

## Code of Ethics of INESC TEC

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# Code of Ethics of INESC TEC

## Preamble

The Code of Ethics of INESC TEC systematises and formalises the ethical and deontological principles that should guide the institutional and individual conduct of INESC TEC in the fulfilment of its mission.

The individual compliance with the principles expressed here is required for all those working at INESC TEC, irrespective of their link to the institution<sup>1</sup>, and they should integrate it in the activity they develop at the institution, as well as in the relations with companies and other entities and, in general, with the surrounding community.

The compliance with the principles expressed herein is without prejudice to the application of other special legal regimes of activity or conduct to which the collaborators are subject to, namely the principles defined on this matter in the protocols of assignment of human resources established between INESC TEC and the associated institutions, applying with precedence over the provisions of this code, whatever is stipulated in this regard by the assigning institution to which the collaborators are contractually bound.

The code is based on the values of INESC TEC and also on the principles stated by the UN Global Compact<sup>2</sup> and by the European Charter for Researchers<sup>3</sup>.

This Code of Ethics, together with the documents that frame INESC TEC Social Responsibility, Management of Conflict of Interest, Data Protection Policies and the Rights and Duties of those working or studying at INESC TEC, constitute a cornerstone of the institution's vision and position which must support all its activity.

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<sup>1</sup> The map of INESC TEC affiliation links may be found at:

<https://iris.inesctec.pt/authAPI/apiRequestFile?handle=123456789/7609&httpMethod=GET&apiName=dspaceAPI&>

<sup>2</sup> The Global Compact of the United Nations (UN) is an initiative planned for companies that are committed to align their operations and strategies with the ten [universally accepted](https://www.unglobalcompact.org) principles in the areas of human rights, labour, environment and anti-corruption (<https://www.unglobalcompact.org>)

<sup>3</sup> Established by the European Commission Recommendation of 11 March 2005 ([http://ec.europa.eu/euraxess/pdf/brochure\\_rights/eur\\_21620\\_en-pt.pdf](http://ec.europa.eu/euraxess/pdf/brochure_rights/eur_21620_en-pt.pdf))

## **Chapter I - Objectives**

### **Article 1**

The objectives of this code are:

1. To affirm a culture based on rigour, competence, transparency and respect for others;
2. To contribute to a transparent, rigorous and responsible management of the Institution;
3. To guide those who work at INESC TEC, in general, and the researchers, in particular, regarding their rights, responsibilities and obligations related to the ethical issues raised by their activity, through the establishment of a set of rules of conduct and the definition of situations that can constitute an improper conduct in research.

## **Chapter II - Ethical Principles and Commitments of INESC TEC**

### **Article 2**

#### **Ethical Principles**

INESC TEC endorses the following ethical principles:

1. To govern its operation in compliance with the law and according to high ethical standards, guided by the prime value of respect for human dignity;
2. To promote research activity freely and rigorously, aiming at expanding the frontiers of knowledge while being oriented towards the good of mankind;
3. To guide its performance with the utmost respect for people, caring for the personal and professional achievement of all those who work at the institution, thus ensuring equality of opportunities, namely equal access and treatment with regard to gender, social, political, ethnic and religious issues and minimising the disadvantages of disabled people;
4. To promote innovation, by creating an environment favourable for creativity and entrepreneurial attitude from all those who work at the institution;
5. To take into account the well-being of the communities in which it operates through the exercise of a social responsibility policy that defends environmentally, economically and socially sustainable development and the pursuit of the sustainable development goals set by the United Nations<sup>4</sup>;
6. To practice an economic, efficient and balanced use of resources;
7. To cooperate with other entities and with society in general;
8. To affirm and practice its independence from political ideologies, religions, political power, economic power and artificial social barriers.

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<sup>4</sup> Available for consultation at <https://unric.org/en/united-nations-sustainable-development-goals/>

## **Article 3**

### **Commitments of INESC TEC**

**All those working at INESC TEC are assured that:**

1. They are considered and treated with respect, equality and dignity;
2. Their working conditions are suitable to the activities and duties that they perform;
3. They have a safe and healthy environment and working conditions, having access to the necessary and adequate resources for the performance of their duties;
4. They are paid for their work in accordance with their duties and rights;
5. They will not be subject to any form of discrimination based on their ethnic or social origins, language, gender, age, physical disability, sexual orientation, political opinions, philosophical or religious beliefs;
6. They are free to determine the appropriate methods for solving the problems posed by the research activities, in accordance with recognised ethical principles and practices, safeguarding the limitations that may arise from specific circumstances of the research or operational restrictions, as long as they do not conflict with ethical practices and principles that the researchers must embrace;
7. INESC TEC does not tolerate any form of harassment within the Institution, namely those of a moral and sexual nature, as well as any verbal or physical humiliation or coercion;
8. It guarantees freedom of association and expression;
9. It respects the privacy and confidentiality of communications and personal information;
10. It does not tolerate any acts of active or passive corruption.
11. It contributes to the awareness of all researchers towards a culture of integrity in research and promotes an adequate training in ethics and integrity so that all those involved are informed of the relevant codes and regulations.
12. It establishes an Ethics Committee, in the form of a collegiate and independent advisory body, whose composition, competences and mode of operation shall be governed by the Regulation set out in Appendix III of this Code.

**In the relationship with other entities, INESC TEC ensures that:**

1. It makes public its shares or other types of equity in companies and other entities;
2. It mentions in its Annual Accounts and Activity Report the patronage and sponsorship actions it has benefited in the year concerned;
3. It manages the funds granted by donors rigorously and transparently, always seeking to ensure that the projects to which they are intended for are successfully completed.

**In the respect for the environment, INESC TEC commits itself to:**

1. Maximise the energy efficiency of its facilities and activities by encouraging a reduction in demand and the preferential use of renewable resources;
2. Minimise its carbon footprint;
3. Ensure the efficient use of the resources it uses;
4. Maximise the recovery of the waste that INESC TEC generates;
5. Applying environmental criteria in the acquisition of goods and services and in the execution of works, where applicable.

