

RRI Dimensions and related Key Performance Indicators

Ethics - General Description

Ethics in RRI is based on the EC assertion that "in order to adequately respond to societal challenges, research and innovation must respect fundamental rights and the highest ethical standards. Beyond the mandatory legal aspects, this aims to ensure increased societal relevance and acceptability of research and innovation outcomes," (European Commission, 2012). In the broad RRI context, ethics can be divided into the following three subfields.

- Research integrity and good research practice, which is concerned with issues such as scientific misconduct and questionable research practices (e.g. plagiarism, fabrication, fraud, authorship and intellectual property, and citation/acknowledgement practices, scientific neutrality, conflicts of interest in peer review and scientific advice, etc.).
- Research ethics for the protection of the objects of research. The ultimate goal of policy in this field is that human beings, animals and other objects of research are duly protected. The existence and proper functioning of institutional procedures are clearly relevant measures for this goal.
- Societal relevance and ethical acceptability of R&I outcomes is a main issue in the promotion of RRI policies and indicators as it should be designed in accordance with the understanding, that this issue is a challenge of governance in complexity that calls for a network approach. This dimension is the one that is closest to the general policy of RRI as a cross-cutting principle and the one for which the European Union has its most distinct role to play.

Process indicators of ethics include mechanisms for appraisal of ethical acceptability, documented by different projects such as: ELSI/ELSA (Ethical, Legal and Social Implications/Aspects of research) project component for ethical acceptability, and formal ethics reviews such as an Institutional Review Board clearance. Outcome indicators include documented changes in R&I priorities attributable to the appraisal of ethical acceptability, and percentage of research proposals that require substantive changes because of ethics review clearance process (Strand et al., 2015, p. 36).

Ethics – List of Indicators

Criteria	Type	Indicator
Ethics / Social inclusion	Process	Existence of an ethics committee/ Research Ethics Committee / Research Ethics Officer
		Mechanisms for multi-stakeholder/transdisciplinary processes of appraisal of ethical acceptability (best practices)
		Documentation regarding normative tensions related to research integrity policies and actions
		RRI/ELSI/ELSA component in statutory documents of organization/project/event?
		Formal and actual scope of ethics review
		Strategies for addressing access issues from disadvantaged social groups: Number and type of strategies for e.g. the disabled, illiterate people, migrants, elderly people, single parents, etc.
		Considerations/strategies of benefits from activities
		Considerations/strategies for the design of communication and outreach strategies to reach disadvantaged group
		Number of stakeholders who actively review/show interest in research results that have an impact on social inclusion
Ethics / Social inclusion	Outcome	Documented change in R & I priorities attributable to appraisal of ethical acceptability
		Integration of ethics assessment into HubIT activities, its scope, mechanisms, significance
		The percentage of activities purposefully delivered in accessible locations (e. community centers)
		The percentage of activities purposefully modified to address issues of social justice and inclusion (method, technique, needs of specific community)
		The percentage of participants attending events from disadvantaged groups (+how they found out about the event)
		The percentage of activities that may have unintended negative effects on social inclusion/justice (benefits only small portion of population or created barriers)
		Percentage of projects/collaborations/activities that have modified their methodology to include/benefit disadvantaged groups



Ethics / Social inclusion	Perception	Perception of the value of ethics in day to day activities
		Perception of importance of social inclusion in the project day-to-day activities
		Attitudes towards ethics in science

