Pan-European interoperable AC-DC HYbrid electricity NETworks

D1.3: Legal and ethical issues and guidelines

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List of Acronyms and Abbreviations

Abbreviation	Description
AEPD	Agencia Española de Protección de Datos (Spain)
ALLEA	All European Academies
CNIL	Commission Nationale de l'Informatique et des Libertés (France)
CNPD	Comissão Nacional de Proteção de Dados (Portugal)
DPIA	Data Protection Impact Assessment
EC	European Commission
EDPB	European Data Protection Board
EU	European Union
EUREC	European Network of Research Ethics Committees
GA	General Assembly / Grant Agreement (context-dependent)
GDPR	General Data Protection Regulation
GEP	Gender Equality Plan
HDPA	Hellenic Data Protection Authority (Greece)
IPR	Intellectual Property Rights
NAIH	Nemzeti Adatvédelmi és Információszabadság Hatóság (Hungary)
PDPL	Personal Data Protection Law (Montenegro)
PMU	Phasor Measurement Unit
SCCs	Standard Contractual Clauses
ToC	Table of Contents
WP	Work Package

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Executive summary

The HYNET project is a Horizon Europe initiative that advances energy innovation while ensuring full compliance with the highest ethical and legal standards. Anchored in the Horizon Europe Ethics Guidelines, the European Code of Conduct for Research Integrity, and the Charter of Fundamental Rights of the European Union, the project prioritizes transparency, accountability, and respect for privacy and fundamental rights.

To safeguard ethical integrity, HYNET has established a structured framework that integrates risk assessment, ethical monitoring, and compliance mechanisms across all activities. Particular emphasis is placed on data protection, with alignment to the General Data Protection Regulation (GDPR), the ePrivacy Directive, and evolving European legislation. Even though HYNET demonstrations do not involve direct use of personal data, the consortium has proactively adopted measures such as privacy-by-design principles, and informed consent procedures for activities such as interviews, workshops, and communication tools.

The project also maintains a robust framework for the management of Intellectual Property Rights (IPR), ensuring equitable ownership, protection, dissemination, and confidentiality of research outputs. This supports innovation while safeguarding the contributions of all partners. In parallel, HYNET has embedded gender equality as a cross-cutting dimension, striving for balanced participation in research teams, leadership, and dissemination activities. The consortium actively contributes to the objectives of the European Gender Equality Strategy 2020–2025, with women holding prominent roles in project coordination, management, and scientific leadership.

By integrating ethics, data protection, intellectual property management, and gender equality into its governance structure, HYNET ensures that its research activities are conducted responsibly and sustainably. This approach strengthens the credibility, impact, and societal relevance of the project's outcomes, positioning HYNET as a model of responsible research and innovation within Horizon Europe.

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1. Introduction

1.1 Scope and objectives

HYNET project primary aim is to develop innovative operational tools for power dispatch, voltage control, and security within these grids, addressing the current challenges in transitioning from traditional AC systems to hybrid ones that integrate DC components. The project introduces new control algorithms, protection mechanisms, and grid-forming capabilities to manage the increasing penetration of renewable energy sources and power electronics. This report addresses the ethical and legal aspects of HYNET, focusing on how the project upholds research integrity, safeguards data, and advances gender equality within the broader framework of European regulations.

As the initial version of this deliverable, it sets out a reference framework designed to:

- Assess the project's alignment with Horizon Europe's ethical standards, while also identifying ways in which HYNET goes beyond these requirements by promoting openness, accountability, and respect for individual rights.
- Detail the project's comprehensive strategy for data protection and privacy, including security protocols, the use of Data Protection Impact Assessments (DPIAs), and the ethical handling of personal information.
- Review the ethical safeguards applied across research activities such as interviews, workshops, and focus groups, with particular attention to privacy, data security, and the responsible management of project-related material.
- Highlight the project's commitment to gender equality by presenting its Gender Equality Plan (GEP), the participation of women in leadership roles, and the emphasis on inclusivity among both researchers and end-users.

1.2 Dependencies with other tasks and deliverables

This deliverable represents the work carried out under Task 1.3 "Data management, IPR, legal and ethics monitoring", and is also related to Task 2.2 "Technologies requirements and use cases definition" regarding industry-standards and relevant data exchange models used within the context the HYNET use cases. Additionally, this deliverable is considered a complementary document to "Data Management Plan" (initial version) which was submitted on M6.

