



Project co-financed by the European Regional Development Fund through the Competitiveness Operational Programme
“Investing in Sustainable Development”



**“Horia Hulubei” National Institute for Research and Development
in Physics and Nuclear Engineering (IFIN-HH)
Extreme Light Infrastructure-Nuclear Physics
(ELI-NP) - Phase II**



Extreme Light Infrastructure-Nuclear Physics (ELI-NP)

Research and Innovation

versus

Public Procurement

**Raluca Stoicea
Bucharest, May 8, 2018**



ELI-NP

ELI-NP Project

310 M € 2013-2019

Large equipment (unique, new technology, R&D, innovation):

- High Power Laser System, 2 x 10PW maximum power
- High Intensity Gamma Beam System

Experiments (equipment, assembling, unique concepts, innovation:

- 8 experimental areas (experiments with gamma, laser, and gamma + laser) - unique, innovative concepts
- Laboratories

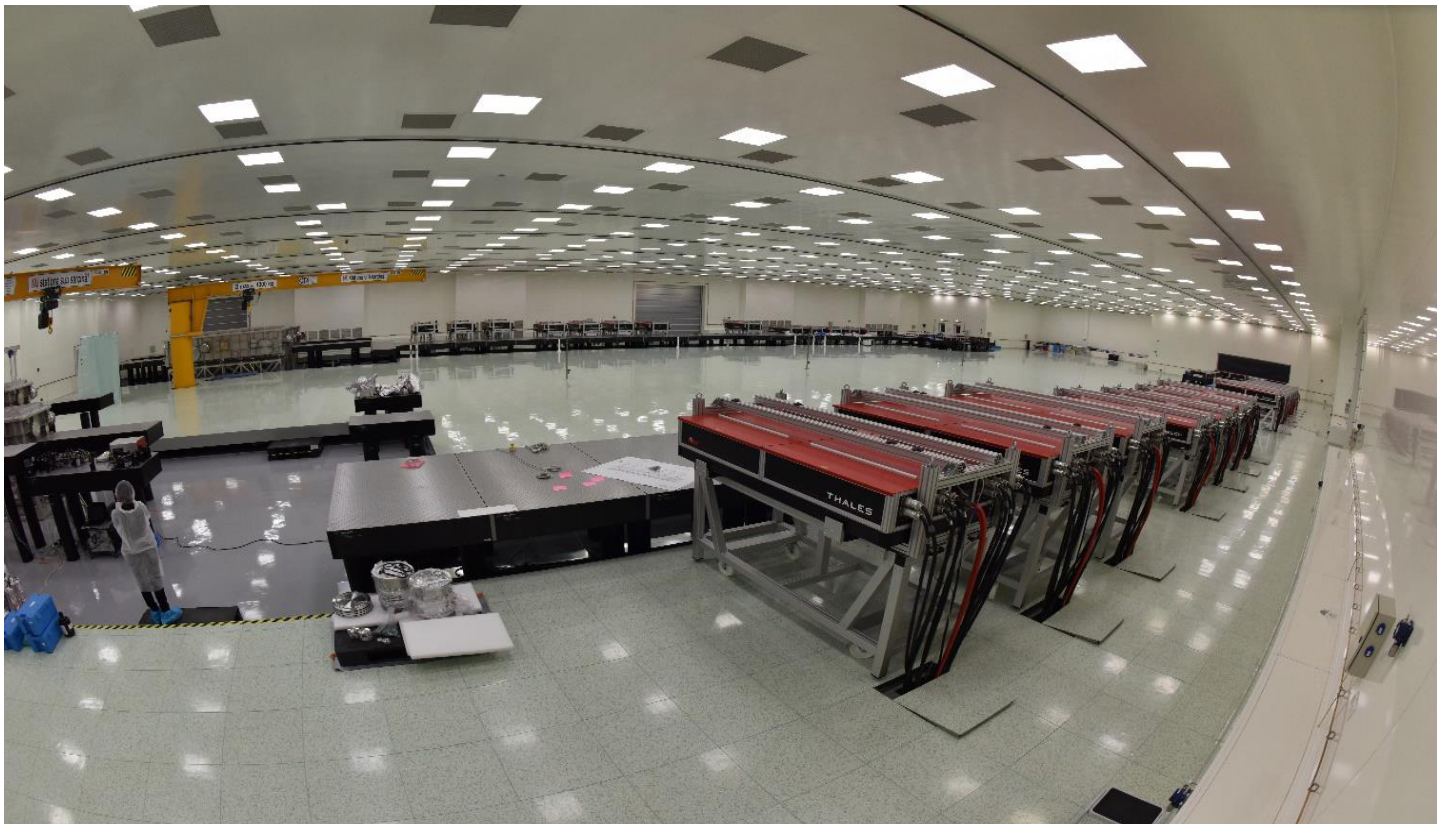
Buildings (2013-2016): 33000sqm, complex & unique, based on R&D