## Chapter III – Code of Conduct

### Article 4

#### General Duties of conduct of all those Working at INESC TEC

Without prejudice to other duties and obligations to which they are subject in accordance with their legal and contractual status, all those working at INESC TEC shall:

1. Perform their duties always considering and safeguarding the interests of INESC TEC;
2. Comply with and respect the law and other regulations or contracts to which they are bound or that are applicable to them;
3. Identify themselves as members of INESC TEC in the disclosure of all the activities in which they participate, namely in publications and R&D projects;
4. Maintain confidentiality about any information obtained as a result of their affiliation to INESC TEC, and, upon request, make this commitment by signing a confidentiality statement;
5. Abstain from trying to obtain funding or other types of benefits through false information or omission of relevant facts;
6. Abstain from pursuing personal or third party interests in detriment of INESC TEC interests;
7. Make a careful, rational and efficient use of INESC TEC facilities and resources that are provided to them, abstaining from using them, directly or indirectly, for their own benefit or that of any third party;
8. Treat the remaining INESC TEC co-workers with respect and loyalty;
9. Contribute to the proper processing of personal data to which they have access, in accordance with the law and applicable regulations;
10. Ensure the protection of INESC TEC intellectual property rights in accordance with their contractual obligations as well as with INESC TEC Intellectual Property Regulation;
11. Ensure that the use and sharing of any information that may be considered sensitive is duly considered and restricted to the needs for the proper execution of their activity.

### Article 5

#### Specific duties of INESC TEC Researchers

1. All those conducting research and development at INESC TEC should make every effort to ensure that their research work is original and relevant to society, assuming their particular responsibility towards the institutions to which they are linked, the funding entities and the research team;
2. All researchers must assume intellectual honesty, authenticity, objectivity, respect for intellectual property, methodological and experimental rigour, impartial data analysis, as well as the non-violation of the rights and dignity of human beings involved in research to preserve the credibility and quality of research;
3. In particular, researchers are responsible for ensuring compliance with the following set of principles:

##### A. Integrity

4. Act honestly and diligently in all situations, ensuring rigour, compliance with applicable laws, regulations and conventions;
5. Act with a complete separation between their personal interests and those of the institution, declaring their interests in external entities and complying with the agreed conflict of interest management plans as defined in the current Conflict of Interest Management Policy.

##### B. Diligence, efficiency and responsibility

1. Act, within the scope of their duties, with competence, responsibility, professionalism, rigour, zeal and diligence in the activities and other responsibilities entrusted to them;

2. Promote society's trust in INESC TEC and contribute to the good image and reputation of the institute;
3. Protect and respect INESC TEC assets, namely goods, equipment and facilities, refraining from using them for personal gain or allowing their abuse by third parties.

#### **C. Loyalty and cooperation**

1. Follow the instructions of those who have, even if occasionally and at any level, the responsibility to coordinate, supervise or direct their activities;
2. Contribute to the improvement of the Institution's processes and results, through the free expression of their ideas and opinions;
3. Collaborate with each other and provide the colleagues with the information and knowledge they need to develop their projects;
4. Promote good interpersonal relationships.

#### **D. Dissemination of results**

1. Promote the dissemination of research results in a timely, open and transparent manner, in accordance with international best practices and, to the extent possible, in accordance with FAIR<sup>5</sup> principles, without prejudice to the restrictions arising from confidentiality obligations or the protection of results by intellectual property rights;
2. Present the results of their work in accordance with the conventions of their scientific field and, where applicable, so that research can be verified and reproduced;
3. Use, whenever possible, the principles of Open Science<sup>6</sup>.

#### **E. Adoption of good research practices**

1. Ensure that all research is conducted in compliance with the rules and protocols for the safety of persons and property;
2. Keep an appropriate record that allows the verification of research results;
3. Ensure the principle of research freedom;
4. Refrain from any kind of plagiarism and misappropriation of intellectual creations;
5. Ensure the confidentiality of the research findings in order to safeguard the potential opportunity to protect intellectual property, where applicable, under the terms defined in the Intellectual Property Regulation in force;
6. Ensure that the referencing of sources used in the production of scientific work is rigorous and complete;
7. Ensure respect for copyrights by adequately referring to the sources used in the work;
8. Ensure the correct insertion of the names of authors and co-authors in the publications, as well as the expression of due recognition to other co-workers, when justified.

## **Artigo 6º**

### **Self-Assessment and submission to the Ethics Committee**

1. INESC TEC provides its researchers with a self-assessment survey (Appendix II), helping them to evaluate whether a given research project needs to be previously submitted for assessment and acceptance by the Ethics Committee, in order to ensure compliance with the principles and ethical standards contained in this Code. The survey should be answered and recorded, which may demonstrate good faith in the event of an investigation of possible misconduct in research, as defined below;
2. If research projects deal with human beings or personal data, or use software with autonomous operation, in particular when it involves artificial intelligence – object of autonomous treatment in Annex I –, they must be submitted to the Ethics Committee approval, whenever the result of the self-assessment indicates that the research involves a non-negligible risk to the rights and/or safety of people, facilities or equipment.

<sup>5</sup> Standing for "Findable, Accessible, Interoperable and Reusable".

<sup>6</sup> See <https://www.ciencia-aberta.pt/nosp>

3. If research projects deal with animals, they should be submitted to an ethical committee with competence in the area, and its results should be transmitted to INESC TEC Ethics Committee.

## **Chapter IV – Investigation of possible misconduct in research**

### **Article 7**

#### **Guiding principles**

These guiding principles are a summary of the Procedure for the Investigation of Possible Misconduct in Research (as provided for in Appendix IV,) and aim at informing INESC TEC researchers of the characterization of bad research practices and their possible consequences, but also of the guarantees and rights that assist them.

In accordance with the law, INESC TEC guarantees to anyone working at INESC TEC that reports, in good faith and in accordance with this procedure, the existence of a misconduct in research, that he or she will not be in any way prejudiced.

#### **A. DEFINITION OF POOR RESEARCH PRACTICE AND OF MISCONDUCT IN RESEARCH**

The distinction between poor research practice and misconduct in research is important since the first only needs to be identified and dealt with through training and guidance, while research misconduct needs to be investigated through an inquiry procedure and may lead to the adoption of proportionate measures provided for in this Code and even disciplinary measures, when applicable.

