Memorandum of Understanding
On the Establishment and Operation of the Extreme Light Infrastructure (ELI)

Document:
Version: 2010.04.16
Date: 16/04/2010
File: CZ-HU-RO ELI MoU - 20100416.doc
The Ministry of Education, Youth and Sports of the Czech Republic, duly represented by Prof. Vlastimil RŮŽIČKA, Vice Minister for Research and Higher Education, Plenipotentiary for the ELI Project in the Czech Republic

The National Office for Research and Technology of Hungary, duly represented by Dr. Tivadar LIPPÉNYI, CEO of ELI-HU Ltd., Plenipotentiary for the ELI Project in Hungary

The National Authority for Scientific Research of Romania, duly represented by Prof. Dr. Nicolae-Victor ZAMFIR, General Director of the National Institute for Nuclear Physics and Engineering, Plenipotentiary for the ELI Project in Romania

Hereinafter referred as “the Undersigning Parties”,

- Recognizing that the ambition of ELI to establish and operate the first Research Infrastructure in the world dedicated to the investigation and applications of laser-matter interaction in the unprecedented ultra-relativistic regime corresponds to one of the major scientific needs of Europe, as identified by the European Strategic Forum on Research Infrastructures in its Roadmap issued in October 2006 and updated in December 2008;

- Desiring the establishment of ELI as a highly multidisciplinary international platform granting effective access to researchers and users from the European Union, associated countries and third countries;

- Recognizing that ELI represents an added value in the strengthening and structuring of the European Research Area (ERA) by contributing to the mobility of knowledge and researchers;

- Desiring that ELI will foster significant scientific and technological improvements in the field of laser science and beyond at international level and will increase the use of intellectual potential throughout Europe through their dissemination;

- Acknowledging the results achieved within the ELI Preparatory Phase and the conclusions reached on October 1st, 2009 by the ELI Preparatory Phase Steering Committee on the Integrated Proposal presented by the Czech Republic, Hungary and Romania with the strong support of the representatives of the European Commission.

Have agreed as follows:
Article 1 – Cooperation on the establishment of the ELI-ERIC

(1) The Undersigning Parties are willing to cooperate on the establishment of a European Research Infrastructure Consortium, with the name “Extreme Light European Research Infrastructure Consortium” (hereinafter referred to as “ELI-ERIC” or “ERIC”), according to rules set in Council Regulation EC 723/2009\(^1\) and as requested in the resolutions of the Steering Committee meeting of the ELI Preparatory Phase Consortium held on October 1\(^{st}\), 2009.

(2) The ELI-ERIC shall be established for an unlimited period or for a period ending not earlier than five years after the beginning of the operational phase, in compliance with Council Regulation (EC) 1083/2006\(^2\).

(3) The Undersigning Parties shall comply with the obligation set in Council Regulation EC 723/2009 of recognising ELI-ERIC as an international body, in the sense of Article 151 (1)(b) of Directive 2006/112/EC\(^3\), and as an international organization in the sense of the second indent of Article 23 (1) of Directive 92/12/EEC\(^4\) and Article 15, point (c) of Directive 2004/18/EC\(^5\). The limits and conditions of the exemptions provided for in these provisions shall be laid down in the Statutes of the ERIC between the Parties founding the ERIC.

(4) The ELI-ERIC shall have its registered office on the territory of a Member State or a country associated to a community research, technological development and demonstration programme in accordance with the Council Regulation 723/2009 Article 8, paragraph (1).

(5) The ELI-ERIC and its facilities will be designed and used exclusively for civilian research. It shall pursue its activities on a non-economic basis, as defined and in the conditions described in Article 3 of Council Regulation EC 723/2009. The ELI-ERIC may carry out limited economic activities, provided that they are closely related to the principal task to establish and operate the Extreme-Light-Infrastructure and do not jeopardize its mission.

(6) The Statutes of the ELI-ERIC shall be established in accordance with the conditions of the Czech-Hungarian-Romanian Integrated Proposal approved on October 1\(^{st}\), 2009 by the Steering Committee of the ELI Preparatory Phase Consortium.

Article 2 – Tasks and Scope of the future ELI-ERIC

(1) The principal task of the ELI-ERIC shall be to establish and operate full scope of the Extreme-Light-Infrastructure.

(2) The Undersigning Parties shall implement and commission, with highest priority, by December 31\(^{st}\), 2015 at the latest, a facility with primary mission in beamline

---


generation of secondary sources for science and applications in Dolní Břežany near Prague (Czech Republic), a facility with primary mission in attosecond science and applications, in Szeged (Hungary), and a facility with primary mission in ELI nuclear physics in Măgurele, near Bucharest (Romania). Development of technologies, necessary for building the ultra-high intensity facility, will also be carried out at the three sites by the ELI-ERIC through coordinated and complementary programmes.

(3) The three Undersigning Parties hosting a facility shall have equal status as ELI hosts.

