

# Electronic, didactic and innovative platform for learning based on multimedia assets



## e-DIPLOMA



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## D7.1: Report on Mapping Legal and Ethical Considerations

**Version No1.4**  
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## 1. Technical References

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## 3. Introduction

### 3.1. Executive Summary

This deliverable is developed in the context of Work Package 7 of the Project (WP7). The main aim of WP7 is to develop a legal and ethical framework to guide all aspects of Research and Development within the project. Specifically, it aims to provide guidance on compliance with legal frameworks on software and tools development, access of the target groups, multiplication and communication of the outcomes, cybersecurity and data protection and establish sustainable governance for the data infrastructure.

Moreover, the WP will provide guidance on aligning all project actions and outcomes with sociocultural issues and contexts at local and EU levels, including aspects of gender, sustainable development, and diversity. In general, the legal and ethical framework that will be developed in this WP shall follow the structure as laid out in the Ethics Guidelines for Trustworthy AI report by the European Commission, but also adapt this structure to best fit the specific aims and application of e-DIPLOMA.

Considering the above, this Report aims in scoping, analysing existing legislation and standards, stakeholder insights and knowledge, and pertinent literature to identify relevant perspectives and requirements, foci, methodologies, and lessons learned from similar systems/projects for (future) societal impact research. This deliverable, along with D7.2 the “Ethics Plan” serves as guidelines regarding Data management and ethics, gender, privacy, security, and regulatory aspects of this project. The consortium commits to staying up to date and any developments in the area of legislation and policy that are connected with the project’s thematic area, throughout its lifetime.

### 3.2. Abbreviation List

This is the list of the acronyms that are used in the present document:

- EC: European Commission
- WP: Work Package
- EU: European Union
- ALLEA: All European Academies
- FAIR: Findability, Accessibility, Interoperability, and Reusability
- GA: Grant Agreement
- MGA: Model Grant Agreement
- AI: Artificial Intelligence
- GDPR: General Data Protection Regulation
- CPDP: Commission for Personal Data Protection
- HREC: Human Research Ethics Committee
- BOE: Government Gazette of Spain
- CBPID: Code of Good Practice in Research and Doctorate

### 3.3. Reference Documents

Sources used for developing ethics requirements of the e-DIPLOMA project:

- Data transfers outside the EU: International data transfers using model contracts
- Deliverable 1.3 Data Management Plan (still under construction)
- Deliverable 6.1 Country report



- Directive 95/46/EC
- Ethical guidelines on the use of artificial intelligence and data in teaching and learning for educators (<https://education.ec.europa.eu/news/ethical-guidelines-on-the-use-of-artificial-intelligence-and-data-in-teaching-and-learning-for-educators>)
- Ethics and data protection (2021) ([https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ethics-and-data-protection\\_he\\_en.pdf](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ethics-and-data-protection_he_en.pdf))
- Ethics Issues Table and Ethics Self-Assessment for Horizon 2020 proposals; Horizon 2020 regulation No 1291/2013
- EU Directive 2016/680 of the European Parliament and of the Council of 27 April 2016
- European Code of Conduct for Research Integrity of ALLEA (All European Academies) [http://ec.europa.eu/research/participants/data/ref/h2020/other/hi/h2020-ethics\\_code-of-conduct\\_en.pdf](http://ec.europa.eu/research/participants/data/ref/h2020/other/hi/h2020-ethics_code-of-conduct_en.pdf)
- FAIR Principles: <https://www.go-fair.org/fair-principles/>
- Grant Agreement (GA) of the e-DIPLOMA
- Guidelines, Recommendations and Best Practices, European Data Protection Board [https://edpb.europa.eu/our-work-tools/general-guidance/guidelines-recommendations-best-practices\\_en](https://edpb.europa.eu/our-work-tools/general-guidance/guidelines-recommendations-best-practices_en)
- Handbook on European data protection law (2018 edition), European Union Agency for Fundamental Rights and Council of Europe, European Court of Human Rights, European Data Protection supervisor <https://fra.europa.eu/en/publication/2018/handbook-european-data-protection-law-2018-edition>
- Manual for Researchers: Information related to Ethics and Gender Issues (July 2019).
- Manual for Researchers: Interview guidelines (July 2019).
- Manual for Researchers: Work methodology and guidelines for the project (July 2019).
- Meetings with the project officer prior to sign the Grant Agreement.
- Regulation (EU) 2021/695 <https://eur-lex.europa.eu/legalcontent/EN/ALL/?uri=CELEX:32021R0695>

