

# JASPERS Networking Platform

## Workshop: ELI pillars – status and way forward

### Role of National authorities: Romania

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Brussels, 11-12 September 2017

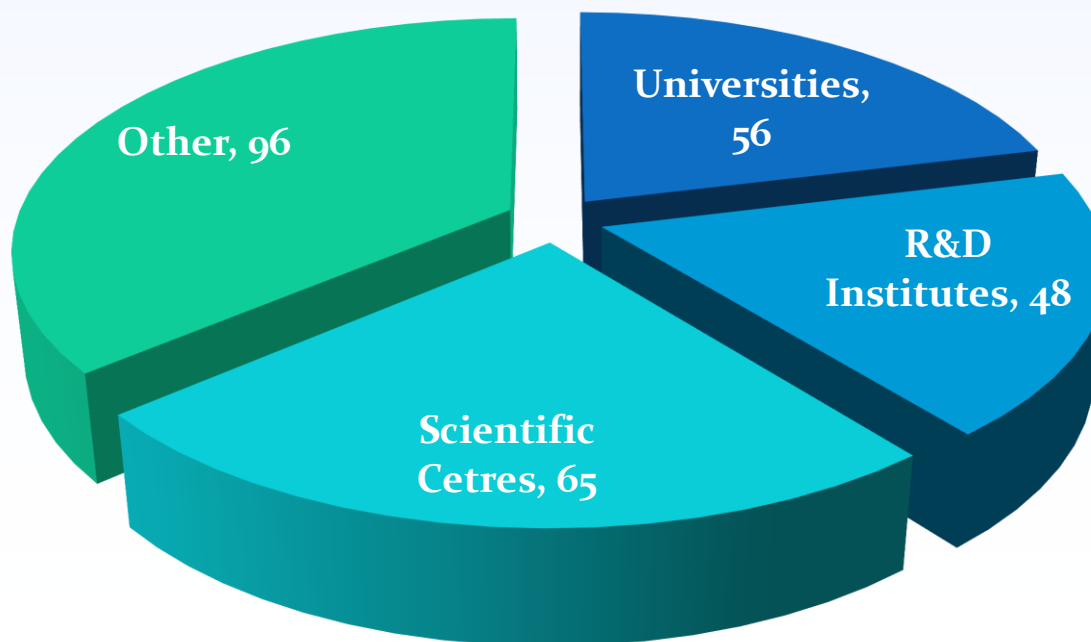
## Overview

- ❖ R&D policy is supported by the **National RDI Strategy** as well as the **Governing Programme**
- ❖ RDI public policy cycle 2007-2013 ended and was subjected to critical assessment
- ❖ The National RDI Strategy 2014-2020 based on SMART specialization was elaborated and approved
- ❖ Competitive funding is the main form of public funding for RDI in Romania
- ❖ The most important financial instruments for RDI are:
  - the National RDI Plan and
  - the structural funds programmes (mainly OP Competitiveness)
- ❖ **Ministry of Research and Innovation (MRI)**, is main body responsible for research and innovation policies and funding, having also the role of coordinator of the national R&D institutes
- ❖ Romanian Academy is also funding authority for the Academy R&D institutes and centers

# R&D SYSTEM

The Romanian research system comprises 1300 organizations:

- About 1000 private companies performing R&D
- 265 public R&D organizations:
  - 56 public certified universities
  - 48 national R&D institutes
  - 65 research institutes/centres of the Romanian Academy
  - 96 other public research institutes and centres



## ***Smart Specialization Strategy***

- ❖ National RDI Strategy 2014-2020 approved in Dec 2014
- ❖ The strategy is the result of a complex exercise of consultations and public debate
- ❖ *Vision: economic competitiveness is based on an innovation ecosystem where research supports progress on global value-added levels*
- ❖ 4 smart specialization areas, 3 national priorities and basic research
- ❖ Romania set a GERD target of 2% of GDP until 2020, of which 1% of GDP shall be public expenditure (state budget and structural funds) and the other 1% private expenditure