##### **Poor research practice:**

Although certain research practices are considered inadequate, they do not prefigure cases of misconduct in research when conducted without intent. The following serve as examples:

1. Failure to give proper recognition to others involved in research activities, where this does not constitute deliberate exploitation of ideas or work of others without acknowledgment;
2. Deviation from current accepted practice in carrying out research, provided that it does not cause harm to humans or involve the illicit disclosure of personal data;
3. Failure to obtain the required favourable opinion from the Ethics Committee provided it was not deliberate, and does not cause immediate harm to third parties;
4. Failure to follow any protocols contained in the ethical consent that has been given for the research, provided it was not deliberate and was not harmful to third parties;
5. Failure to follow any protocols set forth in the directives of recognised professional, academic, scientific or governmental bodies, where this was not deliberate and would not be harmful to third parties;
6. Failure to meet certain legal formalities without adverse consequences to third parties or to the institution.

##### **Misconduct in research:**

For the purposes of this Procedure, the acts or omissions listed below, configure misconduct in research:

1. Repeated poor research practices, as characterised above;
2. Fabrication, forgery, plagiarism or deception in proposing, carrying out or reporting research results;
3. Deliberate exploitation of ideas and work of others without due acknowledgment;
4. Fraud, including data fabrication, using false information on funding request or misuse of research funds, equipment or facilities;
5. The use of false curricular information;
6. Intentional distortion of results in order to favour a given line of work or to satisfy interests unrelated to the scientific truth;

7. Publication of data that is known or reasonably suspected to be false or deceptive;
8. Deliberate, reckless, dangerous or negligent deviation from current accepted practices in conducting research, including failure to comply with ethical review requirements, relevant legislation or directives of professional, academic, scientific or governmental bodies, if such failure results in unreasonable risk or damages to humans, facilities, equipment or the environment;
9. Deliberate adulteration of data, undisclosed duplication of publication, failure to declare material interests, misrepresentation of qualifications or experience, and misrepresentation of inappropriate claims of authorship.
10. Intentional failure to get the required favourable opinion from the Ethics Committee;
11. Mismanagement or improper preservation of data and research results;
12. Breach of the confidentiality obligation, when it exists;
13. Inciting, abetting or concealing misconduct in the research of others.

## **B. INVESTIGATION PROCEDURE**

This procedure describes the process that must be followed when INESC TEC is alerted to suspected misconduct in research. Its purpose is to enable a full and fair investigation of issues related to the research and to reach a conclusion on the alleged suspicion before considering any disciplinary action or other one that may be required or recommended.

1. The President of INESC TEC Executive Committee oversees the implementation of this Code of Procedures and is responsible for ensuring that all cases of potential misconduct in research are dealt with in accordance with the processes defined herein; if the Executive Committee has not been appointed, that responsibility will rest upon the Chairman of the Board;
2. The President of INESC TEC Executive Committee may seek confidential advice to reach a decision;
3. In case of a complaint, The President of INESC TEC Executive Committee shall determine whether or not an investigation is justified and inform the complainant of his decision;
4. If a case in any way involves the President of INESC TEC Executive Committee or gives rise to a potential conflict of interest, the responsibility for conducting the process shall be transferred to the Chairman of the Board;
5. If the involvement also reaches the Chairman of the Board, the President of the Scientific Council will be responsible for conducting the process;
6. If the President of INESC TEC Executive Committee considers that there are grounds for an inquiry, he shall inform the researcher concerned of the suspicions that have been raised and which will be investigated;
7. Once the Investigation procedure is initiated, it cannot be interrupted or terminated without a final decision;
8. Where the alleged misconduct in research may simultaneously give rise to criminal liability, the case shall also be forwarded to the competent authorities;
9. The President of INESC TEC Executive Committee has the authority to take precautionary measures that are appropriate to prevent situations of potential danger or legal infringement and to prevent the occurrence of damages, which may include the suspension of the activity in question;
10. Once the existence of misconduct in research has been established, the researcher concerned shall be given the opportunity to request a review of the decision by an appeal body.

## **C. PRINCIPLES OF FAIRNESS, CONFIDENTIALITY AND INTEGRITY**

1. INESC TEC is committed to ensuring that complaints of misconduct in research are fairly and rigorously investigated;
2. All proceedings will be conducted under the presumption of innocence principle, with independence and confidentiality;
3. A frivolous or malicious allegation of misconduct in research is considered a serious disciplinary offense;
4. While suspected misconduct in research is under investigation under this Procedure, the complainant, the researcher targeted by the complaint, any witness or other person involved in this process may not disclose or make any statements about the allegations to third parties, unless formally allowed by the Board of INESC TEC or when required by law; failure to comply with this rule may be considered a serious disciplinary offense within the framework of labour disciplinary procedure, in cases that may lead to its opening.



**D. SCOPE OF APPLICATION**

1. INESC TEC is responsible for investigating any suspicions of misconduct in research raised against any of its staff or grant holders, as well as students who carry out projects, Master's dissertations or PhD theses at INESC TEC;
2. This Procedure may also apply to any person authorised to carry out research at INESC TEC or to use INESC TEC facilities for research purposes, in accordance with what is established in the protocols that govern the assignment of human resources.

**E. OBLIGATION AND METHOD OF REPORTING SUSPECTED MISCONDUCT IN RESEARCH**

1. Staff, grant holders or students involved in INESC TEC projects, including guest researchers, have a responsibility to report to INESC TEC any concerns about misconduct in research, if they have been witnessed or for which there are grounds for suspicion;
2. Allegations of potential misconduct in research should be made in writing, accompanied by evidence supporting the suspicions, and addressed confidentially to the President of the Executive Committee of INESC TEC.

