Centre of Scientific and Technical Information
(SCSTI)

DECLARATION

on Fostering the Culture
of **SCIENTIFIC INTEGRITY**
in Slovakia

Slovak Centre of Scientific and Technical Information (SCSTI)

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EURÓPSKA ÚNIA
Európsky fond regionálneho rozvoja
OP Integrovaná infraštruktúra 2014 – 2020

MINISTERSTVO ŠKOLSTVA, VEDY, VÝSKUMU A ŠPORTU SLOVENSKEJ REPUBLIKY

SK4ERA

CENTRUM VEDECKO-TECHNICKÝCH INFORMÁCIÍ SR

RI4SK

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Slovak Centre of Scientific and Technical Information (SCSTI))
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Slovak Centre of Scientific and Technical Information (CVTI SR)

The Slovak Centre of Scientific and Technical Information (CVTI SR), a subsidiary organisation (public body) of the Slovak Ministry for Education, Science, Research, and Sport, is the national information centre for science, technology, innovation, and education, and specialised scientific library of the Slovak Republic.
The CVTI coordinates activities and ensures the operation of interdisciplinary R&D centers and national infrastructures for research, development, innovation, and education.

National Project: Horizontal Support of Slovakia's Involvement in the European Research Area (SK4ERA)

The strategic aim of the project is to set up a professional support system for the involvement of Slovak public institutions and private enterprises in the European Research Area and in European research and innovation programmes. The planned outcomes of the project are (i) deepening Slovakia's involvement in the European Research Area; (ii) raising the number of international collaborative research projects; (iii) improving the quality of exploitation of the national research infrastructure; (iv) increasing the excellence of Slovak research; (v) building awareness about Slovak research and innovation abroad. The project will improve the quality of information and services provided to researchers within the ERA in the priority areas defined in the RIS3 SK strategy. The strategic aim of the national project is to set up a professional support system for the involvement of Slovak public institutions and private enterprises in European research and innovation programmes, especially the Horizon 2020 programme and the upcoming 9th Framework Programme Horizon Europe.

RESEARCH INTEGRITY for SLOVAKIA (PS RI4SK)

Activity 1:

Creating a national code of conduct for scientific integrity and setting up the structures (ethics committees) necessary for its implementation

Activity 2:

Education and awareness-building about the principles of scientific integrity

Activity 3:

Coordinating investigations of scientific and research misconduct

Activity 4:

Establishing a suprainstitutional national platform for scientific integrity

DECLARATION

The aim of this Declaration on Fostering the Culture of Scientific Integrity in Slovakia (henceforth referred to as 'the Declaration') is to encourage all organisations involved in the administration and funding of research and education in Slovakia to voluntarily commit to observing the highest ethical standards of scientific integrity, with the intention of strengthening the ethical aspect of scientific activity, which is essential to the scientific endeavour, and of increasing the confidence of the public and the international research community towards Slovak research institutions.

Researchers, university faculty, students, research centres, universities, academies, funding agencies, and other actors involved in the research system have a duty, stemming from the nature of their activities, to honour and uphold the principles of scientific integrity, including honesty in conveying and presenting information; reliability and integrity in performing research; objectivity, impartiality, and autonomy; openness and accessibility in publishing research results and archiving primary data; eliminating conflicts of interest; properly referencing sources; respecting relevant norms regarding the storage and retention of records and data; and maintaining high ethical standards in rearing future generations of researchers. Whenever researchers or university faculty apply for a professional position, it is incumbent on their prospective employer to invest maximum effort into determining whether the applicant might have previously violated the principles of scientific integrity, or whether he or she might presently be subject to an investigation concerning such violations.

This Declaration is based on promulgated European standards, principally on **The European Code of Conduct for Research Integrity (1)** , which is the binding document for researchers participating in EU Framework Programmes. This Declaration primarily contains textual definitions of ethical rules which would be binding for its signatories insofar as they made a voluntary commitment to their observance.

This Declaration commits Slovak universities and research organisations (as voluntary signatories to the Declaration) to implementing education in the field of scientific integrity for students on all levels of the education system as well as for experienced researchers.

This Declaration includes recommendations regarding the investigation of violations of scientific integrity and proposes adopting a legislative amendment that would allow for the sanctioning of unethical conduct, for instance by revoking dishonestly/fraudulently acquired academic qualifications.

An important part of fostering the culture of scientific integrity is the creation of a national supra-institutional platform, the National Ethics Committee for Scientific Integrity, which will oversee the harmonisation of institutional structures and procedures and their subsequent implementation, serve as an advisory body to individual institutions and their ethics committees, monitor their activity and assist in the creation of national education programmes and, last but not least, represent Slovakia in the realm of fostering scientific integrity on the international level. With that in mind, the authors of this Declaration propose changes to the existing legislation, which will necessitate the creation of ethics committees at all universities, research centres, and funding agencies, as well as of a National Ethics Committee for Scientific Integrity charged with investigating violations of scientific integrity in Slovakia.

To avoid 'making decisions about science without involving scientists,' this Declaration was composed with the participation of all relevant parties. The outcomes of the international conference Ethics, Integrity, and Responsibility in Research and Education, which was held on 21 May 2019 in Banská Bystrica (part 1 **(2)** and part 2 **(3)**), led to the formation of the Working Group for Scientific Integrity in Slovakia (PS RI4SK), which was responsible for integrating the perspectives of scientists, representatives of funding agencies, and the Slovak Accreditation Commission into the Declaration and reflecting their ambitions for improving the state of science in Slovakia from the standpoint of scientific integrity.

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*NOTE: This Declaration uses a set of well-defined terms whose definitions are given in the glossary. Each such term is italicised upon its first use in the text.

1. Who is affected by this Declaration

The Slovak research infrastructure comprises the Slovak Academy of Sciences, universities (public and private), state research institutions and funding agencies (the Slovak Research and Development Agency [Agentúra na podporu výskumu a vývoja], the Research Agency [Výskumná agentúra], and the agencies VEGA and KEGA), as well as private organisations involved in research and development. All have a particular obligation to foster a culture of scientific unimpeachability.
They are responsible for formulating the rules of good scientific practice based on generally accepted national and international standards, setting up the relevant structures within their institutions (e.g. ethics committees, ombudspersons, ethics boards), and ensuring the observance of the highest standards, including the standard that each violation of good scientific practice shall be identified in its initial stages and duly addressed.
This Declaration was elaborated by the Working Group for Scientific Integrity in Slovakia (henceforth referred to as PS RI4SK), whose members include: the Agency for Research and Development, the Academy of the Police Force in Bratislava, the Centre for Scientific and Technical Information of the Slovak Republic, the University of Economics in Bratislava, the ESET company, the Slovak Academy of Sciences, the Slovak Accreditation Agency for Higher Education, the Slovak Technical University in Bratislava, the Trenčín University of Alexander Dubček in Trenčín, the Technical University in Košice, the University of Matej Bel in Banská Bystrica, the University of Pavel Jozef Šafárik in Košice, Comenius University in Bratislava, and the School of Management in Bratislava.

