IMPLEMENTATION CHECKLIST FOR THE 2023 RI GUIDELINES

This checklist consists of three parts. Part 1 is for the leadership of the organisation, Part 2 for research leaders, principal investigators and others with a role of responsibility in research, and Part 3 for individual researchers. The checklist helps each group ensure that the main practices of research integrity are followed. It aligns with the Finnish system of self-regulation and ensures the implementation of research integrity in organisations committed to the 2023 RI Guidelines.

1. ORGANISATION'S LEADERSHIP

1.1. Research environment

Ensures that the organisation has an up-to-date, clear and open course of action and guidelines in place for research integrity and the handling of suspected violations of research integrity, in line with the 2023 RI Guidelines.

Creates a safe atmosphere in the organisation for compliance with research integrity and for reporting suspected RI violations.

Ensures that the organisation has appropriate policies and tools in place for responsible, traceable and reproducible curation and management of research data.

1.2. Training, supervision and mentoring

Regularly assesses the need for research integrity training in the organisation.

Organises research integrity training, ensures the staff's opportunity to participate and follows participation in training.

Appoints a research integrity adviser in the organisation and allocates sufficient resources for the task. Information on research integrity advisers is available on TENK's website.

Ensures that undergraduate and graduate students receive training in research integrity.

1.3. Research procedures

Offers support for those with a role of responsibility in research for following good research practices.

1.4. Safeguards and agreements

Handles alleged RI violations without delay, directing them to the director of the organisation.

Protects whistleblowers who have reported a suspected RI violation in good faith by ensuring that their research career does not suffer as a consequence.

Follows the procedure for investigating alleged violations of research integrity described in Chapter 5 of the 2023 Guidelines.

1.5. Data practices and management

Ensures that the organisation has up-to-date and easily accessible data management and data protection guidelines.

Promotes the openness of data and possibility of secondary use within the organisation by ensuring that research data is available as openly as possible, while maintaining necessary usage restrictions in accordance with the FAIR principles of data management. (The FAIR principles stand for Findable, Accessible, Interoperable and Reusable.)

1.6. Collaborative working

Promotes cooperation within and between academic disciplines.

Reviews and signs cooperation agreements.

1.7. Authorship, publication and dissemination

Ensures that the organisation has responsible practices and appropriate tools in place for communicating about research to the research community and the general public.

1.8. Reviewing and evaluating

Provides opportunities for review and evaluation tasks.

2. THOSE WITH A ROLE OF RESPONSIBILITY IN RESEARCH

2.1. Research environment

Ensure that the RI Guidelines and the organisation's own research integrity guidelines are available for researchers and students within their own area of responsibility.

Foster an open atmosphere for discussions on research integrity.

Set an example of complying with research integrity.

2.2. Training, supervision and mentoring

Maintain and update their own expertise and knowledge in research integrity.

Orient researchers to research integrity and ensure that the supervised theses are carried out following good research practices.

2.3. Research procedures

Take into account the existing research data when planning new research.

Ensure that research is carefully and accurately planned, implemented, analysed and documented.

Use resources allocated for research appropriately and responsibly.

Ensure that the objectives and implementation of research are agreed upon by all parties involved.

2.4. Safeguards and agreements

Ensure that the subjects and participants of research are treated with respect and in compliance with legislation and ethical guidelines.

Are responsible for obtaining necessary research permits and, if necessary, for requesting an ethical review before data collection begins.

2.5. Data practices and management

Comply with current data protection legislation and the data protection guidelines of their organisation in the processing of data.

Ensure that all parties involved agree before data collection on the ownership of research data, the rights to its use, and on the processing, storage and possible reuse of personal data, both during the research and afterwards.

Ensure that data processing, management and storage is carried out as agreed.

Share openly how data and research results under their responsibility can be found and how they can be reused for secondary purposes.

2.6. Collaborative working

At the start of a project, ensure that all parties agree on following good research practices, the handling of possible allegations of RI violations, the guidelines to be applied, and the protection of intellectual property rights. In international collaborative projects, the parties agree in advance on how to investigate alleged RI violations and decide which party will carry out the investigation and which country's practices will be followed. In EU funded projects, the European Code of Conduct for Research Integrity is followed.

At the start of the project, ensure that all parties agree on the objectives of the collaboration and that communication is as open and transparent as possible.

Ensure that all parties agree on the authorship and contributorship of scientific and other publications before a manuscript is submitted to the publisher. Information on authorship is available on TENK's website *(Agreeing on authorship)*. International authorship guidelines are binding in Finland only if agreed upon by the authors in advance.

2.7. Authorship, publication and dissemination

Ensure that research activities and results are reported following agreed-upon practices.

2.8. Reviewing

Encourage researchers in their responsibility area to take part in various reviewing and evaluation tasks, providing advice if necessary.

3. INDIVIDUAL RESEARCHER

3.1. Research environment

Engages with research integrity and good research practices and related guidelines.

Familiarises themselves with the 2023 RI Guidelines and the research integrity guidelines of their organisation.

3.2. Training, supervision and mentoring

Maintains and develops their knowledge in research integrity independently and by participating in their organisation's research integrity training.

3.3. Research procedures

Carries out research tasks conscientiously and according to plan.

Documents research activities accurately and carefully.

3.4. Safeguards and agreements

Acts respectfully towards and recognise the dignity and autonomy of research participants; shows the same respect towards tangible and intangible cultural heritage, biodiversity, and the rights of animals used for scientific and educational purposes.

Notifies without delay the director of the organisation of suspected RI violations that come to their attention.

Makes an immediate notification to the director of the organisation of a suspected RI violation that severely endangers human life or the society, or that represents other serious dishonesty or misuse of funding. If necessary, this notification can also be submitted to the Secretary General of TENK.

3.5. Data practices and management

Handles and stores all data carefully; when personal data is involved, complies with data protection legislation.

Follows current guidelines on the non-disclosure, confidentiality and secrecy of information.

3.6. Collaborative working

Communicates actively and independently about the progress of research with all parties involved.

Informs and consults all parties involved when material is submitted for publication.

3.7. Authorship, publication and dissemination

Communicates honestly and openly about their research irrespective of the publication format or channel.

Respects the work of colleagues, acknowledges their achievements and refers to the work of others in an appropriate manner.

Ensures that all persons mentioned in a list of authors are willing to accept responsibility for the entire content of the publication or for their separately agreed part.

Agrees on the order of names in the list of authors with all the authors of the publication, and ensures that this mutual agreement is based on the significant contribution required by authorship in the planning, data collection and analysis and interpretation of the results. Additionally ensures that said areas of responsibility are noted in the publication. More information on authorship can be found in TENK's authorship recommendations on TENK's website. International authorship guidelines apply in Finland only if there is a prior agreement between the authors.

Makes sure that significant conflicts of interest and commitments are noted in the publication.

3.8. Reviewing

Refrains from research-related evaluation or decision-making if suspecting a conflict of interest concerning the matter at hand or the persons involved. Recusal is based on self-assessment. Provisions on conflict of interest are laid down in the Administrative Procedure Act, and the general provisions on conflict apply in the handling of alleged RI violations.

Reports sources of funding and other relevant conflicts of interest and commitments to all parties and targets of research and to publications. In publications, these factors are specified for each author separately.