## APPENDIX I

### Research Projects to be submitted to the Ethics Committee

#### I. RESEARCH WITH HUMAN BEINGS OR PERSONAL DATA

1. Besides complying with all good practices designed to fulfil the ethical principles set out above, as well as with the principles and guidelines contained in international reference documents<sup>7</sup>, research involving human beings and personal data must be justified, meet quality criteria, and protect the dignity, rights, well-being, security and privacy of all those involved. This commitment extends to participants, researchers, and other research stakeholders.
2. The abovementioned good practices require special responsibilities, protections, care and methodologies, of which the following principles are highlighted:
  - 2.1 The interest and the well-being of every human being must prevail over the interest of science;
  - 2.2 Research should not involve risks and burdens disproportionate to the potential benefits and should prevent or minimise discomfort and physical and psychological suffering situations of the individuals under investigation;
  - 2.3 No research with human beings shall be conducted without the properly documented and informed consent of the participants, except in cases where the Ethics Committee considers that it is not necessary, if dully justified and according to the law;
  - 2.4 Researchers should inform participants in advance about their right to, freely and at any moment, cease their participation in the project or to revoke their previous consent, without suffering any adverse consequences as a result of that option;
  - 2.5 Personal data obtained in research shall be kept confidential and shall not be retained beyond the time necessary for the purpose of their handling, in accordance with the opinion of the competent ethics body(ies) and/or applicable law, after which they shall be destroyed;
  - 2.6 Where justified and compatible with the purpose of research, in addition to confidentiality, pseudonymisation or even irreversible anonymisation of data shall be guaranteed;
  - 2.7 Increased protections should be taken into account when research concerns vulnerable groups, namely children.
3. Researchers should assess the ethical risk of all the procedures included in research and, in cases where the risk to participants is not insignificant, an independent ethical review should be requested before the start of the research work, which can only begin if approved by the Ethics Committee after an independent review of its scientific merit.
4. Any non-conformities detected in the course of the project will have to be assessed and appropriate measures shall be taken to prevent their occurrence. If this is not possible, an immediate submission to the competent ethics body(ies) shall be required.

#### II. RESEARCH INVOLVING AUTONOMOUS SYSTEMS OR ARTIFICIAL INTELLIGENCE (AI)

Ethical principles specifically apply to the behaviour of human beings, individually or in groups, in their social interactions. When there are machines whose action interferes with that same society without a direct human supervision – as is the case of autonomous or artificial intelligence systems – these systems must be developed,

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<sup>7</sup> Namely, the Declaration of Helsinki of the World Medical Association, containing Ethical Principles for Medical Research involving Human Subjects, adopted by the 18th General Assembly of the WMA, in Helsinki, Finland, in June of 1964, and, of the same Association, the Declaration of Taipei on Ethical Considerations regarding Health Databases and BioBanks, adopted by the 53rd General Assembly of the WMA, in Washington, DC, USA, in October of 2002, are accessible, respectively, at <https://www.wma.net/what-we-do/medical-ethics/declaration-of-helsinki/> and <https://www.wma.net/policies-post/wma-declaration-of-taipei-on-ethical-considerations-regarding-health-databases-and-biobanks/>.

designed and evaluated on an ethical basis, which also informs the definition of conditions and criteria of trust based on their technical quality as well as the ability to justify and explain the decision-making process.

The need for AI to be reliable goes through three essential components: the first one is related to an ethical order (regarding the respect for fundamental human rights, applicable laws or regulations and nuclear principles and values), the second one is related to technical robustness and reliability (since an insufficient technological capacity can give rise to unintentional damage) and the third one is related to traceability and auditability.

A set of guidelines is listed for the development of reliable AI or autonomous systems, which are committed to ethical principles:

### **1. Ensuring an ethical purpose**

- 1.1 Ensuring that AI is focused on the human being, that is, being developed, applied and used based on the respect for its fundamental rights and for the ethical principles of beneficence (to do the right thing), nonmaleficence (not harming anyone), preservation of its autonomy and justice;
- 1.2 Based on the same values and principles, seeking to prospectively assess the possible effects of AI on human beings, their interactions and on common good;
- 1.3 Paying special attention to situations involving the most vulnerable groups, such as children, people with disabilities or minorities, or situations with asymmetries in power or information, such as between employers and employees or between companies and consumers.

### **2. Developing Reliable AI**

- 2.1 Incorporating the requirements for a reliable AI, starting from the first design phase: accountability, good data management and control, design for the common good, non-discrimination, respect for human autonomy, respect for privacy, technical soundness, security and transparency;
- 2.2 Ensuring that all team members are aware of the shared responsibility that they assume in their areas of activity;
- 2.3 Considering technical and non-technical methods in order to ensure the application of these requirements in AI systems;
- 2.4 Considering the same requirements when building the system itself, the testing environment and the potential applications of the system;
- 2.5 Making efforts to create conditions for the traceability and auditability of AI systems, particularly in critical contexts or situations. Wherever possible, designing the system in such a way that all its constituent parts, namely data, pre-trained models, etc can be traced. Besides this, establishing the methods for explaining the AI system;
- 2.6 Ensuring the participation and inclusion of stakeholders in the design and development of the AI system, clearly informing them at every step of the way about the capabilities and limitations of the system;
- 2.7 Ensuring the diversity of teams, in several dimensions, as this diversity may favour the fulfilment of the different requirements expressed;
- 2.8 In case of fundamental conflicts between different goals (e.g. transparency and dissemination of potentially dangerous or dual-use solutions, or the identification and correction of biases that put people's privacy at risk), acting with a sense of ethics and always communicate and document such compromise solutions;
- 2.9 Integrating the development of a reliable AI in the organisation's culture and providing information to stakeholders on how that concern should be translated into the design and use of AI systems;
- 2.10 Promoting opportunities for reflection and discussion of ethical issues and emerging challenges arising from AI systems, as well as for anticipating future scenarios arising from the evolution of the configuration of AI systems, thus ensuring the proper training of all their agents involved in their creation and development;
- 2.11 Ensuring the assessment of the reliability of the AI systems developed, namely through: the adoption of a set of procedures in order to ensure that same reliability in the development, dissemination and use phases, adaptable to the specific case in which it is being used; to conduct a dynamic and permanent process of identification of requirements, assessment of solutions and to ensure better results throughout the life cycle of the AI system.

