



## D1.3 Ethics Monitoring Report



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***Big Energy Data Value Creation within SYNergetic enERGY-as-a-service Applications through trusted multi party data sharing over an AI big data analytics marketplace***

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**Table of contents**

<b>Executive summary .....</b>	<b>5</b>
<b>1 Introduction .....</b>	<b>6</b>
1.1 Purpose of the document	6
1.2 Scope of the document	6
1.3 Structure of the document	6
<b>2 Ethical issues .....</b>	<b>7</b>
2.1 Legal foundation	7
2.2 Regulation	8
2.2.1 GDPR in Greece [5]	10
2.2.2 GDPR in Spain [7]	10
2.2.3 GDPR in Austria [14]	10
2.2.4 GDPR in Finland [13]	11
2.2.5 GDPR in Croatia [16]	11
2.3 Ethical Research Conduct	11
<b>3 Guidelines .....</b>	<b>12</b>
3.1 Roles	12
3.1.1 LEPI Officer	12
3.1.2 Data Protection Officer	13
3.1.3 Ethical Advisory Committee	13
3.2 Overview of research ethics	14
3.3 Practical procedure for ethics issues management	14
3.4 Ethics Risks Management	15
<b>4 Legal, Privacy and Policy Issues .....</b>	<b>18</b>
4.1 Legal	18
4.2 Privacy	19
4.3 Policy	20
4.3.1 Gender Equality Plan	22
<b>5 Conclusions .....</b>	<b>23</b>
<b>6 References .....</b>	<b>24</b>
<b>ANNEXES .....</b>	<b>27</b>
I. ANNEX A. Ethics Issue self-assessment chart	27
II. ANNEX B. Ethics issue memo template	28





## Abbreviations and Acronyms

Acronym	Description
CA	Consortium Agreement
DoA	Description of Action (annex I of the Grant Agreement)
DPO	Data Protection Officer
EAC	Ethical Advisory Committee
EC	European Commission
GA	Grant Agreement
GDPR	General Data Protection Regulation
LEPI	Legal and Policy Issues
PC	Project Coordinator
PMB	Project Management Board
PO	Project Officer
TC	Technical Coordinator
TL	Task Leader
WP	Work Package
WPL	Work Package Leader



## Executive summary

The SYNERGY consortium is aware that a number of ethical, privacy and data protection issues will be raised by the activities to be performed in the scope of the project. The project involves the carrying out of household, building, DER, network and market data collection in a set of 5 demonstrators in Greece, Spain, Finland, Austria and Croatia. For this reason, consumers participants will be involved in certain aspects of the project and user-related data (smart metering together with sensing data for the creation of occupants' context-aware behaviour and flexibility profiles) will be collected.

Therefore, the consortium will have to comply with all European and national legislation and directives relevant to the country where the data collection is taking place. The collection, processing and transmission of personal data will be analysed under principles of (a) The Universal Declaration of Human Rights and the Convention 108 for the Protection of Individuals with Regard to Automatic Processing of Personal Data, (b) The **General Data Protection Regulation (GDPR)** (Regulation (EU) 2016/679), and (c) The national laws applying its provisions. Any additional regulations at the national level that do not fall under the GDPR and apply to data protection or any other sensitive information will also be taken into account.

Data managed during the project will be processed only under the following preconditions which need to be met: (a) When the data subject has given her/his consent; (b) When the processing is necessary for the performance of or the entering into a contract; (c) When processing is necessary for compliance with a legal obligation; and (d) When processing is necessary in order to protect the vital interests of the data subject.



# 1 Introduction

## 1.1 Purpose of the document

This deliverable presents a procedure for handling SYNERGY ethical issues. In doing so, the Guidelines will safeguard compliance with legal and ethical requirements under the Horizon 2020 Programme.

The document shall clarify the main roles related to the ethical monitoring in the SYNERGY project: the LEPI Officer, The DPO and the Ethical Advisory Committee. Furthermore, it outlines the modus operandi for managing arising ethical issues involving the relevant stakeholders in the project.

## 1.2 Scope of the document

This document is aimed to provide the guidelines for the consortium regarding the ethics monitoring in SYNERGY for those that have to comply with all European and national legislation and directives relevant to the country where the data collection is taking place.

## 1.3 Structure of the document

This document is structured as follows:

- Chapter 3 provides information about the relevant regulation, also with the specific particularities of legislation in the five demos sites. The ethical research conduct is defined.
- Chapter 4 introduces the guidelines for ethical monitoring, including the identification of the main roles, an overview of research ethics and the practical procedure to be implemented.
- Chapter 5 includes a short overview of the covered ethics issues: legal, privacy and policy
- Chapter 6 shows the conclusions of this report.