ELI–NP High Power Laser System

Public procurement Supply Contract (2013 – 2019)

Provider: Consortium Thales France & Thales – Romania

R&D component: unique and new technology - innovative solution – IP



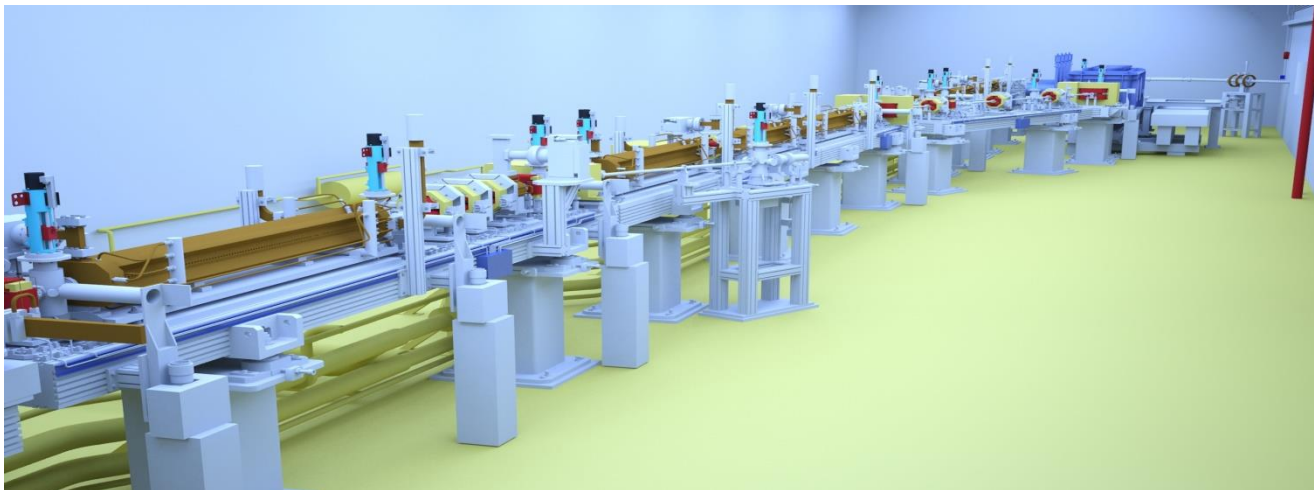
Gamma Beam System (GBS)

Public procurement Supply Contract (2014 – 2019)

Provider: EuroGammaS Consortium: 8 European countries

7 associates and 10 subcontractors - EU expertise (large EU laboratories and specialised companies) – Italy (Istituto Nazionale di Fisica Nucleare - INFN – leader, Università degli Studi di Roma “La Sapienza”), France (Centre National de la Recherche Scientifique – CNRS), Sweden, Germany, Denmark, UK, Slovenia, Spain