## APPENDIX II

### **“Checklist” on ethical issues that may be raised by the project**

*If the answer to any of the following questions is no, please try to justify it below:*

- Have you ensured that all those involved in your project are comfortable with the proposed goals?
- Have you taken the necessary care, particularly with junior researchers, to clarify the ethical issues that the project may involve?
- Did you choose and distribute the work to the team members in an equal and non-discriminatory manner?
- Have you tried to provide the conditions for a proper conduction of the work?
- Are you convinced of the originality of the studies that you intend to pursue?
- Have you cared about the non-existence of bias in data collection and research design?
- Have you tried to ensure the reliability of previous data or results from which you can make secondary use?
- Have you planned your activities in order to ensure the methodological and experimental rigour?
- Did you seek to ensure the monitoring of the project in the event that new ethical issues arise during its execution?
- Do you seek to ensure, within your capacity, a minimum use of material and energy resources?
- Have you planned procedures for recording the activities and the intermediate results of your work in order to improve its traceability and reproducibility?
- Have you taken appropriate care in the internal and external preservation of the information collected?
- Have you tried to ensure that the obtained results do not reproduce or perpetuate stereotypes?
- Have you ensured that you are aware of the sources of previous results that you may use, so that you can refer them properly?
- Have you tried to plan a proper dissemination of the results?

**Justification:**

*If the answers to any of the following questions is yes, please try to justify it below:*

- Does the research proposed in your project have any bias regarding ethnicity, gender, ...?
- Have you received any form of pressure that might jeopardise the goals of the research?
- Do you think the results of your research could potentially be used for military purposes?
- Do you anticipate any possibility that the results may cause harm to people, other living beings or organisations?

**Justification:**

**If your project involves human beings or personal data, proceed to the next checklist:**

*If the answer to any of the following questions is no, please try to justify it below:*

- Have you tried to limit the information requested to participants to the minimum necessary?
- Is it possible to ensure the anonymity of the people involved?
- Have you taken appropriate measures to ensure the confidentiality, privacy and security of the data collected?
- Have you defined, under the project, the date and process for deleting data, where applicable?
- Do you ensure the right to be forgotten to participants?

**Justification:**

*If the answer to any of the following questions is no, please try to justify it below:*

- Does the study involve activities that may cause harm to members of the research team?

- Does the study involve the discussion of sensitive topics related to intimacy, drug use, behaviours that could be seen as "illegal", health issues, emotional issues, work issues, etc?
- Can the study cause discomfort or anxiety to the participants?
- Does the research involve people that, by being within an organisation, can be limited in their right to refuse to participate in the study?
- Does the project involve participants who, due to their condition or vulnerability, cannot give consent?
- Does the project require participants to be part of the study, without their knowledge or their informed consent at the time of data collection?

**Justification:**

**If your project involves autonomous systems or artificial intelligence, proceed to the next checklist:**

*If the answer to any of the following questions is no, please try to justify it below:*

**Human Involvement**

- Do you consider that the system is properly suited to the type of predictable users and to their working environment?
- When the system is in use, are there any assessment mechanisms to that suitability planned?
- Are there any planned and documented situations in which the user may need to partially or completely switch off the AI functions?
- Is there any user support planned if such an event occurs?

**Algorithms and boundary conditions**

- Are the "learning and forgetting" rules being met?
- Is there any monitoring planned for the "learning and forgetting" processes (e.g. in case of outdated data or legal requirements)?
- Do you consider procedures for monitoring the quality of information used in learning?
- Are you considering possible biases in the data used for learning?
- Are there any situations in which the system is forced to stop and ask for counselling or even decisive intervention from a human being?
- Are the limits for decisions or proposals generated by the system clearly established?
- Do you consider the possibility of the system explaining to humans the reason for a decision as well as the process to reach that decision?
- Can the results of the programme be reproduced?

**Compliance and safety of learning systems**

- Are there any mechanisms to avoid deliberately teaching the system wrong things?
- Are there any mechanisms planned for detecting security breaches?
- Are there any mechanisms planned for detecting and cancelling possible back doors?

**Potential long-term impact**

- Has a long-term risk assessment been carried out?
- If the system is used on a large scale, could it result in loss of knowledge or of skills to mankind?
- Are there any mechanisms planned for the monitoring of any unexpected or irrational outcomes?
- Are there mechanisms capable of detecting whether the system has started to operate independently from the predefined tasks?

**Justification:**

## APPENDIX III

### INESC TEC Ethics Committee Regulation

#### Chapter I

#### Scope and Competencies

#### Article 1

#### Scope of Operation

The Ethics Committee (Ethics\_C) of INESC TEC is a consultative, collegial, multidisciplinary and independent body whose activity is governed by this Regulation and whose mission is to ensure the observance and promotion of standards of integrity, honesty and responsibility in research activities carried out by INESC TEC members, in their internal and external relations, as well as in their professional conduct, in accordance with the terms provided by the Code of Ethics of INESC TEC.

#### Article 2

#### Competencies

1. The area of competence of the Ethics Committee is the research and development activity carried out at INESC TEC involving, in any form, human beings, biological material of human origin, personal data or software susceptible of autonomous operation, in particular when it involves the use of artificial intelligence.
2. In the exercise of its powers, **Ethics\_C** will take into account Code of Ethics of INESC TEC, as well as the international declarations and guidelines on ethics and bioethics to which it refers and will promote, accordingly, within the scope of INESC TEC activities, respect for safeguarding human dignity and integrity, preserving the environment and responsible use of biological material.
3. Within the scope of its competences, it is the responsibility of **Ethics\_C**:
  - a) To analyse the questions raised by anyone working at INESC TEC, no matter the type of link he or she has with the Institution, as well as to take the initiative to formulate opinions and recommendations;
  - b) To express its opinion on ethical aspects of scientific research protocols of INESC TEC research units or on projects in which its members participate, namely, but not limited to, those referring to experimental procedures, clinical studies, therapeutic tests or diagnoses performed in human beings, collection and processing of personal data and development or use of software susceptible to autonomous operation, particularly when it involves the use of artificial intelligence, in the cases determined by the Code of Ethics;
  - c) To request periodic and detailed information on the development of the research protocol on which they have pronounced, as well as, in justified cases, to recommend the suspension of a given project;
4. To organize and stimulate opportunities for collective reflection on research practice problems involving ethical issues and to promote training activities in this area.
5. INESC TEC—EC does not make legal or disciplinary assessments, but it may, when asked, give opinions with a view to instructing legal or disciplinary proceedings.
6. When deemed necessary, **Ethics\_CC** may request from third parties all information it deems relevant, as well as opinions from external experts.
7. Opinions issued by **Ethics\_C** always take the written form and are not binding in nature.