1.3 Document structure

The deliverable is organised as follows:

- Section 2 outlines Horizon Europe's ethical framework, emphasizing the core principles that guide HYNET's research practices.
- Section 3 reviews the legal context, presenting relevant European and national regulations. It details compliance obligations in eight consortium partners who are engaged in four demonstration sites situated across Cyprus, Greece, Portugal, Spain, France, Hungary, Norway, and Montenegro with particular focus on GDPR alignment and national legal provisions.
- Section 4 examines the project's governance measures, including ethical supervision, defined responsibilities, and strategies for managing potential risks to ensure that data is handled both securely and responsibly.

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- Section 5 presents the project's formal approach to ethics-related risk management. It describes the processes for identifying, evaluating, monitoring, and addressing risks, as well as the mitigation measures established to respond to specific ethical challenges.
- Sections 6 considers the treatment of ethical issues within HYNET's research activities, with attention to privacy, data security, and the responsible handling of materials from interviews and other project engagements.
- Finally, Section 8 highlights HYNET's Gender Equality Plan and the initiatives undertaken to foster greater equality and inclusion across the project.

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2. HYNET Compliance

Research ethical compliance is a cornerstone of EU-funded research, and adherence to established principles is regarded as essential. While no single European standard universally governs research ethics, several frameworks provide clear direction for projects like HYNET. The project has drawn on the following key sources of guidance:

2.1 Horizon Europe Ethics Guidelines[1]

Horizon Europe sets out a series of requirements to ensure that ethical concerns are integrated into every stage of research. Under these guidelines, projects are expected to:

- Incorporate ethical considerations from planning through implementation.
- Comply with relevant laws and regulations, particularly those related to privacy and data protection.
- Safeguard participants' rights and well-being, including the use of informed consent.
- Offer additional protections for vulnerable populations.
- Apply data protection principles and assess privacy implications, regardless of whether personal data is collected.
- Uphold honesty, accountability, and integrity throughout the research process.
- Submit to ethical review where human subjects or sensitive topics are involved.
- Ensure open and transparent communication within the project and with stakeholders.
- Continuously review and improve ethical practices as circumstances evolve.
- Keep comprehensive records of all ethical decisions and actions.

2.2 European Code of Conduct for Research Integrity[2]

Developed by the European Science Foundation and All European Academies (ALLEA), this code promotes a culture of integrity and high standards across the research community. It encourages researchers to:

- Conduct their work with honesty, openness, and transparency.
- Demonstrate responsibility and ethical conduct in all professional interactions.
- Communicate findings truthfully.
- Respect participants and treat data in line with ethical norms.
- Contribute to fostering integrity within the broader scientific environment.
- Uphold rigorous standards of conduct at every stage of research.

[1] European Commission. (2023). Online Manual - Horizon Europe Ethics Guidelines. Retrieved from [https://webgate.ec.europa.eu/funding-tenders-opportunities/display/OM/Online+Manual]

[2] European Science Foundation and All European Academies (ALLEA). (2023). European Code of Conduct for Research Integrity. Retrieved from [https://allea.org/wp-content/uploads/2023/06/European-Code-of-Conduct-Revised-Edition-2023.pdf]

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2.3 European Network of Research Ethics Committees (EUREC)[3]

EUREC serves as a collaborative platform for ethics committees across Europe, supporting harmonization and the exchange of knowledge. For HYNET, this network provides opportunities to:

- Work jointly with ethics committees and experts.
- Share experiences and good practices.
- Strengthen the standardization of ethical review procedures.
- Contribute to advancing ethical benchmarks in research.
- Access updated information on relevant legislation and guidance.

2.4 European Data Protection Board (EDPB)[4]

As the authority interpreting and harmonizing the application of GDPR, the EDPB outlines critical responsibilities for data controllers, including:

- Ensuring lawful processing, data minimization, and the protection of individual rights.
- Implementing appropriate security measures and carrying out Data Protection Impact Assessments (DPIAs) for high-risk activities.
- Notifying authorities and data subjects in cases of data breaches.
- Maintaining transparency in profiling and automated decision-making.
- Establishing valid consent practices, managing joint controllerships, and regulating international data transfers.

In alignment with EDPB guidance, HYNET commits to documenting its legal basis for data processing, applying strong security protocols, and conducting DPIAs where needed. Where personal data is used—for example, in newsletter distribution—the project will respect individual rights and ensure clear mechanisms for responding to requests. Even though HYNET's demonstration activities do not involve human participants or personal data, informed consent will be obtained when required, and international transfers will follow legally compliant pathways. Ongoing monitoring and adaptation of data protection practices will ensure continued alignment with GDPR and evolving EDPB recommendations.