## Thematic priorities of the National RDI Strategy

### ❖ Smart specialization areas

Bio-economy

Information and Communication Technology, Space and Security

Energy, Environment and Climate Changes

Eco-Nano-Technologies and Advanced Materials

### ❖ National priorities

Health

Heritage and cultural identity

New and emerging technologies

### ❖ Basic research

## Health (national priority)

**Health and Pharmaceuticals**

Tourism and eco-tourism

Food and Beverage  
Processing

Creative Industries

## Eco- and nanotechnologies and advanced materials

**Bio-economy (agriculture, forestry, fishery and aquaculture), bio-pharmaceuticals and biotechnologies**

Vehicle and Components  
Industry

Creative Industries

Textiles and Leather  
Wood and Furniture

Food and Beverage  
Processing

Health and Pharmaceuticals

## Energy, Environment, Climate Change

**Energy and environmental management**

Bio-economy (agriculture, forestry, fishery and aquaculture), bio-pharmaceuticals and biotechnologies

Tourism and eco-tourism

## Bio-economy

**Bio-economy (agriculture, forestry, fishery and aquaculture), bio-pharmaceuticals and biotechnologies**

Tourism and eco-tourism

Food and Beverage  
Processing

## IT&C

**Information Technology and Communication**

Vehicle and Components  
Industry

Creative Industries

Energy and environmental  
management

# Main objectives for the 2014-2020 period

The Strategy vision sets out a set of principles for action along three main pillars:

- ❑ *business firms become key actors in innovation* (supported by fiscal incentives, IP regime, interfaces with the public sector);
- ❑ *the RDI sector is a space of opportunity for the talented* (supported by international openness, access to infrastructures, education for creativity)
- ❑ *breakthroughs in priority domains* (supported by long term programmes, international strategic partnerships, translational research, rewards for excellence).