2. Why this Declaration is needed

The prevailing situation in Slovakia concerning the assurance of scientific integrity is insufficient. Although certain universities and research institutions have their own directives and codes of conduct, these are too qualitatively diverse. In effect, there are two main approaches to the regulation of scientific practice in Slovakia. Some universities and research institutions have their own ethics committees, the majority of which are designed to address ethical questions to do with the application of specific research methods—which may include the involvement of human subjects or laboratory animals—in particular research projects, rather than to tackle academic misconduct or violations of research standards. More often than not, ethics committees are formed ad hoc to respond to an individual problem, and therefore do not possess the requisite experience in addressing scientific misconduct. Other research institutions lack ethics committees entirely.
This situation results from the absence of a complex legal framework addressing research ethics and integrity in Slovakia, and it causes frequent problems in the involvement of Slovak researchers in the European Research Area (ERA), especially in projects that are part of the EU's Framework Programmes (e.g. Horizon 2020), where ethical considerations are treated with the utmost seriousness **(4)**.

3. How this Declaration helps to address the situation

Support structures devoted to fostering scientific integrity in individual countries must reflect existing national legislations and conform to internationally accepted norms and directives, without compromises to the fundamental principles of scientific integrity, whilst also observing the principles of academic freedom.
PS RI4SK has agreed to draw on international (primarily European) recommendations regarding good scientific practice, namely on the European Science Foundation's Members Forum on Research Integrity (2010), the **European Code of Conduct for Research Integrity (1)**, **the OECD definition of scientific misconduct (5)**, the recommendations of **the European Network of Research Integrity Offices – ENRIO (6)**, the outcomes of European projects of **the European Network of Research Ethics and Research Integrity – ENERI (7)**, and **the European Network for Academic Integrity – ENAI (8).**

COMMITMENTS to fostering a culture of scientific integrity in Slovakia

1. We are committed **to ensuring the highest standards of scientific integrity based on the foundational principles of good scientific practice**
to be observed by researchers and university faculty as well as by other institutions performing and funding research, primarily by creating a suitable support infrastructure, whereby we will foster the credibility of these institutions on both the national and international levels.
2. We are committed **to providing education aimed at fostering good scientific practice** as the most effective proactive preventive step towards the creation of a national research environment defined by the principles of scientific integrity.
3. We are committed **to observing a fair, transparent, and efficient system** for the investigation of scientific misconduct, dishonesty, and violations of the principles of good scientific practice.
4. We are determined **to establish a National Ethics Committee for Scientific Integrity** whose main purpose will be to implement and harmonise institutional structures devoted to fostering a culture of scientific integrity, serve as an advisory body for public and private universities and research institutions, and represent Slovakia in the realm of fostering scientific integrity on the international level.

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1. WE ARE COMMITTED TO ENSURING THE HIGHEST STANDARDS OF SCIENTIFIC INTEGRITY BASED ON THE FOUNDATIONAL PRINCIPLES OF GOOD SCIENTIFIC PRACTICE

Because Slovakia is an integral part of the European research environment, it is necessary to harmonise its National Code of Conduct for Scientific Integrity with the existing European and global codes listed above.
The European Code of Conduct for Research Integrity (1) relates to research in all scientific disciplines and is currently the binding document for **the Horizon 2020 (9)** and **Horizon Europe (10)** programmes. Good research practice is based on the foundational principles of research integrity, which serve to guide researchers and university faculty in their everyday scientific practice as well as in the tackling of various practical, ethical, and intellectual challenges stemming from their work. The Code of Conduct also defines examples of unethical and dishonest conduct.

Good scientific practice is centred around the following principles **(1):**

- ***reliability*** *in ensuring the quality of research, reflected in its design, methodology, analysis, and use of resources;*
- ***honesty*** *in developing, undertaking, reporting, and presenting research and its results*
- *in a transparent, fair, complete, and impartial fashion;*
- ***respect*** *for colleagues, research participants, society, ecosystems, cultural heritage, and the environment;*
- ***accountability*** *for the research, from conception to publication, for its management and organisation, for expert training, supervision, and guidance, for the rearing of future generations of researchers, as well as for the broader implications of the research.*

2. WE ARE COMMITTED TO PROVIDING EDUCATION AIMED AT FOSTERING GOOD SCIENTIFIC PRACTICE AS THE MOST EFFECTIVE PROACTIVE PREVENTIVE STEP TOWARDS THE CREATION OF A NATIONAL RESEARCH ENVIRONMENT DEFINED BY THE PRINCIPLES OF SCIENTIFIC INTEGRITY.

The meaning of the term scientific integrity is not sufficiently embedded in our culture, and violations of scientific integrity can be a natural consequence of this lack of familiarity. That is why it is necessary to introduce education in this sphere on all levels of university education, including lifelong education of researchers and university faculty. To ensure that this education is not a mere formality, it must be sponsored by individuals with an unassailable record of personal integrity and a demonstrated history of promoting the values of academic and research ethics.

Every member of the student, scientific, and pedagogical community should adopt principles relating to the following:

proper engagement ***with literature and other sources;***
proper planning of procedures, *acquisition, evaluation, management, and presentation of experimental data;*
proper treatment of ***experimental objects;***
proper treatment ***of human subjects, probands, and other participants of research procedures****, respecting their personal dignity and autonomy;*
proper academic writing;
proper ***acknowledgement of contributions*** *made by people and institutions to the results of scientific work;*
proper ***communication*** *with the media and dissemination of the results of scientific work;*
identification of dishonest publishing practices and avoidance of publishers and journals that use them.

By respecting these principles, we will be fostering an environment in which researchers, students, and faculty will be unafraid to identify and stand up to tendencies to break the rules and point out violations of scientific integrity and good research practice (if and when they find out about them), and in which various acts of scientific misconduct, such as falsification, fabrication, plagiarism, and other related practices, will be adequately sanctioned.

For more information on successful examples of the implementation of educational activities in the realm of research integrity at European universities, please consult the following LERU publication: **Towards a Research Integrity Culture at Universities (11).**

3. WE ARE COMMITTED TO OBSERVING A FAIR, TRANSPARENT, AND EFFICIENT SYSTEM FOR THE INVESTIGATION OF SCIENTIFIC MISCONDUCT, DISHONESTY, AND VIOLATIONS OF THE PRINCIPLES OF GOOD SCIENTIFIC PRACTICE.

It is imperative that students, researchers, and university faculty master the knowledge, methods, and ethical guidelines relevant to their disciplines. Violations of good research practice are, in essence, violations of professional obligations. They harm the research process, create discord in the relationships between researchers, and undermine public confidence in research and the integrity of its outcomes. They also waste time and resources and, last but not least, are detrimental to research subjects, users, society, and the wider environment.

Despite the best efforts to foster integrity and introduce preventive education in this sphere, cases of scientific misconduct will certainly arise. When they do, it will be necessary to investigate them and, if suspicions are confirmed, introduce adequate sanctions and corrective measures.