[3] EUREC. (2023). European Network of Research Ethics Committees. Retrieved from [http://www.eurecnet.org]

[4] European Data Protection Board (EDPB). (2022). ANNUAL REPORT STREAMLINING ENFORCEMENT THROUGH COOPERATION. Retrieved from [https://edpb.europa.eu/system/files/2023 04/edpb_annual_report_2022_en.pdf]

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3. Ethics in HYNET

The HYNET consortium shows a strong awareness of the ethical responsibilities linked to its research activities and is fully committed to the standards set out in the Horizon Europe Programme and in Article 19 – Ethical Principles of the EU Charter of Fundamental Rights. Ethical, social, and data protection considerations are treated as central pillars of the project.

HYNET's approach to ethics is fully aligned with both European and national legal frameworks, supported by a structured system of ethical monitoring built on three core principles:

a. Guaranteeing transparency in all aspects of data collection and management, with clear communication to stakeholders involved as data providers.
b. Securing explicit, written informed consent from business participants contributing data during the project's pilot evaluation phase.
c. Protecting data security, privacy, and integrity through a unified security and ethics management policy that integrates technological safeguards with responsible data governance practices across the research scope.

3.1 Applicable legislation

The HYNET framework requires a comprehensive review of all relevant legislation, together with strict adherence to core ethical principles. All partners engaged in research are expected to operate in compliance with both national and European laws, observing national data protection rules as well as broader EU regulations.

Collectively agreed protocols govern participant recruitment, research activities, and the handling of project data, including its collection, analysis, and storage. These shared guidelines are regularly reviewed by the project's Steering Committee to ensure consistency and compliance. Each partner is directly responsible for meeting the obligations in their own country, providing evidence of compliance to the ethics committee, and ensuring full alignment with both EU and national legislation.

3.1.1 European Legislation

The General Data Protection Regulation (GDPR)[5] is recognized as central to HYNET's ethical and legal obligations. Within the project's governance system, the Steering Committee oversees the development and enforcement of data protection strategies to ensure compliance with GDPR requirements. Researchers are tasked with protecting participant confidentiality and treating any personal information as strictly privileged. Such data must be handled in a way that respects participants' dignity and preserves their right to privacy. Before consent is obtained, participants are to be fully informed of potential risks related to confidentiality or anonymity, as well as the intended use of their personal information.

In addition to GDPR, **the ePrivacy Directive (2002/58/EC) and the forthcoming ePrivacy Regulation** provide further safeguards for privacy and confidentiality in electronic communications. The Directive, introduced in 2002 and subsequently updated in 2006[6] and 2009, governs areas such as cookies, spam,

[5] European Union. (2016). General Data Protection Regulation (GDPR). Retrieved from [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R0679]

[6] European Union. (2006). ePrivacy Directive. Retrieved [https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:105:0054:0063:EN:PDF#:~:text=This%20Directive%20aims%20to%20harmonise,to%20ensure%20that%20the%20data]

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and the security of electronic communications. The upcoming Regulation seeks to replace and modernize these rules, creating a more uniform legal framework across the EU.

To ensure compliance with ePrivacy requirements, HYNET has implemented the following measures:

- Cookie Consent: The project website requests users' informed consent before cookies are stored on their devices, explains their purpose, and allows users to accept or reject them
- Confidentiality of Communications: All electronic communications are treated as confidential. Any monitoring, processing, or interception is carried out only where lawful and consistent with user expectations.
- Spam and Direct Marketing: HYNET respects the prohibition of unsolicited communications, sending newsletters or marketing materials only with valid consent.
- Monitoring Regulation Updates: The consortium remains attentive to ongoing developments in the proposed ePrivacy Regulation and will adapt its practices to remain fully compliant with the most up-to-date requirements.

3.2 National level legislation

The HYNET project involves data collection from eight consortium partners who are engaged in four demonstration sites situated across Cyprus, Greece, Portugal, Spain, France, Hungary, Norway, and Montenegro. Each of these partners operates within a distinct legal and regulatory environment and therefore must observe the specific national requirements governing data protection, privacy, and ethical research practices in their respective countries. To ensure consistency, the consortium has established a common framework that aligns national obligations with overarching European standards, such as the GDPR and Horizon Europe ethical guidelines. This dual-level approach guarantees that while partners comply with their local legislation, they also contribute to a harmonized process that secures transparency, accountability, and uniform standards of data handling across all demonstration activities.