## Chapter II

### Composition and Functioning

#### Article 3

#### Membership and mandate of members

1. **Ethics\_C** is composed of a president and four members, preferably from different scientific areas in order to safeguard its multidisciplinary character.
2. The president and the other members of the **Ethics\_Care** appointed by the Board of Directors of the Institution, after hearing the Scientific Council and the Workers Commission.
3. The term of office of **Ethics\_C**members is three years.
4. In case of resignation of any member of the **Ethics\_C**, he or she will be replaced following the provisions of paragraphs 2 and 3 of this article.
5. **Ethics\_C**members do not receive any direct or indirect remuneration for this activity.

#### Article 4

#### Obligations

**Ethics\_C** members must:

1. Assure their best effort and commitment towards the fulfilment of the objectives and competences of the Commission, making full use of their sectorial knowledge;
2. Maintain absolute secrecy and confidentiality regarding the contents of the matters dealt with in the meetings of the Commission.

#### Artigo 5.º

#### Functioning

1. The Ethics Committee meets, in principle, once a month, and whenever summoned by its President.
2. The summons for each meeting should be sent at least five working days before the meeting, and must contain the date, time and place of the gathering, as well as the respective agenda.
3. The **Ethics\_C** can only function and deliberate with the presence of the majority of its members.
4. The issues to be considered by **Ethics\_C** are analysed in an ordinary meeting and decided by consensus of its members.
5. **Ethics\_C** will issue, within a maximum period of thirty working days, a written opinion on each question submitted to it.
6. Approved opinions and recommendations will be communicated to interested parties and sent to the Board of Directors for information and eventual disclosure.
7. When interested parties challenge the opinions or recommendations issued, this will be discussed at an **Ethics\_C** meeting specially called for this purpose.
8. When deemed convenient, the principal investigator of the project in question and / or persons responsible for the Centre in which the project is taking place may be invited to attend the meetings, without the right to vote. **Ethics\_C** may also request the presence of experts of recognized competence in the topics under discussion.
9. Minutes of each meeting of **Ethics\_C** shall be drawn up, which shall contain the date, time and place of the meeting, members present and agenda, as well as the opinions and recommendations subject to deliberation.

10. The minutes are subject to approval at the beginning of the next meeting, and at the end of each meeting a draft containing the resolutions taken must be signed by all those present.

## **Article 6**

### **Powers of the President**

It is up to the President of **Ethics\_C**:

1. To call the meetings of the Ethics Committee and establish the agenda;
1. To chair the meetings and guiding the respective work;
2. To make sure that opinions and recommendations issued by **Ethics\_C** reach all interested parties, and strive for compliance with what is established therein;
3. To request information or expert opinion whenever this is decided by the **Ethics\_C**;
4. To prepare the annual report on the activities of **Ethics\_C**, to be presented to the Board of Directors;
5. To represent **Ethics\_C**;
6. To verify the possible existence of conflicts of interest, incompatibilities and impediments of the members of **Ethics\_C**, and inform the Board of Directors;
7. To inform the Board of Directors of vacancies in the **Ethics\_C**, and request its filling.

## **Article 7**

### **Impediments**

1. In the event of a vacancy, resignation or permanent incapacity of the President, his functions will be assured on an interim basis by the oldest member of the **Ethics\_C**, until the conclusion of the nomination process for the new President, under the terms of Article 3.
2. The members of the **Ethics\_C** who are authors or co-authors of projects presented for discussion and deliberation must inform the President of this fact, being prevented from participating in the issuing of an opinion and in the subsequent monitoring of that project.

## **Chapter III**

### **Final dispositions**

## **Article 8**

### **Revision**

1. These Regulation may be revised at any time, with any changes being approved unanimously by **Ethics\_C** in the exercise of functions and subject to approval by the Board of Directors.
2. Under the terms of the preceding paragraph, any member of the **Ethics\_C** may submit proposals for amendments to the present regulation.



## **Article 9**

### **Missing Cases**

In the cases not covered by this regulation, the provisions of INESC TEC Statutes and other applicable legislation are in force.

## **Article 10**

### **Implementation**

The present Regulation comes into force after approval by the INESC TEC Board of Directors and consequent publication on the INESC TEC Intranet.

## **APPENDIX IV**

### **Code of Practice for Investigating concerns about Conduct of Research at INESC TEC**

This Code of Practice for Investigating Concerns about the Conduct of Research outlines the process that will be followed when any allegation of research misconduct is received.

In accordance with the law, to all those working at INESC TEC, regardless of their affiliation to the institution, is guaranteed that if they report, in good faith and in accordance with this procedure, the existence of a misconduct in research, they will not, as a result, be in any way prejudiced.

#### **1. Introduction**

- a) This procedure describes the process that must be followed when INESC TEC is alerted to suspected misconduct in research. Its purpose is to enable a full and fair investigation of issues related to the research and to reach a conclusion on the alleged suspicion before considering any disciplinary action or other one that may be required or recommended. If, at the end of the investigation, misconduct in research has been found to have occurred, the procedures contained within this Code of Practice may determine a disciplinary process to those subjected, in legal terms, to the disciplinary power of INESC TEC.
- b) The Chief Executive Officer of INESC TEC oversees the implementation of this Code of Practice and is responsible for ensuring that all cases of potential misconduct in research are dealt with in accordance with the processes defined herein; if an Executive Committee has not been appointed, that responsibility will rest upon the Chairman of the Board;
- c) If a case in any way involves the Chief Executive Officer of INESC TEC or gives rise to a potential conflict of interest, the responsibility for conducting the process shall be transferred to the Chairman of the Board;
- d) If the involvement also reaches the Chairman of the Board, the President of the Scientific Council will be responsible for conducting the process.
- e) Once initiated, the Code of Practice should normally progress to the natural end-point irrespective of:
  - i. the complainant withdrawing the complaint at any stage;
  - ii. the respondent admitting, or having admitted, the alleged misconduct, in full or in part; or
  - iii. the respondent or the complainant no longer being in post at INESC TEC.

