NCP_WIDE.NET Project: The key factors for impact in strategic research and innovation funding in a view of widening actions. The impact of Widening Success Stories

What do we mean by impact in widening actions and projects?

Prof. Rafael Rodríguez-Clemente.

IDAEA-CSIC. Barcelona. SPAIN. raro@orgc.csic.es

10-11 October 2017, Tallinn, Estonia

- Impact of an action are the consequences foreseen or/and observed of such action. All Projects proposals in Widening must have an impact prospect.
- There as two kind of Impact Assessment:
 - The IA made BEFORE the action is done ("ex-ante")
 - The IA made AFTER the action comparing the expectatives with the results (expost"). Research Councils UK (RCUK) defines research impact as 'the demonstrable contribution that excellent research makes to society and the economy'. This can involve academic impact, economic and societal impact or both.

POLITICAL VISION OF THE ERA

"the ERA defines the European way to excellence in research and is a major driver of EU competitiveness in a globalized world" ("2020 vision for the ERA)

- ► attractive conditions (...) for carrying out research and investing in RD intensive sectors in Europe
- ► business is stimulated to innovate and invest in Europe, in particular in RD
- ► significant support from the cohesion policy (...) to ensure optimum deployment across Europe of S&T capacities
- ► the supply of human resources is S&T is in line with the demand by public and private research players
- research institutions across the ERA have strategic, financial and managerial autonomy
- ► European research institutions provide attractive working conditions for researchers from all parts of the world, both men and women
- ► top-level scientific institutions (and) major research infrastructures in the ERA (...) are jointly funded at EU level when appropriate
- ► a significant share of public funding of research is provided through ERA-wide open competition thus gradually promoting the necessary specialization and concentration of resources into units of excellence (...)
- ► top-level scientific institutions (and) major research infrastructures in the ERA promote excellence in science (...)
- ► the ERA is at the core of all major global networks of S&T knowledge producers, distributors and users
- the European publicly supported research and technology base plays a key-role (...) through world class cutting edge research

UNDERSTANDING EX-ANTE IMPACT ASSESSMENT

- Impact assessment is a key tool to ensure that Commission initiatives and EU legislation are prepared on the basis of transparent, comprehensive and balanced evidence.
- Impact assessment is an aid to political decision making, not a substitute for it.
- While many actors may be involved in an impact assessment, the lead service remains fully responsible for its quality. The Impact Assessment Board provides support and advice, and scrutinizes the quality of all impact assessments.

EUROPEAN COMISSION. IMPACT ASSESSMENT GUIDELINES. 15 January 2009. SEC(2009)

«Ex-ante» impact (of policies or projects)

- Impact assessment is a set of logical steps to be followed when you prepare policy (or projects) proposals.
- It is a process that prepares evidence for political decision-makers (or managers of programs) on the advantages and disadvantages of possible policy (projects proposals) options by assessing their potential impacts.
- The problem (project) definition must include a clear baseline scenario as the basis for comparing policy (problem solvent) options.
- The IA should assess the impacts of policy (results of the projects) options as net changes compared to the 'no policy change' (no project)/baseline

SMART-objectives of "Ex-ante" IA (included in the Project proposal)

- Specific: objectives should be precise and concrete enough not to be open to varying interpretations. They must be understood similarly by all.
- Measurable: objectives should define a desired future state in measurable terms, so that it is possible to verify whether the objective has been achieved or not. Such objectives are either quantified or based on a combination of description and scoring scales.
- Achievable: if objectives and target levels are to influence behavior, those who are responsible for them must be able to achieve them.
- Realistic: objectives and target levels should be ambitious setting an objective that only reflects the current level of achievement is not useful but they should also be realistic so that those responsible see them as meaningful.
- Time-dependent: objectives and target levels remain vague if they are not related to a fixed date or time period.

WHAT ARE THE LIKELY ECONOMIC, SOCIAL AND ENVIRONMENTAL IMPACTS?

