

SYSTEM LEADERSHIP FOR SDG-ALIGNED RESEARCH SECURITY IN IRELAND

Seán Lacey

Research Integrity & Compliance sean.lacey@mtu.ie
Officer, Munster Technological
University, Ireland

School of Politics and
International Relations, University
College Dublin, Ireland

 [0000-0003-3005-6294](https://orcid.org/0000-0003-3005-6294)

ABSTRACT

What is new?

Research security has rapidly emerged as a priority in research governance across Europe and internationally. However, discussions frequently frame research security primarily in terms of national security or geopolitical risk, with limited attention to how security measures intersect with sustainable development objectives. This paper addresses this gap by exploring the relationship between research security and the Sustainable Development Goals (SDGs), using the emerging Irish research security framework as an illustrative context. It argues that research security and sustainable development are not inherently in conflict; however, aligning them requires coordinated system leadership to ensure that security measures protect research integrity and national interests without undermining openness, collaboration, and equitable participation in global research systems.

What was the approach?

The paper draws on policy developments surrounding the introduction of national research security guidelines in Ireland, informed by wider European policy discussions and initiatives. It considers these developments alongside existing research governance frameworks, including research integrity, ethics, and open research practices, in order to explore how research security can be integrated within established institutional structures rather than implemented as a standalone compliance requirement.

What is the academic impact?	The paper contributes to debates in research management and administration by framing research security as a governance challenge rather than solely a regulatory obligation. It highlights how the implementation of research security raises broader questions about leadership, institutional coordination, proportionality, and the balance between protection and openness within contemporary research systems.
What is the wider impact?	For research managers and policymakers, the paper identifies practical considerations for implementing research security in ways that support rather than undermine international collaboration and sustainable development. It emphasises that coordinated system leadership, institutional support, and alignment with existing governance processes are essential if research security is to reinforce, rather than conflict with, the objectives of the SDGs.
Keywords	Research security, Research integrity, System leadership, Sustainable Development Goals, SDGs

BACKGROUND: RESEARCH SECURITY, LEADERSHIP, AND THE SDGS

Research security has become an increasingly prominent feature of research governance internationally, shaped by concerns relating to geopolitical instability, dual-use research, foreign interference, and the protection of sensitive knowledge, infrastructure, and expertise. While these concerns are often framed in terms of national security or economic competitiveness, they also raise important questions for sustainable development. In particular, how research security is developed and implemented has direct implications for the Sustainable Development Goals (SDGs) (United Nations, 2015), including SDG 4 (Quality Education), SDG 9 (Industry, Innovation and Infrastructure), SDG 10 (Reduced Inequalities), and SDG 17 (Partnerships for the Goals).

Unlike these goals, which relate to the outcomes that research systems enable, research security also aligns closely with SDG 16 (Peace, Justice and Strong Institutions) by shaping how research is governed, how risks are managed, and how trust and accountability are maintained within research systems.

For Ireland, these issues are especially salient. The national research system is highly internationalised, outward-facing, and dependent on global collaboration to address societal challenges such as climate change, public health, digital transformation, and food security. Safeguarding research against misuse and coercion is therefore necessary, but it must be achieved without undermining the openness, trust, and inclusivity that underpin both scientific progress and sustainable development.

This paper argues that research security should be understood not simply as a compliance or risk-management activity, but as a governance challenge requiring coordinated system leadership. From this perspective, the central question is not whether research security and the SDGs are compatible, but how research systems can implement security measures in ways that support openness, collaboration, and sustainable development. The paper uses Ireland as an illustrative context through which these broader governance challenges can be explored, many of which are likely to be relevant across research systems within the European Research Area (ERA).

However, the relationship between research security and the SDGs is not always straightforward. Measures introduced to mitigate security risks may, if applied disproportionately, restrict international collaboration, increase administrative burdens, limit researcher mobility, or discourage engagement with particular regions or partners. Such outcomes can create tensions with SDG 4 (Quality Education), SDG 9 (Industry, Innovation and Infrastructure), SDG 10 (Reduced Inequalities), and SDG 17 (Partnerships for the Goals), all of which depend upon the exchange of knowledge, collaboration, and inclusive participation. The challenge is therefore not whether research security should be pursued, but how it can be implemented in ways that protect research systems while maintaining the openness and cooperation required to support sustainable development.

