ÖSTERREICHISCHE AGENTUR FÜR WISSENSCHAFTLICHE INTEGRITÄT

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Responsible Artificial Intelligence – legal perspectives on emerging technologies and research integrity

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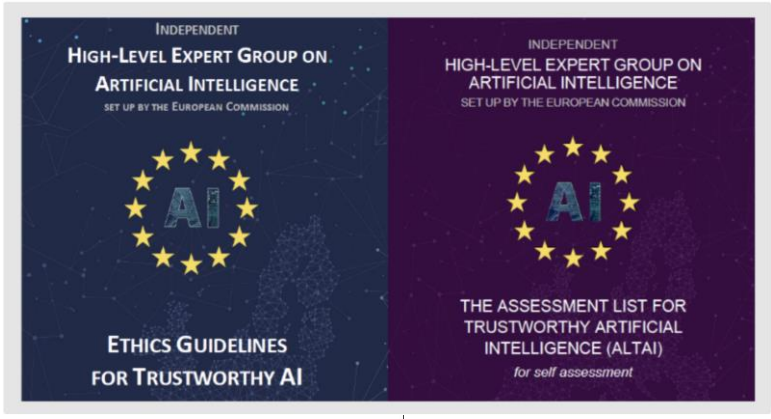
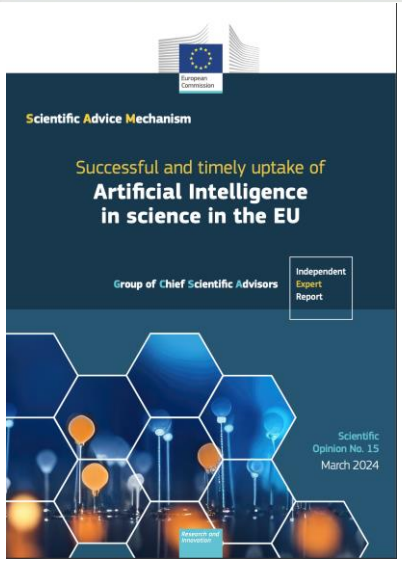
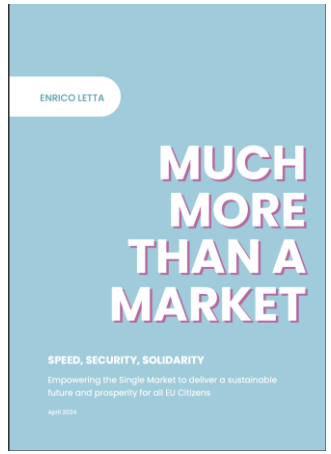
DALL-E via ChatGPT
Human supervision: TK

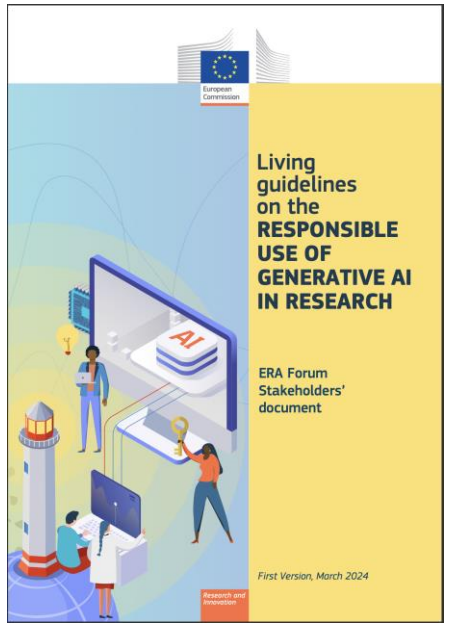
Emerging legal and regulatory landscape

Selected documents and guidelines



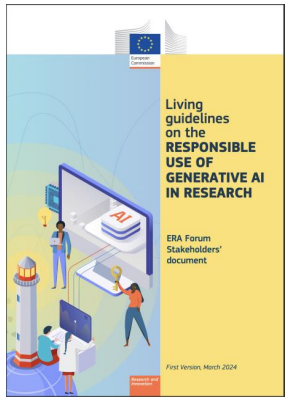


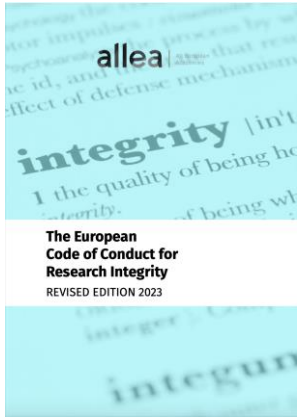




Emerging legal and regulatory landscape

Living guidelines on the responsible use of generative AI in research – European Code of Conduct for RI