- Identify direct and indirect environmental, economic and social impacts and how they occur.
- Identify who is affected by these impacts (including those outside the EU) and in what way.
- Identify whether there are specific impacts that should be examined (fundamental rights, SMEs, consumers, competition, international, national, regional).
- Assess the impacts in qualitative, quantitative and monetary terms or explain in the IA why quantification is not possible or proportionate.
- Consider the risks and uncertainties in the policy choices, including expected compliance patterns.

The analysis of impacts consists of three major steps:

- Step 1: Identification of economic, social and environmental impacts
- Step 2: Qualitative assessment of the more significant impacts
- Step 3: In-depth qualitative and quantitative analysis of the most significant expected impacts

ARRANGEMENTS FOR FUTURE MONITORING AND EVALUATION

- Identify core progress indicators for the key objectives of the possible intervention.
- Provide a broad outline of possible monitoring and evaluation arrangements.
- Ensure that evaluations are designed and timed in a way that the results can be used as input for future impact assessments.

«Ex-post» Impact Assessment (1)

- The basis for all impact assessments should be the defined goals for the program and what the expected impact of the funded research should be. In both basic and applied research – it may be relevant to search for scientific gains but also for societal impact in a broader sense.
- The problem is to know what is the time span to observe impacts...
- Some Widening Projects are specifically designed for providing a basis for policy making in a specific field in such cases the impact must be measured as to which degree knowledge developed in the supported project is taken up and implemented in policy making, or ultimately, to which degree this knowledge has led to solving the problem addressed by the specific policy.
- The political indicators on the ERA should be used, when possible, to assess the impact of the Widening Projects.

ERA in promoting a European knowledge society ('Lisbon-related indicators')

Target indicators

Public investments in knowledge

European integration of research Systems

Strength of the business research base of Europe

Transition towards a knowledge-based economy - structural change

Productivity of the economy

Contribution of research to address grand societal challenges

ERA Headline indicators Key ERA indicators

ERA	research	actors	COO	peration
and	cohesion			

International cooperation in S&T and opening up to the world

Mobility of researchers and research careers

Knowledge transfer between public and private sector

Pan-European research Infrastructures Excellence of the S&T base

Human resource base of the ERA

Knowledge-based innovation

Firm dynamics - structural change

International attractiveness of Europe for Business innovation and investment

Confidence of society in science and the S&T community

Impact of Widening support on Universities. Questions to be addressed

All Widening Calls ask for Impact of the action to be supported!

- 1. How much public funding is just a lump sum and how much is linked to student numbers (with breakdown between undergraduates and postgraduates)? How is research financed? Which is the share of project funding in total public funding of universities?
- 2. Is the quality of university research independently assessed and how much of the funding is tied to the results of this assessment? Concrete suggestions along these lines can be found in Benedetto Lepori's report.
- 3. Which universities have formal IP/technology transfer offices? How many universities have research parks or business incubators?
- 4. What the university procedures for hiring? How are jobs advertised. Does the choice need to confirmed by the relevant ministry?
- 5. Where do the university's graduates go? To the public sector or the private sector? In which country? What kind of jobs do they get, in which sectors? How many graduates get back into academia after working in the business sector?
- 6. What is the profile of academics? What is their gender? Their nationality? Where (country + institution) did they get their highest degrees from?

SOME RELEVANT INDICATORS FOR WIDENING ACTIONS

- (i) publications/impact factors in basic science,
- (ii) patents/socio-economic factors in applied science, and
- (iii) the issue of dissemination of results
 /creation of public awareness (in all sectors),
- (iv) added value when compared to national funding.

PROVISIONS FOR WIDENING IMPACT ASSESSMENT

- 1. Time component: Usually, the projects do not turn out direct results that can be immediately measured in terms of impact. The long term impact can only be seen after a certain period, as we observed in the direct relationship between FP7 RegPot Program beneficiaries and success of Widening proponents.
- 2. Cost component of the IA: Financing of this long-term task has to be considered in the financial provisions of the Widening actions.
- 3. Collecting Impact data: besides the data of the previous slide, other innovation data must be collected such as contracts, participation in regional forums, membership in "clusters", etc.

THANK YOU FOR YOUR ATTENTION!

raro@orgc.csic.es