



National Framework

For the Integrity and Security of Research



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This document was developed and proposed by the Working Group on Research Security, established by the Ministry of University and Research. The group includes subject-matter experts as well as representatives of the Conference of Italian University Rectors (CRUI) and the Council of Presidents of Public Research Institutions (COPER). A presentation of the needs and general criteria outlined therein was delivered to the research and academic community during two technical workshops held in October, and at the National Public Conference held on 4 December in Bari.



Introduction

The freedom of scientific and technological research is a pillar of academic freedom and scientific integrity. It comprises the right and the possibility for researchers to explore, investigate, and develop theories and methodologies within a scientific space that is open yet at the same time protected. In this context, international, European, and national collaborations — whether confined to public entities or extended to private actors — constitute an essential component of open, inclusive, and free research.

International cooperation fosters the development of contacts and the exchange of ideas among researchers across the globe. It contributes to building bridges between cultures and nations, bringing benefits not only to scientific progress but also to the economy and society as a whole.

In this context — which remains essential for a country such as Italy — it is important to recognise that activities of foreign actors, or those otherwise external to the national research system¹, may pose increasing challenges to the integrity and security of that system, particularly in light of global competition and rising international tensions. In certain cases, such activities may also affect national security. For this reason, in May 2024, the Council of the European Union adopted a Recommendation² calling on Member States to take steps to develop and implement a coherent set of strategic actions aimed at strengthening research security. This includes the development of a national approach, in consultation with the research and innovation sector, with the objective of establishing appropriate models to safeguard researchers' work and the value of national research.

The Ministry of universities and research has sought to provide universities, research institutions and researchers with practical tools, in the form of best practices and guidelines, enabling them—on a voluntary basis and through self-assessment—to foster a secure environment around their work and research outputs, thereby also contributing to the resilience of the national system.

The objective was therefore to implement the Recommendation of the Council of the European Union by adopting an appropriate model and by encouraging its application, so as to continue promoting open, safe and responsible international cooperation in research.

A range of factors may expose researchers to risks that could undermine the integrity and security of research. These include, for example:

- seeking opportunities to gain economic and/or technological advantages;
- the unlawful acquisition and use of technologies for purposes contrary to the protection of human rights and international law;

¹ European Commission – Tackling R&I Foreign Interference – Staff Working Document
(<https://op.europa.eu/en/publication-detail/-/publication/3faf52e8-79a2-11ec-9136-01aa75ed71a1/language-en>)

² Council Recommendation of 23 May 2024 on enhancing research security
(<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32024H03510>)

- the recruitment of industrial expertise abroad with the aim of securing or accelerating access to results and/or methods of significant scientific interest and/or value, thereby weakening the capacities of other States, research institutions or potentially competing enterprises.

The Ministry of Universities and Research is committed to strengthening the national research system by making available tools and resources designed to raise awareness and to protect the activities of institutions and researchers against malicious interference, improper use and the unwanted transfer of knowledge. At the same time, it is crucial to underline that ‘academic freedom’—which encompasses the scientific and organisational autonomy of universities and research bodies—necessarily entails ‘academic responsibility’. It is therefore incumbent upon the institutions themselves to act and to adopt the measures required to safeguard their research, thereby ensuring that it is not diverted or exploited for inappropriate or undesirable purposes.

When the integrity and security of research -along with its data, methods, and outcomes- are not adequately safeguarded, a range of negative consequences may arise. These include, for example: a decline in public trust in research findings and data; the loss or unlawful appropriation of sensitive data, as well as data of significant scientific interest and/or value; a loss of national control over the potential economic impacts of research; reputational damage, including the risk of losing future collaborative opportunities; violations of national or EU regulations.

This concern is also strongly felt by researchers themselves, as evidenced by data recently gathered through a dedicated survey that involved approximately 80% of Italian universities and research institutions. The results show that risks for our national research institutions are on the rise and may manifest in diverse forms. A concerted collective effort is therefore essential in order to design and implement effective measures to safeguard the integrity and security of research in Italy, in line with orientations commonly agreed at EU level. The Italian research system, supported by ongoing interministerial dialogue promoted by the Ministry of universities and research—which also involves government agencies and independent authorities and provides a platform for exchange of information and experience—bears a shared responsibility to identify and mitigate such challenges. It is furthermore of strategic importance that organisations and institutions engaged in or financing research possess full awareness of the potential risks linked to the activities submitted to them, so that dialogue can be initiated with the proposers to mitigate such risks prior to any approval.

Anchored firmly in the principles of open science and academic freedom, this model represents an initial step in supporting the integrity and security of research -ultimately serving as the most effective safeguard for upholding those very principles.