# Main objectives for the 2014-2020 period

## Implementation of National RDI Strategy 2014-2020

National RDI  
Plan

OP  
Competitiveness  
PA1 RDI

Regional OP  
PA1 -TT

OP Human  
Capital  
PA Education  
and training

OP Rural  
Development  
Investment  
in agriculture  
and rural  
development

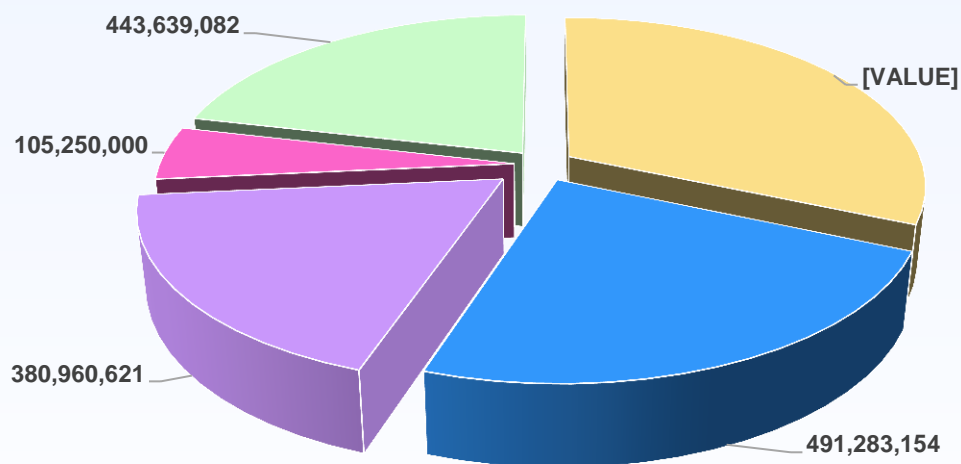
Sectoral  
Plans  
of ministries

Romanian  
Academy  
Programs

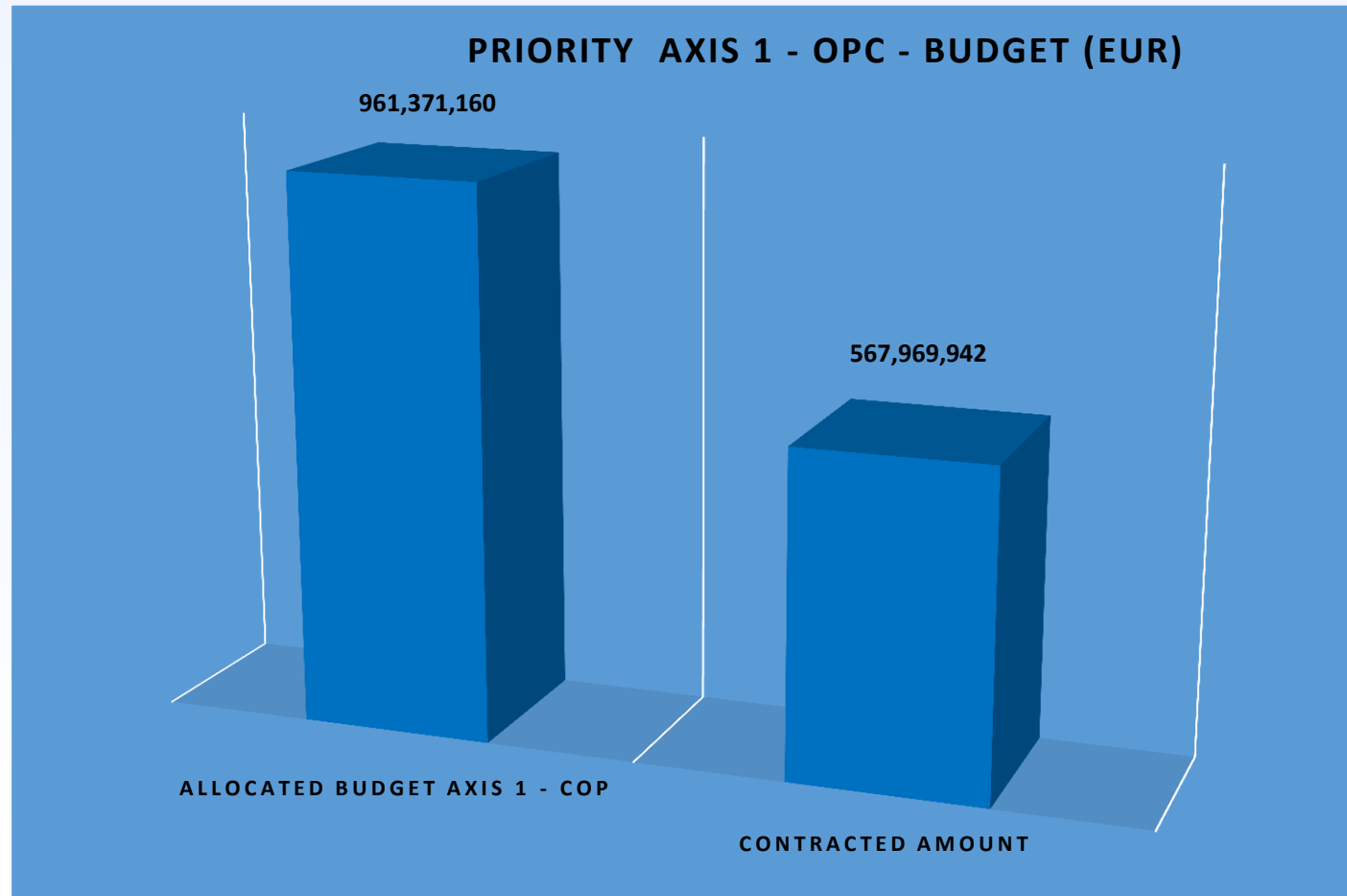


## National R&D Plan Budget (lei)

Total – 3,073,491,094 lei



- 1. Development of national system of RDI
- 2. Increasing Romanian Economic Competitiveness for RDI
- 3. European cooperation and international
- 4. Fundamental and frontier research
- 5. Research in the strategic fields