- **Reliability** in ensuring the quality of research, reflected in the design, methodology, analysis and use of resources. **This includes aspects related to verifying and reproducing the information produced by the AI for research. It also involves being aware of possible equality and non-discrimination issues in relation to bias and inaccuracies.**
- **Honesty** in developing, carrying out, reviewing, reporting and communicating on research transparently, fairly, thoroughly and impartially. **This principle includes disclosing that generative AI has been used.**
- **Respect** for colleagues, research participants, research subjects, society, ecosystems, cultural heritage and the environment. **Responsible use of generative AI should take into account the limitations of the technology, its environmental impact and its societal effects (bias, diversity, non-discrimination, fairness and prevention of harm). This includes the proper management of information, respect for privacy, confidentiality and intellectual property rights, and proper citation.**
- **Accountability** for the research from idea to publication, for its management and organisation, for training, supervision and mentoring, and for its wider societal impacts. **This includes responsibility for all output a researcher produces, underpinned by the notion of human agency and oversight.**

RI, emerging technologies & Human Rights

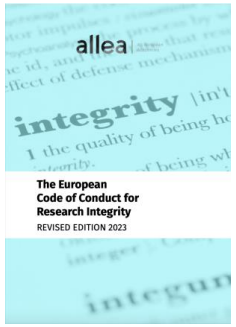
RI is located within the human rights framework

Reliability

Honesty

Respect

Accountability



Good Research Practices

- Research Environment
- Training, Supervision and Mentoring
- Research Procedures
- Safeguards
- Data Practices and Management
- Collaborative Working
- Publication, Dissemination, and Authorship
- Reviewing and Assessment

Human rights

- Right to education
- Right to teach
- Right to be informed
- Academic freedom
- Right to free movement
- Right to desirable work
- Sustainability rights
- Freedom of speech
- Freedom from discrimination
- Freedom of opinion and information
- Right to publish
- Right for private life
- Freedom for torture and degrading treatment

Emerging technologies' challenges

- Lack of algorithmic
- transparency
- Unfairness, bias and
- discrimination
- Lack of contestability
- Opacity of AI Systems
- Legal personhood issues
- Adverse effects on workers
- Privacy and data protection
- issues
- Liability for damage
- Lack of accountability for
- harms
- Intellectual property rights

RI, emerging technologies & Intellectual Property Rights

RI, AI and Copyright and Patents

- **Reliability**
- **Honesty**
- **Respect**
- **Accountability**

Intellectual Property Rights

Patents

Copyright

Trademarks

Industrial designs

Geographical indications

Trade secrets

Emerging technologies
Challenges (patens & copyright)

- **AI inventorship?**
- Patent protection for AI generated works

- **Can AI be an author?**
- Is there copyright protection for works generated by AI?

- **Who is the owner of an AI-generated work?**
- Data ownership

- **Infringements of IPRs**

Responsible AI & IPRs

AI Inventorship – policy discussions

I. **AI inventorship – can AI be an inventor ? (AI-generated inventions)**

1. **DABUS case**

- test cases in IP offices worldwide (Europe (EPO), UK, US, South Africa, South Korea, Australia; 2018-2022+)
- no protection can be granted

2. **International policy discussions**

- **World Intellectual Property Organisation** *AI Inventions* (2023): should we continue to require only human inventorship?
- **United Kingdom**: (28 June 2022) on patent *Artificial Intelligence and Intellectual Property: Copyright and Patents: Government Response to Consultation* on protection for AI-devised inventions
  - no legal change needed - no evidence that UK patent law was inappropriate to protect inventions made using AI
- **United States Patent and Trademark Office**, Department of Commerce: *Request for Comments Regarding Artificial Intelligence and Inventorship* (Guidance issued in February 2024): no AI inventorship possible

II. **Patent protection for AI systems and AI-assisted inventions**

- **<u>involve humans</u>**
- AI is to be treated as mathematical method (must solve a technical purpose/contributes to technical solution)

Human supervision/human involvement

Responsible AI & IPRs

AI & copyright – policy discussions

I. Can AI be an author?
II. Is there copyright protection for works generated by AI?

- Copyright incentivise products of human creativity and intelligence
- Level of creativity required for copyright protection

- In common law jurisdictions (Australia, UK, USA) no provision requiring an author to be **human.**

- **Data is not protected - compilations of data may enjoy copyright protection**
- Software is protected under the Berne Convention
- European Directives defined originality for computer programmes, databases and photographs as “the author’s own intellectual creation”.

Lawmakers moving toward a position where modifying the output of an AI system and creating a new (derived) work allows the human author to obtain copyright.

