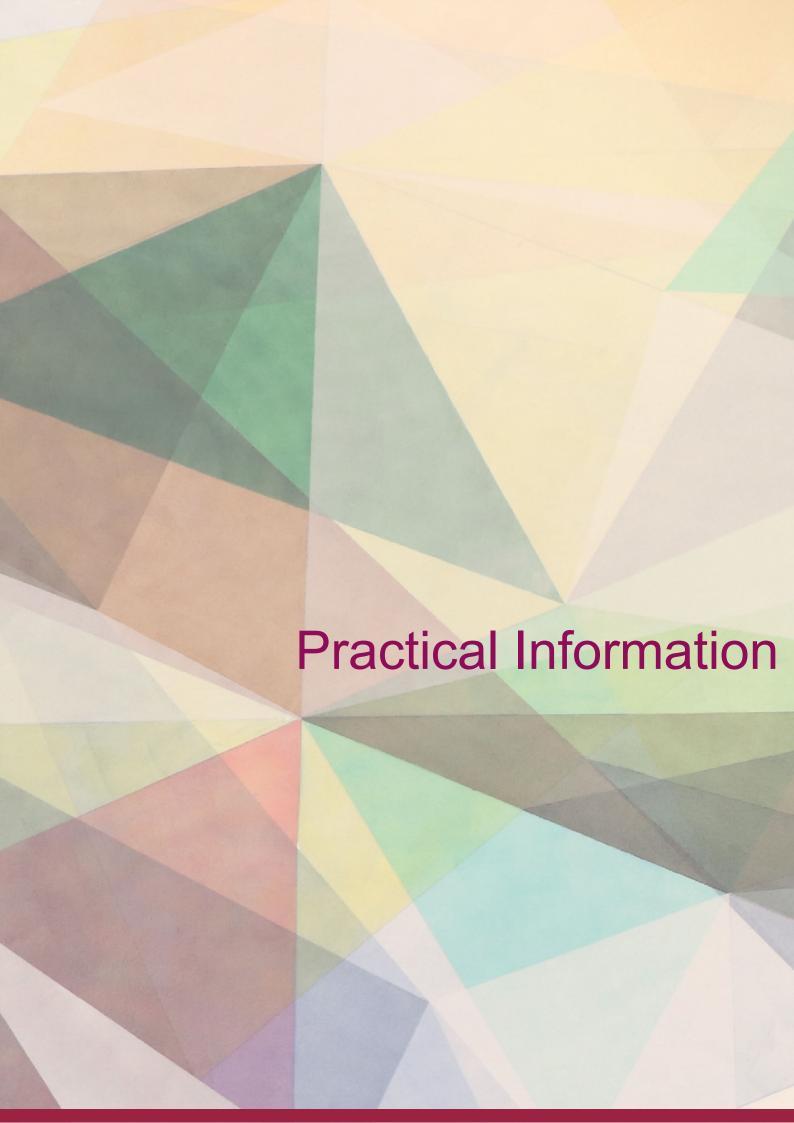


Involve SSH-Research

Practical Information

Background

Selected Literature



Practical information 1

How can SSH-research be systematically considered?

When a new R&I programme is set up, or when such an existing programme is revised, it is the right time to ensure that the programme's objectives can draw on the insights and expertise of SSH-researchers. This is aimed at the politicians and programme managers who define these objectives and provide the budgets for such a programme.

At this point, program managers should already be aware of the specifics of the disciplines, fields, and topics summarized as SSH-research and of the potential they bring to the specific R&I program.

- The diversity of the members should already be taken into account in the composition of accompanying bodies such as advisory boards or the like; in particular, representatives of various disciplines in the humanities, social sciences and cultural sciences should be involved in developing the goals of the research funding programme.
- SSH-research helps to **understand a problem correctly** and to formulate it in the form of a call for proposals. This can also make the involvement of SSH-research visible and self-evident in the research community.
- In the discussions, the representatives of all research disciplines should be given equal respect; in particular, the discursive forces in interdisciplinary discussions and the expertise of SSH-research should be trusted.
- Be **generous with provisions on interdisciplinary collaboration**, as it requires time and space for researchers from different backgrounds to get to know each other. SSH-research is usually unable to generate commercial income from research, which should be taken into account in the funding quota.