## 4. Review and analyses of the duties and rights of actors involved

### 4.1. Duties of the actors

The actors involved (therein referred to as “beneficiaries”) have the following duties:

- They must implement the Agreement to their best abilities, in good faith and in accordance with all the obligations and terms and conditions it sets out.
- They must have the appropriate resources to implement the action and implement the action under their own responsibility and in accordance with Article 11 of the Grant Agreement (GA). If they rely on affiliated entities or other participants (see Articles 8 and 9 of GA), they retain sole responsibility towards the granting authority and the other beneficiaries.
- They are jointly responsible for the technical implementation of the action. If one of the beneficiaries fails to implement their part of the action, the other beneficiaries must ensure that this part is implemented by someone else (without being entitled to an increase of the maximum grant amount and subject to an amendment; see Article 39 of GA).

- The beneficiaries (and their action) must remain eligible under the EU programme funding the grant for the entire duration of the action. Costs and contributions will be eligible only as long as the beneficiary and the action are eligible.
- They must inform the granting authority (and the other beneficiaries) immediately of any events or circumstances likely to affect significantly or delay the implementation of the action (see Article 19 of GA).
- They must be aware and follow the guidelines provided by the Deliverables of the project and follow the updated versions of them (such as Deliverable 7.2, Ethics Plan).
- They must use the relevant forms provided to the consortium for the realization for each task, procedure and activity that requires such us (such as the informed consent forms provided for Deliverable 9).
- They must respect EU laws and regulations, as well as national laws of where partner institutions are based and their internal regulations. Subsequently, all deliverables created, must take the aforementioned into consideration and make sure they do not contradict them.
- They must submit to the coordinator in good time:
  - the prefinancing guarantees (if required; see Article 23)
  - the financial statements and certificates on the financial statements (CFS) (if required; see Articles 21 and 24.2 and Data Sheet, Point 4.3)
  - the contribution to the deliverables and technical reports (see Article 21)
  - any other documents or information required by the granting authority under the GA

## 4.2. Rights of actors involved

*General principles*, including fundamental rights, values and ethical principles, environmental and labour standards, rules on classified information, intellectual property rights, visibility of funding and protection of personal data are to be respected by all actors involved. More specifically:

- the right to autonomous self-determination,
- the right to dignity and integrity of reputation,
- the right to freedom,
- the right to be treated fairly,
- the right to privacy (personal privacy, privacy of personal interaction and communication, privacy, or personal data)

*Intellectual property rights*: The right to use the beneficiaries' materials, documents and information is granted in the form of a royalty-free, non-exclusive, and irrevocable license, which includes the following rights:

- a) use for its own purposes (in particular, making them available to persons working for the granting authority or any other EU service (including institutions, bodies, offices, agencies, etc.) or EU Member State institution or body; copying or reproducing them in whole or in part, in unlimited numbers; and communication through press information services)
- b) distribution to the public (in particular, publication as hard copies and in electronic or digital format, publication on the internet, as a downloadable or non-downloadable file, broadcasting by any channel, public display, or presentation, communicating through press information services, or inclusion in widely accessible databases or indexes)





- c) editing or redrafting (including shortening, summarising, inserting other elements (e.g., meta-data, legends, other graphic, visual, audio or text elements), extracting parts (e.g. audio or video files), dividing into parts, use in a compilation)
- d) translation
- e) storage in a paper, electronic or another form
- f) archiving, in line with applicable document-management rules
- g) the right to authorize third parties to act on its behalf or sub-license to third parties the modes of use set out in Points (b), (c), (d), and (f), if needed for the information, communication, and publicity activity of the granting authority
- h) processing, analyzing, aggregating the materials, documents and information received, and producing derivative works.

*Data protection:* the basic right to privacy of all data subjects involved in the project. As such, all personal data needed for the execution of some of the project's trials will be collected and processed in accordance with current regulations, such as the EU's General Data Protection Regulation (GDPR) 2016/679, as well as any additional regulations at the national level.

