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IE CERS HAS

Ex-ante evaluation, monitoring, and socio-economic impact assessment of RIs in the Danube macro region:
Current practices and proposed methods

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Outline

Some major RI policy issues

The ResInfra@DR project

Current RI policy practices in the Danube macro region

An overview on three guidance documents on

- ex-ante evaluation,
- monitoring,
- socio-economic impact assessment of RIs

Policy proposals

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RI policy issues

The importance of RIs

their role in addressing major challenges, and thus the socio-economic consequences of their operation; the financial implications of building and maintaining appropriate RIs; etc.

⇒ systematic, sound, transparent strategic planning is needed

Many RIs are exploited below the socially optimal level ⇒

A shift in emphasis towards better use and management of existing RIs

- funding, interoperability, open access on the basis of merit, meeting educational and training needs
- better co-ordination of RI policies, both at national and EU levels, to achieve more efficient utilisation of resources and skills

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RI policy issues (2)

Knowledge generation ⇒ the role of RIs

- thorough dialogue and understanding between the co-producers and users of knowledge
- different research systems, geared towards
  - ‘pure science’: achieve scientific excellence, prestige
  - business needs: enhance competitiveness
  - societal challenges (‘grand challenges’): improve quality of life

  these rationales are not mutually exclusive
  all three are/ can be present in a given research system
  the main policy question is their ‘weight’

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RI policy issues (3)

Escalating costs of building new RIs and modernising existing ones vs. budget constraints

- international collaboration might be needed
  Danube macro region, the EU, beyond the EU

Building large international RIs

- long lead time, wide-ranging expertise to plan
- appropriate governance structures and rules to facilitate the widest possible use
- budget cycles, financial rules and priorities of the participating countries need to be aligned in the long run
- political negotiation to agree on the location

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Facilitating macro-regional scope and link up to socio-economic actors of Research Infrastructure in the Danube Region - **ResInfra@DR**

www.interreg-danube.eu/resinfra-dr

Duration: January 2017 – June 2019

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ResInfra objectives

Improved knowledge for RI policy-making and implementation

Upgraded strategic intelligence and tools for RI funding decisions

Enhanced regional socio-economic impact of research infrastructure

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Outputs

4+1 Stakeholders dialogue WORKSHOPS in 2017–2018

3 guidance documents on
- Ex ante assessment of RI investment
- Monitoring of existing RIs
- Assessment of socio-economic impacts of RIs

2 sets of recommendations to RI policy-makers and managers

3 trainings for (a) policy-makers and (b) potential reviewers
(in total 100 trained participants)

Reviewers registry: profiles of 200 qualified experts

Strategy for financially sustainable RIs in the Danube region

Pilot action1: Peer learning action (9 existing/to be upgraded RIs)

Pilot action2: Ex-ante assessments/support (3 planned RIs)

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RI policy-setting processes in Central and South-East European countries

Some of the main questions of the ResInfra@DR project

- The tools and methods applied to
  - devise national RI development roadmaps
  - prepare proposals for the ESFRI (European Strategy Forum on Research Infrastructures) Roadmap
- The actors and stakeholders involved in these strategy-setting processes
- The types and extent of international (macro regional) co-operation in investing in and using RIs

The ESFRI Roadmap

hardly any proposal from these countries for devising and revising it

⇒ no need to rely on any strategy-setting tools and processes

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RI policy-setting processes in Central and South-East European countries (2)

National RI development roadmaps

- suggestions on individual RI projects by major universities, other publicly financed R&D performing organisations (influential researchers)
- assessed by various committees

  ⇒ no comprehensive strategic analyses

  ⇒ sparse use of ex-ante evaluation (or other systematic, transparent policy preparation methods)

Exceptions (not an exhaustive list; AT is not covered here)

- new RIs co-financed by the EU: Czech Republic
- the NEKIFUT [Take-off] project in Hungary

Innovation policy evaluation, selected EU countries

Country	Instrument evaluation	Policy-mix evaluation	Socio-econ performance assessment	Expertise
Bulgaria	0	0	0	1
Croatia	0	0	0	1
Czech Republic	0	0	1	1
Hungary	1	0	0	1
Romania	0	0	1	1
Slovakia	0	0	1	0
Slovenia	1	0	1	2