The details of these country-specific obligations, and how they are integrated into HYNET's broader ethical and legal framework, are presented in the subsequent sections.

3.2.1 Cyprus

Cyprus implements the GDPR through **Law 125(I)/2018**[7], which supplements the Regulation by detailing the powers of the Commissioner for Personal Data Protection, specific lawful bases for processing, and penalties for non-compliance. For EU research projects, this means that even if personal data is not directly processed, any use of grid-level measurements that could incidentally contain identifiable information (e.g., from small energy communities) must be assessed. Projects must also demonstrate that synthetic or anonymized data are used where possible, and if real PMU data is included, that anonymization or aggregation procedures are GDPR-compliant and auditable.

3.2.2 Greece

Greece enforces GDPR through **Law 4624/2019**[8], which also transposes Directive (EU) 2016/680 for law enforcement data. The law empowers the **Hellenic Data Protection**

[7] https://www.dataprotection.gov.cy/dataprotection/dataprotection.nsf/law_all_en/law_all_en?OpenDocument

[8] https://www.dpa.gr/en/legal-texts/law-4624-2019

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Authority (HDPA) to supervise compliance and impose sanctions. For EU research projects operating in or with Greek partners, care should be taken that technical and operational data remain outside the scope of personal data; however, where grid models intersect with household-level smart meter data, GDPR safeguards apply. Researchers must conduct a Data Protection Impact Assessment (DPIA) if there is any chance of personal data processing, and document that data flows are either synthetic, anonymized, or subject to lawful processing agreements with operators.

3.2.3 Norway

Although not an EU member, Norway applies GDPR via the **EEA Agreement**, enforced by the **Personal Data Act (2018)**[9] and the **Personal Data Regulations**[10]. The Norwegian Data Protection Authority (**Datatilsynet**) monitors compliance. EU research projects collaborating with Norwegian institutions should recognize that GDPR applies fully in Norway, and must align consent, anonymization, and data-transfer protocols accordingly. Open-source or technical datasets, such as grid dispatch models, generally fall outside personal data rules, but contractual and ethical declarations should explicitly note that no identifiable data is processed and that technical measures are in place to safeguard data integrity.

3.2.4 Spain

Spain's **Organic Law 3/2018 (LOPDGDD)**[11] is notable because, beyond implementing GDPR, it creates a **charter of digital rights** for citizens, including rights in online environments, workplace monitoring, and AI-related processing. For EU research projects, this means heightened sensitivity around automated decision-making, profiling, or use of AI/ML methods on data. Even if projects handle only technical datasets, researchers must be careful in case any linkages to individuals (e.g., demand data tied to households) are introduced. If so, the Spanish law would require clear safeguards, lawful basis documentation, and potentially consultation with the national authority (AEPD).

3.2.5 Portugal

Portugal operationalizes GDPR with **Law 58/2019**[12] and transposes the Law Enforcement Directive with **Law 59/2019**[13]. The national authority (**CNPD**) oversees compliance and has been particularly strict in its enforcement of GDPR provisions, including issuing substantial fines. For EU research projects, special care is needed when dealing with cross-border data flows: even anonymized grid or market data should be accompanied by a legal basis document clarifying that personal data are excluded, or, if any exist, that pseudonymization or minimization has been applied. Documentation of technical and organizational measures

[9] https://lovdata.no/dokument/NLE/lov/2018-06-15-38

[10] https://lovdata.no/dokument/SF/forskrift/2018-06-15-876

[11] https://www.boe.es/buscar/act.php?id=BOE-A-2018-16673

[12] https://dre.pt/dre/detalhe/lei/58-2019-123078403

[13] https://dre.pt/dre/detalhe/lei/59-2019-123078404

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(encryption, secure storage) is important in Portuguese contexts, as CNPD emphasizes accountability.

3.2.6 France

France's **Loi Informatique et Libertés (1978, amended)**[14] and its **2018 Ordinance**[15] adapt GDPR to the national context and reinforce the powers of the **CNIL** (Commission Nationale de l'Informatique et des Libertés). France is particularly proactive in guiding research projects, requiring DPIAs in many cases and strict data-minimization principles. For EU projects with French partners, it is important to maintain detailed records of processing activities and to ensure that any data sharing agreements with non-EU partners explicitly meet GDPR transfer requirements. Even when processing synthetic or anonymized data, CNIL recommends documenting the anonymization methodology to prove that re-identification risk is negligible.