R&D component: unique and new technology - innovative solution – IP



ELI-NP Buildings

- Land area: 10 ha, total built area: 33000 m²

HPLS

GBS

Workshops and Laboratories

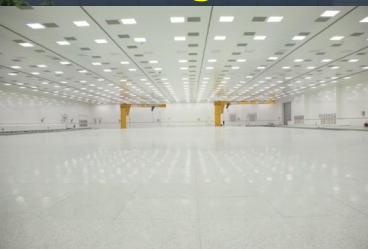
Experiments

Office Building

Guest House

Canteen

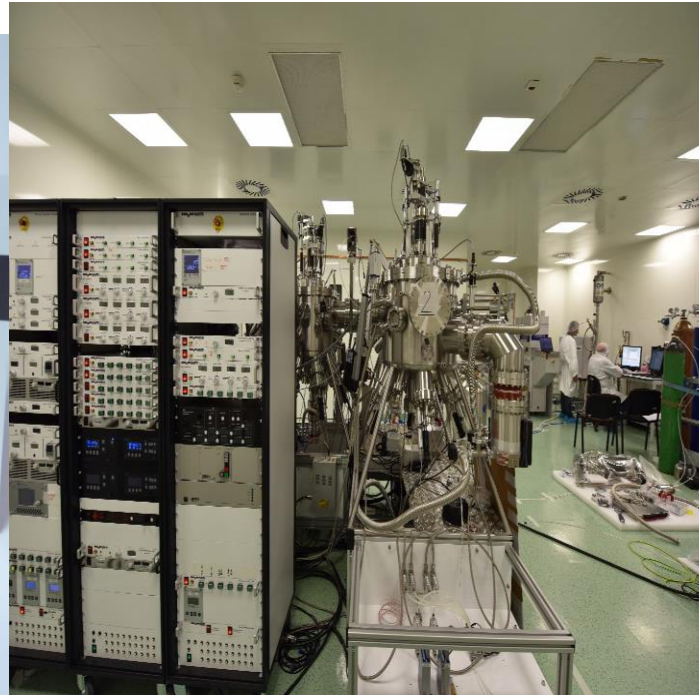
2X10 PW
Lasers



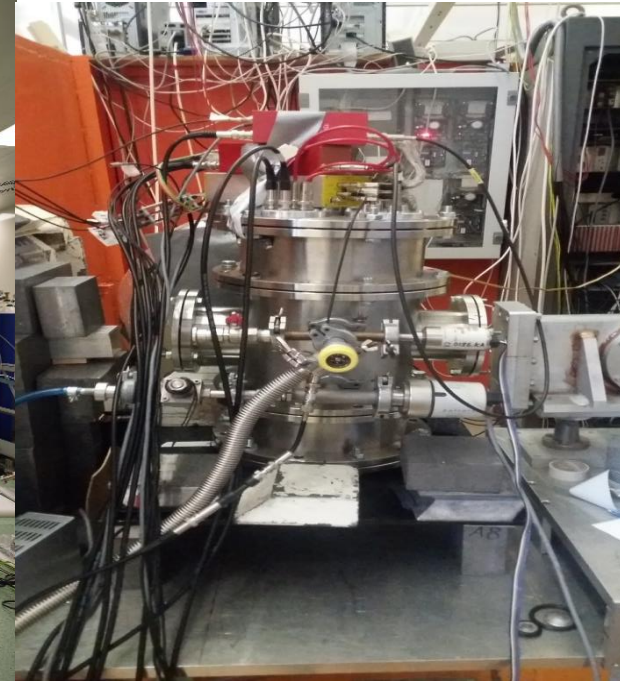
Scientific program, laboratories, experimental set-ups



Experiments –
approved by ISAB
(International Scientific
Advisory Board)



Laboratories – components purchased
within public procurement contracts or
built within collaborative contracts



Experimental set-ups –
components installed and
assembled by ELI-NP
research team