Source: Borrás and Laatsit (2018), Table 2
Note: scale 0 – 2

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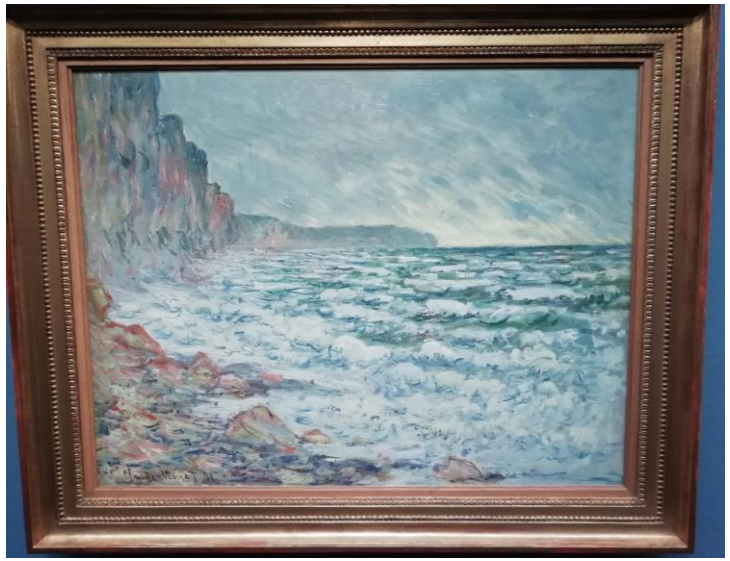
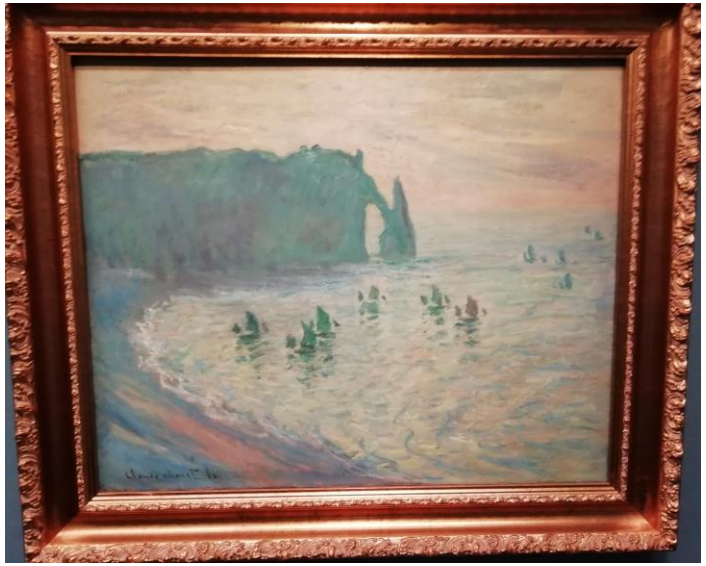
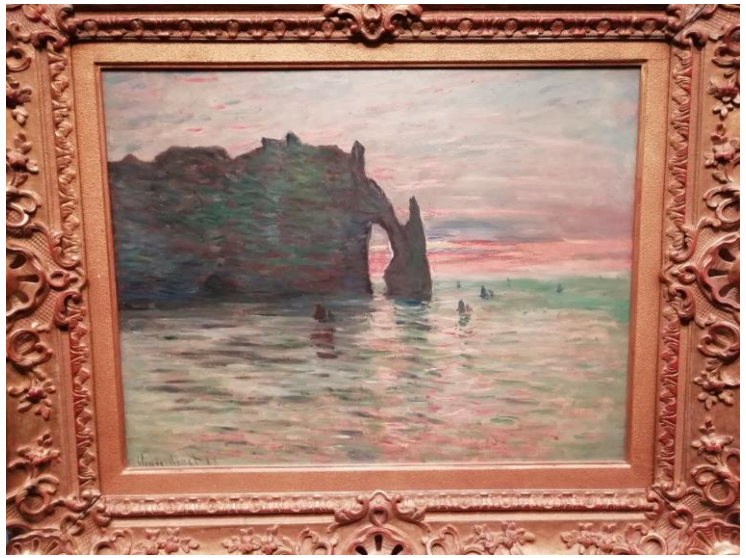
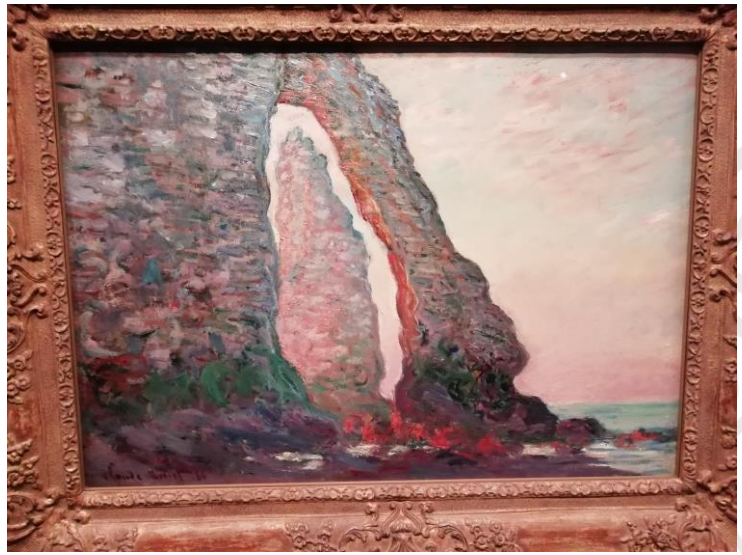
ResInfra guidance documents









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Outline of the ResInfra guidance documents

1 Introduction

- a brief, practically oriented definition of …
- significance, relevance (‘what is in it for me’: RI policy-makers, RI managers)
- RI typology

2 Main methods and indicators of …

- brief descriptions
- pros and cons of methods
- a few examples in boxes

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Outline of the ResInfra guidance documents (2)

3 Organising and managing an ex-ante evaluation/ monitoring/ socio-economic impact assessment
- who initiates: Funding bodies, RIs themselves
- who performs: RI staff vs. external experts; national vs. international experts
- pros and cons of the various approaches, cases to illustrate the differences

4 Concluding remarks
- the main recommendations
- the links between the three documents

Sources

Annex(es)

Preparatory steps for adequate monitoring

Define mission and goals

Before a monitoring system can be designed and implemented, the RI's mission and goals need to be defined and discussed with key stakeholders. It may become necessary to re-evaluate or adapt the goals and mission.

