



SOCIAL LAB HEALTH

**ENRICHING FUNDING MECHANISMS
FOR OPTIMAL IMPACT OF
RESEARCH**

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This pilot action aimed to identify and share good practices for responsible funding. Such good practice would, for instance, include a stronger involvement, within research funding mechanisms, of representatives from different stakeholder groups and from the general population. Such involvement might help widening the impact of research beyond the group of persons concerned with a particular condition or disease.

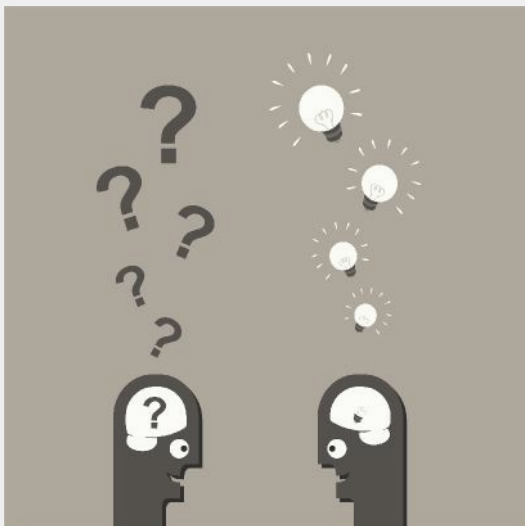
PROBLEM

When funding agencies make decisions about funding of a project,

- a) priorities are not necessarily very needs-based and can be made based on ad-hoc decisions;
- b) proposals are often not consistently evaluated according to RRI principles; and
- c) support and monitoring during project implementation do not necessarily ensure that projects are carried out responsibly.

These potential shortcomings reduce the chances of funding, through the research undertaken, having maximum impact.

In addition, RRI criteria and processes are often included in funding guidelines written in the national language and therefore are not readily transferable to other countries.



ACTIVITIES

To resolve these problems and issues, this pilot action aimed to learn from funders who already have good practices in place and to share this knowledge. The strategy was to first identify good practices regarding how research funding agencies foster research impact for patients and society, both in the evaluation of proposals and the assessment of ongoing projects.

Normatively, the pilot action was inspired by Public Engagement theory. Accordingly, stakeholder engagement in the definition of research priorities and the selection of proposals to be funded; and the ongoing support and monitoring during project implementation, are deemed very important.

An interview guide and a list of potential interview partners from funding agencies were developed and interviews carried out. Further agencies sent written materials that were analysed, and good practices were extracted from these.

The pilot action analysed materials from the following research and innovation funding agencies:

- Flanders Agency for Innovation and Entrepreneurship (VLAIO)
- Austrian Research Promotion Agency (FFG)
- DLR Project Management Agency, Germany (DLR)
- The Netherlands Organisation for Health Research and Development (ZonMw)

LESSONS LEARNT

The following text contains what we consider the most relevant and useful RRI experiences of the involved funding agencies as well as hints for easy implementation elsewhere.

RRI FOCUS AREAS

- **FFG:** Depending on the funding area, the **institution as a whole** is very active in RRI. In the particular area of bottom-up funding of early-stage company projects, some, but not all aspects mentioned in the Commission's definition of RRI are included.
 - **FFG:** Some aspects are tackled in a more general way, e.g. ethics by **fundamental decisions** e.g. not to fund military products or gambling.
 - **VLAIO:** For ethical aspects, e.g. in medical research including patients or in innovation that could lead to products that might be used by the military (dual use), a specific **ethical review committee** has been established that screens funding applications.
 - **VLAIO:** For VLAIO as organization that focusses on enterprises, the **economic added value** is most important. Creating employment is an important benefit for the society as a whole, but also e.g. the reduction of waste.
 - **VLAIO:** The **transfer of knowledge** from research and innovation through collaboration between academics and industry and the use of this knowledge in education is another important aspect.
 - **VLAIO:** To develop concrete solutions for society, the **co-creation of solutions between researchers and other stakeholders** should be considered at the very beginning of a project and throughout its whole lifecycle.
- Economic actors and stakeholders from the broader society should be included to promote the practical viability and implementation of research results and to evaluate the society's costs of new technologies.
- **VLAIO:** RRI should not only focus on science education, but also on the **education of entrepreneurs**.
 - **FFG:** Open Access is difficult in projects that are close to the market and no firm requirements exist. But applicants are encouraged by a bonus system to collaborate with scientific institutes/universities including through **negotiations about publication**.
 - **DLR:** RRI areas that most often have to be **covered by funded projects** include publication of the results under open access; availability of data for future research; and a tangible value of the results e.g. for the development of treatments. In **projects with particular relevance for patient care**, there is also the necessary involvement of patient representatives.
 - **ZonMw:** In the Netherlands, a national programme called **Fostering Responsible Research Practices (FRRP)** exists, which focusses on **research integrity, quality, and social impact**.

