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ORGANISATION EUROPEENNE POUR LA RECHERCHE NUCLEAIRE
CERN **EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH**

Action to be taken

Voting Procedure

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| For Approval | RESTRICTED COUNCIL 156th Session 16 September 2010 | Two thirds Majority of the Member States |
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**Agreement between France, Switzerland and CERN relating to protection
against ionising radiation and the Safety of the Organization's facilities**

The Council is invited to approve the attached draft agreement between France, Switzerland and CERN relating to protection against ionising radiation and the Safety of the Organization's facilities

In accordance with the provisions of the Headquarters and Status Agreements, the Organization collaborates with its Host States, Switzerland and France, notably to avoid any prejudice to their security resulting from its activities.

To this end, CERN has concluded several bilateral agreements with each of the Host States in particular the Convention of 28 April 1972 on protection against ionising radiation and that of 11 July 2000 on the Safety of the facilities associated with the Large Hadron Collider (LHC) and the Super Proton Synchrotron (SPS) with France, and the Agreement of 8 September 1993 providing for collaboration on radiation protection with Switzerland.

By virtue of these agreements, different rules and modes of bilateral collaboration apply on the French and Swiss parts of the Organization's site with regard to protection against ionising radiation and the Safety of the facilities, whereas the facilities constitute a single entity from the technical viewpoint and thus require a single approach and regulatory framework and collaboration between the three parties concerned.

Being aware of the limitations and difficulties of the bilateral approach, CERN and its Host States set up a working group with the aim of drawing up a tripartite agreement to replace the existing bilateral agreements and to introduce a tripartite collaboration and a single regulatory framework for the whole of the Organization's site.

Given the technical nature of the agreement in question, the Host States were represented in this working group by their respective competent authorities in matters of protection against ionising radiation and Safety, namely the French *Autorité de Sûreté Nucléaire* and the Swiss *Office Fédéral de la Santé Publique*.

After several meetings, the working group agreed on the draft agreement provided in the annex.

The purpose of this agreement is to ensure that best practice in matters of protection against ionising radiation and Safety applies to the Organization's facilities where ionising radiation is in use. To this end, it defines a framework for collaboration between the three parties as well as a regulatory framework tailored to the Organization's specific requirements in this area.

The agreement should thus facilitate the functioning of the Organization and at the same time ensure a high level of Safety in the interest of all three parties.

The draft agreement was accepted by the Swiss Federal Council on 18 June 2010. It has also been accepted by the French Ministry for Foreign and European Affairs and by the European Commission, to which it was submitted by France in the framework of the EURATOM treaty.

Once approved by the Council, the agreement will be signed by the three parties.

It will enter into force as soon as the formalities required by the legislation in each of the Host States have been completed.

Proposal:

The Council is invited to approve the draft agreement between France, Switzerland and CERN relating to protection against ionising radiation and the Safety of the Organization's facilities.

ANNEX

Draft Agreement

**between the Government of the French Republic,
the Federal Council of Switzerland**

and

the European Organization for Nuclear Research

**relating to Protection against ionising radiation and the Safety of the
Facilities of the European Organization for Nuclear Research**

The Government of the French Republic (hereinafter "the French Government"),

and

the Federal Council of Switzerland (hereinafter "the Swiss Federal Council"),

and

the European Organization for Nuclear Research (hereinafter "the Organization" or "CERN"),

hereinafter, collectively, "the Parties",

Considering the Convention of 1 July 1953 for the Establishment of a European Organization for Nuclear Research, as amended on 17 January 1971,

Considering the Agreement of 11 June 1955 between the Swiss Federal Council and the Organization concerning the legal status of the Organization in Switzerland (hereinafter referred to as "the Headquarters Agreement"), and in particular Article 26 thereof,

Considering the Agreement of 13 September 1965, as revised on 16 June 1972, between the French Government and the Organization concerning the legal status of the Organization in France (hereinafter referred to as "the Status Agreement"), and in particular Article XXII thereof,

Considering the Convention of 13 September 1965 between the Federal Council of the Swiss Confederation and the Government of the French Republic relating to the extension onto French territory of the site of the European Organization for Nuclear Research, and in particular Article II thereof,

Considering that France and Switzerland, as Host States of the Organization, collaborate with the latter to facilitate the accomplishment of its mission,

Considering that the Organization collaborates with its Host States in order to avoid any prejudice to the security of the Host States resulting from its activities,

Considering that the primary responsibility for the operation and Safety of the Facilities is incumbent upon the Organization,