(4) Within the framework of the ELI Delivery Consortium defined in Article 4 of the present Memorandum, the Undersigning Parties shall establish an Expert Group entrusted with the mission to produce a Resourced Project Assessment which shall detail the tasks to be performed to deliver the Extreme-Light-Infrastructure on the basis of the human resources capacities and expertise available within Europe. The assessment shall be consistent with the constraints of the funding capacity and timescales, and within acceptable risk to the funding agencies. This Expert Group shall include representatives from all members of the ELI Delivery Consortium, in particular from the hosting countries, and from France, Germany and the United Kingdom.

(5) On the basis of a review of the performance and readiness of the various technological options, the Assembly of Members of the ELI-ERIC will decide on the location of the ultra-high-intensity facility by 2012, for a timely delivery of the latter facility, ideally by end 2015 but no later than 2018. All members of the ELI Delivery Consortium shall be eligible for bidding to host the ultra-high-Intensity facility.

(6) The Undersigning Parties expect strong, highly dedicated support in particular from France, Germany and the United Kingdom in the realisation of the aforementioned facilities and the pursuit of all related goals in the form of expertise, know-how and technology transfer.

(7) The Undersigning Parties acknowledge that the present Memorandum does not entail any binding commitment regarding their level of future contribution to the ELI-ERIC.

Article 3 – Organs of the ELI-ERIC

(1) The ELI-ERIC shall operate as a distributed infrastructure with single centralized decision-making and governing bodies.

(2) Pursuant with Article 12 of Council Regulation EC 723/2009, the organs of the ELI-ERIC shall be the Assembly of Members and the Board of Directors.

(3) The Assembly of Members shall be granted with full decision-making powers, including on the adoption of the budget, the definition of the general orientations of the research strategy and international cooperation strategy, the appointment of the Board of Directors, the adoption of amendments to the Statutes. The Assembly of Members shall comprise the contributing Parties with voting rights and non-contributing Parties, attending as Observers with no voting rights.

(4) The Board of Directors shall be the executive body and the legal representative of the ELI-ERIC. It will be chaired by a Director General and several Directors with specialized attributions appointed by the Assembly of Members. The Board will be responsible for the implementation of the research and international cooperation
strategy, for communication at global level, and for the daily management of the infrastructure. It shall be jointly accountable for its action before the Assembly of Members.

(5) The Assembly of Members shall be assisted by a Facility Users’ Council. The Board of Directors shall be assisted by an Advisory Board and, during the implementation phase, by an Implementation Committee. The Statutes and the bylaws shall define the conditions of their intervention.

(6) The Members of the ELI-ERIC shall make sure that the Statutes create the conditions for each contributing party to comply with national and EU legislations regarding the execution and use of their financial commitment.

Article 4 – Establishment of an ELI Delivery Consortium

(1) By virtue of the present Memorandum, an ELI Delivery Consortium is established by the Undersigning Parties as soon as all three Undersigning Parties have attached signatures of their entitled representatives.

(2) The main goal of the ELI Delivery Consortium is the establishment of the ELI-ERIC and the detailed definition of the implementation plan. The tasks and responsibilities of the ELI Delivery Consortium are in particular:

- The definition of a single and robust technical delivery plan of the entire ELI project in line with the TDR (technical design report) currently being finalized within the ELI Preparatory Phase Consortium, with the conditions defined in Article 2 of the present Memorandum, and with the Resourced Project Assessment produced by the Expert Group, as mentioned in Article 2, paragraph (4), and based on the resolutions taken by the ELI Steering Committee on October 1st, 2009. When establishing the delivery plan, it should be ensured that unnecessary duplications are avoided and that economies of scale are exploited;

- The definition of the Statutes, Governance model and Financial and Contribution plan of the ELI-ERIC, as well as the coordinated completion of all proceedings related to its establishment and definition of processes ensuring its efficient operation.

(3) The ELI Delivery Consortium on its own has no legal personality, and does not entail any financial commitment or contribution for the Undersigning Parties. Each party to the ELI Delivery Consortium bears on its own the expenditures linked to its participation in the activities of the Consortium.

Article 5 – Organs and operation of the ELI Delivery Consortium

(1) The organs of the ELI Delivery Consortium shall be: the Steering Board, the Project Management Board and the Task Groups. The creation of additional organs may be decided by the Steering Board depending on the needs of the ELI Delivery Consortium.

(2) The ELI Delivery Steering Board (hereinafter “Steering Board”) shall be the supervising body of the ELI Delivery Consortium. It shall approve the final delivery plan attached to the Statutes of the ELI-ERIC, approve the reports of the ELI Delivery Management Board on the activities of the Delivery Consortium and enable the Undersigning Parties to decide and commit on matters required for the establishment
of the ELI-ERIC. Initially, the Steering Board will consist of one representative of each of the Undersigning Parties. The Steering Board will invite other countries to join the Steering Board. The Steering Board will aim at taking decisions unanimously. No decision can be taken against the national interests of the Undersigning Parties.