How can the integration of SSH-research be ensured at the same time?

Once a research funding programme has been set up and is underway, it is important to ensure that SSH-research can be involved in the calls and in the review process. This section is addressed (in this order) to the managers of such a research funding programme, to the reviewers who are appointed in the decision-making process, and to the evaluators who are to evaluate the success of the research funding programme.

If you are a manager of a research funding program:

- When formulating individual calls: Explain in the text that the social dimensions of a particular problem must be taken into account among other aspects.
- Define criteria that **encourage reviewers to identify the right researchers** not necessarily those with the best formal CV and track record. Metrics, rankings or indicators are a means of decision-making, but they should not be considered the only quality criteria.

Practical information 2

- Involve experts (plural!) from SSH in the evaluation procedures of your tenders.
- Also proactively encourage SSH-researchers to participate in a call for proposals and lead projects and consortia.

If you are a reviewer of project proposals:

- Local and/or contextualized expertise from SSH can sometimes be more valuable for a project than universal, scientific knowledge. Don't rely solely on the rhetoric of excellence **relevance** is also important!
- Be open to **original**, **unconventional project proposals** that involve or are led by SSH-researchers. Respect the autonomy of SSH-researchers to contribute their own ways of working to the projects or tasks they lead.
- Do not rely on the patina of precision that metrics create; also look for other signs of how a research project can be effective.
- Look beyond scientific impact and also consider possible transformative societal, economic, political, environmental or cultural impacts.

If you are a reviewer evaluating the R&I program:

- There are **different types of effects**, which can be both long-term and immediate. Ideas and concepts need time to get out of academic circles and into society.
- Ensure that the programme scope and call texts take into account the **social** dimensions of the societal challenge to be addressed.
- Consider the **reflective dimension of the program** and pay attention to what social values are inscribed in the program.
- Check which types of cooperation are planned and actually take place within the framework of the projects funded by the programme and to what extent participation and communication across disciplines are possible.



What is behind the abbreviation SSH?

"SSH" is the abbreviation used in English and in relation to European research funding programmes for "Social Sciences and Humanities".

SSH necessarily encompasses a variety of different subjects, disciplines and subject areas. To avoid misunderstandings, it is necessary to emphasize some characteristics:

- The disciplines and subject areas grouped together within SSH have in common that they generate knowledge about us as social individuals and as a society – with regard to our history, our values and interests, and the intended and unintended consequences of our actions.
- However, SSH does not refer to a uniform research programme in the narrower sense, but rather to group together very different paradigms and theoretical approaches under the common denominator SSH, which may well be in competition with each other.
- This plurality is causally related to the object of study of SSH – social systems are open in the sense that, in contrast to many areas in the technical and natural sciences, their developments cannot be definitively determined by law.
- Since data sets in the field of SSH are often incomplete and the procedures for data generation are also sometimes cumbersome, a divergent number of methodologies and methodological knowledge has developed, which in turn has led to a strong specialization in individual subjects.

SSH is a policy concept – not an epistemological term generated by science itself. It is an expression of the need to be able to describe the plurality of the bundle of disciplines with a common term and thus make it manageable.

How can SSH be involved in an interdisciplinary manner within the framework of research funding programmes (R&I programmes)? The diverse and divergent, and in some cases very specific, bodies of knowledge and lines of research that exist within the disciplines and subject areas grouped together as SSH are relevant and useful for specific research questions. They have to be identified, and the practical elements of interdisciplinary cooperation between SSH and the technical and natural sciences often have to be established first. The challenge is therefore to create conditions within the framework of research funding programmes under which it is possible to bring about such integration of SSH productively.