Considering the Convention of 28 April 1972 between the French Government and the Organization relating to Protection against ionising radiation and the Convention of 11 July 2000 between the French Government and the Organization relating to the Safety of the Facilities associated with the Large Hadron Collider (LHC) and the Super Proton Synchrotron (SPS),

Considering the Agreement of 8 September 1993 between the Swiss Federal Council and the Organization to ensure collaboration in matters of radiation protection,

Considering that the Conventions of 28 April 1972 and 11 July 2000, on the one hand, and the Agreement of 8 September 1993, on the other, introduced two different modes of bilateral collaboration in matters of Protection against ionising radiation and the Safety of the Organization's Facilities,

Considering that the Organization's Facilities constitute a single entity from the technical viewpoint requiring a single and transparent set of regulations and that it is thus appropriate to establish a tripartite collaboration in the field of Protection against ionising radiation and the Safety of the Organization's Facilities,

HAVE AGREED as follows:**Article 1****Purpose**

The purpose of this Agreement is to ensure that best practice in matters of Protection against ionising radiation and Safety applies to the Organization's Facilities where ionising radiation is in use, taking into account the legislation and regulations of each Host State, the relevant directives of the European Union and the European Atomic Energy Community (Euratom) and the international standards and recommendations issued, inter alia, by the International Atomic Energy Agency (IAEA), the World Health Organization (WHO), the International Labour Organization (ILO) and the International Commission on Radiological Protection (ICRP). An indicative list of the principal regulatory texts of the European Atomic Energy Community and of the international standards and recommendations to be taken into consideration is provided in Annex 1.

To this end, this Agreement defines a framework for collaboration between the Parties and their respective obligations in this respect.

Article 2**Definitions**

For the purpose of this Agreement, the following definitions shall apply:

- a) "Radioactive waste" shall be understood to mean waste Radioactive materials, including all those present on the site of the Organization at the time this Agreement comes into force.
- b) "Radioactive effluents" shall be understood to mean gaseous and liquid effluents that have been activated or contaminated owing to the operation of the Facilities and are discharged into the environment.
- c) "CERN Experiments" shall be understood to mean physics experiments that have been approved or recognised by CERN.
- d) "Certification" shall be understood to mean written recognition by the Authorities that the rules established by CERN provide guarantees in matters of Protection against ionising radiation and Safety that are equivalent to those which would result from the application of their own national regulations. In this context, the Authorities shall take into account CERN's operating requirements and the protection of its interests.

- e) "Facility(ies)" shall be understood to mean all the technical premises, infrastructure and equipment which have been or are required for the operation of CERN's accelerators and experiments.
- f) "Activated materials" shall be understood to mean materials that have been activated or contaminated owing to the operation of the Facilities, including those present on the site of the Organization at the time this Agreement comes into force.
- g) "Radioactive materials" shall be understood to mean Activated materials and both Sealed and Unsealed sources.
- h) "Authorities" shall be understood to mean the French or Swiss authorities competent in matters of safety and radiation protection in research organisations.
- i) "Protection against ionising radiation" shall be understood to mean all the technical and organisational provisions made with a view to limiting and monitoring the exposure of personnel and other people to ionising radiation during the normal operation of a Facility.
- j) "Induced radioactivity" shall be understood to mean the activation of materials or equipment owing to the circulation of beams in the Facilities.
- k) "Scattered radiation" shall be understood to mean the radiation in the environment caused by the operation of the Facilities.
- l) "Prompt radiation" shall be understood to mean the radiation caused, at any given time, by the circulation of beams in the Facilities.
- m) "CERN rules" shall be understood to mean the rules (including technical requirements) adopted by CERN by virtue of its international status and in accordance with Article 4.1 below.
- n) "Sealed source" shall be understood to mean a source of ionising radiation constructed in such a way as to prevent the dispersion of any radioactive substances under normal conditions of use, thereby excluding the possibility of contamination. The enclosure of the sealed source shall comply with the requirements of the ISO standards corresponding to the application under consideration, and shall be classified accordingly.
- o) "Unsealed source" shall be understood to mean a source of ionising radiation which carries a risk of dispersion of radioactive substances and thus of contamination.

- p) "Safety" shall be understood to mean the complete set of technical and organisational provisions made at the design, construction, operation and dismantling stages of a Facility in order to:
- guarantee, under normal conditions, the risk-free operation and state of the Facility for personnel, other people and the environment;
 - avoid accidental situations and limit the effects thereof.

Article 3

Organisation of the collaboration between the Parties

3.1 Tripartite Meetings

The Parties shall hold meetings (hereinafter "Tripartite Meetings") at least twice a year. A Tripartite Meeting shall be convened at the request of any one of the Parties.