## 5. Applicable legal requirements on educational software development, target groups protection, privacy and data protection, cybersecurity, etc. and the principles of transparency, accountability, discrimination, diversity

This section provides a brief overview of the key applicable legal requirements and regulations that need to be taken into consideration when developing the ethics plan for e-DIPLOMA. Links are provided to these documents in order to facilitate beneficiaries' access to them, in detail.

### 5.1. Ethical considerations in research and Horizon Europe actions

According to the European Code of Conduct for Research Integrity of ALLEA (All European Academies), good research practices are based on fundamental principles of research integrity. They guide researchers in their work as well as in their engagement with the practical, ethical, and intellectual challenges inherent in research.

These principles are:

- Reliability in ensuring the quality of research, reflected in the design, the methodology, the analysis, and the use of resources.
- Honesty in developing, undertaking, reviewing, reporting, and communicating research in a transparent, fair, full and unbiased way.
- Respect for colleagues, research participants, society, ecosystems, cultural heritage, and the environment.
- Accountability for the research from idea to publication, for its management and organisation, for training, supervision, and mentoring, and for its wider impacts.

For more information: <https://www.allea.org/wp-content/uploads/2017/05/ALLEA-European-Code-of-Conduct-for-Research-Integrity-2017.pdf>



## Guiding principles

### Article 19 Regulation 2021/695 establishing Horizon Europe:

Actions carried out under the Programme shall comply with ethical principles and relevant Union, national and international legislation including the Charter of Fundamental Rights of the European Union and the European Convention on Human Rights, and its Supplementary Protocols Particular attention shall be paid to:

- the principle of proportionality
- the right to privacy
- the right to the protection of personal data
- the right to the physical and mental integrity of a person
- the right to non-discrimination
- the need to ensure the protection of the environment
- the need to ensure high levels of human health protection

More information: [Regulation \(EU\) 2021/695 of the European Parliament and of t... - EUR-Lex \(europa.eu\)](#)

### Article 14 Model Grant Agreement (MGA)

- The action must be carried out in line with the highest ethical standards and the applicable EU, international and national law on ethical principles
- The beneficiaries must commit to and ensure the respect of basic EU values (such as respect for human dignity freedom democracy, equality, the rule of law and human rights including the rights of minorities).

More information: [https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/common/guidance/aga\\_en.pdf](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/common/guidance/aga_en.pdf)

## 5.2. Principles concerning data practices in research

In 2016, the “**FAIR Guiding Principles for scientific data management and stewardship**” were published in *Scientific Data*. The authors intended to provide guidelines to improve the Findability, Accessibility, Interoperability, and Reuse of digital assets. The principles emphasize machine-actionability, which is the capacity of computational systems to find, access, interoperate, and reuse data with no or minimal human intervention).

The e-DIPLOMA consortium will adopt the FAIR principles for all datasets that will be made available to third parties beyond the consortium.

More information: Wilkinson, M., Dumontier, M., Aalbersberg, I. *et al.* The FAIR Guiding Principles for scientific data management and stewardship. *Sci Data* **3**, 160018 (2016). <https://doi.org/10.1038/sdata.2016.18>

## 5.3. Trustworthy Artificial Intelligence (AI)

Artificial Intelligence (AI) EU approach in detail:

- Human-centric approach
- Trustworthy AI: AI that is reliable
- Legal AI: AI that conforms to legal requirement
- Ethical AI: AI that is ethical

#### Ethical AI – requirements:

- Respect for Human Agency - Basic human rights: autonomy, dignity, freedom
- Privacy & Data Governance
- People have a right to privacy
- Data must be accurate & representative

#### Humans must be able to manage the data:

- Fairness – no discrimination, equal access
- Well-being - “AI systems should contribute to, and not harm, individual, social and environmental well-being.”
- Transparency - AI systems should be understandable (in detail) by humans  
Includes all elements of the AI system (data, code, development processes, how it is operated)
- Accountability & Oversight:  
“Developers must be able to explain how and why a system exhibits particular characteristics”  
Accountability = People who build/operate AI are responsible for what it does, and the consequences  
Oversight = humans are able to understand and control the AI

More information: <https://ec.europa.eu/futurium/en/ai-alliance-consultation.1.html>

## 5.4.National laws and institutional regulations

The following segment will be referring to the relevant national legislation of the countries where partners are based. As we can see, there is integration of General Data Protection Regulation when it comes to EU data regulation, but when it comes to AI for example, countries are on different levels of acknowledgement on a legislative level. When it comes to institutions and their internal rules, there is usually some sorts of ethics committee and a code of conduct when it comes to research, data-sharing, use of data, participation of humans in research and trials and equal treatment.