At the level of an R&I program, it is justified and necessary to speak abbreviated of the "involvement of SSH". This enables a plurality of perspectives that can be assumed to contribute substantially to improving the research output of a funding programme.

What is meant by integration?

In previous experience, the involvement of SSH can be very different. There are roughly three ways in which SSH-expertise can be used in the context of an interdisciplinary research project: First, the expertise can be genuinely used as part of the project's research program. Secondly, it can be used to support the project, for example to ascertain the acceptance of a new technological application through surveys. And thirdly, it can be used for the purpose of dissemination, for example, of such a technique.

to enable the integration of SSH-research through appropriate specifications. Two insights can be gained from this. Firstly, such requirements, especially if they are mandatory, represent a trade-off: for the purpose of improving research output, a complication of the framework conditions of a research funding programme must be accepted as a consequence. There is already good experience on how to prevent the programme from becoming more cumbersome than absolutely necessary.

Three uses of SSH-expertise in research projects

- a) genuinely as part of the project
- b) to accompany the project (e.g. to inquire about the acceptance of a technology
- c) for the purpose of dissemination (e.g. a technique)

Each of these three types can

have a certain relevance within the framework of a specific R&I programme; and for each type, the disciplines attributable to the SSH provide expertise. The separation between these types is also not always clean; nevertheless, the focus here is on integration in the field of research: SSH can contribute specific bodies of knowledge and research perspectives to the research process, which have a positive effect on the newly generated knowledge as a result. The incorporation (or, in the European context, "integration") of SSH-research means that both for the formulation of a question (to be analysed by a scientific research project) and for its answer, at least one discipline or field attributed to SSH is used.

In addition, a distinction can be made between different ways in which SSH-research is to be integrated. These types can be ranked on a scale: in some cases, the involvement of a SSH-partner is mandatory within the framework of the tender criteria, in other cases this is given an extra positive grade in the context of the application evaluation, and in still other cases it is sufficient for the tendering body to determine ex post whether (and in what way) an integration has taken place.

There is now considerable effort in various R&I programmes at European and Austrian level,

The integration of SSH-research works better when it happens repeatedly. This is particularly true for R&I programmes, which are generally understood to be more oriented towards the natural sciences or engineering in terms of their content.

Why is the involvement of SSH-research important?

The integration of SSH-research implies an interdisciplinary approach, but with the specification that this approach in any case includes the body of knowledge or the research perspective of a SSHsubject (or several). But why should this exclusive integration be desired? Why shouldn't it be left to the free play of scientific cooperation how an interdisciplinary research project is set up? This objection is in principle justified; however, it overlooks the fact that in recent decades there has been a strong preference for the technical and natural sciences in R&I funding. As a result, social challenges were responded to with technical solutions that did not always prove to be adequate. Societal challenges, however, are based on individuals, groups and institutions - their actions, their values, their social relationships and cultural origins.

This meets the requirements that arise in particular if research funding policy wants to contribute to solving major societal challenges. The integration of SSH-research aims to systematically better understand these aspects with regard to societal challenges. The fact that this has also been considered increasingly necessary in fact in recent years can be seen from the fact that various R&I programmes have committed themselves to formally providing for the integration of SSH. Of course, this always depends on how the respective R&I program is set up, because it also determines the form in which integration can be provided in the first place.

These formal requirements, which are used by some European and national R&I programmes, can be understood as an expression of a specific research policy effort. In short, this effort is that the perspective of research projects that are intended to contribute to the solution of complex social problems should be expanded more or less "gently" within the framework of tender and evaluation criteria. This, in turn, can be traced back to a general development that sees research funding policy as part of a larger socio-technological transformation policy. As this term suggests, research funding is intended to contribute to solving major social challenges. The integration is a

means to the end. The expectation behind this is that the integration will achieve a qualitative improvement in research output. Improvement in this context does not mean exclusively academic excellence. Rather, the achievement of academic excellence is a prerequisite that represents a kind of quality assurance in the orchestra of the scientific community.

The integration of SSH-research is a means to a specific end. The expectation is that this will result in a qualitative improvement in research output.