ELI-NP - Legal Milestones

- ☐ January, 2012: Submission of the application to EC
- ☐ July, 2012: Government approval of the project
- ☐ September 2012: EC Decision C(2012)6270 for approval of the project (First financing phase)
- ☐ December 2012: Signing of the Grant Agreement (First financing phase)
- ☐ May 2013: Signing the civil construction contract
- ☐ July 2013: Signing the HPLS Contract
- ☐ March 2014: Signing the GBS Contract
- ☐ February 2016: EC Decision C(2016) 775 for modifying the EC Decision C(2012)6270 (reorganizing the implementation schedule and increasing the value of the project). Second financing phase of the Project
- ☐ June 2016: Memorandum of Romanian Government: approval of Romania's participation to ELI-ERIC as host member state – letter to EC (DG Research)

ELI-NP – legal environment

- **Major Project co-financed by the European Regional Development Fund – Competitiveness Operational Programme – Competitiveness through research, technological development and innovation:**
 - fostering partnership between universities/research & development infrastructures and business environment, generating results of economic interest,
 - stimulating the transfer of the research results and of the scientific knowledge to the economic environment, development of the research-development-innovation personnel through partnerships
 - Intellectual property, Transfer of technology
- **Subunit (no legal personality) of “Horia Hulubei” National Institute for R&D in Physics and Nuclear Engineering**
- **Romanian Pillar of the European ELI Project (the other two complementary pillars: ELI-Beamlines – Czech Republic, ELI-ALPS – Hungary)**

- ❑ 2006 - ELI-listed on the Roadmap of the European Strategic Forum for Research Infrastructures (ESFRI)
 - Potential new RI of pan-European interest
 - Relevant European Partnership or Intergovernmental research organization

- ❑ November 2007 - ELI-Preparatory phase (36 months): collaborative activities aiming to bring the project to the level of legal, organisational, financial and scientific maturity; 13 EU states and 40 research and academic institutions

- ❑ October 1st, 2009 - ELI-PP Steering Committee:
 - Implementation of ELI through the construction of three specialised, coordinated and complementary facilities in Czech Republic (ELI-Beamlines), Hungary (ELI-HU) and Romania (ELI-NP)
 - The ELI facilities shall be placed under the single governance of a European Research Infrastructure Consortium (ERIC): joint operation as a single research infrastructure

ELI-ERIC - legal framework

➤ *European:*

- *Council Regulation (EC) No. 723/2009* on the Community legal framework for a European Research Infrastructure Consortium (ERIC), amended by Council Regulation (EU) No 1261/2013 of 2 December 2013 – scope, membership, statutes, fiscal exemptions
- *ERIC Practical guidelines* - Legal framework for a European Research Infrastructure Consortium - Directorate General for Research and Innovation Research Infrastructures March 2015 - *translating, detailing, advising on ERIC establishment and functioning*
- *Decision of the European Commission on ERIC establishment – statutes, technical and scientific description, government declaration (ERIC international body and organization)*

➤ *National: procedures, opportunity, fiscal*

- *Romanian Fiscal Code (Law no. 227/2015)* – transposing the EC Directive 112/2006 (VAT exemption) and the EC Directive 118/2008 (excise duties exemption)
- *Order no. 5180/2013 of the Ministry of National Education*, for approving the Procedure regarding the participation of Romania and Romanian entities to a European research Infrastructure Consortium (ERIC)

➤ *International*

- Intergovernmental international organization: convention between governments
- International organization in respect with procurement and fiscal behaviour
- Statutes/rules/procedures/bodies – international organization

ELI-ERIC – legal entity

- membership must include at least a Member State and two other countries that are either Member States or associated countries.
- members may be represented by one or more public entities, including regions or private entities with a public service mission.
- established under Community law, governed by Community law, in addition to the law of the State where it has its statutory seat.
- has legal personality and the most extensive legal capacity: owning and disposing of assets and purchasing
- *an international organization within the meaning of Article 15(c) of Directive 2004/18/EC –Article 9 of the Directive 2014/24/EU on public procurement*
- may adopt its own procurement rules respecting the principles of transparency, non-discrimination and competition - the statutes must contain the basic principles covering a series of policies (access, scientific evaluation, dissemination, IP, employment, ***procurement***, data)
- the procurement rules provided for in the statutes may be completed by the implementing rules or other internal documents. It is recommended that the specific procurement rules of an ERIC be made publicly available.