#### **2. Principles of fairness, confidentiality and integrity**

- a) INESC TEC is committed to ensuring that complaints of misconduct in research are fairly and rigorously investigated;
- b) All proceedings will be conducted under the presumption of innocence principle, with independence and confidentiality;
- c) A frivolous or malicious allegation of misconduct in research is considered a serious disciplinary offense;
- d) While suspected misconduct in research is under investigation under this Procedure, the complainant, the researcher targeted by the complaint, any witness or other person involved in this process may not disclose or make any statements about the allegations to third parties, unless formally allowed by the Board of Directors of INESC TEC or when required by law; failure to comply with this rule may be considered a serious disciplinary offense within the framework of the labour disciplinary procedure, in cases that may lead to its opening.

### **3. Scope of application**

- a) INESC TEC is responsible for investigating any suspicions of misconduct in research raised against any of its staff or grant holders, as well as students who carry out projects, Master's dissertations or PhD theses at INESC TEC;
- b) This Procedure may also apply to any person authorised to carry out research at INESC TEC or to use INESC TEC facilities for research purposes, in accordance with what is established in the protocols that govern the exchange of human resources.

### **4. Obligation and method of reporting suspected misconduct in research**

- a) Staff, grant holders, students involved in INESC TEC projects and guest researchers, have a responsibility to report to INESC TEC any concerns about misconduct in research, if they have been witnessed or for which there are grounds for suspicion. Failure to do so may constitute concealment of misconduct in research.
- b) Allegations of potential misconduct in research should be made in writing, accompanied by evidence supporting the suspicions, and addressed confidentially to the Chief Executive Officer.
- c) The Chief Executive Officer may, at his or her discretion, consider anonymous allegations and assess the seriousness of the issues, their credibility, and the feasibility of confirming the allegation with credible sources. Depending on the outcome of that assessment, he/she may elect, at his or her discretion, to investigate anonymous allegations in accordance with this Code of Practice.
- d) Concerns about misconduct in research can only be investigated through this process. Where concerns of research misconduct have been raised with someone other than the Chief Executive Officer, that person must take responsibility for informing the Chief Executive Officer.

### **5. The initial Screening process**

- a) The Chief Executive Officer will assess the risks of the potential misconduct and any contractual/legal obligations that INESC TEC may have with third parties, seeking, if needed, for confidential advice in order to reach his/her decision. This assessment should be completed within 10 working days of the concern being raised.
- b) If the Chief Executive Officer determines that an investigation is not warranted, the complainant (if any) will be informed. The complainant has the right to respond if s/he believes that s/he has been misunderstood or key evidence overlooked. The response must be made in writing to the Chief Executive Officer within 10 working days of receiving the outcome of the initial screening. In such circumstances, the Chief Executive Officer will consider whether any further review or investigation is necessary or appropriate.

### **6. Informing the Respondent of a concern raised under the Code of Practice**

- a) If, after any complainant has been given the opportunity to respond (as provided for in 5.b) and any such response has been considered, the Chief Executive Officer determines that there is no case for investigation, s/he will inform the respondent of the concerns raised and the outcome of the initial screening.
- b) If the Chief Executive Officer determines that there is a case for investigation s/he will inform, in person, the respondent of concerns that have been raised and that will be investigated. The respondent's research centre coordinator or equivalent line manager will be present, if possible.
- c) Where an allegation concerns a situation that requires immediate action to prevent risk or harm to staff, participants or other persons, or negative environmental consequences, the Chief Executive Officer may take appropriate action to ensure that any potential or actual danger, illegal activity or risk is prevented or eliminated. Such action, when taken, will be administrative not disciplinary at this stage, pending the outcome of the investigation.
- d) Following the initial screening process, in the event that the nature of the allegation is such that the Chief Executive Officer considers it necessary to notify legal or regulatory authorities, (for example where the alleged activity would constitute a criminal offence) any investigation led by a legal or

regulatory body will take precedence over this procedure, which may need to be suspended to be concluded at a later date, or may be declared unnecessary by the Chief Executive Officer.

## 7. The investigation process

- a) If the Chief Executive Officer concludes that a case should be investigated, the respondent will be asked to provide a written response to the concerns raised within 10 working days of the respondent receiving the request, unless an extension is granted. The respondent will be advised if securing relevant records, materials and locations associated with the research in question is essential in order to carry out a full and fair investigation.
- b) The Chief Executive Officer shall set up a panel to enquire into the allegations. This panel is chaired by the President of the Scientific Council of INESC TEC and shall normally consist of four more members, including a member of the research centre of the respondent with relevant expertise, and a member of a different research centre, if possible, with relevant expertise. Where deemed appropriate, one member may be external to INESC TEC. The process of appointing the panel should normally be completed within 10 working days of the respondent being notified of the investigation.
- c) The respondent and complainant will be informed of the names of the proposed investigators and given 5 working days to raise any concerns, in writing, regarding a potential conflict of interest that may prevent them from acting impartially. The Chief Executive Officer will decide whether any changes to the panel are necessary.
- d) Proposed investigators must declare in writing any conflicts of interest that they may have and confirm that they will adhere to the principles of fairness, confidentiality, and integrity prior to being appointed. The investigators will be required to sign the declaration set out in Appendix 1 confirming this.
- e) The purpose of the formal investigation is to determine whether research misconduct has been committed and the nature and extent of the misconduct. All information pertaining to the case (including the complaint, evidence, and response) will be passed to the panel of investigation, which will aim to report its conclusions to the Chief Executive Officer within 30 (?) days of receiving the details of the case.
- f) Any complainant, the respondent and any member of staff, grant holder, student or guest researcher must answer any reasonable questions that the panel asks of him/her, and must make available to the panel on request any relevant documentary evidence, such as, but not limited to, laboratory notebooks, participant questionnaires and computer records. If information is withheld by a member of staff, grant holder, student or guest researcher the Chief Executive Officer may invoke relevant disciplinary procedures (if appropriate).
- g) The panel may interview both the complainant and the respondent, and any other persons, whose evidence may, in the panel's view, assist the panel in reaching a conclusion. The interviewees will receive notification, in writing, at least ten working days prior to any meetings or panel hearings to which he or she is to be invited to attend during the investigation. Any person attending for interview may be accompanied by another person, a colleague or trade union representative. The panel should be informed of the identity of the accompanying person at least five (5) working days before the interview is scheduled to take place.
- h) The panel shall prepare a report, setting out the evidence which has been evaluated, accounts of interviews, if any, its conclusions as to whether the allegation of misconduct in research is upheld in full, upheld in part or not upheld, and its recommendations to the Chief Executive Officer as to what actions (if any) should be taken to address the misconduct in research either against the respondent or generally. The basis for reaching a conclusion that an individual is responsible for misconduct in research relies on a judgement that there was an intention to commit the misconduct in research and/or recklessness in the conduct of any aspect of a research project.
- i) The conclusion that an individual is responsible for misconduct in research must be supported by a judgment that his/her action was intentional or that there was negligence in the conduct of any aspect of his/her research activity.
- j) Should any evidence of further, distinct instances of misconduct in research (either unconnected to the allegations under investigation or committed by another person or persons) be brought to light during the course of the panel's investigation then the panel will submit these new allegations of misconduct in research in writing to the Chief Executive Officer.