From a governance perspective, research security should not be treated as a standalone or exceptional policy domain. Instead, it should be understood as part of a broader governance ecosystem that already includes research integrity, research ethics, and open research (Lacey et al., 2025; CESAER, 2025). These frameworks share a common concern with how research is conducted, governed, and shared responsibly (UNESCO, 2021; OECD, 2022). Positioning research security within this ecosystem allows security considerations to reinforce, rather than displace, established norms of responsible research practice.

System leadership is key in shaping this integration (Kania & Kramer, 2011; Senge et al., 2014). Decisions taken by governments, funding agencies, and senior institutional leaders influence how risks are framed, how responsibilities are distributed, and how proportionality is maintained in practice. These decisions determine whether research security measures enable safe collaboration or unintentionally constrain participation, particularly for early-career researchers, smaller institutions, and partners in low- and middle-income countries. In this sense, leadership choices directly affect progress toward the SDGs.

Recent European policy developments provide an illustrative example of the strategic importance of these choices. At the Flagship Conference on Research Security held in Brussels in October 2025, research security was increasingly framed as integral to national security, research and innovation capacity, and European competitiveness (European Commission, 2025a). This marked a notable shift from earlier reliance on voluntary awareness-raising toward a stronger emphasis on governance, coordination, and compliance (Council of the European Union, 2024). Parallel discussions within the

ERA appear to signal that research security may increasingly be embedded within legislative and regulatory frameworks, including the proposed ERA Act (European Commission, 2025b).

Ireland's development of national research security guidelines, coordinated through government-led working groups and informed by European policy, reflects this evolving landscape. These guidelines, expected to be published in 2026, provide an opportunity to embed research security within a values-based framework that supports sustainable development. Whether they ultimately advance or constrain the SDGs will depend on system leadership in balancing protection with openness, and in ensuring that guidance is paired with practical support across the research ecosystem.

SUSTAINABLE DEVELOPMENT ISSUES AND SYSTEM-LEVEL PRESSURES IN IRELAND

The relationship between research security and sustainable development is not one of simple alignment. Safeguarding research from misuse supports long-term societal goals by protecting public investment, infrastructure, and trust in science. At the same time, poorly designed or insufficiently resourced security measures risk restricting access to knowledge, narrowing participation in global research, and reinforcing existing inequalities (ALLEA, 2024; Science Europe, 2025b).

These tensions are particularly evident when viewed with respect to the SDGs. SDG 4 emphasises inclusive access to education and knowledge, while SDG 9 and SDG 17 depend on shared innovation capacity and international research collaboration. Research security measures that default to exclusion, heightened scrutiny, or blanket restrictions can conflict with these objectives if they are not carefully implemented. This is especially relevant for Ireland, whose research system relies heavily on cross-border partnerships and participation in European framework programmes.

System-level pressures are intensifying as research security expectations become more formalised. The anticipated successor to Horizon Europe, FP10, is expected to introduce research security compliance as a condition of funding (Science Europe, 2025a). While this reflects a broader European shift toward consistency and resilience, it also raises questions about capacity and proportionality. Institutions with limited resources may struggle to meet expanding requirements, potentially narrowing participation and exacerbating disparities across the European research landscape. These matters intersect directly with SDG 10 on reducing inequalities.

These concerns mirror earlier debates on academic publishing and access to knowledge. High publication fees and paywalls have already created structural barriers to participation in global research, particularly for under-resourced institutions and researchers (Lacey, 2026). When research security requirements are layered onto existing governance burdens, there is a risk of cumulative exclusion, even where individual measures may be justified in isolation.