ELI-ERIC - Statutes

- **Tasks and activities:** *contributing to European top-level R&D, to its innovation potential, fostering the integration of national capabilities into a unique, EU-level distributed research Infrastructure, open to researchers worldwide*
- **Objectives:** *exploit the full scientific potential of the ELI-ERIC infrastructures, offer free open access based on merit and on available resources to users , make optimum use of resources and know-how, develop a common strategy and policy for IP, outreach*
- **Dissemination policy:** *promoting scientific publications & scientific-technical knowledge resulting from its activities to the scientific community, the industrial environment and the general public*
- **Intellectual Property Rights Policy:** *specific Rules of Procedure for IP, innovations and know-how generated as a result of ELI-ERIC activities and/or made available by the Members and for confidentiality of the exchange of information and data*
- **Innovation, Technology Transfer and Industrial Relations:** *providing R&D outreach and collaboration with industry, e.g. joint developments; enhancing the economic effect of ELI-ERIC on individual Members by building synergies and commonalities in the knowledge and technology transfer; underlining industry's involvement and opportunities; stimulating and supporting spin-off industries from research.*

ELI-ERIC – Statutes

Purchases and Procurement

- The Procurement Policy and specific rules of procedure shall be established and approved by the General Assembly, based on the principles of transparency, non-discrimination, and competition
- The procurement rules of procedure will take into account the best practices in international research organisations and the need of ensuring that bids fulfill the best technical, financial and delivery requirements, while providing advanced notification to the Members and to industry about required specifications for the realisation of advanced components and systems
- Direct VAT, Excise Duty and other exemptions granted shall apply to purchases made by ELI-ERIC and on behalf of ELI-ERIC by its Members, provided that such purchase is made solely for the non-economic activities of ELI-ERIC
- VAT exemptions shall be limited to purchases exceeding the value of EUR 300 VAT excluded. ELI-ERIC shall ensure the correct and straightforward application of Art. 131 of 2006/112/CE taking into account the indications coming from the VAT Committee according to Art. 398 of the VAT Directive
- In accordance with the Council Directive 2006/112/EC, Member States may adopt rules for the application of the tax exemption.

ELI-NP – Public Procurement legal framework and particularities

ELI-NP – contracting authority

- **Directive 2014/24/EU on public procurement and repealing Directive 2004/18/EC**
Subunit without legal personality of IFIN-HH - body governed by public law
- ***Romanian Law on public procurement no. 98/2016 and Government Decision no. 395/2016 on methodology for law enforcement***
- ***More than 250 mil. Euros in Contracts concluded following public procurement procedures: public tender procedures, competitive negotiations and dialogue, negotiated procedure without publication of a contract notice***
- ***Multiannual contracts: special terms and conditions, R&D (technical design reports), intermediate deliveries, final delivery (commissioning: installing, testing, operating)***
- ***Unique purchases, unique tender documentation, unique contracts***

ELI-NP – Public procurement challenges (I)

- *Technical specifications hard to precisely and detailed define (new, innovative equipment, final technical parameters, commissioning/testing procedures)*
- *Estimated total value - difficult to establish (R&D not possible to be quantified by the contracting authority), a very few possible providers, warranty, risk etc.*
- *Contract form (terms and conditions): equilibrium between the public interest (contracting authority needing to secure as much as possible the contract while the possible providers are aiming to reduce as much as possible the costs, responsibilities and risk – profit is the scope - SANCTIONS VERSUS CONTRACT SECURITY*
- *Innovative, large and complex equipment – unique expertise in the world - the provider is often a associative structure (a large number of public law entities involved – due to the R&D expertise)*
- *Public-public partnership (comparative to the public-privat partnership as rule of the public procurement): participation in tenders, contractual terms and conditions (less sanctions), IP clauses (research public entities are used to be the sole beneficiary of IP rights - solution: sharing the results, the further development rights)*