- k) The investigation of the panel should normally be completed within ninety (90) days of first notification of the allegation to the Chief Executive Officer. This timescale can be extended where reasonably required.
- l) If the Chief Executive Officer is satisfied that the investigative process has been conducted appropriately and in accordance with this Code of Practice, s/he will inform the respondent and the complainant of the outcome of the investigation.

## **8. Review of the outcome of the Investigation**

- a) The complainant has the right to respond to the Chief Executive Officer if s/he believes that there have been material procedural irregularities which might have affected the outcome of the decision of the panel of investigation. The response must be made in writing to the Chief Executive Officer within 10 working days of receiving the outcome of the investigation. In such circumstances, the Chief Executive Officer will consider whether any further review or investigation is necessary or appropriate.
- b) The respondent has the opportunity to request a review of the decision of the panel of investigation on the grounds of material procedural irregularities which might have affected the outcome.
- c) The request for a review must be made in writing to the Chief Executive Officer within 10 working days of the respondent receiving the conclusions of the panel of investigation.
- d) If the Chief Executive Officer determines that there are appropriate grounds for review, s/he will establish a panel of 3 individuals (excluding any party who was involved in the investigation), to undertake the review. S/he will also appoint a review advisor to manage the process. The process for appointing the review panel should normally be completed within 10 working days of the Chief Executive Officer receiving the request.
- e) The review panel will be given 15 working days from the date of receiving details of the case to report its conclusions to the Chief Executive Officer. If this is not possible a revised timescale will be agreed.
- f) If the review panel finds that there have been material procedural irregularities which might have affected the outcome, the review panel may re-investigate the complaint following the procedures outlined for the panel of investigation, normally reporting its findings to the Chief Executive Officer within 20 working days of its establishment as a panel of investigation, or recommend that a fresh panel of investigation is appointed.
- g) The review panel may confirm the findings of the panel of investigation or overturn, or substitute new findings for the findings of the panel of investigation.
- h) There is no further appeal against the decision of the review panel.

## **9. Conclusion of the Process**

- a) If, at the end of the investigation, misconduct in research has been found to have occurred, the procedures contained within this Code of Practice may form the investigation element of any disciplinary process under the applicable law. To ensure a fair procedure anyone who was a member of the panel of investigation or of the review panel cannot participate in any way in the disciplinary procedure.
- b) In the case misconduct in research has been found to have occurred, the Chief Executive Officer will inform the outcome of the investigation to other third parties who are deemed to have a legitimate interest in the outcome of the proceedings, including, for example the co-authors of the respondent in a manuscript subject to an allegation of misconduct in research, the publisher of a manuscript that was subject to an allegation of misconduct in research in order that this can be retracted or corrected, any funding body which has supported the research in question, any regulatory or other agencies as required by law, any other organisation involved in the research. Care will be taken to ensure that there is adequate consideration of the requirements of the Data Protection Act in disclosing information and of the general duty of trust and confidence owed to employees.
- c) If the complaint is not upheld, the Chief Executive Officer will take such steps as he determines are appropriate, given the seriousness of the complaint, to support the reputation of the respondent and any relevant research project(s).
- d) If the complaint is judged to be mischievous or malicious, the Chief Executive Officer in consultation with the coordinator of the research centre to which the complainant belongs, will determine whether the matter should be dealt with as a disciplinary issue in accordance with due process and the INESC TEC's disciplinary procedures.

**10. The limits**

The Chief Executive Officer will not consider allegations where the substantive event(s) complained about occurred more than three years before the allegation is received.

**11. Record Keeping**

The Office of the Chief Executive Officer shall retain all records of any review or investigation carried out under this procedure for a period of six (6) years beginning with the date on which the INESC TEC relationship with the respondent (and complainant?) ends, except when constituting an element of legal action, in which case they must be kept until the final res judicata.

**12. Reporting**

An annual report providing anonymised summary details of any investigations conducted under this Procedure and their outcome will be presented by the Chief Executive Officer to the Board of Director for approval. Once approved this statement will be published on the INTRANET of INESC TEC.

## **APPENDIX IV.1**

### **Declaration of the Investigators or Reviewers**

I can confirm that I:

1. Will abide by the conditions and provisions of the Code of Practice for Investigating Concerns about the Conduct of Research at INESC TEC as it affects the work of the panel of investigation/review panel;
2. Have declared to the Chief Executive Officer /President of the Board of Directors any links to the research and/or the individuals involved in the complaint or any interests which might conflict with the principles of the Code of Practice for Investigating Concerns about the Conduct of Research at INESC TEC;
3. Will respect the confidentiality of the proceedings by not divulging any details of the case to any third party, including the identity of the complainant, respondent or any witnesses throughout the work of the panel and afterwards, unless formally sanctioned by INESC TEC or otherwise required by the law;
4. Will adhere to the principles of fairness, confidentiality and integrity;
5. Will undertake the work of the panel of investigation/review panel within the timetable established by the Code of Practice.

Nome of the Investigator/Reviewer: .....

Signed: .....

Date: .....

## **APPENDIX IV.2**

### **Confidentiality agreement with Attendee at Research misconduct hearing**

I agree to treat in complete confidence all information disclosed to me either during the meeting or within documentation relating to the case. I will not divulge any details of the case to any third party, including the identity of the complainant, respondent or any witnesses unless formally sanctioned by INESC TEC or otherwise required by the law.

Name of the Investigator/Reviewer: .....

Signed: .....

Date: .....



### APPENDIX IV.3

#### FLOW OF DIAGRAM OF THE PROCEDURE