Key Definitions

In the supporting documents for the national model on research security and integrity—and in related materials—the following terms are defined as follows:

External collaborations and external sources of funding refer to:

- collaborations with entities or institutions located outside the EU or not affiliated with international organizations recognized by treaty³;
- collaborations with entities that do not belong to public institutions;
- funding originating from institutions outside the EU⁴ or not affiliated with international organizations recognized by treaty⁵;
- funding provided by private entities.

Institution / Research institution refers to universities, research organizations, and other research-performing bodies (as defined by international standards), used either collectively or individually depending on the context.

Research Security and Integrity: as defined within the G7 SIGRE framework,

- **Security of research** means protecting research methods, data, and results from theft, misuse, inappropriate exploitation, and other forms of misconduct.
- **Integrity of research**, which is the direct product of integrity of researchers, is about sticking to professional values, principles, and practices that keep research honest, responsible, and societally impactful.

This definition is broadly aligned with the Council of the EU's Recommendation of May 23, 2024, where 'Research security' refers to

«anticipating and managing risks related to:

(a) the undesirable transfer of critical knowledge and technology that may affect the security of the Union and its Member States, for instance if channelled to military or intelligence purposes in third countries;

(b) malign influence on research where research can be instrumentalised by or from third countries in order to inter alia create disinformation or incite self-censorship among students and researchers infringing academic freedom and research integrity in the Union;

(c) ethical or integrity violations, where knowledge and technologies are used to suppress, infringe on or undermine Union values and fundamental rights, as defined in the Treaties. »

³ For instance, the UN, WHO, or CERN.

⁴ For instance, research grants -including competitive calls- issued by public entities outside the EU.

⁵ For instance, the UN, WHO, or CERN.

National Framework: Structure and coordination

To provide appropriate support to institutions engaged in matters relating to the security and integrity of research, the Ministry of universities and research—working in coordination with the other ministries concerned and with the National Cybersecurity Agency—undertakes the implementation of a model structured around the following two levels:

- a) a national-level body, provisionally named the National Center for Research Security and Integrity, as recommended in the Council's May 23, 2024 Recommendation⁶. This body will bring together government stakeholders (at various levels) and research institutions, including their respective coordinating entities;
- b) a decentralized level, composed of designated contact points for research security and integrity within research institutions and universities. These contact points will serve as liaisons between the national center and the same institutions. This action is entrusted to the autonomy of the institutions, which are nonetheless encouraged to develop internal mechanisms for coordination with individual researchers and research groups. This should be pursued through targeted training and awareness-raising activities, the development of specific competences on issues related to research integrity and security, and the provision of adequate support to existing structures (such as research offices, technology transfer, internationalisation and legal affairs).

At the national level, responsibilities include the following:

- i) coordination of technical working groups and task forces to ensure the periodic updating of guidelines and procedures aimed at identifying undue interference, recommending minimum levels of due diligence for external agreements and/or collaborations, identifying and promoting the application of measures to safeguard data security, ethics and research integrity, while at the same time protecting international and cross-sectoral openness through open science and open innovation approaches, in full respect of the fundamental freedom of research;
- ii) to provide, upon request, timely and appropriate support to institutions in classifying the levels or profiles of risk associated with research activities (particularly those involving international or otherwise external collaborations⁷), and in adopting suitable and proportionate mitigation measures;
- iii) to promote, support, and -upon request- assist the development of local expertise (i.e., designated contact points for research security and integrity) in monitoring potential risks. This includes developing standardized tools for risk assessment that, when adopted by research funding bodies, help ensure consistent and transparent procedures for transmitting information relevant to research security and integrity in the context of funding applications;
- iv) to create opportunities for open dialogue and exchange with all stakeholders in the research system, to share information on current and emerging risks, including best practices and case studies, with the aim of continuously improving the effectiveness of measures introduced to ensure research security and integrity;

⁶ https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:C_202403510

⁷ See the definitions provided in the previous section.

- v) to design and promote training courses on the topic of undue foreign interference, making them available -also online- to the research community, institutional leadership, and research support personnel;
- vi) to develop an effective and efficient model to facilitate smooth interaction between research institutions and other bodies that finance or conduct research activities and the competent government authorities, including through the establishment of a preliminary self-assessment system that allows the process to be tailored to the levels and profiles of risk identified
- vii) to provide guidelines and instructions for business travel, in particular to areas (either transit or destination) with medium-to-high risk profiles.

It is desirable that institutions wishing to implement the model internally undertake efforts to:

- i) to inform and train researchers, students, and technical-administrative staff on issues related to research security and integrity;
- ii) to develop a visitor protocol aimed at minimizing potential risks during on-site visits;
- iii) to ensure the collection and regular updating of data related to ongoing external collaborations;
- iv) to contribute to the assessment of activities involving external collaborations or funding, and - where deemed necessary- request support from the national level;
- v) to participate in defining mitigation measures proportionate to the level of risk;
- vi) to support the development of procedures to be followed in the event of cybersecurity incidents that may impact research security and integrity, in coordination with their IT services and competent national authorities.