Typical examples of violation of research ethics include fabrication, falsification, and plagiarism (henceforth referred to as 'FFP') in the design, execution, and evaluation of research, or in the reporting of research outcomes (including in academic and scientific papers). These violations of research integrity are considered extremely serious because they distort research results, thereby widening the distance between research and its main purpose – the search for truth.

There are also other kinds of violation of good research practice which compromise the integrity of researchers and university faculty or of the research process itself, frequently termed 'questionable research practices' (henceforth referred to as 'QRP'). There is no clear boundary between FFP and QRP, and it is necessary to adopt measures aimed at their thorough investigation, especially in cases where FFP is carried out repeatedly by experienced, senior researchers, who should otherwise serve as role models for their students and younger colleagues. More specific definitions and procedures are discussed in Annexe 2 of this Declaration

Recommendations Regarding the Investigation of Violations and Alleged Violations of the Principles of Scientific Integrity.

The most serious instances of unacceptable practices are to be sanctioned. That said, it remains crucial to direct all available effort towards their prevention, especially by means of discussion, education, supervision, guidance, and leadership by example, as well as by cultivating a positive and stimulating research environment.

4. WE ARE DETERMINED TO ESTABLISH A NATIONAL ETHICS COMMITTEE FOR SCIENTIFIC INTEGRITY WHOSE MAIN PURPOSE WILL BE TO IMPLEMENT AND HARMONISE INSTITUTIONAL STRUCTURES DEVOTED TO FOSTERING A CULTURE OF SCIENTIFIC INTEGRITY, SERVE AS AN ADVISORY BODY FOR PUBLIC AND PRIVATE UNIVERSITIES AND RESEARCH INSTITUTIONS, AND REPRESENT SLOVAKIA IN THE REALM OF FOSTERING SCIENTIFIC INTEGRITY ON THE INTERNATIONAL LEVEL

The National Ethics Committee for Scientific Integrity (henceforth referred to as 'the Committee') will be entirely autonomous and independent of political and other influences. We presume that the institutions signatory to this Declaration will take an active part in its creation.

The Committee should fulfil the following roles:

to function as an advisory body to the Ministry of Education, Science, Research, and Sport of the Slovak Republic (whilst maintaining complete autonomy);
to create a platform responsible for defining the standards of research integrity and overseeing their harmonisation on the national and international levels (the Committee would be responsible for setting clear national standards of good research practice and defining the criteria of scientific misconduct and dishonesty, whilst taking into account the particularities of different scientific disciplines and the opinions of learned societies and professional associations);
to monitor the implementation of structures fostering a culture of scientific integrity in Slovakia (ethics committees, codes of conduct, procedures for the investigation of misconduct and fraud in research and education, etc.);
to function as a national advisory body to individual research institutions, even when approached by non-signatories to the Declaration;
to function, upon request, as an impartial and neutral arbiter with no conflict of interest in complicated investigations (e.g. cases involving multiple institutions, national as well as international);
to investigate cases where a person accused of violating research integrity appeals against the decision of the relevant research institution;
to promote the doctrine of research integrity (via conferences, workshops, lectures, and so on);
to create national education programmes devoted to preventing violations of research integrity;
to create and maintain a database of information that will enable the general harmonisation of sanctions on the national level;
to coordinate activities aimed at supporting research integrity and represent Slovakia on the international level;
to elaborate reports anonymously summarising closed investigations of cases identified by the signatories to the Declaration (annual country reports);
to monitor the annual reports of universities and research institutions about violations of research integrity, and to create and maintain a national database of anonymised cases of violations of research integrity;
to create an Internet portal of the National Ethics Committee for Research Integrity where the Committee would publish annual reports, examples of best practices, and anonymised information related to the investigation of individual cases, where it would provide a FAQ section, and so on.

GLOSSARY

This Declaration uses a set of well-defined terms whose definitions are included below:

Scientific integrity **(12)** *is the primary precondition of good research, based on the conscientious observance of the highest professional and moral standards, including transparency, and the performance of research in a critical and impartial manner with absolute integrity of scientific practice, education, and administration. The opposite of research integrity is scientific misconduct and dishonesty.*
The term 'scientific integrity' is therefore understood by the authors to encompass both research and academic integrity.

Scientific misconduct **(12)** *is dishonest and insincere conduct which represents the opposite of research integrity and stands in direct contradiction to moral standards. Typical examples include plagiarism, cheating and copying at exams, fabricating research data, recording fabricated data, omitting inconvenient facts and data, falsifying research, dishonest practices in the publication of research outcomes, failure to declare a conflict of interest, abusing information acquired during the evaluation process, fictitious authorship, superficial or unprofessional evaluation, systematic and purposeful publishing in journals and with publishers that have a demonstrated history of dishonest practices (journals and publishers typically called 'predatory' in the academic community).*
'Scientific misconduct' is therefore understood by the authors to encompass both research and academic misconduct..

FFP DEFINITION (1)

- ***fabrication*** *is creating fictitious data and recording it as real.*
- ***falsification*** *is manipulating research materials, equipment, or processes, or changing, omitting, or suppressing data or outcomes.*
- ***plagiarism i****s using other people's work or ideas without giving proper credit to the original source, which constitutes a violation of the rights of the original author(s) to their creative intellectual outputs.*

References:
(1) https://allea.org/code-of-conduct/.
(2) https://archive.tp.cvtisr.sk?486321JOWEGJ6G41.
(3) https://archive.tp.cvtisr.sk?488115NZQ8RN7V24.
(4) European Commission (2018) Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing Horizon Europe – the Framework Programme for Research and Innovation, laying down its rules for participation and dissemination. Retrieved from https://eur-lex.europa.eu/eli/reg/2021/695/oj.
(5) http://www.oecd.org/science/inno/40188303.pdf.
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(12) Slovak Accreditation Agency for Higher Education: Standards for the Higher Education Internal Quality Assurance System, https://saavs.sk/wp-content/uploads/2020/09/Standardy-pre-vnutorny-system-zabezpecovania-kvality-2.pdf.

National Code of Conduct for Scientific Integrity*

Preamble

The National Code of Conduct for Scientific Integrity (henceforth referred to as 'the Code') serves as an annexe to **the Declaration on Fostering the Culture of Scientific Integrity in Slovakia,** whose aim is to encourage all organisations involved in the performance and funding of research in Slovakia to publicly commit to observing the highest ethical standards of scientific integrity, with the intention of strengthening the confidence of the public and the international research community towards Slovak research and academic institutions.

The National Code of Conduct for Scientific Integrity builds on existing legislation and emphasises the values of accountability, honesty, truthfulness, humanity, and sustainability.