In this context, system leadership operates across multiple levels of the research system. Government departments and funding agencies provide strategic direction through policy, guidance, coordination, and funding mechanisms, while research-performing organisations (RPOs) are responsible for translating these expectations into local governance arrangements, institutional processes, and practical support for researchers. Effective implementation therefore depends upon complementary leadership at both national and institutional levels, supported by clear roles, shared expectations, and ongoing coordination.

System leadership is therefore critical in managing these pressures. Research security cannot be framed as a binary choice between openness and protection. Instead, it requires a risk-informed, context-sensitive approach that recognises disciplinary diversity, institutional capacity, and the cumulative impact of governance requirements. From an SDG perspective, this balance is central to SDG 16, where strong institutions are defined not by restriction, but by their ability to govern transparently and fairly (Hickmann et al., 2024). Without system leadership, research security risks becoming a blunt instrument that undermines the SDG ethos of inclusivity and shared progress.

CHALLENGES OF IMPLEMENTATION AND THE NEED FOR COORDINATED SUPPORT

Implementing research security in practice presents challenges for RPOs in Ireland. RPOs are already managing expanding responsibilities across research integrity, ethics, open research, data protection, and contractual compliance, often within constrained resource environments. Introducing research security without dedicated support risks overburdening institutions and weakening both uptake and consistency (CESAER, 2025). If left unaddressed, these pressures risk constraining Ireland's capacity to advance the SDGs through an open, inclusive, and internationally connected research system, particularly SDG 4 on quality education and SDG 9 on sustainable innovation.

National coordination is therefore essential. The Department of Further and Higher Education, Research, Innovation and Science has demonstrated leadership by establishing working groups to develop national research security guidelines and supporting documentation, scheduled for publication in 2026. This represents an important foundation, but guidance alone will not guarantee consistent and proportionate implementation across the sector. System-level coordination is necessary for security measures to be applied in ways that support, rather than inadvertently restrict, international collaboration and knowledge exchange central to SDG 17.

There is a strong case for establishing a national coordinating structure for research security, such as a National Research Security Forum, analogous to the National Research Integrity Forum and the National Open Research Forum. Such a body could support coherence across institutions, provide access to shared expertise, and act as a focal point for interpretation, training, and due diligence. It could also serve as Ireland's interface with emerging European initiatives, including proposed EU-level centres of expertise, risk observatories, and shared due diligence platforms (European

Commission, 2025a). By promoting consistency and shared capacity, a national forum could help prevent uneven implementation that risks reinforcing institutional and disciplinary inequalities, contrary to SDG 10 on reducing inequalities.

At institutional level, research security should be approached as a whole-of-institution responsibility rather than a task confined to senior research management. Researchers at all career stages require practical support to address questions such as whether their work has dual-use or sensitive applications, whether collaborators or funders introduce security concerns, how data and materials are shared securely, and how mobility arrangements are managed. Clear, well-resourced local points of contact are therefore essential, linked to national support structures to assist with more complex assessments. This distributed model of support is critical to sustaining inclusive participation in research and ensuring that security measures do not disproportionately affect early career researchers or internationally mobile scholars, with implications for SDGs 4 and 10.

Integrating research security into existing processes is critical to avoiding duplication and compliance fatigue (Lacey et al., 2025). Incorporating security considerations into ethics review, contract assessment, and research integrity training allows institutions to build on established practices rather than creating parallel systems. This approach reinforces the view that research security is part of responsible conduct of research, aligned with existing ethical and integrity frameworks, rather than an external or exceptional requirement. Such integration supports the SDG agenda by embedding security within governance systems that already aim to maximise societal benefit, responsibility, and sustainability.

System leadership engagement underpins all of these measures (Senge et al., 2014). Senior leaders must communicate risks clearly, explain the rationale for security measures, and support researchers rather than deter them. This leadership function aligns closely with SDG 16, which places emphasis on accountable decision-making and institutional trust as prerequisites for sustainable development. Without adequate resourcing, coordination, and leadership, research security risks being unevenly applied, weakening trust and undermining Ireland's ability to contribute meaningfully to global sustainable development. Conversely, proportionate and coordinated system leadership in research security can strengthen Ireland's contribution to the SDGs by safeguarding openness, equity, and responsible collaboration.

