



MINISTERUL EDUCAȚIEI NAȚIONALE
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RESEARCH INFRASTRUCTURES

- Recent developments, relevant topics -



RESEARCH INFRASTRUCTURES

- Definition and aims
- Case studies for:
 - On-line platforms (RO and SI)
 - Audit of RIs (HR)
 - Guidelines for access (IE)
 - 2016 ESFRI Roadmap / National Roadmaps under preparation (RO)
 - Assessment exercise (LT)
- Impact issues



Research Infrastructure – RI

- definition and concept-

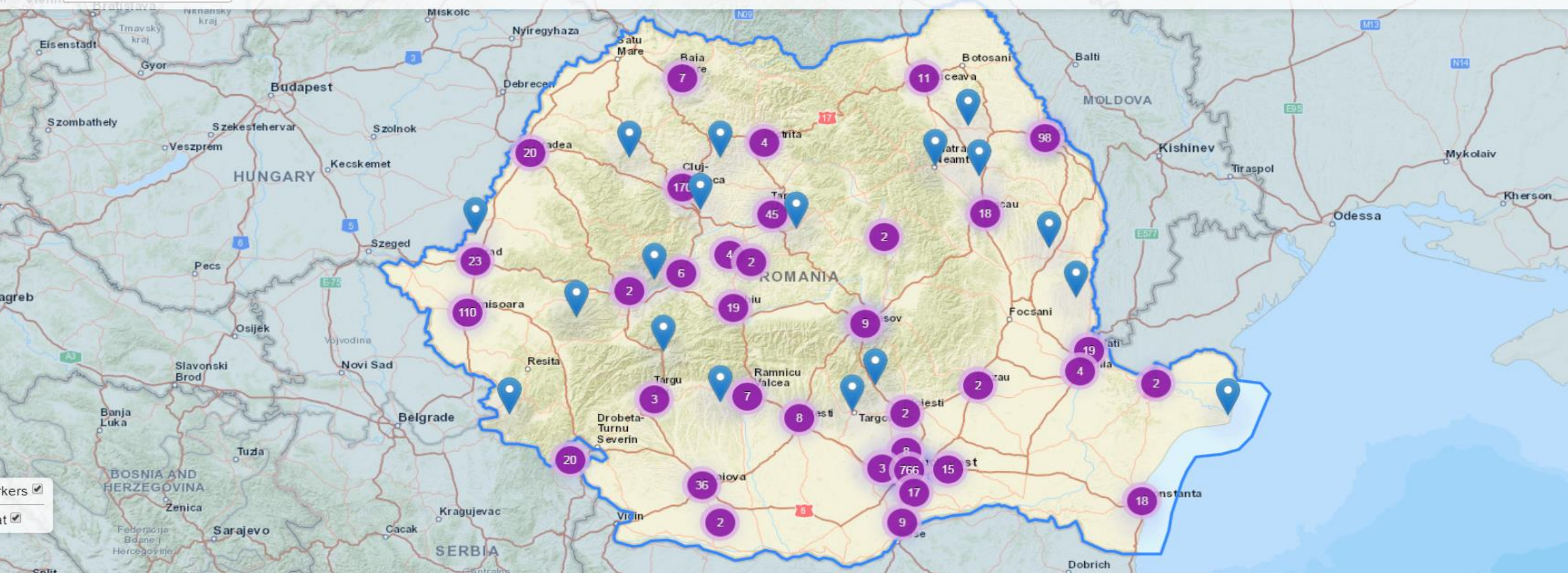
- No single definition
- EC terminology: RIs refer to “*facilities, resources and related services used by scientific community to conduct top-level research in their respective fields, ranging from social sciences to astronomy, genomics to nanotechnologies*”
- In a broader sense, RIs can encompass a wide variety of physical items of research equipment, including :
 - individual collections of such equipment located in one single host or distributed across a different number of host institutions
 - e-infrastructures and scientific collections, such as bio-banks, repositories, data collections



Research Infrastructure – RI - the approach at the national level -

- To set up a **register of all existing ‘capital’ equipment** (i.e. in 2013, HR carried out an **audit of research equipment**, all public universities and PROs invited to supply info on their capital equipment of more than 130k euro)
- To **publish at a single on-line platform** (like SICRIS in SI, ERRIS in RO etc.)
- To **make it publicly available under access guidelines** – see 2016 European Charter for Access to RIs - Principles and Guidelines for access and related services (i.e. IE - National Principles for Access to RIs)
- To encourage PROs and HEIs to map and publish their research potential (equipment and facilities) and encourage SMEs to make use of existing facilities - **RIs are the core of the knowledge triangle !**

Infrastructure name: County: City: Domain: Equipment name:





Results for all infrastructures

Search term(s) found in:

Infrastructures(1261)

Services(6992)

Equipment(18635)

[Click here to SEARCH using the INFRASTRUCTURES MAP \(new\)](#)

Research Infrastructure in Applied Science - INCESA

University of Craiova

INFRASTRUCTURE (1)

SERVICE (12)

EQUIPMENT (176)

📍 CRAIOVA 🗨️ 0 REVIEWS ⚙️ MODIFIED IN 20/01/2016

Research Department for Condensed Matter Physics and Advanced Materials

National Institute of Materials Physics

INFRASTRUCTURE (1)

SERVICE (57)

EQUIPMENT (106)

📍 MAGURELE 🗨️ 0 REVIEWS ⚙️ MODIFIED IN 01/04/2016

Facility for research/development and testing of explosive materials, flammable/toxic substances, explosion-proof equipment and training of intervention staff for toxic/flammable atmospheres - PCDIEx

NATIONAL INSTITUTE FOR RESEARCH AND DEVELOPMENT IN MINE SAFETY AND PROTECTION TO EXPLOSION - INSEMEX PETROSANI

INFRASTRUCTURE (1)

SERVICE (15)

EQUIPMENT (140)

📍 PETROSANI 🗨️ 0 REVIEWS ⚙️ MODIFIED IN 02/02/2016

**SEARCH**
basic, advanced ...**SERVICES**
bibliographic indexes ...**LOGIN**
data entry ...**NOTIFICATIONS**
news ...**SICRIS**
basic information ...**SICRIS / Public Access****FIND**

SICRIS - Slovenian Current
Research Information
System

RESEARCHERS

14287

ORGANISATIONS

903

RESEARCH GROUPS

1518

ACTIVE PROJECTS

407

ACTIVE PROGRAMMES

335

30.09.2016

Announcement of installation of Bibliographies V5.6 software and updates of the document Typology of Documents/Works for Bibliography Management in COBISS and of the document on additional guidelines for cataloguing bibliographic units to be considered when evaluating research performance

**Slovene**



Research Infrastructure – RI

-IE case study: National Principles for Access to RIs-

- National guidelines adopted recently (www.heai.ie) to govern the access to items of RIs hosted within publically funded institutions
- *“proper access to RIs requires that there be in place a professional and customer-oriented support services”, including:*
 1. Open and transparent access policies
 2. Auditable access cost basis
 3. Proper record keeping including records requests including where relevant, decisions and reasons in the event of a refusal, usage data etc.
 4. Proper service and maintenance contracts in place, where relevant
 5. Support staff who can operate the RI and assist in the training of postgraduate students and other researchers
 6. A large item of Research Equipment database is over 100k euro



National Roadmaps for RIs

- published or last updated -

- Under preparation: BE, CY, RO, IT, (TK)
- 2016: FR
- 2015: CZ, DK, (CH), (MN)
- 2014: AT, HR, EE, FI, EL, PL, PT, (NO)
- 2013: DE, NL, ES
- 2012: HU, UK
- 2011: LT, SI, SE
- 2010: BG

Source: <http://ec.europa.eu/research/infrastructures>



ROMANIA in 15 European RIs **- coordinator in 2 of them: Danubius-RI and ELI -** **(ESFRI Roadmap – published in March 2016)**

New ESFRI projects (7/21)

- **Environment (3/5):** ACTRIS, **DANUBIUS-RI**, EPOS
- **Energy (1/4):** MYRRHA
- **Health & Food (3/8):** EU-OPENSREEN, MIRRI
- **Physical Sciences & Engineering (1/3):** KM3NeT 2.0