### **Bulgaria:**

- The Bulgarian legislation on data protection does not encompass significant variations of the General Data Protection Regulation (Regulation (EU) 2016/679) ('GDPR').
- The data protection landscape in Bulgaria is shaped by the Protection of Personal Data Act 2002
- The guidelines issued by the Commission for Personal Data Protection ('CPDP')

### **Cyprus:**

- Law providing for the Protection of Natural Persons regarding the Processing of Personal Data and for the Free Movement of such Data of 2018 (Law 125(I)/2018) which repealed GDPR 2016.
- The convention for the protection of human rights and human dignity act of 2001
- The processing of personal data (protection of the individual) laws 2001 to 2012

### **Estonia:**

- Cyber Security Act
- Personal Data Protection Act
- Information Systems Data Exchange Layer Regulation
- Information Society Service Act
- Copyright Law



Tallinn University (TLU) regulations:

- Ethics Committee of the University
- Code of Conduct - Research integrity
- Gender quality Plan
- More information: <https://www.tlu.ee/en/ethics-and-good-practices>

#### **Hungary:**

- Act CXII of 2011 on Informational Self- Determination and on Freedom of Information.
- Act LXXVI of 2014 on Scientific Research, Development, and Innovation

Budapest University of Technology and Economics (BME) Regulations:

- Code of Ethics
- More information:  
[https://www.kth.bme.hu/document/2678/original/Code%20of%20Ethics\\_BME.pdf](https://www.kth.bme.hu/document/2678/original/Code%20of%20Ethics_BME.pdf)

#### **Italy:**

- Cyber Security Act
- Personal Data Protection Act
- Information Systems Data Exchange Layer Regulation
- Information Society Service Act
- Copyright Law

#### **Netherlands:**

- Dutch Implementation Act for GDPR (Uitvoeringswet Algemene verordening gegevensbescherming).
- The Dutch Database Act (Databankenwet)

Technical University of Delft (TU Delft) regulations:

- Research involving Human Research Subjects – including master's theses – requires approval from the Human Research Ethics Committee (HREC)
- More information: <https://www.tudelft.nl/over-tu-delft/strategie/integriteitsbeleid/human-research-ethics>

#### **Spain:**

- Order SSI/81/2017, of January 19, which publishes the Agreement of the Human Resources Commission of the National Health System and approves the protocol by which basic guidelines are determined to ensure and protect the right to the privacy of the patient, students, and residents in Health Sciences.
- Royal Decree-law 5/2018, of July 27, urgent measures for the adaptation of Spanish law to the European Union regulations on data protection (BOE 183 of 07/30/2018).
- Organic Law 15/1999 on Data Protection and its Development Regulation approved by Royal Decree 1720/2007, of December 21.
- Organic Law 1/1996, of January 15, on the Legal Protection of Minors, partially modifying the Civil Code and the Civil Procedure Law.
- Law 14/2011, of June 1, on science, technology, and innovation (consolidated text September 6, 2022)



- Law 17/2022, of September 5, which modifies Law 14/2011, of June 1, on Science, Technology, and Innovation

Universitat Jaume I (UJI) regulations:

- Internal regulations of the committees.
- Code of Good Practice in Research and Doctorate (CBPID).
- Protocol by which the criteria and procedure for authorization of dissemination of research surveys conducted in the University Community at the Universitat Jaume I are approved.
- Criteria for the treatment of personal data in Doctoral, Master's and Bachelor's degree thesis.
- Protection of the digital rights of the university community in accordance with that established in the statutes of the University.
- Criteria for the communication of personal data for which the University is responsible to research groups (Center for Security and Privacy of the Universitat Jaume I).
- More information: <https://www.e-revistas.uji.es/index.php/languagevalue/ethics-policy>

Valencia Polytechnic University (UPV) Regulations:

- Ethical and good practice statement
- The Sonda Journal
- More information: <https://revistasonda.upv.es/ethics-and-good-practices/>

## 6. Ethical and social issues that may arise with respect to the future design of the project methodology and tools within the concepts of educational technology and open access education.