Human supervision/human involvement

Responsible AI & IPRs

Data ownership - policy discussions

I. Who is the owner of an AI-generated work?

- **Personal data roles and responsibilities**
- **Roles of the parties involved (i.e., data controller, data processor/service provider etc.)**
- **Mixed roles/joint controllership are also possible and should be considered on a case-by-case basis**

II. Data owner

- **Different national regulations**
- **EU acts regulate data ownership (i.e., principles of open data)**
- **Importance of contracts**

Human supervision/human involvement

vs

Organisational/institutional responsibilities

Responsible AI & IPRs

Infringements - policy discussions

- Materials used to train the **AI (input)** and the **results created by the AI (output)**

- Materials used to train the AI **could be copyrighted AND** it is likely that **reproductions** of these materials are made during the training process.
- Reproductions may constitute **an infringement to the copyrights** of the author of these materials.
- Exceptions vary from jurisdiction to jurisdiction

(US: fair use, EU: exclusions for research, education, cultural and heritage institutions, etc.)

- Very difficult to identify which materials could be used to train an AI system without infringing any IPRs
- US Supreme Court ruling – the **Warhol case on fair use.**

Human supervision/human involvement

vs

Organisational/institutional responsibilities

Responsible AI within the existing IPRs legal framework

In lieu of recommendations

A need for a holistic, global approach to main challenges

- Copyright harmonisation (WITTEM project)
- Patent procedures standardisation (European Patent Office)

Training & education

- Standard frameworks
- Multidisciplinary skills
- Costs & resources needed

Guidance and norms for joint responsibilities and roles in AI ownership

- Roles and responsibilities of researchers, RPOs, RFOs, etc.
- Repositories of “responsible” and recommended AI tools
- Costs & resources needed

List of cases

Andersen v. Stability AI Ltd., 23-cv-00201-WHO, (N.D. Cal. Oct. 30, 2023) ('William H. Orrick United States District Judge Order on Motions to Dismiss and Strike').

Andy Warhol Foundation for the Visual Arts, Inc v Goldsmith., 17 U.S.C. § 107(1).

District of Delaware, 'Thomson Reuters Enterprise Centre GmbH et al v. ROSS Intelligence Inc.' (United States District Court).

Doe v GitHub, Inc., 4:22-cv-06823, (N.D. Cal.)

Getty Images (US) Inc & Ors v Stability AI Ltd [2023] EWHC 3090 (Ch).

Getty Images (US), Inc. v. Stability AI, Inc., 1:23-cv-00135, (D. Del.).

Kadrey v. Meta Platforms, Inc., 3:23-cv-03417, (N.D. Cal.).

The New York Times Company v. Microsoft Corporation, 1:23-cv-11195, (S.D.N.Y.).

References

Kritikos, Michalis. (2017). 'Safeguarding Research Integrity in Europe: an Object of Increasing Legal Attention', Finding Common Ground: Consensus in Research Ethics Across the Social Sciences (Advances in Research Ethics and Integrity, Vol. 1), Emerald Publishing Limited, pp. 199-210.

Letta, Enrico. (2024). 'Much more than a market – Speed, Security, Solidarity, Empowering the Single Market to deliver a sustainable future and prosperity for all EU Citizens', https://www.consilium.europa.eu/media/ny3j24sm/much-more-than-a-market-report-by-enrico-letta.pdf.

Rodrigues, Rowena (2020). 'Legal and human rights issues of AI: Gaps, challenges and vulnerabilities'. Journal of Responsible Technology 4 (C):100005.

Artificial Intelligence Act, P9_TA(2024)0138, 2024, https://www.europarl.europa.eu/doceo/document/TA-9-2024-0138_EN.pdf.

'Artificial Intelligence (AI) and Inventorship' (WIPO 2023) SCP/35/7 [117].

European Commission, Directorate-General for Communications Networks, Content and Technology, Ethics guidelines for trustworthy AI, Publications Office, 2019, https://data.europa.eu/doi/10.2759/346720.

European Commission, Directorate-General for Research and Innovation, Successful and timely uptake of artificial intelligence in science in the EU, Publications Office, 2024, https://data.europa.eu/doi/10.2777/08845.

European Commission, Directorate-General for Research and Innovation, Directorate E-Prosperity, Living guidelines on the responsible use of generative AI in research, 2024, Publication Office, https://research-and-innovation.ec.europa.eu/document/download/2b6cf7e5-36ac-41cb-aab5-0d32050143dc_en?filename=ec_rtd_ai-guidelines.pdf.

Recommendation on the Ethics of Artificial Intelligence, UNESCO, (7905), 2021, https://unesdoc.unesco.org/ark:/48223/pf0000380455.

'When Code Creates: A Landscape Report On Issues At The Intersection Of Artificial Intelligence And Intellectual Property Law'. IPOS, SMU Centre for AI, CAIDG, 2024, available: https://www.ipos.gov.sg/docs/default-source/resources-library/when-code-creates-landscape-report-on-ip-issues-in-ai.pdf.

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