Develop an operational framework

A framework should be developed which explains how a given RI will work, how it will accomplish its objectives and how it will operate within the structure of already existing research organisations and RIs.

Develop the monitoring framework

A monitoring framework describes the process of how RI performance will be tracked, examined and assessed. The reporting obligation to funders and expected output over time will influence the monitoring framework, timing and process. The monitoring framework can be developed using a bottom-up approach, together with experts from the field, staff from the RI or its host organisation and relevant stakeholders, including funders and users from various sectors, both national and foreign.

Collect Baseline data

At the beginning of the monitoring period, data need to be collected to establish a baseline to which future monitoring data can be compared

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Internal versus external monitoring

	Internal	External
Pros	• Better knowledge of the RI and its context (including political aspects) • Access to the RI and its personnel • Reduced cost • Increased availability for meetings/ activities when required • Capacity to collect information in case the RI is reluctant to divulge important information to external experts	• More adequate and specialised skillset and expertise • Could be more open and objective, as external experts have no direct stake in the RI • Capacity to collect information (sometimes people find it easier to open up to strangers than to colleagues)
Cons	• Increased risk of subjectivity • Experts might fear potential negative professional and social consequences and could therefore be less willing to monitor critical data • Lack of monitoring expertise	• Higher costs (fees, potential transport and accommodation costs) • Decreased availability for participation in meetings/ activities or greater difficulty in organising such activities • Reduced understanding of the RI's specific features compared with internal experts • External experts might face similar difficulties in staying objective (e.g. if there is a high degree of participation), or may fear professional and social consequences

A few guiding principles

Define key issues and areas to monitor

Consider stakeholder needs

Decide what information to collect

Decide how to collect information

Decide how to record the information collected

Apply quality control

Adhere to ethical and data protection regulations

Interpret collected data to infer desired information

Obstacles to improve policy practices

Opaque, non-participatory overall decision-making culture

Organisational (in)stability of RI policy-making bodies

- changes in government

Awareness of methods, availability of methodological skills

Policy proposals: Issues for strategic RI planning

Policy orchestration

- STI policies and RI policies (specific features of scientific domains)
- STI policies and other policy domains affecting RTDI activities
- STI policies and policies aimed at promoting socially, economically, and environmentally sustainable development

Use of existing RIs

- multiple governance, organisational and financial models to improve efficiency

Future needs vs. existing RIs

- more efficient exploitation of existing knowledge vs. generation of new knowledge
  - are there better ways to unlock the available repository of knowledge?
  - is there a need to change the way in which knowledge is generated?

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Policy proposals: Issues for strategic RI planning (2)

Future needs vs. existing RIs (cont'd)

- the life cycle of the RIs
  - financial sustainability of existing and new RIs
  - decommissioning of RIs
- international co-operation and competition
  - new models of collaboration (strike a balance between co-operation and competition)
  - co-investment
  - IPR
  - ethical issues

People

- RI development strategies and education policy
  - operate and govern RIs
  - utilise RTDI results
  - life-long learning of researchers
  - mobility of skilled people among sectors and regions ⇒ diffusion and exploitation of knowledge

Policy proposals

RI investment strategy

Modern policy preparatory tools, in particular ex-ante evaluation, monitoring, and socio-economic impact assessment

Implementation of RI policies

Financially sustainable and operational and business model for RIs

Networking among the main RI actors

RI policy issues and the relevance of foresight

Decisions on building new RIs and upgrading existing ones present a complex challenge

A wide range of stakeholders

different, and sometimes even conflicting interests

A lot is at stake

- future scientific capabilities
- consequences on socially, environmentally, and economically sustainable development
- strategic choices
  - significant immediate financial repercussions
  - potentially huge long-term implications

Severe budget constraints

Significantly differing opinions

No evidence in a strict sense

Foresight

can reduce technological, economic or social uncertainties

by identifying multiple futures and various policy options

make better informed decisions

by bringing together different communities of practice with their complementary knowledge and experience

obtain public support by improving transparency

⇒ improve overall efficiency of public spending

Foresight is neither a panacea, nor a decision

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Benefits of foresight on RI

Underpins RI development strategies
if the selected future needs would be better served by modifying the existing RIs or building new ones

Encourages systemic and systematic thinking

Facilitates strategic deliberations on strategic issues

Compels developing multiple models of running and using RIs

Develops shared understanding of the context (where are we now?) and a shared vision (where do we want to go?)

Creates commitment among the participants

Reduces uncertainty

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Thank you for your attention!

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