3.2.7 Hungary

Hungary's **Act CXII of 2011**[16] (the Privacy Act) was amended after GDPR to align national provisions, while also preserving rules on **freedom of information** and public access. The Hungarian authority, Nemzeti Adatvédelmi és Információszabadság Hatóság (**NAIH**), oversees both transparency and data protection. For EU research projects, the dual emphasis on privacy and public access means that project deliverables (reports, datasets) must balance openness with compliance. If grid data sets are published as open source, researchers must provide evidence that no personal data is contained or that anonymization/pseudonymization has been applied. Careful licensing and open data statements are recommended to meet Hungary's transparency culture.

3.2.8 Montenegro

Montenegro's **Personal Data Protection Law (PDPL)**[17] predates full GDPR alignment but has been amended to approximate EU standards, overseen by the national Agency for Personal Data Protection. For EU research projects, the key point is that **data transfers to/from Montenegro are treated as transfers to a "third country"** under GDPR, unless the project ensures equivalent safeguards. Researchers must therefore use data processing agreements, Standard Contractual Clauses (SCCs), or demonstrate that only non-personal/technical data is exchanged. Since your project's datasets are grid-level and synthetic, the main requirement is to **document** this fact clearly for compliance reviews.

[14] https://www.legifrance.gouv.fr/loda/id/JORFTEXT000000886460

[15] https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000037604004

[16] https://njt.hu/translated/doc/J2011T0112P_20240301_FIN.pdf

[17] https://www.azlp.me/en/legal-framework/national-legislation/personal-data-protection-law

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4. Ethics Roles

Since the project has gotten ethics clearance, the additional body of the External Ethics Committee is no longer relevant for HYNET project, safeguarding also funds to be allocated to other needs. Instead, we will include an additional member responsible for legal matters, to the External Advisory Board body. More specifically, in order to ensure that the project will meet all the foreseen and unforeseen ethics requirements during its lifetime has taken some precautionary measures. First of all, within the context of D1.3 "Legal and ethical issues and guidelines" UBE as document leader but also project coordinator is collecting National Ethical and Legal constraints / regulations and legislations that should be taken into account throughout the project. Secondly, UBE as coordinator is also including to the project Mrs Eleonora Papatsoutsou, expert in the area of Ethical and Legal aspects of Horizon Europe programme in order to address also any issues that may arise within the consortium. Her responsibilities will involve:

- **Raising Awareness and Providing Legal Clarity**: Partners are kept informed about the data protection laws that apply to their activities, with particular emphasis on the General Data Protection Regulation (GDPR) and its role as the cornerstone of data protection within the European Union.
- **Advisory and Support Role**: Ongoing consultation is provided to all partners to help them incorporate data protection requirements into every aspect of their work. This role also includes acting as the primary contact point for individuals (data subjects) who may have questions or concerns regarding the handling of their personal information.
- **Guidance on Communication Tools**: Practical recommendations are issued to project participants regarding best practices in the use of communication platforms, ensuring that privacy and data security principles are consistently applied.
- **Monitoring and Compliance Checks**: Regular evaluations are carried out to verify that the consortium is meeting all legislative obligations and that internal policies and procedures relating to data protection are being respected.
- **Privacy by Design and Default**: The integration of privacy safeguards into the project's architecture is actively promoted and implemented, ensuring that protective measures are embedded into both the design and default operational settings.
- **Internal Communication of Data Protection Matters**: Any issues or developments concerning data protection are shared within the consortium, particularly through the General Assembly (GA), to foster transparency and collective accountability.
- **Data Breach Procedures**: Clear protocols are established for responding to potential data breaches. These include immediate notification of supervisory authorities and affected individuals, together with corrective measures to address the incident.
- **Record-Keeping and Documentation**: Comprehensive documentation of all data processing activities is maintained. This ensures not only transparency but also that the consortium's practices remain verifiable and aligned with the requirements of applicable data protection regulations.

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5. Ethics Assurance mechanisms

To maintain high ethical standards throughout the project, the consortium has implemented strong ethical assurance mechanisms. These mechanisms include internal review processes, as well as monitoring and reporting protocols, to ensure compliance with ethical guidelines and legal obligations.