ANNEXE 1

Article I. Scope of application and general provisions

I.1. Activities covered by this Code

a) This Code applies to research in the broadest sense of the term I, carried out at the institutions (including private ones) that have adopted it. It covers research funded from public as well as private sources, whether basic, applied, or practice-oriented.
b) The term 'research' applies to all activities linked to the performance (lifecycle) of research: the project design phase, the submission of a funding proposal, the evaluation and approval of that proposal, the execution and assessment of research, the dissemination of its results, and its possible application in practice. It encompasses activities such as evaluation, expert review, reporting of outcomes, publication, education of future generations of researchers, and wider dissemination of research outcomes.
c) The principles and standards of this Code also apply to popular-science publications and teaching materials.

I.2. Institutions bound by this Code

a) This Code is based on the principle of self-regulation and is therefore only binding for the institutions that have adopted it.
b) This Code can subsequently be adopted by other institutions, including private and public organisations active in research and development.
c) Joint research endeavours involving institutions (including private ones) that have not adopted this Code or an alternative should only take place if there is sufficient assurance that they will be carried out in accordance with the spirit of this Code.

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*NOTE: The Code uses a set of well-defined terms whose definitions are given in the glossary. Each such term is italicised upon its first use in the text.
(I) Including the works produced by students and doctoral candidates as part of the education process.

I.3. Subjects covered by this Code

In institutions that have adopted this Code, its contents primarily apply to:

a) individual researchers, university faculty and university students on all levels of the education system (regardless of whether they are employed by a university or a research institution), as well as visiting and external researchers (if they participate in research carried out by the institution, or if they publish their own research under its auspices);
b) project leads, principal investigators, directors of research institutions, university rectors and chancellors, deans, project coordinators, and other persons involved in research management;
c) the work of all other parties involved in research, such as support staff, students, or members of the public.

I.4. Conformance of the Code with existing legislation and other provisions

ANNEXE 1

a) All scientific and research activities of institutions bound by this Code conform to the existing legislation of the Slovak Republic.
b) The norms detailed herein are to be understood as minimum standards and can be elaborated and expanded for every discipline, branch, or institution.
c) Existing codes (including rules of procedure/statues of ethics committees) of the signatories shall remain in force if they conform to Article 1**(4)**.

Article II. Guidelines for research and education activities

II. 1 General principles (5)

a) The foundational value of science is the freedom of scientific investigation and its independence from political, religious, and ideological convictions. It is unacceptable for any authority to try to curtail the freedom of scientific investigation. The need to uphold this value is enshrined in **the Bonn Declaration on Freedom of Scientific Research (1)**, to which the Slovak Republic is a signatory.
b) In the performance of their activities, researchers, university faculty, and other staff observe generally recognised ethical principles. In relation to other employees, they uphold the principles of human dignity, consideration, respect, courtesy, and honesty, in accordance with this Code.

II.2 Good research practice **

Good research practice applies to the following spheres:

- research environment,
- education, supervision, and professional guidance,
- research methodologies,
- ethical measures guaranteeing safety and security,
- processing and management of data,
- cooperation and coordination,
- publication and dissemination of information,
- evaluation, assessment, and editorial work.

II.2.1 Research environment

ANNEXE 1

Research institutions and universities:

a) help to spread awareness of research integrity in society and ensure that research is defined by a culture of research integrity;
b) play a decisive role in the articulation of clear rules and procedures for good research practice, as well as in the proper and transparent investigation of its violations;
c) maintain an adequate infrastructure for the management and protection of data and other kinds of research materials (III), ensuring the reproducibility of research;
d) apply transparent procedures in the recruitment and promotion of researchers and academics;
e) diligently uphold the principles of equal opportunity and non-discrimination, meaning that no person shall be discriminated against based on race, gender, skin colour, religious conviction, age, national or ethnic identity, national or social background, property, sexual preference, language, physical ability, social, economic, or other standing. Employees are free and equal in their dignity and rights.

**NOTE: The entirety of Article II borrows heavily from The European Code of Conduct for Research Integrity (2) https://allea.org/code-of-conduct/.

(III) including qualitative and quantitative data, protocols, processes, other research artefacts, and related metadata

II.2.2 Education, supervision, and professional guidance

a) Research institutions and universities ensure proper and adequate education in the fields of ethics and research integrity to guarantee broad awareness of the relevant codes, norms, and regulations, as well as of potential problems and textbook cases.
b) Throughout their whole career researchers and university faculty, from junior to the most senior, take part in training in the fields of ethics and research integrity.
c) Researchers, university faculty, project leads, principal investigators, and trainers supervise and advise the members of their teams, provide professional guidance in the development of their research, its design and structure, and foster a culture of research integrity by setting a personal example.

II.2.3 Research procedures

ANNEXE 1

Researchers and university faculty:

a)reflect the state of the art in their disciplines in their research efforts;
b)are thorough and deliberate in the design, execution, analysis, and documentation of their research;
c)use research funding in a proper, efficient, responsible, and economic way;
d)publish the results and interpretations of their research openly, honestly, transparently, and accurately; in relevant instances, they maintain the confidentiality of their findings and data;
e)report the outcomes of their research in accordance with the norms of their discipline so that they can be verified and reproduced (where doing so is possible);
f)must recognise their accountability for the quality of their research and the credibility of the acquired outcomes, and act in accordance with the principles of good scientific practice and scientific integrity defined in the publication **Recommendations Regarding the Investigation of Violations and Alleged Violations of the Principles of Scientific Integrity**, which is part of the **Declaration.**

Scientific research:

a) is carried out only with the use of proper scientific methodology and in strict compliance with the rules applicable to a given discipline;
b) is based on systematic scepticism. It is open to doubts and rational, justified criticism.

II.2.4 Ethical measures guaranteeing safety and security

Researchers and university faculty:

a) observe the rules and codes relevant to their discipline;
b) treat their research subjects—whether human, animal, cultural, biological, environmental, or physical—with due respect and care and in accordance with applicable legal and ethical provisions;
c) are mindful of the health, safety, personal dignity, and autonomy of their co-workers, other people to whom a particular research project is relevant, and the whole of society;
d)take account of and monitor the potential risks and ramifications that may stem from their research;
e) recognise that research protocols must reflect and be sensitive to differences stemming from age, gender, social background, culture, religion, or ethnic origin;
f) adhere, in their public statements aimed at the dissemination of scientific knowledge and research outcomes, to their respective expertise in research, development, innovation, or teaching, bearing in mind the difference between professional and personal opinions, and convey information in accordance with the principles of scientific integrity.

II.2.5 Processing and management of data

Researchers, university faculty, research institutions, and universities:

a) ensure the adequate acquisition, processing, storage, and management of all (even unpublished) data and research materials, as well as their safe retention for an appropriate period;
b) ensure, within reasonable constraints, that access to data is as open as possible and corresponds to the FAIR (IV) principles of data management;
c)provide transparent access to and use of their data and research materials to others;
d)treat data as legitimate research outcomes which can be cited;
e) ensure that all contracts and other agreements relating to research outcomes contain fair terms and conditions of their use, ownership, and protection, in accordance with the relevant intellectual property laws.