IMPLEMENTATION OF RRI

SELECTION OF ISSUES FOR FUNDING

- **VLAIO: Political leadership:** Issues of societal concern are promoted by the government that provides the agency with funding for respective programmes, e.g. with focus on climate-friendly innovation or on the societal aspects of care, ageing society etc

STAKEHOLDER INVOLVEMENT

- **VLAIO: Working groups for stakeholder involvement:** Where applicable, many stakeholders are involved in a funding area, e.g. academics, industry and education in a programme regarding Artificial Intelligence. Their respective aims and guidelines are aligned in working groups.
- **DLR:** In projects with particular relevance for patient care the **involvement of patient representatives in planning, implementation and exploitation** of the study is required as a precondition for funding.
- **DLR:** In specific projects, the involvement of **area-specific stakeholders** is expected, for example collaboration with the International Rare Diseases Research Consortium in projects regarding rare diseases. Patient participants can, furthermore, receive a **compensation for wages** that they lost while taking part in projects.
- **DLR:** In certain projects the **involvement of clinical practitioners** in the research process is funded.

EVALUATION OF PROPOSALS

- **VLAIO:** Applications for funding have to elaborate on such aspects and are evaluated according to a **screening grid that comprises all relevant aspects** including many RRI issues. The evaluation is implemented using an IT-tool.
- **FFG:** A guideline for basic programmes contains **criteria for funding**, e.g. ecology, gender, social aspects or relevance for the region; and applicants have to answer specific questions. It is the applicants' choice how to respond to the questions or requirements. For example, stakeholder/user integration is not always required in the application phase but can be a criterion in the impact evaluation. The answers are compiled in a schematic report and build the basis for the assessment and funding decision by an expert committee.

- **FFG:** Many RRI aspects like ethics are discussed on a project basis.
- **VLAIO:** To increase the efficacy of RRI it is important to follow-up the criteria in ongoing projects to ensure that initial requirements are maintained throughout the whole project.
- **DLR:** Evaluation criteria most often include the publication of the results under open access; availability of data for future research; and a tangible value of the results for health care or for the development of treatments including a plan for implementation. In projects with particular relevance for patient care there is also the involvement of patient representatives.
- **DLR:** Where relevant (e.g. in cancer research) gender and age-specific aspects have to be tackled by the projects.

- **DLR:** Costs for Open Access publication of results are refunded.

- **DLR:** Where relevant, costs for scientific communication and training of young scientists are refunded.

- **ZonMw:** The Dutch government in cooperation with research organizations is funding a five-year national programme called Fostering Responsible Research Practices (FRRP), as an instrument to improve research integrity, quality, and social impact. The programme covers the entire field of science in order to reveal factors that contribute to what is considered 'responsible' such as the peer review system, the use of bibliometrics and the value of Open Access. Its goals are to promote responsible research practices, to prevent questionable research practices and research misconduct, and to enhance the quality of research in general. The programme is accompanied by workshops and for example an "Open Science Boost" award.

- **ZonMw:** Research and research funding organizations from Europe and Northern America founded the Ensuring Value in Research (EViR) Funders' Collaboration and Development Forum in 2017 (<https://sites.google.com/view/evir-funders-forum>). They developed a Consensus Statement and offer Guiding Principles. The aim is to advance the practices of health-related research and research funding, in order to increase its value. The principles are grouped into the following issues:

- o Justifiable research priorities
- o Robust research design, conduct and analysis
- o Regulation and management of research conduct proportionate to risks
- o All information on research methods and findings accessible and all reports are complete and usable

OTHER ASPECTS

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