3.1.1 Representatives

In the Tripartite Meetings, the French Government and the Swiss Federal Council shall be represented by the Authorities. The Organization shall be represented by the organisational unit competent in matters of Safety and radiation protection.

The Authorities and the competent CERN unit shall appoint the persons, including any experts and advisors, who will attend the Tripartite Meetings. Each Party shall inform the other Parties of the persons thus appointed.

3.1.2 Terms of reference

At the Tripartite Meetings:

- a) the Organization shall submit to the Authorities for Certification by them:
 - the CERN rules, including any substantial amendments thereto,
 - the documentation mentioned in Annex 2, with the exception of the Radioactive waste inventory and the annual report on operational Safety and Protection against ionising radiation in the Facilities.
- b) the Organization shall submit and the Authorities shall approve:
 - the methods of evaluation of the impact on the environment and people of Scattered radiation and Radioactive effluents (cf. Article 4.2),
 - the methods of evaluation of the impact on the personnel of Prompt radiation and Induced radioactivity (cf. Article 4.3);

- c) the Parties shall define:
 - the accreditation procedure for the CERN Dosimetry Service (cf. Article 5),
 - the procedures for the classification and declaration of significant events (cf. Article 9),
 - the procedures for the implementation of this Agreement, notably the means of communication and the guiding principles concerning the form and structure of the documents to be submitted in accordance with this Agreement and the procedure for the examination of these documents (cf Article 4.4);
- d) the Parties shall approve the choice of waste disposal paths (cf. Article 7);
- e) the Parties shall decide upon any amendments to any annex to this Agreement (cf. Article 13);
- f) the Parties shall agree upon the dates and annual programme of visits (cf. Article 3.3);
- g) the Authorities shall inform the Organization of any substantive changes in the Host States' legislation .

The approved minutes shall constitute the formal record of the decisions taken in Tripartite Meetings.

The Organization shall respond to any observations or requests formulated by the Authorities in Tripartite Meetings.

3.1.3 Secretariat

The Organization shall provide secretarial support for the Tripartite Meetings, shall convene and prepare them and be responsible for their follow-up. The Organization shall submit the draft minutes to the other Parties for approval. The Organization shall also send to the Parties the documents it prepares in accordance with this Agreement.

3.2 Request for expert evaluation

At the Organization's request, the Authorities may provide expert evaluations in specific matters relating to Protection against ionising radiation and Safety, following a procedure to be defined by mutual consent.

Any expert evaluations the Authorities may provide shall be without prejudice to their entitlement to formulate observations and requests at Tripartite Meetings.

3.3 Visits

To achieve the objective defined in Article 1 of this Agreement, the Authorities shall conduct visits, which can be joint visits, on the site of the Organization.

The Authorities shall consult each other on the visits they plan to conduct each year and propose to the Organization dates for the visits and a programme setting out the themes to be examined. The Parties shall agree upon these dates and programme at a Tripartite Meeting.

Additional visits may be organised if circumstances so dictate.

The Authorities may be accompanied on such visits by their own accredited experts.

A follow-up letter shall be drawn up after each visit. Items noted by the Authorities during visits may give rise to observations or requests on their part. The Organization shall respond to any such observations or requests.

Article 4

CERN's obligations with respect to Protection against ionising Radiation and Safety

4.1 General obligation

The Organization shall draw up Rules and take the necessary measures to guarantee Protection against ionising radiation and Safety throughout the life cycle (design, construction, operation, decommissioning and dismantlement) of its Facilities, in accordance with the procedures defined in this Agreement.

4.2 Impact of Scattered radiation and Radioactive effluents on people and the environment

The Organization shall evaluate, using methods approved in Tripartite Meetings, the impact of Scattered radiation and Radioactive effluents on people and the environment. The Organization shall take the necessary measures to keep this impact as low as reasonably achievable.

4.3 Impact of Prompt radiation and Induced radioactivity on personnel

The Organization shall evaluate, using methods approved in Tripartite Meetings, the impact of Prompt radiation and Induced radioactivity on personnel. The Organization shall take the necessary measures to keep this impact as low as reasonably achievable.

4.4 Documentation on Safety and Protection against ionising radiation

The Organization shall prepare and keep up to date the documentation on Protection against ionising radiation and Safety referred to in Annex 2.

Any amendments to the documents referred to in Annex 2 and the procedures for communicating this documentation to the other Parties shall be defined in Tripartite Meetings. The preliminary examination of the documents, prior to their examination in Tripartite Meetings, shall be done by the Authorities and their technical advisors.