CONCLUSIONS

Research security now sits at a critical intersection of national security, research and innovation policy, and sustainable development. For Ireland, the challenge is not whether to strengthen research security, but how to do so in a way that supports the SDGs rather than undermining them, a task that demands system leadership across government, funding agencies, and RPOs.

Handled carefully, research security can reinforce the conditions under which research delivers public value. Proportionate measures, embedded within existing governance

frameworks and supported by coordinated national structures, can safeguard trust, enable safe collaboration, and strengthen responsible research practice. Such an approach supports SDG 4 by preserving access to knowledge, SDG 9 by enabling innovation within secure frameworks, SDG 10 by avoiding unnecessary exclusion, and SDG 17 by sustaining international partnerships.

Handled poorly, research security risks producing the opposite outcome. Excessive restriction, uneven implementation, and insufficient support can narrow participation, discourage collaboration, and reinforce inequalities within the global research system. The ongoing European shift from voluntary awareness-raising toward regulated compliance heightens these risks, making leadership choices particularly consequential.

Ireland's forthcoming national research security guidelines represent an important moment. With clear leadership, coordinated and resourced support, and sustained attention to proportionality and equity, research security can be aligned with Ireland's commitments under the SDGs. Without these elements, there is a risk that security measures will erode the very openness and collaboration that sustainable development depends upon.

This paper has argued that system leadership provides the mechanism through which research security and the SDGs can be aligned by coordinating action across government, funding agencies, and RPOs. By framing research security as a governance challenge rather than solely a compliance obligation, the paper highlights the importance of proportionality, coordination, and shared responsibility in supporting secure, open, and sustainable research systems. In terms of SDG 16, research security becomes a test of institutional determination, demonstrating whether systems can protect legitimate interests while preserving openness, fairness, and public trust.

ACKNOWLEDGEMENTS

The author gratefully acknowledges the colleagues and research professionals whose discussions and insights through meetings and research security initiatives at local, national, and international levels have informed the development of this opinion piece. In particular, the author acknowledges the valuable discussions within the Higher Education Institutions Research Security (HEIRS) Community of Practice in Ireland.

REFERENCES

- ALLEA. (2024). 'ALLEA Statement on Research Collaboration and Research Security in a Shifting Geopolitical Landscape'. <https://doi.org/10.26356/ALLEA-RESEARCHSECURITY-STATEMENT>
- CESAER. (2025). *Research security as a collective responsibility: empowering universities, enabling Europe*. Available at: <https://www.cesaer.org/content/5-operations/2025/20251027-cesaer-input-note-research-security.pdf> (Accessed: 22 June 2026).
- Council of the European Union. (2024). Council Recommendation on Enhancing Research Security (ST 9097/2024 REV 1), *Publications Office of the European Union*. Available at:

- <https://data.consilium.europa.eu/doc/document/ST-9097-2024-REV-1/en/pdf> (Accessed: 22 June 2026).
- European Commission. (2025a). *European Flagship Conference on Research Security*. Brussels, 28–30 October 2025. Available at: <https://euresearchsecurityconference.service-facility.eu/> (Accessed: 22 June 2026).
- European Commission. (2025b). *Commission announces new measures to strengthen research security*. Available at: https://research-and-innovation.ec.europa.eu/news/all-research-and-innovation-news/commission-announces-new-measures-strengthen-research-security-2025-10-28_en (Accessed: 22 June 2026).
- Hickmann, T., Biermann, F., Sénit C.A., Sun, Y., Bexell, M., Bolton, M., Bornemann, B., Censoro, J., Charles, A., Coy, D., Dahlmann, F., Elder, M., Fritzsche, F., Galvão, T.G., Grainger-Brown, J., Inoue, C., Jönsson, K., Koloffon Rosas, M., Krellenberg, K., Moallemi, E., Alva, I.L., Malekpour, S., Ningrum, D., Paneva, A., Partzsch, L., Ramiro, R., Raven, R., Szedlacsek, E., Thompson, J., van Driel, M., Viani Damasceno, J., Webb, R., & Weiland, S. (2024). 'Scoping article: Research Frontiers on the Governance of the Sustainable Development Goals'. *Global Sustainability*, 7, e7, <https://doi.org/10.1017/sus.2024.4>
- Kania, J. & Kramer, M. (2011). 'Collective Impact.' *Stanford Social Innovation Review*, 9(1), 36–41. <https://doi.org/10.48558/5900-KN19>
- Lacey, S., Farrelly, T., Doherty, T., McMurphy, S., & De Roiste, A. (2025). 'From Principles to Protection: Leadership in uniting Integrity and Ethics for Research Security.' *Societal Impacts*, Volume 6. <https://doi.org/10.1016/j.socimp.2025.100129>
- Lacey, S. (2026). 'Reforming Academic Publishing to Support the Sustainable Development Goals: A Call for Leadership.' *Eur Sci Ed*. 51:e181623. <https://doi.org/10.3897/ese.2026.e181623>
- OECD. (2022). 'Integrity and security in the global research ecosystem'. *OECD Science, Technology and Industry Policy Papers*, No. 130, OECD Publishing, Paris, <https://doi.org/10.1787/1c416f43-en>
- Science Europe. (2025a). *FP10: Beyond an Investment - Reinforcing the commitment towards a strong and independent FP10*. Available at: <https://www.scienceeurope.org/media/nqra2ne2/202502-fp10-concluding-statement.pdf> (Accessed: 22 June 2026).
- Science Europe. (2025b). Science Europe Report on Research Security: Key Messages and Actions from the Workshop Series. *Science Europe*. <https://doi.org/10.5281/zenodo.17433204>
- Senge, P., Hamilton, H., & Kania, J. (2014). 'The dawn of system leadership'. *Stanford Social Innovation Review*. 13(1), 27–33. <https://doi.org/10.48558/YTE7-XT62>
- UNESCO. (2021). *UNESCO recommendation on open science*. Available at: <https://www.unesco.org/en/open-science/about> (Accessed: 22 June 2026).
- United Nations. (2015). *Transforming our world: the 2030 Agenda for Sustainable Development*. New York: United Nations. Available at: <https://sdgs.un.org/2030agenda> (Accessed: 11 August 2026).

BIOGRAPHY

Seán Lacey is the Research Integrity & Compliance Officer at Munster Technological University (Ireland), where he provides institutional leadership in research integrity, ethics, open research, research security, and research assessment. His work focuses on strengthening research governance through responsible, transparent, and sustainable approaches to research. He collaborates nationally and internationally on research governance initiatives and is the institutional lead for the implementation of the Coalition for Advancing Research Assessment (CoARA). Seán is also a Principal Fellow of Advance HE in recognition of his sustained strategic leadership in higher education. Originally trained in applied mathematics and statistics, his research increasingly explores how research governance can be better aligned with the Sustainable Development Goals.

AUTHORS' CONTRIBUTION STATEMENT

Seán Lacey  [0000-0003-3005-6294](https://orcid.org/0000-0003-3005-6294);  Conceptualisation; Data curation; Formal Analysis; Investigation; Methodology; Project administration; Resources; Software; Validation; Writing – original draft; Writing – review & editing.

Accepting Editor: José M. R. C. A. Santos | Received: 17 March 2026 | Accepted: 4 August 2026

Cite as: Lacey, S. (2026). System Leadership for SDG-Aligned Research Security in Ireland. *Journal of Research Management and Administration*, 5(1), 2026081201. <https://doi.org/10.18552/jorma.v5i1.1450>

(CC BY-NC 4.0) This article is licensed to you under a [Creative Commons Attribution-NonCommercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/). When you copy and redistribute this paper in full or in part, you need to provide proper attribution to it to ensure that others can later locate this work (and to ensure that others do not accuse you of plagiarism). You may (and we encourage you to) adapt, remix, transform, and build upon the material for any non-commercial purposes. This license does not permit you to use this material for commercial purposes.