An ethics risk assessment procedure, overseen by the HYNET Steering Committee, will ensure compliance with European research ethics standards. Throughout the project's duration, all ethical matters will be addressed in accordance with this procedure.

The General Data Protection Regulation (GDPR) outlines specific criteria for identifying processing activities that may pose a risk to data subjects. These criteria, originally introduced by the Article 29 Data Protection Working Party, are summarized below:

1. **Assessment or Rating, including Profiling and Predicting**: This refers to the processing of data to assess, predict, or profile aspects of an individual's performance at work, economic situation, health, personal preferences, interests, reliability, behaviour, location, or movements (as outlined in GDPR Recitals 71 and 91).
2. **Automated Decision-Making with Legal or Significant Effects**: This involves processing that results in decisions affecting individuals' legal status or having similarly significant consequences, such as credit approvals or hiring decisions (Article 22 and Article 35(3)(a) of the GDPR).
3. **Systematic Monitoring**: This refers to processing activities used to observe, monitor, or control individuals, especially by technologies that track behaviour in public or accessible spaces (Article 35(3)(c) of the GDPR). This is of particular concern when individuals are unaware of who is collecting their data or how it will be used.
4. **Sensitive or Highly Personal Data**: This includes the processing of special categories of data as defined in Article 9 of the GDPR (e.g., political opinions, health information), and data relating to criminal convictions or offenses, as per Article 10.
5. **Large-Scale Data Processing**: Although the GDPR does not define "large-scale" processing, Recital 91 suggests considering the number of data subjects, the volume of data, the duration of the processing, and the geographical scope of the activity when assessing whether data is processed on a large scale.
6. **Combining or Matching Datasets**: This involves combining datasets from different sources or data controllers in ways that may exceed data subjects' reasonable expectations, thus posing additional risks.
7. **Processing Data from Vulnerable Subjects**: Data concerning vulnerable individuals, such as children, the elderly, or those with disabilities, can lead to heightened risks due to the imbalance of power between the data subject and the data controller (Recital 75 GDPR).
8. **Innovative Use of Technology**: This refers to processing activities that employ new or emerging technologies, such as combining biometric methods like fingerprint and facial recognition for physical access control.
9. **Processing that Restricts Rights or Services**: This includes any processing that directly impacts on individuals' ability to exercise a right or access a service, such as denying entry to a platform or modifying a contract based on automated processing (Article 22 and Recital 91).

A specific template for the Ethics Risk Assessment will be utilized to evaluate compliance with these criteria and ensure that potential ethical risks are properly addressed.

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PART 1		
Data processing activity	(*e.g.*: Storage of contact information (names, emails) of people for the purpose of communication activities after their explicit consent to receive such information. This data is collected/stored under the consent of the persons or from already published data. They are used only for purposes related to project communication and not transferred to any third party outside of the consortium for any reason).	
Does it involve processing of personal data?	Y/N	<Brief explanation>
Is there any exception (law) that supports the processing without DPIA?	Y/N/NA	<Brief explanation>

PART 2- Ethics risk assessment (only necessary for personal data processing without any exception for DPIA)		
Criterion	**Y/N**	**<Brief explanation>**
1. Evaluation, scoring, profiling, prediction?		
2. Automated decision making?		
3. Systematic Monitoring?		
4. Sensitive data or highly personal data?		
5. Large-scale processing?		
6. Matching or combining datasets?		
7. Vulnerable subjects?		
8. Innovative technology?		
9. Prevents subject from exercising rights?		

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PART 3- Ethics risk analysis (only necessary if the answer to any of the questions in Part 2 is "YES")	
Analysis	Briefly describe analysis of risks
DPIA likely to be required?	Y/N

Within HYNET's data protection framework, the assessment template is divided into three distinct parts. Part 1 must be completed for all data processing activities, ensuring a consistent baseline of documentation. Part 2 applies specifically to cases where personal data is involved and where no exemptions exist that would otherwise permit processing without a Data Protection Impact Assessment (DPIA). If any response in Part 2 indicates a potential risk (i.e., a "Yes" answer), then the consortium is required to carry out a more detailed evaluation of that activity. This expanded review, which records the safeguards and mitigation strategies introduced to minimize ethical risks, is captured in Part 3 of the template.

Through this structured process, HYNET strengthens its ethical assurance mechanisms. The aim is to uphold the highest possible ethical standards, safeguard the rights and well-being of all individuals affected by the research, and demonstrate unwavering compliance with both legal requirements and the broader ethical principles underpinning European research activities.