# OP Competitiveness-Priority Action 1 RDI Actions

OP Competitiveness-Priority Action 1 RDI Actions	Type of projects	Current status
1.1.1 Large R&D Infrastructure	<ol style="list-style-type: none"> <li>1. R&amp;D Investments in public institutions</li> <li>2. R&amp;D Investments in enterprises</li> <li>3. Innovation clusters</li> </ol>	<ol style="list-style-type: none"> <li>1. New call in February 2018</li> <li>2. Closed</li> <li>3. New call in February 2018</li> </ol>
1.1.2 The development of R&D networks of centres nationally coordinated and linked to related European and International networks and ensuring researchers to scientific European and International publications	<ol style="list-style-type: none"> <li>1. CLOUD Databases</li> <li>2. RoEduNet</li> <li>3. Electronic access to scientific publications</li> </ol>	<ol style="list-style-type: none"> <li>1. New call in October 2017</li> <li>2. New call in October 2017</li> <li>3. Closed</li> </ol>
1.1.3 Creating synergies with HORIZON 2020 and other international R&D programs	ERA Chairs, Teaming, JTI, KIC, etc... Support centres	Open call
1.1.4 Attracting high skilled personnel from abroad to consolidate R&D capacity	R&D projects led by specialists from abroad	1. Closed call, Projects in implementation
1.2.1 Stimulating the demand for innovation in enterprises through R&D projects carried out by single enterprises or by partnership between enterprises, R&D institutes and universities	<ol style="list-style-type: none"> <li>1. Technological Innovative enterprises</li> <li>2. R&amp;D projects for start-up and spin-off</li> <li>3. RDI projects for young innovative enterprises</li> </ol>	<ol style="list-style-type: none"> <li>1. New call in September 2017</li> <li>2. Open call until budget will be reach</li> <li>3. Closed call, Projects in implementation</li> </ol>
1.2.2 Loans, guarantees and risk capital measures for innovative SMEs and research organisations that meet market demands	Risk capital measures for innovative SMEs loans and guarantees	- MOU was signed with Funds of Funds
Action 1.2.3: Knowledge Transfer Partnerships	Knowledge Transfer Partnerships	New call open in April 2018

## Major projects - Priority Axis 1 of OP Competitiveness

- The Extreme Light Infrastructure – Nuclear Physics (ELI-NP) - phase 2
- The International center for advanced studies of rivers-deltas-sea systems ("Danubius") – Romanian contribution to the EU Strategy for the Danube Region in RDI sector

## Role of ELI - NP

- ❖ ELI is large scale research infrastructure with the role of extraordinary efficient catalyst for connecting research communities within both the national and international academic sector and with industry.
- ❖ In the first place ELI-NP should push to a high level the excellence and attractiveness of the research environment of Romania making it internationally competitive.
- ❖ In order to stimulate the interaction between ELI-NP and industry the Romanian Government and local authorities of Bucharest-Magurele area will facilitate the development of a technological area, where science generates solutions to economic and social needs and contributes to the creation of new jobs and prosperity.

# Role of ELI - NP

## Magurele High-Tech Cluster

- ❖ ELI-NP Industrial Forum was established in April 2012
- ❖ In June 2013 the Magurele High-Tech Cluster was established as an association of over 50 business and research entities
- ❖ An innovation cluster is being developed in the Magurele area with support from the SOP Increase of Economic Competitiveness

## Magurele Science Park

- ❖ Science and technology park and business incubator that will trigger the development of innovative SMEs via logistic support and fiscal incentives.
- ❖ The initiative belongs to the R&D institutes of Magurele, the Magurele High-Tech Cluster and the local, regional and central authorities

- ❖ The Ministry of Research and Innovation is Intermediate Body (IB) and the Ministry of European Funds is Managing Authority (MA).
- ❖ Role of IB: to monitor and provide support in the implementation of the project and to verify all expenses claimed for reimbursement
- ❖ Role of MA: to check the quality of IB activity and to pay claims for reimbursement approved by IB
- ❖ The Certifying Authority is responsible for certifying payments to EC

- ❖ How IB proceeds:
  - Ordinary monitoring of progress is done quarterly and there are also planned on-the-site monitoring visits.
  - Ad hoc visits and sessions with the beneficiary, entrepreneur, designer, engineer are done whenever appropriate
  - There is also an independent monitoring supported by Jaspers
  - Both, ordinary reporting of beneficiary to IB and ordinary reimbursement claims are done quarterly, but IB approves even extraordinary claims in order to streamline the verifications
  - Copy of expenditure supporting documents are checked on the desk and 3-4 times a year on-the-spot verifications of the original documents and technical aspects are organized together with external experts