Article 5 CERN Dosimetry Service

CERN's personal dosimetry service (hereinafter referred to as "the Dosimetry Service") measures, by means of personal dosimeters, the external exposure of all persons working on the site of the Organization who are likely to be exposed to ionising radiation. It organises dosimetry measurements for internal exposure should circumstances so dictate.

The Dosimetry Service shall be accredited by the Authorities according to the accreditation procedure defined by the Parties in Tripartite Meetings.

The Dosimetry Service shall periodically forward the results of the individual dose-rate monitoring to the two Host States for recording in the national registers.

Article 6 Radioactive materials

The import and export of radioactive materials shall be the subject of permits issued by the Authorities in accordance with their national legislation, it being understood that permits issued by one Authority shall be taken into account by the other. The permits shall define the holding and handling rules as a function of the risk of dispersion of the radioactive substances and thus of contamination, while at the same time taking technical constraints into consideration.

The Organization shall be free to decide how Radioactive materials are transported on its own site, under its exclusive responsibility.

The Organization shall maintain an inventory of Sealed sources, stipulating their place of storage. Every year, the Organization shall send the other Parties a summary of the inventory.

Article 7

Radioactive waste

Radioactive waste originating from CERN's Facilities shall be disposed of by the Host States via the paths established in accordance with their national legislation.

With a view to the management of radioactive waste, the Organization shall prepare and communicate to the other Parties a "waste study" covering all the Facilities on the site.

This study shall stipulate the various disposal paths intended for each type of waste produced and is updated whenever necessary. The waste study shall take into account the need for fair distribution between the Host States, in terms of quantity, level of activity and toxicity of waste, and shall aim to use the most technically and economically advantageous disposal path.

The choice of disposal path shall be approved by the Parties after examination at a Tripartite Meeting.

The Organization shall keep a record of the Radioactive waste disposed of in the Host States and an inventory of the Radioactive waste present on its site.

Article 8

Transportation

The transportation of Radioactive materials and Radioactive waste between the CERN sites shall be undertaken in accordance with European regulations applicable in the Host States governing the transportation of dangerous materials by road, it being understood that the Authorities shall grant CERN the special dispensations provided for by these regulations to take its operating requirements and special technical characteristics into account. The conditions of transportation of Radioactive materials and Radioactive waste, taking into account these regulations and special dispensations, shall be laid down in a CERN Rule to be approved by the Authorities.

Pending the drafting of a CERN Rule on this subject, the existing special dispensations shall remain in force, it being understood that the special dispensations issued by one Authority shall be recognised by the other.

Transportation inside the CERN site, not involving the use of public highways, shall be undertaken in accordance with procedures which the Organization shall be at liberty to define without reference to the Authorities.

Article 9
Declaration of events

The Organization shall immediately declare any significant event to the Authorities with reference to the International Nuclear Event Scale (INES) jointly established by the IAEA and the Nuclear Energy Agency (NEA) of the Organisation for Economic Cooperation and Development (OECD). The procedures for declaration and classification shall be defined at a Tripartite Meeting.

Article 10
Security of Switzerland and France

Nothing in this Agreement shall affect the right of the Swiss Federal Council or the French Government to take appropriate measures, which may include requesting CERN to suspend the operation of its Facilities, in the interest of the security of Switzerland or France in accordance with the provisions of Article 26 of the Headquarters Agreement or Article XXII of the Status Agreement respectively.

Article 11
Execution of the Agreement by the Parties

The Parties shall execute this Agreement in good faith, in a spirit of mutual information and collaboration taking into account their rights and obligations under the Headquarters Agreement and the Status Agreement and in accordance with an approach proportional to the risks in matters of Protection against ionising radiation and Safety.

Article 12
Disputes

The Parties shall employ their best efforts to settle any disputes amicably.

Any dispute regarding the interpretation or application of this Agreement that it has not proved possible to settle amicably shall be brought to the attention of the President of the CERN Council, who may attempt to broker an amicable settlement or submit the matter to the Council.

Any dispute regarding the interpretation or application of this Agreement that it has not proved possible to settle according to the provisions of the preceding paragraph shall be submitted to a single arbitrator, in accordance with the Optional Rules for Arbitration involving International Organizations and States of the Permanent Court of Arbitration.

Article 13 Amendments

This Agreement may be amended, according to the procedure followed for its adoption, at the request of one of the Parties. The three Parties shall consult each other on any amendments that may be needed to this Agreement.

However, any amendments to any annex to this Agreement shall be decided in Tripartite Meetings.