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6. Intellectual Property Rights (IPR)

Intellectual Property Rights (IPR) form an essential pillar in safeguarding the innovations and outputs generated through HYNET's research and development activities. By granting creators exclusive rights to use, reproduce, and distribute their work, IPR not only protects contributions but also stimulates innovation and maintains a competitive research environment.

Core Elements of IPR in the Consortium:

1. **Ownership of Results**: All results emerging from the project—such as inventions, technical designs, software, or other deliverables—are subject to ownership rules defined in the consortium agreement. This agreement clearly outlines how rights are allocated among partners, ensuring fair recognition of contributions and equitable distribution of benefits.
2. **Use and Dissemination**: The consortium will establish procedures governing how research outcomes can be used and shared. These procedures ensure that findings are disseminated to the broader scientific community in line with legal and ethical standards, while also safeguarding sensitive or proprietary information.
3. **Protection of Intellectual Property**: Partners are encouraged to actively secure their intellectual assets through appropriate legal mechanisms, such as patent applications, trademark registration, or copyright protections. The consortium will also provide access to legal expertise and support to help navigate the often-complex landscape of intellectual property protection.
4. **Confidentiality Arrangements**: Confidentiality agreements will be applied across the consortium to protect sensitive data and trade secrets exchanged during the project. These agreements are designed to prevent unauthorized disclosure and ensure that confidential information is managed responsibly.
5. **Dispute Resolution Mechanisms**: To address potential disagreements, the consortium agreement includes clear procedures for resolving conflicts over ownership, use, or protection of intellectual property. These mechanisms ensure that disputes are handled fairly, transparently, and without undue delay.

The IPR framework within HYNET ensures a coordinated and transparent approach to managing intellectual property. It protects the interests of all partners while encouraging knowledge sharing, legal compliance, and the responsible utilization of research results throughout the project's duration.

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7. Use of Personal Data in HYNET

7.1 Interviews

Within Work Packages 2 to 6 (WP2–WP6), HYNET partners carry out a range of activities such as expert interviews, focus groups, workshops, and validation sessions. According to the project's Data Management Plan (D1.2), any outputs from these activities—such as audio or video recordings, written protocols, and transcriptions—will not be released as primary datasets. This decision reflects HYNET's strong commitment to safeguarding both privacy and security.

Because of the sensitive nature of these materials, anonymization is not considered a reliable safeguard. The relatively small sample size means that even anonymized data could allow for re-identification of respondents, making full public availability inappropriate.

An exception exists for the use of such content in project communication activities. However, this use is strictly conditional upon obtaining the explicit consent of the content owner. Whenever consent is granted, HYNET will establish transparent rules and conditions outlining the purpose of use, and participants will retain the right to request the immediate withdrawal of their material. This process ensures respect for privacy and reinforces individual control over personal data.

In addition, the consortium will maintain continuous ethical oversight. These practices will be periodically reviewed and updated in line with new ethical standards, evolving data protection legislation, and recognized best practices. This ongoing vigilance highlights HYNET's responsible approach to data governance: protecting the confidentiality and security of participants while still enabling controlled, consensual use of interview-based materials for communication purposes.

7.2 HYNET website

As with other Horizon Europe initiatives, HYNET processes a limited amount of personal data in connection with its website and newsletter subscriptions. To protect the rights of individuals, the project has established clear procedures and safeguards, all of which are set out in its Privacy and Cookie Policy. The key provisions are summarized below:

- **Types of Data Collected**: When users visit the project website or subscribe to the newsletter, certain personal information is collected. This may include details submitted through subscription forms or contact requests.
- **Purpose of Data Use**: Collected data is used strictly for project-related communication and dissemination activities. It will never be used for purposes outside the scope of the Privacy Policy unless subscribers are explicitly informed and, where necessary, their consent is obtained.
- **No Sale or Transfer of Contact Data**: The HYNET project does not sell, rent, or lease its contact lists to third parties. The newsletter distribution list is securely maintained by a mail service provider and is used exclusively for sending project communications.
- **Handling of Contact Form Data**: Personal information provided through the website's "contact us" function is used only for communication purposes. Data is securely stored on HYNET's email server, managed by UBE Belgium, and retained solely for the period required to meet contractual obligations with the European Commission. In any case, such data will not be held for more than five years after the project's completion. Newsletter subscribers retain the right to unsubscribe or request deletion of their personal information at any time, either via the opt-out function or by contacting the consortium directly at info@hynet-project.eu.

