Title of Representative

- 5 MAR. 2015

Date

Date