Article 14 Abrogation of previous Conventions and Agreements

The following are hereby abrogated:

1. The Convention of 28 April 1972 on Protection against ionising radiation between the Government of the French Republic and the Organization;
2. The Convention of 11 July 2000 between the Government of the French Republic and the Organization relating to the Safety of the Facilities associated with the Large Hadron Collider (LHC) and the Super Proton Synchrotron (SPS);
3. The Agreement of 8 September 1993 between the Swiss Federal Council and the Organization to ensure collaboration in matters of Protection against ionising radiation.

Article 15 Revocation

This Agreement may be revoked by one of the Parties subject to three years' notice.

Article 16 Entry into force of the Agreement

Each of the contracting Parties shall notify the other two Parties that it has completed the formalities required by its national regulations for entry into force of this Agreement. It shall come into effect three months after the date of reception of the last of these notifications.

Done at Geneva, on dd/mm/yy, in three copies in the French language.

For the French Government

For the Swiss Federal Council

For the Organization

ANNEX 1

Indicative list of the principal regulatory texts of the European Atomic Energy Community and of the international standards and recommendations

- Council Directive 96/29/Euratom of 13 May 1996 laying down the basic safety standards for the protection of the health of workers and the general public against the dangers arising from ionising radiation
- Council Directive 2003/122/Euratom of 22 December 2003 on the control of high-activity sealed radioactive sources and orphan sources
- Council Directive 2006/117/Euratom of 20 November 2006 on the supervision and control of shipments of radioactive waste and spent fuel
- Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management of 5 September 1997
- International Basic Safety Standards for Protection against Ionizing Radiation and for the Safety of Radiation Sources (*Basic Safety Standards* n°115 - AIEA, 1997) established under the auspices of the NEA/OECD, IAEA, FAO, ILO, WHO and PAHO.
- Recommendation n°103 of the International Commission on Radiological Protection (ICRP, 2007)
- European agreement concerning the international carriage of dangerous goods by road (ADR) of 30 September 1957

ANNEX 2

Documentation on Safety and Protection against ionising radiation provided for in the execution of the Agreement between the Government of the French Republic, the Swiss Federal Council and the European Organization for Nuclear Research relating to Protection against ionising radiation and the Safety of the Facilities of the European Organization for Nuclear Research

1. Documentation on Safety and Protection against ionising radiation in the existing Facilities.

For Facilities currently in operation, the Organization keeps up to date the following documentation on Safety and Protection against ionising radiation:

- For the entire CERN site:
 - the CERN waste plan,
 - the radioactive waste inventory,
 - the CERN Emergency Plan (formerly Internal Emergency Plan),
 - the annual report on Safety and Protection against ionising radiation in the Facilities
- For all the Organization's Facilities:
 - the specific Safety files for each Facility,
 - the CERN Rules associated with the operation of each Facility.

This documentation is communicated to the other Parties at their request with the exception of the annual report on Safety and Protection against ionising radiation and the Radioactive waste inventory, which are communicated annually.

2. Documentation on Safety and Protection against ionising radiation in the event of modification of a Facility.

In the event of a modification that has a significant impact on Safety and Protection against ionising radiation in an existing Facility:

- a) **Prior to** the modification, the Organization shall communicate to the other Parties the updated Safety file for the Facility in question as well as any amended CERN Rules;
- b) **After** the modification, the Organization shall communicate to the other Parties an amendment to or updated version of the documentation in question.

3. Documentation on Safety and Protection against ionising radiation for new Facilities

For all new Facilities recognised or approved by CERN, the Organization shall provide the following documentation:

- For the new Facility:
 - At the design stage:
 - an impact study,
 - a preliminary Safety file.
 - Prior to commissioning:
 - a Safety file,
 - the CERN Rules associated with the operation of the Facility.
 - Having responded to the observations and requests of the Authorities and once the Facility has been commissioned, CERN shall provide:
 - a definitive Safety file,
 - the updated version of the CERN Rules associated with the operation of the Facility.
- For the entire site of the Organization:
 - an amendment to or updated version of the CERN waste plan,
 - an amendment to or updated version of the CERN Emergency Plan,
 - an amendment to or updated version of the annual report on Safety and Protection against ionising radiation in the Facilities.

4. Documentation on Safety and Protection against ionising radiation in the event of dismantlement of a Facility.

In the event of dismantlement of a Facility, the Organization shall provide the other Parties with the following documentation **prior to** dismantlement:

- For the Facility of the Organization to be dismantled:
 - an impact study of the dismantlement operations,
 - a preliminary Safety file on the decommissioning and dismantlement,
 - the CERN supervision and maintenance rules to be observed from the start of decommissioning until completion of the dismantlement operations.
- For the entire site of the Organization:
 - an amendment to or updated version of the CERN Emergency Plan.