- *MoUs/Cooperation Agreements/Collaborative contracts = a “must” for ELI-NP*
- *R&D collaboration (MoUs, Protocols, Cooperation Agreements) are usually followed by common programs/projects - contracts between the 2 parties (sharing, using, paying expertise for R&D activities) – public procurement legal framework intervenes*
- *Paying R&D activities (designs, studies, calculations etc.) = Paying services = application of the public procurement legislation*
- *Directive 2014/24/EU on public procurement is not applying to public service contract for research and development services other than those where the benefits accrue exclusively to the contracting authority for its use in the conduct of its own affairs, on condition that the service provided is wholly remunerated by the contracting authority*
- *Romanian Law no. 98/2016 is not applying to the public procurement services contracts whose object consists of R&D services which fulfil cumulatively the following conditions:*
 1. *The results are exclusively for the contracting authority in performing its own activity and*
 2. *The provided service is fully paid by the contracting authority*

European and national legislation:

- Research and innovation - main drivers of future growth
- Public authorities should make the best strategic use of public procurement to spur innovation.
- Buying innovative products, works and services plays a key role in improving the efficiency and quality of public services while addressing major societal challenges.
- Where a need for the development of an innovative product or service or innovative works and the subsequent purchase of the resulting supplies, services or works cannot be met by solutions already available on the market, contracting authorities should have access to a specific procurement procedure

Partnership for innovation – new procedure

- aims at the development of an innovative product, service or works and the subsequent purchase of the resulting supplies, services or works, provided that they correspond to the performance levels and maximum costs agreed between the contracting authorities and the participants.
- Based on the procedural rules that apply to the competitive procedure with negotiation
- Contracts should be awarded on the sole basis of the best price-quality ratio

Partnership for innovation:

- praiseworthy, still not really adapted to the research field needs*
- not a real partnership (procedural and time constraints are applying)*
- in fact it is a negotiation procedure*
- competent authorities are not prepared to support its practice*
- it should cover the cooperation between the world-wide research institutions – public procurement procedures are not attractive and do not offer valid solutions*

Research needs:

- flexibility in formalities, time, procedures while fully complying with principles of transparency, competition, equal treatment*
- proper mechanisms for establishing research partnerships*
- proper mechanisms for establishing research – industry cooperation*
- collaboration between research and public procurement authorities*

Procedures do not really meet the needs and the dynamic of the research:

- long time spent on excessive formalities*
- lack of proper and sufficient human expertise: hard to find high competency*
- a lot of questions/particular situations arising during the procedures - answers hard to get*
- unpredictability of the duration/finalization of the procedures/concluding the contracts with impact on reaching the scientific objectives in due time for being on top*

Contracts forms - important issue

Clear and comprehensive instructions from the competent authorities - an important support, considering the level of detail in the European and national legislation

Detailed laws = Detailed norms

Building complex research infrastructures under the public procurement law is a huge challenge - despite the time margins allocated for public procurement process, the schedule will be always impacted by unforeseeable public procurement events

Research field should benefit of special regulation in regard with the public procurement

- ***ELI-NP Industrial Forum***
 - *framework of dialogue between research and industry*
 - *promotion of contractual research, technology transfer, innovation, etc.*
 - *forming a cluster of high-tech companies in Măgurele*
- ***“Măgurele High Tech Cluster”***
 - *89 members (including TownHall and County Council)*
 - *advanced research – knowledge – new technology – technology transfer*
- ***“Măgurele Science Park” – Feasibility Study***
 - *hub for R&D activities and high-tech companies*
- ***“Laser Valley – Land of Lights”***
 - *project to develop a smart regional development: science, education, technology, social*

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(ELI-NP) – Phase II