## 2 Ethical issues

### 2.1 Legal foundation

The legal foundation regarding ethical principles in the SYNERGY project is Article 19 of the EU Regulation establishing the Horizon 2020 Framework Programme [18]:

*Article 19 – Ethical principles*

- 1. All the research and innovation activities carried out under Horizon 2020 shall comply with ethical principles and relevant national, Union 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 and the need to ensure high levels of human health protection. (...)*

The guiding framework for the project is not only general ethical principles but also the relevant legislation.

Article 19 refers explicitly to the Charter of Fundamental Rights of the EU [19], which defines personal, civic, political, economic and social rights enjoyed by people within the EU. Also, the Council of Europe's European Convention on Human Rights [20], which entered into force in 1953, constitutes a basis for ethical questions.

The explicit reference in Article 19 to the right to privacy and the right to the protection of personal data underpins the importance of these privacy related principles for research. As a fundamental legal principle, the principle of proportionality as well as the right to non-discrimination should be observed.

The SYNERGY Grant Agreement, Part B [21] outlines in Section 5.1 how ethic issues will be faced in the project. It is based upon a complete ethics self-assessment carried out in order to identify and deal correctly with any ethics issues that may arise from SYNERGY. Since engagement with stakeholders and data collection of heterogeneous datasets are two key components within SYNERGY, the results of this ethics self-assessment are directly related to the Humans Requirements and the Protection of Personal Data Requirements.



All research in the project must take this assessment into account and be considerate of these issues.

Besides the specific ethical issues and principles, general principles of ethical research conduct should be observed in the SYNERGY project, as explained in section 2.3.

## 2.2 Regulation

The SYNERGY project involves the carrying out of household, building, DER, network and market data collection in a set of 5 demonstrators in Greece, Spain, Finland, Austria and Croatia. For this reason, consumers participants will be involved in certain aspects of the project and data will be collected. This will be done in full compliance of the main legislation and more specifically:

- Regulation (EU) 2016/679 [1] of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) [2].
- Directive 2002/58/EC [3] of the European Parliament and of the Council of 12 July 2002 concerning the processing of personal data and the protection of privacy in the electronic communications sector (Directive on privacy and electronic communications).
- Regulation (EU) 2018/1725 [4] of the European Parliament and of the Council of 23 October 2018 on the protection of natural persons with regard to the processing of personal data by the Union institutions, bodies, offices and agencies and on the free movement of such data, and repealing Regulation (EC) No 45/2001 and Decision No 1247/2002/EC.

In particular, according to the General Data Protection Regulation (GDPR), which is related to the protection of individuals with regard to the processing of personal data and on the free movement of such data, the EC defines the personal data as:

*“any information relating to an identified or identifiable natural person (‘data subject’); an identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person; (Article 4.1.)”.*



The GDPR was intended to unify data privacy legislation across Europe, so as to reinforce data privacy of all EU citizens and reformulate the perception of organizations and enterprises towards data protection. One of the major purposes of EU General Data Protection Regulation is “ensuring a consistent and high level of protection of natural persons and to remove the obstacles to flows of personal data in the Union”. The concept of regulation instead of a directive is to limit the regulatory interventions by member states and national data protection authorities.

The innovation of GDPR in comparison with the previous European actions is that it combines the regulatory aspects with organizational and technological perspectives.

The GDPR framework refers to natural persons, but not to anonymized data (data which do not allow the identification of a data subject). According to article 4, par. 1 of the GDPR, the personal data is defined as *“any information relating to an identified or identifiable natural person (data subject)”*.

The GDPR makes also a distinction between the **anonymisation** and the **pseudonymisation**. The latter refers to reversible de-identification of personal data, for example in case where it is allowed to re-identify hashed identifiers. Moreover, according to article n° 26 of the GDPR, *“The principles of data protection should apply to any information concerning an identified or identifiable natural person. Personal data which have undergone pseudonymisation, which could be attributed to a natural person by the use of additional information, should be considered to be information on an identifiable natural person. To determine whether a natural person is identifiable, account should be taken of all the means reasonably likely to be used, such as singling out, either by the controller or by another person to identify the natural person directly or indirectly. The principles of data protection should therefore not apply to anonymous information, namely information which does not relate to an identified or identifiable natural person or to personal data rendered anonymous in such a manner that the data subject is not or no longer identifiable. This Regulation does not therefore concern the processing of such anonymous information, including for statistical or research purposes”*.