Despite the high standards to safeguard, the work that is produced from this project may be misused or raise serious and/or complex ethical issues, especially when it comes to educational technology. The standard of care and caution needs to be raised in the following cases:

When it comes to the use of AI, especially in education some types of objectives, methodologies, system architecture or design may be inherently problematic, such as AI systems due to the following risks:

- to limit human rights, subordinate, deceive or manipulate people, violate bodily or mental integrity, create attachment or addiction, or hide the fact people are interacting with an AI system
- to cause people to be disadvantaged socially or politically, reduce the power that they have over their lives, or result in discrimination, either by the system, or by the way it will be used
- to cause people to suffer physical, psychological, or financial harm, cause environmental damage, or significantly disrupt social processes and institutions (for example, by contributing to misinformation of the public)
- systems/techniques that have the potential to lead to significant negative social impacts and/or significant negative environmental impacts—either through intended applications or plausible alternative uses; or
- systems/techniques aimed at replacing or influencing human decision-making processes in a way likely to adversely impact affected individuals or have the potential to circumvent the autonomy of those individuals; or

- systems/techniques/technology that can lead to new manipulative, exploitative or social control practices; or
- systems/techniques/technology with the potential to have harmful implications for human rights, subordinate, deceive or manipulate people, violate bodily or mental integrity, create attachment or addiction, or hide the fact that people are interacting with AI.

In terms of human participation, serious and/or complex issues may arise when the implementation:

- includes children/minors/people unable to give informed consent, with no clear justification for their participation or benefit to them; or
- involves highly vulnerable participants, such as people exposed to or affected by multiple or intersecting vulnerabilities, or methods that have the potential to significantly exacerbate the vulnerability of already vulnerable groups or individuals.

In terms of data sharing, there needs to be awareness in case the proposed research:

- envisages the large-scale collection of special category data and/or data related to criminal convictions and offenses, if the intended processing poses a significant risk to the rights and freedoms of the research participants; or
- involves the covert observation or deception of research participants, to collect sensitive/special category data; or
- uses personal data that was not collected or otherwise provided by the data subjects for research purposes, and for which the data subjects may have a legitimate objection or
- carries a significant risk of breaching privacy or confidentiality that is likely to result in threats to data subjects' physical safety, loss of business or employment opportunities, humiliation or damage to their reputation or relationships, or
- involves profiling and/or systematic monitoring of individuals or groups of individuals, and/or intrusive methods of data processing (e.g., data mining, web-crawling, social network analysis, geolocation tracking); or
- results in the transfer of special category data to countries with inadequate data protection regimes, without the knowledge or explicit consent of the data subjects.

Considering the above, the consortium develops and aims on developing different safeguards such as the present document, the Ethics Plan (D7.2) the Data Management Plan (D7.3) and WP9 on Ethics requirements to establish clear guidelines and code of conduct throughout the project's implementation. On top of that, there are similar projects that have served as "good practices" for the current project, and we can learn from.

For instance:

- The H2020 project 'RAISD' (Grant Agreement no: 822688) and its inclusion of vulnerable people in research, has guided the present project's guidelines when it comes to what is needed in terms of ethical and legal compliance, to balance progress and innovation, while not compromising vulnerable people's autonomy.
- The H2020 project 'MEESO' (Grant Agreement no: 817669) and the importance it placed on Data Management, has been very significant in the development of this project's guidelines.



## 7. Conclusions

The e-DIPLOMA consortium holds in high regard all the legal and ethical principles, protocols, laws, and requirements that apply to this project. Therefore, throughout the realisation of this project, the consortium commits to taking the above into consideration and following the code of conduct that is set out while creating its own internal guidelines and being up to date with any relevant changes in regulations and subsequently updating the present document if necessary.



# e-DIPLOMA



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