# Magurele High Tech Cluster ROMANIA

***MHTC or How to develop Excellency in cluster in a community where Excellency is the Rule?***

## MAGURELE HIGH TECH CLUSTER

89 entities

N	TYPE
18	RD&I
5	Universities
54	SMEs
4	Local authorities
7	NGOs
1	Hospital

### Areas of activity

#### 1. Advanced Research:

- Nuclear Physics
- Lasers and plasma
- Materials Physics
- Earth Physic

#### 2. Optoelectronics

#### 3. Methods and nuclear technologies for health and environment

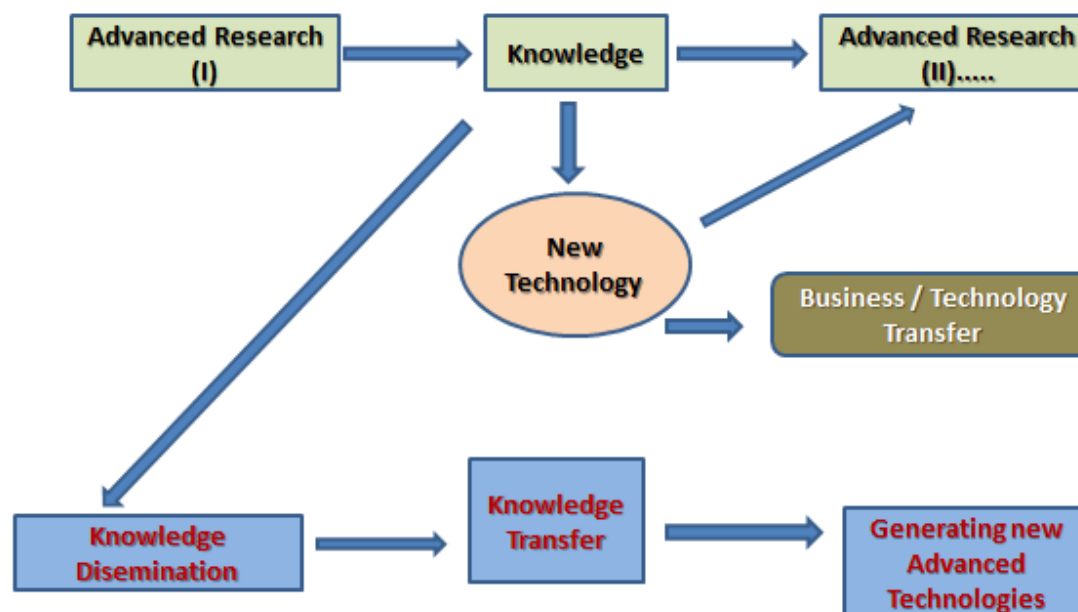
#### 4. Preserving cultural heritage through nuclear technologies and lasers

#### 5. Information and Communication Technologies, Energy, Security

#### 6. Technologies for agriculture

#### 7. Training & educational products & science promotion

## The Model for Knowledge and Technology Transfer in Advanced Research



## What is specific about MHTC?

- ✓ It is a Science driven Cluster
- ✓ It is set up around ELI – NP Project
- ✓ It is a bottom up initiative
- ✓ Around 30% of the Romanian research is done on Magurele Campus
- ✓ All SMSs have to develop research activities to become member of the cluster

# MHTC - An engine for the area

## Advanced Science and Innovative Business

- Magurele High Tech Cluster
- Incubator
- Scientific Park
- Laser Valley – Land of Lights (Bucharest – Magurele – Giurgiu – Ruse)

## National & Local Administration

- Ilfov County
- City of Magurele
- Municipality of Bucharest
- Giurgiu County
- Ministry for Research and Innovation

- 1. Magurele High Tech Cluster - project implemented under Sectoral Operational Programme “Increase of Economic Competitiveness” 2007 – 2013**
- 2. Risk Management for Large Scale Infrastructures in the Romanian Bulgarian cross border area - project in implementation under INTERREG V-A - Romania - Bulgaria Programme 2014 – 2020**
- 3. RI2Integrate - Embeddedness of high quality research infrastructures in the Danube Region**

- **Full political support for the implementation and for all further development of ELI-NP;**
- **Romania fully committed for establishing ELI-ERIC;**
- **Romania ready to host ELI-ERIC;**
- **Dedicated scientific program to broaden the national community for ELI-NP.**



For info or further questions on this seminar and the activities of the JASPERS Networking Platform, please contact:

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