(3) The ELI Delivery Management Board (hereinafter "Management Board") shall be the management body of the ELI Delivery Consortium at operative level acting according to the decisions of the Steering Board. Its main tasks include in particular the coordination and control of the activities of the Task Groups and reporting on progress to the Steering Board. The Management Board shall consist of at least one representative of each Undersigning Country appointed by its respective ELI plenipotentiary. Unresolved issues – with relation to legal, governance and financial matters in particular – can be escalated to the Steering Board at any time.

(4) After the entry into force of the present Memorandum, the Management Board shall establish specialised Task Groups in charge of carrying out the tasks described in Article 4(2). The Management Board shall define the action plan and deliverables of the Task Groups. Their composition will be agreed on by the Management Board on the basis of the conditions established in the Internal Regulations of the ELI Delivery Consortium.

(5) An Expert Group shall be established by the Managing Board as soon as possible after the entry into force of the present Memorandum and entrusted with the mission to produce the Resourced Project Assessment referred to in Article 2(4). The Expert Group shall identify in particular the human resource capacities and expertise available at European level for the implementation of the project and review the funding capacities and time constraints. On the basis of this assessment, the Expert Group shall provide the Steering Board with recommendations on the establishment of the delivery plan which should comply with the provisions of the Integrated Proposal presented by the Czech Republic, Hungary and Romania.

(6) The Terms of Reference and the Internal Regulations of the ELI Delivery Consortium will be elaborated by the Undersigning Parties, and agreed on by the ELI Delivery Steering Board following the entry into force of the present Memorandum. The activities shall be organised so as to ensure efficiency, cooperation and fair representation of all interests.

Article 6 – Language
All dealings under this Memorandum of Understanding shall be done in the English language.

Article 7 – Disputes
The Undersigning Parties shall endeavour to settle by negotiations any dispute concerning the interpretation or application of the present Memorandum of Understanding.

Article 8 – Entry into force
This Memorandum of Understanding shall enter into force as soon as all three Undersigning Parties have attached signatures of their entitled representatives.
Article 9 – Accession
After the entry into force of this Memorandum of Understanding, and having set up the ELI Delivery Consortium, the three Undersigning Parties shall invite members of the ELI Preparatory Phase Consortium and other countries to join the ELI Delivery Consortium. Any competent authority of any State already a member of the ELI Preparatory Phase Consortium and willing to contribute to the establishment of the ELI-ERIC and to the implementation of the tasks defined in Article 2 of the present Memorandum, may accede to the ELI Delivery Consortium. The conditions of accession shall be the subject of an agreement between the acceding authorities and the ELI Delivery Consortium.

Article 10 – Amendments to this Memorandum of Understanding
Any amendment to this Memorandum of Understanding shall be decided upon consensus among all Undersigning Parties, and shall not undermine or jeopardize ELI’s scientific and technological goals as well as their achievement as outlined in this Memorandum of Understanding and defined by the ELI Delivery Consortium. The amended Memorandum of Understanding shall enter into force as soon as all Undersigning Parties have attached signatures of their entitled representatives to the amended version. The dealings related to the amendment processes and/or signatures shall not delay the project or compromise the activities of the Undersigning Parties.

Article 11 – Termination and withdrawal
(1) The Memorandum of Understanding is concluded for an indefinite period. The conditions stipulated in this Memorandum of Understanding shall govern the relationships between the Undersigning Parties within the ELI Delivery Consortium until the ELI-ERIC is established.

(2) The Undersigning Parties may withdraw from this Memorandum of Understanding by notifying their decision to the ELI Delivery Steering Board convoked for this specific purpose. The withdrawal will become effective only six months after notification to the ELI Delivery Steering Board to allow negotiations on the decision to withdraw between the Undersigning Parties and on the appropriate reorganization of the ELI Delivery Consortium. During this six-month period, the Undersigning Party willing to withdraw shall attend the meetings of the ELI Delivery Steering Board, but shall not take part into decisions. Withdrawal shall not entitle the withdrawing Undersigning Party to any reimbursement of the expenses incurred under this Memorandum.

Article 12 – Signature
The present Memorandum of Understanding was established in the English language and signed in six copies by the Undersigning Parties.
SIGNATURE PAGE (1)

The Ministry of Education, Youth and Sports, Ministerstvo školství, mládeže a tělovýchovy (MŠMT), duly represented by:

[Signature]

Prof. Vlastimil RŮŽIČKA,

Vice Minister for Research and Higher Education
Plenipotentiary of the ELI Programme of the Czech Republic

Date  April 10, 2018
SIGNATURE PAGE (2)

The National Office for Research and Technology, Nemzeti Kutatási és Technológiai Hivatal (NKTH), duly represented by,

Dr. Tivadar LIPPÉNYI,
Plenipotentiary for the ELI Project in Hungary, CEO of ELI-HU Ltd.

Date April 10, 2010

---

9
SIGNATURE PAGE (3)

The National Authority for Scientific Research of Romania, Autoritatea Natională pentru Cercetare Științifică (ANCS), duly represented by:

[Signature]

Prof. Dr. Nicolae-Victor ZAMFIR

General Director, National Institute of Physics and Nuclear Engineering
Plenipotentiary of the ELI Programme of Romania

Date April 16, 2010