(IV) findability, accessibility, interoperability, and reusability

II.2.6 Cooperation and coordination

All parties to collaborative research:

a) are responsible for the integrity of the research;
b) agree at the start of their collaboration on the goals of the research and the transparent and open methods of its presentation;
c) agree at the start of their collaboration on the applicable rules and codes concerning research integrity, the existing legislation and other legal provisions, the protection of the intellectual property of the collaborators, and the methods of resolving potential conflicts and violations of research ethics;
d) are duly informed in advance about the submission for publication of research results.

ANNEXE 1

II.2.7 Publication and dissemination of information

a) All authors are fully responsible for the entire content of a publication unless stated otherwise.
b) All authors must agree on the order of authorship, recognising that authorship is judged according to criteria measuring their contribution to the research design, the collection of relevant data, and the analysis and interpretation of outcomes.
c) Authors ensure that their work is available to their colleagues in a timely, open, transparent, and accurate manner unless agreed otherwise.
d)In their communication towards the public, as well as in print and social media, authors shall act honestly and in full accordance with the principles of research integrity.
e) Authors acknowledge the importance of the work and intellectual contributions of other scientists, including their colleagues, assistants, and research supporters, who have had an impact on the research, and properly cite all related works.
f) All authors must declare any conflict of interest and financial and other support acquired for their research or the publication of its outcomes.
g) If necessary, authors will publish a correction or arrange the retraction of their work, following clearly defined procedures and providing a clear, unambiguous, and truthful statement explaining their actions. Prompt corrections are to be judged positively.
h) Researchers and university faculty also adhere to the abovementioned criteria, whether they publish in subscription journals, open-access journals, or in alternative publishing platforms.
i) Researchers and university faculty shall avoid publishing their work in questionable ways and making use of non-credible publishing platforms, such as so-called predatory journals and conferences.

II.2.8 Evaluation, assessment, and editing

a) Researchers and university faculty take seriously their commitment to academia and are exceptionally conscientious in evaluating and assessing research and taking part in decision-making processes.
b) In evaluating publication and funding proposals, appointments, promotions, or rewards, researchers and university faculty shall act transparently and with adequate reason.
c) Reviewers, editors, and board and committee members who find themselves in a conflict of interest shall withdraw from decision-making processes regarding the relevant publication, funding, appointment, promotion, or reward.
d) Reviewers shall maintain confidentiality unless they have been granted approval for disclosure by the author or publisher.
e) Reviewers and editors respect the rights of authors and applicants and seek their consent to use their ideas, data, and interpretations.

ANNEXE 1

Article III. Violations of scientific integrity

III.1 Definition of violations of the ethical principles of research and other unacceptable practices

Despite the best efforts to foster integrity and introduce preventive education in this sphere, cases of scientific misconduct will certainly arise. When they do, it will be necessary to investigate them and, in cases where suspicions are confirmed, introduce adequate sanctions and corrective measures.
Typical examples of violation of research integrity include fabrication, falsification, and plagiarism (henceforth referred to as 'FFP') in the design, execution, or evaluation of research, or in the reporting of research outcomes.

III.1.1 Serious violations of scientific integrity

The following violations (FFP) are considered especially serious because they distort research outcomes: **(2)**

a) **Fabrication** is creating fictitious data and recording it as real.
b) **Falsification** is manipulating research materials, equipment, or processes, or changing, omitting, or suppressing data or outcomes.
c) **Plagiarism** is using other people's work or ideas without giving proper credit to the original source, which constitutes a violation of the rights of the original author(s) to their creative intellectual outputs.

III.1.2 Questionable research practices

There are also other kinds of violation of good research practice which compromise the integrity of researchers or of the research process itself, frequently termed questionable research practices (henceforth referred to as 'QRP'). There is no clear boundary between FFP and QRP, especially in cases where QRP is carried out repeatedly by experienced, senior researchers and university faculty.

Apart from the more direct violations of good research practice listed in this Code (FFP), other examples of unacceptable practices include, but are not limited to, the following:

ANNEXE 1

a) QRP to do with data:

- improper/insufficiently conscientious management of research data;
- improper storage of primary data;
- arbitrary suppression of primary data, including the information about that data's acquisition, or the destruction of such data before the prescribed mandatory deadline on its retention.

b) QRP to do with publishing or conference activities and submission of grant proposals: :

- manipulation of authorship or denigration of the contributions of other researchers;
- repeated republishing of significant parts of one's own earlier publications, including translations, without properly acknowledging or citing the original (so-called 'self-plagiarism');
- selective citation with the aim of supporting one's own findings or of pleasing editors, reviewers, or colleagues;
- launching or supporting journals which undermine the quality control of research (so-called 'predatory journals');
- providing false or inaccurate information in funding proposals, which may disadvantage competing proposals;
- organising/supporting or taking part in so-called predatory conferences.

c) QRP to do with research methods/practice:

- employing inappropriate (harmful or dangerous) research methods, using improper/insufficiently conscientious research designs;
- failing to observe the protocol (with human research subjects);
- bias design – selecting methods aimed at achieving the desired results;
- using inappropriate statistical methods.

d) QRP to do with the work of an evaluator:

- violation of confidentiality;
- superficial, unprofessional, uncritical and unobjective evaluation;
- failing to declare a conflict of interest;
- abusing information acquired during the evaluation process;
- violations of impartiality (whether towards the applicant or the research theme).

e) QRP to do with personal behaviour:

- inadequate management or leadership of the research project;
- unjustified expansion of the bibliography;
- arbitrarily accusing a researcher of violating ethical and other research principles;
- failing to provide access to or consciously distorting research outcomes (inflating the importance or practical applicability of research outcomes);
- delaying or hampering the work of other researchers;
- abusing one's seniority for intentional violations of research integrity;
- ignoring or suppressing violations of research integrity;
- insufficient/improper guidance of students;
- sabotaging research activities, especially by damaging research instruments but also documents, hardware, software, and chemicals that a researcher might require for his or her work;
- hampering the career growth of junior researchers who, in good faith, identify a potential instance of scientific misconduct or dishonesty on the part of their colleagues;
- discriminatory behaviour on the basis of age, sex, gender, ethnicity, race, religious creed, political beliefs, physical, social, and other handicaps.

ANNEXE 1

The most serious instances of unacceptable practices are to be sanctioned. That said, it remains crucial to direct all available effort towards their prevention, especially by means of professional education, supervision, and guidance, as well as by cultivating a positive and stimulating research environment.

III.2 Investigating violations and alleged violations of the principles of scientific integrity

In order to resolve such situations, it is necessary for every institution involved in research and education to have a 'manual' detailing the procedure for the investigation of violations of the principles of scientific integrity. That procedure should be based on the following principles: integrity, fairness, confidentiality, balance, prompt action, and no detriment. It should be published, transparent, and freely accessible (to everyone concerned) **(3)**, **(4)**. More specific rules and procedures are detailed in Annexe 2 to the Declaration, **Recommendations Regarding the Investigation of Violations and Alleged Violations of the Principles of Scientific Integrity.**

ANNEXE 1

Glossary

This Code uses a set of well-defined terms whose definitions are included below:

Scientific integrity **(6)** *is the primary precondition of good research, based on the conscientious observance of the highest professional and moral standards, including transparency, and the performance of research in a critical and impartial manner with absolute integrity of scientific practice, education, and administration. The opposite of research integrity is scientific misconduct and dishonesty.*
The term 'scientific integrity' is therefore understood by the authors to encompass both research and academic integrity.