Improvement also (and above all) means that the research output should be realistic, holistic and compatible. The problem analysed in the project is to be prepared by means of an adequate research question in such a way that a realistic description of reality is possible, that different perspectives of different social actors are taken into account, and that political decision-makers can derive instructions for action from it.

What are possible starting points for involvement?

There are many ways to specifically involve SSH in inter- and transdisciplinary research projects, programmes and — of course — also in the mission and transformative research agenda. SSH-research can help to weigh and integrate complex cross-domain perspectives and viewpoints, including those of non-academic actors such as policymakers, companies, NGOs, consumers, users or citizens.

In the following, six starting points are presented as to how aspects of SSH-research can typically be integrated into research projects that are generally understood to be more oriented towards the natural sciences or technology in terms of their content. This is a selection of partially overlapping approaches. They are intended to illustrate to those responsible for R&I programmes how SSH could be included in the calls for project proposals. Under no circumstances should this selection be understood as an attempt to exhaustively capture the breadth of potential scientific contributions from the broad field of SSH-research.

- Framing
- New Political Economy
- Public Acceptance
- · Innovation Research
- Social Innovation
- · Impact Research
- 1. Framing: This is the embedding of topics or events in interpretive grids, whereby complex information is selected from different perspectives and prepared in a structured way so that a certain problem definition, attribution of causes, moral evaluation and/or recommendation for action in the respective topic is emphasized. Applied to the integration of SSH into interdisciplinary and mission-oriented research, this can mean, among other things, using SSH-research to critically analyse and question the postulated complex challenges from different perspectives before putting out to tender a purely technological solution approach that reduces the scope of action.

The major social challenges are great, as they affect societies and cultures, how we humans interact with each other and also with our environment, how we produce and consume, how we construct meaning and discretion for our actions and how we reproduce our societies and cultures, but also how we change them and our behaviour. Major challenges are therefore not an exclusive area of action for technology and natural sciences, but affect the substance of SSH to a large extent. Asking the question "What is really important?" ex ante, for example in the areas of climate change and adaptation, mobility or digital public health services, can help to identify alternatives to rapid technological solutions or certain technological developments that address the causes of symptoms and thus often only initiate incremental steps towards improvement. Various research strategies are suitable for this purpose, such as scenario techniques, future studies, needs analyses, participatory research, accompanying research and much more.

Based on the further question "What if?", SSHresearch can also be helpful in the creation of alternative scenarios, whereby intangible characteristics of human action can and should also be taken into account.

2. New Political Economy: this includes theories and research areas that explain political behavior, decision-making processes, and structures using methods and approaches in economics. It is important to note that the methods and approaches used are often understood from multiple perspectives and in connection with social processes.

There is a dimension to political economy in almost everything, even if it is not asked. For example, what is the political economy of climate change and climate change adaptation, the bioeconomy and its sub-areas, or how is the political economy of the Internet of Things or zero-waste approaches designed? Who does the intervention serve, who does it and why? Which interests are taken into account and which are not? How does the potential innovation affect the market and society? Who benefits and who doesn't? What policies and regulations are missing or needed? Are governance adjustments needed?

- 3. Public Acceptance: Technological precautions without proper consideration of human actions (including emotions) are often not sufficient to carry out successful innovations. Especially with regard to transformative changes and overcoming complex major challenges with all their rebound pitfalls, public acceptance is indispensable. Acceptance-related research is important for the development of "more socially acceptable" technology, technological processes and technical products and can thus contribute to avoiding the waste of resources in terms of financial and intellectual capacities caused by unused technological inventions. The concept of "societal readiness levels" of certain technologies fits in with SSH's instrumental understanding of increasing the social acceptance of technology. In particular, transdisciplinarity, in which non-academic interest groups and non-formalised knowledge are addressed and included in research projects, is a competence that is assigned to SSH-researchers due to their perceived proximity to social areas, sometimes unquestioned. They are therefore often involved in participation and engagement processes in which they use a variety of process tools such as design thinking, participatory technology development or multistakeholder workshops and thus acquire cumulative skills.
- 4. Innovation Research: The development and use of new technologies and the market penetration often associated with them (thus the economic core of innovation) are a social process with various social effects. There is a growing awareness that the idea of public support for research and innovation should be to support the right innovations (and not innovations per se). What "right" means depends on a variety of views, principles and beliefs and should never be decided in isolation. It is important to understand that innovation is not only the business of companies, but also a social concern at various levels. Innovation research can therefore be the subject of business administration, but also of anthropology, cultural studies, history, political science, sociology, economic and human geography, etc.