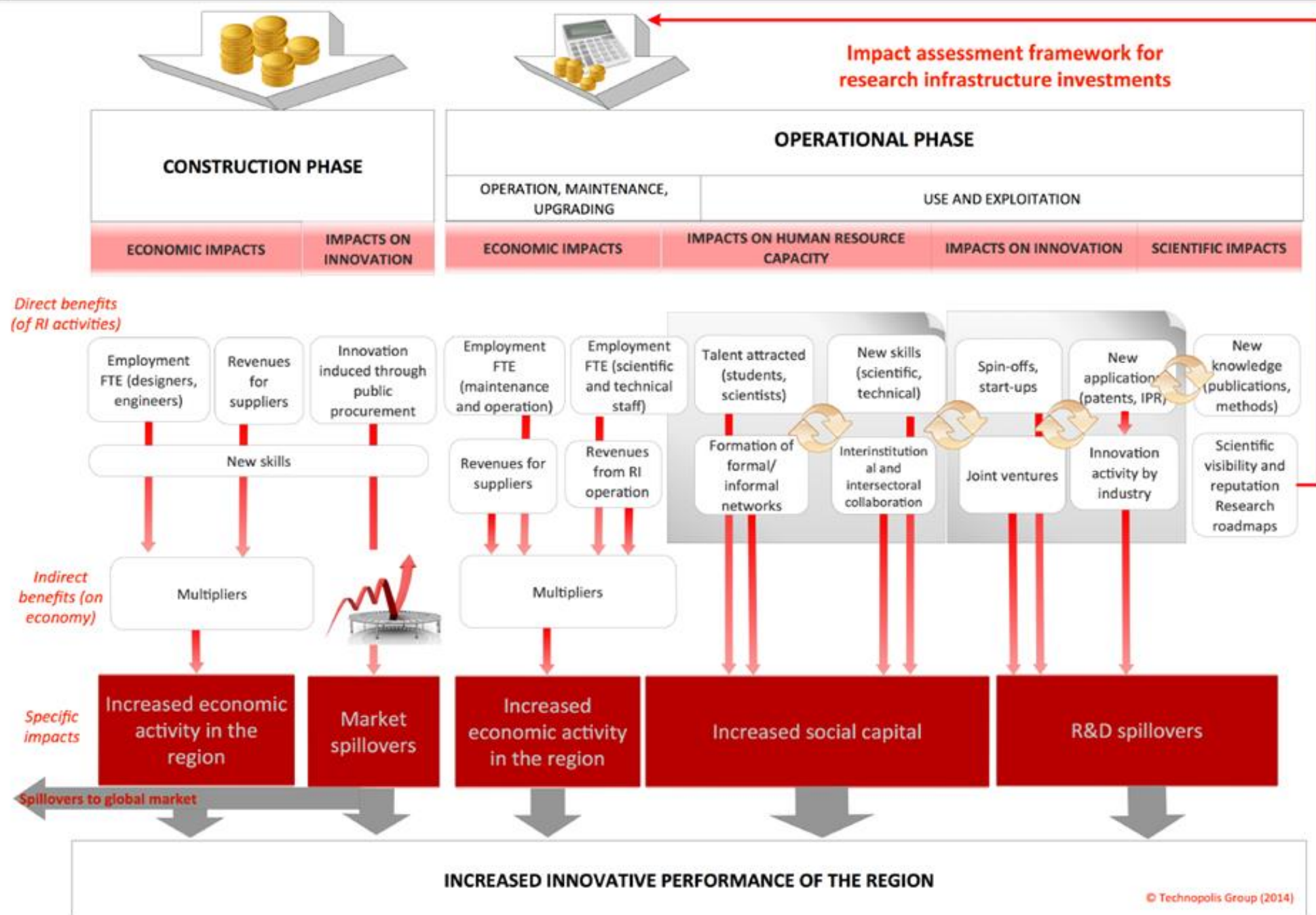
ESFRI landmarks (8/29)

- **Environment (2/5):** EMSO, LifeWatch,
- **Health & Food (1/6):** ECRIN ERIC
- **Physical Sciences & Engineering (4/11):** **ELI**, FAIR, HL-LHC, SPIRAL2
- **E-Research Infrastructures (1/1):** PRACE



Key questions for the assessment of RIs (i.e. LT exercise)

1. Does the RI provide resources for high level of research comparable on international area?
2. How the RI strengthens international competitiveness of the country in a relevant field(s) of research?
3. Does the RI correspond to what can be defined as “RI of broad national interest”?
4. Does the research performance of the applicants justifies further development of the RI?
5. Is the RI technically, financially or organizationally feasible?
6. Are the human resources adequate to ensure high quality research and efficient use of the RI?
7. Does the RI contribute to achieving RIS3 or other national R&I goals?
8. Is the RI organized in the way to be able to provide OA and/or services for scientific community of the country and international researchers?
9. Is the expected socio-economic impact realistic?
10. Will the opportunities for international cooperation be strengthened?
11. Is the RI compatible with the ESFRI policy? Does the involvement in ESFRI is realistic?





Some recent documents published on RI topics

- March 2016 – EC Strategy Report on RIs (ESFRI Roadmap 2016)
- 2016 - European Charter for Access to RIs (DG-RTD B4)
- 2008 – 2016: National Roadmaps on RIs
- June 2016 – National ERA Action Plans: Chapters on the Priority 2b
- March 2016: Mosta (Lithuania) - Final report on RI assessment
- 2015 - 2016: PSF Peer review reports of R&I systems: Bulgaria (2015), Moldavia (Apr 2016), Hungary (Sep 2016) etc.
- 2015 – Technopolis Group: Guide to impact assessment of RIs



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Thank you for your attention