Scientific misconduct **(6)** *is dishonest and insincere conduct which represents the opposite of research integrity and stands in direct contradiction to moral standards. Typical examples include plagiarism, cheating and copying at exams, fabricating research data, recording fabricated data, omitting inconvenient facts and data, falsifying research, dishonest practices in the publication of research outcomes, failure to declare a conflict of interest, abusing information acquired during the evaluation process, fictitious authorship, superficial or unprofessional evaluation, systematic and purposeful publishing in journals and with publishers that have a demonstrated history of dishonest practices (journals and publishers typically called 'predatory' in the academic community).*
'Scientific misconduct' is therefore understood by the authors to encompass both research and academic misconduct.

References:

(1) https://www.bmbf.de/files/10_2_2_Bonn_Declaration_en_final.pdf.
(2) The European Code of Conduct for Research Integrity https://allea.org/code-of-conduct/
(3) ENRIO: Recommendations for the Investigation of Research Misconduct by ENRIO (2019) http://www.enrio.eu/resources/?cat=6.
(4) OECD Global Science Forum. Investigating Research Misconduct Allegations in International Collaborative Research Projects. A PRACTICAL GUIDE. April 2009, 6 ff. (https://www.oecd.org/science/inno/40188303.pdf).
(5) Code of Ethics of the Slovak Academy of Sciences https://www.sav.sk/php/download_doc.php?doc_no=7663.
(6) Slovak Accreditation Agency for Higher Education: Standards for the Higher Education Internal Quality Assurance System, https://saavs.sk/wp-content/uploads/2020/09/Standardy-pre-vnutorny-system-zabezpecovania-kvality-2.pdf.

ANNEXE 2

Recommendations Regarding the Investigation of Violations and Alleged Violations of the Principles of Scientific Integrity*

Preamble

The Recommendations Regarding the Investigation of Violations and Alleged Violations of the Principles of Scientific Integrity (henceforth referred to as 'the Recommendations' or 'the Manual') serve as an annexe to the Declaration on Fostering the Culture of Scientific Integrity in Slovakia, whose aim is to encourage all organisations involved in the performance and funding of research in Slovakia to publicly commit to observing the highest ethical standards of scientific integrity, with the intention of strengthening the confidence of the public and the international research community towards Slovak research and academic institutions.

This manual is not binding and should be understood as a series of recommendations. It should serve as a guide in the creation of institutional ethics committees, as well as in the investigation of violations of the principles of scientific integrity.

I. General rules for the investigation of potential violations of the principles of scientific integrity

Every European country should adopt a uniform and stable system for investigating violations of the principles of scientific integrity. The main responsibility for that system can be devolved to the local and domestic levels, with the leading role being played by government organisations, funding agencies, private foundations, research institutions, universities, etc. Particular importance should be attached to the appropriate division of competencies, emphasising that it is in the inherent interest of the academic community and society at large to investigate violations of research ethics in a thorough and transparent fashion.
Every investigation of an alleged violation of the ethical standards of research and education must be based on the following principles:

I. 1. Integrity and confidentiality

Investigations are to be carried out fairly, comprehensively, and efficiently, with an emphasis on thoroughness and objectivity, and in full accordance with the National Code of Conduct for Scientific Integrity, which contains definitions of various types of scientific misconduct and unacceptable research practices, and which conforms to the European Code of Conduct for Research Integrity (ALLEA, 2017) **(1)**.
All parties to the investigation of alleged violations of the principles of scientific integrity (I) must declare any existing or potential conflict of interest which might arise during the investigation by the time the investigative report is elaborated.
The institution will promptly adopt measures aimed at ensuring that the investigation is resolved within a reasonable timeframe.

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* NOTE: These Recommendations use a set of well-defined terms whose definitions are given in the glossary. Each such term is italicised upon its first use in the text.
(I) The organisation under investigation, the members of the ethics committee, the whistle-blower, the witnesses, and other possibly relevant subjects

Investigations of alleged violations of the principles of scientific integrity are to be carried out in the strictest confidentiality, with the aim of protecting all concerned parties. That said, the principle of maintaining confidentiality must never interfere with the primary aim of the investigation, which is to arrive at the truth. Therefore, if any conflict arises between the demands of confidentiality and the demands of truth-seeking, precedence shall be given to the latter. In providing information about the investigation to a third party, there is an obligation to maintain its confidentiality—if circumstances allow—in accordance with existing legal provisions.

The investigation of an alleged violation of the principles of scientific integrity must determine the degree of culpability (ranging from low to very high, e.g. negligence and intentionality).

During the investigation of an alleged violation of the principles of scientific integrity, institutions must protect the rights of whistle-blowers as well as those of witnesses, and they must guarantee that their professional future will not be put in peril.

Academic freedom presupposes the right to errors and a diversity of opinion.

Directives concerning the investigation of violations of good research practice must be publicly available to ensure their transparency and uniformity and to ensure that everyone can acquaint themselves with the relevant rules in advance.

ANNEXE 2

I.2. Fairness and the principle of no detriment

Investigations of alleged violations of the principles of scientific integrity are to be carried out in a manner fair and proper towards all concerned parties, in accordance with applicable legislation, guidelines, and the internal directives and regulations of the relevant institution.

Every person accused of violating the principles of scientific integrity will be considered innocent until proven otherwise.

The ethics committee is responsible for the collection of evidence in accordance with the statute and the internal and generally binding legal regulations of the relevant institution, and it must protect and safeguard this evidence throughout the entire investigative process, not only from abuse but also from destruction.

Persons accused of violating the principles of scientific integrity will be informed of all the details of the charge and be allowed a fair hearing during which they can respond to the allegations and proffer evidence, call a witness, possibly file an appeal against the proposed sanctions.

Although not all national and institutional procedures provide for oral testimony, a standard verbal questioning of a witness is consistent with the principle of fairness and can sometimes be instrumental to the successful resolution of the investigation. The scientific community therefore allows it as part of these Recommendations.

Persons found to have violated the principles of scientific integrity will be punished by measures proportionate to the seriousness of their misconduct. They should be able to appeal against the proposed sanctions and corrective measures.

If the accused is absolved of the charge, steps will be taken to clear their name in the academic and scientific community. This procedure should be defined in the statute of the ethics committee.

No person who has brought an allegation (whistle-blower) in good faith shall face persecution in relation to the allegation, and if necessary, they shall be afforded adequate protections.