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- **GDPR Compliance and Data Subject Rights**: The HYNET website fully respects the rights of individuals as defined by GDPR. This includes the rights to information, access, correction, deletion, restricted processing, portability, objection, and protection from automated decision-making. Visitors and newsletter recipients may exercise these rights by submitting a request to info@hynet-project.eu.
- **Cookie Management**: The “Privacy and Cookie Policy” provides clear guidance for users on how to manage cookies. Visitors are instructed on adjusting browser settings to control or delete cookies according to their preferences. For further assistance, users can consult the policy or contact the site administrator directly. These provisions are designed to empower users with the information necessary to make informed choices regarding cookie use.
- **Google Analytics and User Control**: The HYNET website may employ cookies from Google Analytics or similar services. To support user autonomy, visitors who prefer not to share their data with Google Analytics can install the Google Analytics Opt-out Browser Add-on. This tool allows individuals to block data transmission to Google Analytics across all websites. By offering this option, HYNET enhances transparency and enables users to maintain full control over how their data is collected and used.

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8. Gender Equality

In line with Article 14 of the Grant Agreement (GA), HYNET beneficiaries *"must take all measures to promote equal opportunities between men and women in the implementation of the action and, where applicable, in line with the gender equality plan. They must aim, to the extent possible, for a gender balance at all levels of personnel assigned to the action, including at supervisory and managerial level."*

The consortium is strongly aligned with the European Commission's Gender Equality Strategy 2020–2025 and has embedded its principles into project governance. This commitment is structured around three central objectives:

1. **Promoting gender balance within research teams.**
2. **Ensuring equitable participation in decision-making processes.**
3. **Incorporating gender and sex-based perspectives into research and innovation outputs.**

The HYNET partnership itself reflects these priorities: it is a gender-balanced, multinational consortium. Equal opportunities for men and women are actively safeguarded in all project tasks. As project coordinator, UBE is responsible for overseeing the integration of gender considerations into every stage of the project—from scientific research and technical development to demonstrations and communication activities.

Although the technologies being developed are gender-neutral and intended for universal application, HYNET takes proactive steps to include a balanced group of male and female participants in pilot validation campaigns. This ensures that potential gender-related insights are considered during data analysis and interpretation, even if project outcomes are not expected to affect men and women differently.

The consortium's commitment to inclusivity is already reflected in its leadership structure. Female researchers occupy several prominent positions, including Technical Coordinator, Dissemination and Communication Manager, and leaders of Work Packages 3 and 6. In addition, many of the project's core contacts and contributing researchers are women, demonstrating that female participation is integral to project delivery. HYNET remains committed to strengthening this representation throughout the entire lifecycle of the project.

Gender equality is also a guiding principle in the project's external-facing activities. Demonstrations will apply gender-unbiased selection criteria for participants. Dissemination and communication events will aim for balanced gender representation among keynote speakers, panellists, and attendees. Furthermore, all publications—including scientific articles, reports, and white papers—will be carefully reviewed to ensure that language, visuals, and user interfaces remain free of gender bias or assumptions.

Finally, all HYNET partners act as equal opportunity employers. They actively promote diversity within their workforces, support flexible working arrangements, and ensure equitable benefits for all parents. By fostering an inclusive and supportive working environment, the consortium not only advances gender equality but also strengthens the overall quality and impact of the project.

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9. Conclusions

The HYNET project demonstrates a strong commitment to responsible research and innovation by embedding ethical, legal, and governance safeguards across all activities. The consortium ensures full compliance with Horizon Europe Ethics Guidelines, the GDPR, and relevant national regulations, while adopting proactive measures to anticipate evolving requirements such as the upcoming ePrivacy Regulation.

Key mechanisms—including risk assessments, privacy-by-design principles, and transparent consent procedures—guarantee that privacy, data security, and accountability are central to project operations. Intellectual Property Rights (IPR) are managed under a clear framework that protects partner contributions while encouraging knowledge sharing and innovation.

Equally important, the project integrates gender equality as a guiding principle, ensuring balanced participation in research, leadership, and dissemination activities. This reflects HYNET's alignment with the European Gender Equality Strategy 2020–2025 and its commitment to inclusivity and diversity.

By combining technical excellence with ethical integrity, HYNET positions itself as a model for trustworthy and future-oriented research, strengthening the impact and credibility of its results across Europe and beyond.

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