Innovation is basically anything new that adds some form of added value. And every value creation is based on a certain level of acceptance. Value can be understood as economic value, but should not be limited to it. Thinking about innovation should not be reduced to its technical substance, often in combination with economic value creation. In fact, we are becoming increasingly accustomed to thinking about different types of innovations, such as business model innovations, organizational innovations, innovations in and through the public sector, and social innovations. At the latest since Schumpeter's groundbreaking writings, we also know that (some) innovations have the potential to change our way of life and our behavior and actions in social, cultural and economic terms.

In innovation research, the social sciences have often contributed to explaining the social dimensions of innovation, its complexity, but also paradoxes of innovation processes.

5. Social Innovation: The purpose of social innovation is to reinvent, recombine or figure practices (including with the support of new technologies) in areas of social action, with the aim of addressing needs and problems better than is possible through the use of existing practices. In other words, an innovation is social insofar as it varies ways of acting that are socially accepted and widespread in society (or parts of it). Social innovations cannot be technological per se, but they often use new technologies.

The approach recommended here is to open up possibilities for the joint development of technological and social innovations within a project. Social innovations can be decisive for social transformation processes to change or even redirect social change. Participatory approaches that promote the involvement and empowerment of end-users, civil society actors and other groups are often an important part of this.

6. Impact Research: The concept of impact is often closely linked to the pursuit of public acceptance. SSH can make important contributions to the identification and tracking of impacts by analysing different impact dimensions, in particular the social, economic and cultural effects of interventions on specific social groups or on the entire fabric of a society. It is important to note that impact tracking can already be done ex ante and not just ex post.

It is worth asking how a possible intervention affects different social groups (women, older people, children, low-skilled people, people with disabilities, non-mobile groups, etc.) in terms of a wide range of cultural, social, technical, ethical, legal and economic aspects. The question of implications — e.g. in terms of safety, legal dimensions such as restriction of freedom, social dimensions such as participation, accessibility, inclusion, diversity, or also in environmental interaction terms such as resource consumption, pollution, etc. — is an important starting point for calibrating research questions within the framework of the impact research approach.



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What is the idea of this document?

The integration of the humanities, social sciences and cultural sciences (SSH) into programmes to promote research and innovation (R&I) is widely discussed. But how can it be achieved in concrete terms? This brochure is intended as a practical guide for all those involved in the design or implementation of research and innovation (R&I) programmes.

It is divided into three parts: First, an overview of a series of practical tips on how to integrate SSH-research into an R&I program. This handout consists of two sections, each relating to a specific phase in the "life cycle" of a research funding programme (R&I programme): the first phase is that of establishing the programme; the second phase is that of the implementation of the programme. In both phases, the integration of SSH-research is important.

The second part is detailed background information, which in four chapters sets out the scientific and research policy goal of a systematic integration of research from the humanities, social sciences and cultural sciences and what experiences already exist with regard to such integration.

The third part is a bibliography that summarizes the relevant documents – grey literature, scientific articles and research reports – by topic in order to prepare further reading for the interested reader.

This is the English Al-supported translation of the brochure "GSK-Forschung einbinden" that was published in German in 2020: https://irihs.ihs.ac.at/id/eprint/5602.

The brochure is based on a comprehensive review of the relevant literature, numerous interviews with involved stakeholders in the European context and the English edition of the "SSH Guidlines":

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