II. Recommendationsd

II.1 Recommendation 1: Procedure for the investigation of violations of scientific integrity

Existing legal regulations do not reflect the full gamut of possible instances and circumstances of unscientific, unethical, and dishonest conduct. While they serve to protect other rights, they do not safeguard the credibility of science and education and the conditions of their proper functioning. Despite their antagonistic positioning, the person whose work has been called into question, that person's institution, and the person who brought the allegation share a common interest: to promptly investigate the case, arrive at a just resolution and prevent its disclosure. All three parties are invested in protecting their good reputation. The procedural rules guiding the investigation of violations of scientific integrity must reflect and respect these common interests. That is why it is necessary to divide the procedure into the following phases:

ANNEXE 2

Phase one (preliminary inquiry) should establish the merits of the case and determine whether the allegation is justified. In this phase, it is necessary to maintain a balance between the rights of the accused and the rights of the accuser, with a view to confidentiality as well as to the need to adopt a clear position in regard to the facts within a reasonable timeframe. Throughout this phase, it is crucial to protect the rights of the accused, who might turn out to be innocent. The phase should conclude with a decision on the legitimacy of the allegation, indicating whether it warrants further investigation, or whether it has proven to be baseless. As a rule, it must be reflected whether the violation in question was carried out purposely, consciously, or out of negligence.

Phase two (investigation) may include further fact-finding, the questioning of witnesses, the collection and study of evidence, the subsequent issuance of a formal statement as to whether or not misconduct took place, and finally, a response to the confirmed allegation. That response can include the introduction of a reconciliation process, the issuance of recommendations for a supervisory body or a third party, or the adoption of sanctions by the relevant bodies of the relevant institution (for instance, a commitment to correct or retract publications containing demonstrated errors/elements of misconduct). Protecting the general credibility of science requires that the investigation and confirmation of facts and the response to proven cases of misconduct be accomplished within a reasonably short timeframe. The investigation is not public and typically takes the form of an oral consultation.

Generally, this procedure provides for the possibility of reconciliation. That said, this flexibility cannot lead to the protectionist treatment of certain persons, nor to the closure of a case without an adequate resolution and adoption of a position.

This phase ends with the elaboration of a written recommendation/report for the relevant statutory body, which contains a conclusion/ruling and an attached justification. For more details, see: **Good Research Practice, APVT Recommendations (2)**
Both phases of the procedure the preliminary inquiry and the investigation — must conform to the following principles:

ANNEXE 2

1. Prior to commencing the investigation of a specific case, the rules (II) must clearly state the following:

a) who will officially receive allegations of scientific misconduct (an ombudsperson, an independent ethics consultant, the chair of the ethics committee, etc.);
b) what forms of allegations are acceptable (written, oral, signed, or anonymous);
c) when inquiries and investigations are to be initiated, by whom, and in what form;
d) possibilities of appeal (to whom, in what form and timeframe, against the content or the formal side of the investigation);
e) information about potential sanctions (suspension of funding, revocation of an academic degree, disciplinary measures, correction or retraction of an article, etc.);
f) what steps will be taken to form the investigative bodies – ethics committees; will they be formed ad hoc; will the process involve existing committees (national, institutional), or will their form be mixed (e.g. with a permanent chairperson and other provisionally appointed members from a given institution or from outside); the involvement of experts in the given field is indispensable and enhances objectivity, especially in smaller institutions;
g) in cases where researchers from various institutions from a given country, or from international institutions, are participating in the research, it is necessary to agree, prior to the start of the collaboration, on the proper definitions of the terms fabrication, falsification, plagiarism,and questionable research practices, as well as on the methods of investigation of possible violations of the principles of scientific integrity.

2. During the investigation of a specific case, the rules must also clearly state that:

a) any conflict of interest of any person involved in the investigation must be subject to open discussion, both from the party bringing the allegation and from the party accused;
b) the accused must have the right to a fair hearing during both phases of the investigation;
c) if a violation of the principles of scientific integrity has not been demonstrated, the procedure must guarantee confidentiality relating to the parties and the acquired findings;
d) the individual phases of the procedure must be concluded within a reasonable timeframe;
e) the results of the investigation must be communicated to all relevant research organisations, universities, funding agencies, and journals within a reasonable timeframe following its conclusion;
f) the whole procedure, its outcomes, and individual phases must be recorded in a detailed, transparent, and confidential manner and then mailed to all concerned parties (such as a funding agency, an editor, the national ethics committee, the Ethics Committee for the Framework Programmes of the European Union, etc.).

The authors of the Declaration recommend that all research institutions and universities, in their investigation of violations of the principles of scientific integrity, adhere to the **Recommendations for the Investigation of Research Misconduct by ENRIO (2019) (3)**, which include detailed procedures for the investigation of scientific misconduct based on the long-term experience of European countries.

(II) Institutional directives for the investigation of violations of research ethics

II.2 Recommendation 2: Constitution and competencies of ethics committees

Each research institution, university and organisation involved in the funding of research should have an ethics committee for the investigation of ethical problems arising from scientific practice. The committee is responsible for determining and verifying the propriety of approaches to ethically sensitive matters, such as the use of personal data, human tissue, and human or animal subjects, or the performance of research in third countries. The committee also oversees the observance of the highest ethical standards in the area of scientific integrity during the 'execution of research' (it should therefore be responsible for investigating cases of scientific misconduct, such as fabrication, falsification, and plagiarism, as well as breaches of confidentiality, failures to declare a conflict of interest, or other questionable practices violating research integrity).

Under specific circumstances (in cases concerning an especially distinctive issue), it can be useful to establish an **ad hoc committee**, but in general, **permanent committees** are to be preferred, insofar as they possess sufficient accumulated knowledge of and plentiful experience with investigating violations of the principles of scientific integrity. In any case, whether concerning an ad hoc or a permanent committee, it is undeniably advantageous if the committee includes a member familiar with institutional processes. One of the committee members should be designated as the point of contact (III), whose main role is to officially receive allegations and advise on the appropriate procedure where suspicions of the violation of scientific integrity arise.

ANNEXE 2

Constitution of the ethics committee. The ethics committee typically has five to seven members (IV). Smaller institutions can make use of the possibility to create joint committees. In the creation of ethics committees devoted to the investigation of alleged violations of the principles of scientific integrity, it is necessary to clearly define the mandate of the committee and develop a statute and rules of procedure detailing how members are appointed, what their roles and competencies are, what the duration of their mandate is, what the conditions for the re-election of the chairperson are, and so on. The committee can also include a permanent investigative panel, or a person charged with convening such a panel in case the need arises to investigate allegations of violation of scientific integrity.

The ethics committee chairperson, who is responsible for the activities of the ethics committee, is typically an experienced, respected researcher or a person with a legal background. Above all, the chair should possess qualities such as fairness, objectivity, and the ability to process information without bias. For more details, see the following OECD **(4)** publication.

Ethics committees devoted to the investigation of violations of the principles of scientific integrity should have access to special software allowing for the identification of plagiarism.

(III) Ombudsperson, legal expert, chairperson of the ethics committee, research integrity officer/advisor
(I)V Experts in a given discipline, a legal expert, an expert in the field of scientific integrity, an independent committee member, an external expert; it is important to take into account the gender balance of the committee

II.3 Recommendation 3: Statute of the ethics committee

The ethics committee is typically a permanent advisory body of the statutory body of a university or research institution, devoted to overseeing the observance of ethics and integrity in science, research, and education, whose activities are defined in the statute of the given institution.
The roles of the ethics committee include giving opinions and investigating allegations concerning the unethical behaviour of members of the academic community, researchers, and university faculty, and providing written documentation, conclusions, and recommendations to the statutory body.
The ethics committee is an independent body of a university or a research institution, which is completely impartial in its activity and decision making and is not subject to any individual or institutional interests.
The chair of the ethics committee is elected by the members of the ethics committee by a simple majority vote, typically for a four-year term. The members of the ethics committee are appointed and can be removed by the statutory body (chancellor, dean, director, chairperson, etc.). The members of the ethics committee must have adequate professional qualifications, and their expertise should be relevant to the activities of the ethics committee.

ANNEXE 2

Activities of the ethics committee:
overseeing the observance of generally recognised and accepted moral and ethical principles of integrity in science, research, and education, defined in the relevant code of conduct;
evaluating and investigating complaints from the academic community, staff, researchers, as well as the public;
investigating anonymous allegations (in warranted cases);
elaborating annual reports detailing its activities and the conclusions and sanctions adopted by the statutory body, which it then relays to the National Ethics Committee for Scientific Integrity;
in serious cases where an appeal has been filed, forwarding the documentation, including the evidence and an attached opinion, to the National Ethics Committee for Scientific Integrity for further investigation;
upon request, elaborating an expert opinion concerning the investigation of ethical problems;
investigating unethical behaviour and relaying its conclusions to the statutory body for a final decision.

The ethics committee issues statements about the conclusions of its investigations of misconduct allegations (report regarding the results of the investigation), which it relays to the statutory body for a final decision, along with its recommendations. The statutory body must inform the ethics committee of its decisions. The ethics committee summarises all information about investigated cases, along with the conclusions and sanctions adopted, in a brief annual report, which it then submits to the National Ethics Committee. The decision of the ethics committee can be appealed (for instance, at the National Ethics Committee for Scientific Integrity).

ANNEXE 2

Glossary

These Recommendations use a set of well-defined terms whose definitions are included below:

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Definition FFP (1)

Fabrication is creating fictitious data and recording it as real.
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Plagiarism is using other people's work or ideas without giving proper credit to the original source, which constitutes a violation of the rights of the original author(s) to their creative intellectual outputs.

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(1) The European Code of Conduct for Research Integrity https://allea.org/code-of-conduct/.
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„We are committed to ensuring the highest standards of scientific integrity based on the foundational principles of good scientific practice to be observed by researchers and university faculty as well as by other institutions performing and funding research, primarily by creating a suitable support infrastructure, whereby we will foster the credibility of these institutions on both the national and international levels. "

„We are committed to providing education aimed at fostering good scientific practice as the most effective proactive preventive step towards the creation of a national research environment defined by the principles of scientific integrity."

„We are committed to observing a fair, transparent, and efficient system for the investigation of scientific misconduct, dishonesty, and violations of the principles of good scientific practice."

„We are determined to establish a National Ethics Committee for Scientific Integrity whose main purpose will be to implement and harmonise institutional structures devoted to fostering a culture of scientific integrity, serve as an advisory body for public and private universities and research institutions, and represent Slovakia in the realm of fostering scientific integrity on the international level."

EURÓPSKA ÚNIA
Európsky fond regionálneho rozvoja
OP Integrovaná infraštruktúra 2014 – 2020

MINISTERSTVO ŠKOLSTVA, VEDY, VÝSKUMU A ŠPORTU SLOVENSKEJ REPUBLIKY

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RI4SK

RESEARCH INTEGRITY for SLOVAKIA (PS RI4SK)

Activity 1:
Creating a national code of conduct for scientific integrity and setting up the structures (ethics committees) necessary for its implementation;
Activity 2:
Education and awareness-building about the principles of scientific integrity;
Activity 3:
Coordinating investigations of scientific and research misconduct
Activity 4:
Establishing a suprainstitutional national platform for scientific integrity.

Members of working group RESEARCH INTEGRITY for SLOVAKIA (PS RI4SK)

RNDr. Soňa Ftáčniková, PhD. | chief coordinator, coordinator Activity 4
Slovak Centre of Scientific and Technical Information, Bratislava

Ing. Peter Beňo | secretary
Slovak Centre of Scientific and Technical Information, Bratislava
Assoc. Prof. Mgr. Ing. Gabriela Dubcová, PhD. | coordinator Activity 1
University of Economics in Bratislava
prof. RNDr. Ľubica Lacinova, DrSc. | coordinator Activity 2
Slovak Academy of Sciences, Bratislava
doc. JUDr. Mgr. Jana Šimonová, PhD. | coordinator Activity 3
Academy of the Police Force in Bratislava

doc. PhDr. Alexandra Bitušíková, CSc. | Matej Bel University in Banská Bystrica
prof. RNDr. Jozef Masarik, DrSc. | Comenius University, Bratislava
prof. Ing. Robert Redhammer, PhD. | Slovak Accreditation Agency for Higher Education, Bratislaval,
Mgr. Róbert Karul. PhD. | Slovak Academy of Sciences, Bratislava
prof. Ing. Ján Szolgay, PhD. |
prof. RNDr. Peter Fedoročko, CSc. | Pavol Jozef Šafárik University in Košice
MgA. Paulína Böhmerová | ESET spol. s.r.o.
prof. Ing. Milan Terek, PhD. | School of Management in Bratislava
prof. Ing. Ervin Lumnitzer, PhD. | Technical University of Košice
RNDr. Zdenka Krajčovičová, PhD. | Alexander Dubček University in Trenčín
doc. Ing. Jaromír Mlýnek, CSc. | Academy of the Police Force in Bratislava
JUDr. Stanislav Mydlo | Slovak Research and Development Agency, Bratislava
Ing. Juraj Noge | Slovak Centre of Scientific and Technical Information, Bratislava
Ing. Anna Krivjanská | Slovak Centre of Scientific and Technical Information, Bratislava
Mgr. Jitka Dobbersteinová | Slovak Centre of Scientific and Technical Information, Bratislava

RNDr. Soňa Ftáčniková, PhD. | Slovak Centre of Scientific and Technical Information, Bratislava | text
Mgr. Eva Vašková | Slovak Centre of Scientific and Technical Information, Bratislava | graphic

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„... IS TO ENCOURAGE
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AND FUNDING OF RESEARCH AND EDUCATION
IN SLOVAKIA
TO VOLUNTARILY COMMIT TO OBSERVING
THE HIGHEST ETHICAL STANDARDS
OF SCIENTIFIC INTEGRITY,
...“