In SYNERGY, as described in D1.2 Data Management Plan [9], to assure data privacy **all data will be anonymised and encrypted** by the data owners prior to being stored on the SYNERGY platform.



The SYNERGY project will collect data in 5 demonstrators in Greece, Spain, Finland, Austria and Croatia, under the responsibility of several demo partners at each demo site. In the following, the consortium outlines the legislation for the countries involved in the pilots:

### 2.2.1 GDPR in Greece [5]

The Greek demo site has to comply with the requirements of the GDPR legislation, in the form of Law 4624/2019 (“Data Protection Law”) [11], which entered into force on 29 August 2019.

The main piece of legislation that governed the processing of personal data before the entry into force of the GDPR was Law 2472/1997, which has been repealed with the exception of a few provisions that remain in force. These provisions mainly refer to the registry, which is retained by the Greek DPA, which defines some terms and provides rules in relation to the establishment and operation of the DPA.

### 2.2.2 GDPR in Spain [7]

The Spanish demo site has to comply with the requirements of the GDPR legislation in the form of the Organic Law 3/2018, of 5 December, on the Protection of Personal Data and Guarantee of Digital Rights (“Ley Orgánica 3/2018, de 5 de diciembre, de Protección de Datos Personales y garantía de los derechos digitales”) (the “Data Protection Act”) [13] which entered in force on 7 December 2018.

The main pre-GDPR legislation has essentially been repealed. There are, however, some exceptions:

- provisions of the former data protection law (Organic Law 15/1999) that implemented Art. 13 of the Directive will remain in force unless expressly modified, replaced or repealed; and
- processing activities subject to Directive (EU) 2016/680 continue to be governed by the aforementioned former data protection law until this directive is transposed into Spanish law.

### 2.2.3 GDPR in Austria [14]

Austria has updated old legislation and now the Austrian demo site has to comply with the requirements of the GDPR legislation in the form of the Data Protection Act, Federal Law Gazette I Nr. 165/1999 (the “Data Protection Act”) [10] which entered in force on 1<sup>st</sup> January 2000 and was later amended to reflect GDPR requirements by two Data Protection Amendment Acts in 2018: Data



Protection Act 1 & 2 on the Amendment of Material Laws (Federal Law Gazette I Nr. 32/2018 [11] & Nr. 37/2018 [12]); amending a wide range of material laws to reflect GDPR changes.

#### **2.2.4 GDPR in Finland [13]**

The Finnish demo site has to comply with the requirements of the GDPR legislation in the form of a new legislation: the Finnish Data Protection Act (1050/2018) (the “Data Protection Act”) [14], in force since 1 January 2019 and the Act on Protection of Privacy in Working Life (759/2004) (the “Workplace Privacy Act”) [15] which is in force since 1 April 2019.

#### **2.2.5 GDPR in Croatia [16]**

The Croatian demo site has to comply with the requirements of the GDPR by means of a new legislation; Act on the Implementation of the General Data Protection Regulation (in Croatian: Zakon o provedbi Opće uredbe o zaštiti podataka) (the “Implementation Act”) [17] which entered in force on 25 May 2018.

### **2.3 Ethical Research Conduct**

According to Article 34 of the SYNERGY GA [22] about Ethics and Research Integrity, the SYNERGY partners must carry out the action in compliance with (a) ethical principles (including the highest standards of research integrity) and (b) applicable international, EU and national law. Therefore, as described in D11.1 H – Requirement No. 1 [23], the SYNERGY Consortium will carry out the action in compliance with ethical principles (including the highest standards of research integrity) such as:

- Respecting human dignity and integrity
- Ensuring honesty and transparency towards research subjects and notably getting free and informed consent (as well as assent whenever relevant)
- Protecting vulnerable persons
- Ensuring privacy and confidentiality
- Promoting justice and inclusiveness
- Minimising harm and maximising benefit



- Sharing the benefits with disadvantaged populations, especially if the research is being carried out in developing countries.
- Respecting and protecting the environment and future generations

In addition, the beneficiaries must respect the fundamental principle of research integrity — as set out, for instance, in the European Code of Conduct for Research Integrity [24] of ALLEA – All European Academies [25], which defines four fundamental principles of good research practices: Reliability, Honesty, Respect and Accountability. These fundamental principles form a basis for good research practices and refer to the way of research as well as to the handling of the research results.

The rights of individuals to privacy and personal data protection must be respected and safeguarded throughout the course of the SYNERGY project. Corresponding provisions must be taken.

In the SYNERGY project the informed consent of research participants will be required and must be obtained whenever research is dealing with personal data, according to the GDPR rules. To ensure an appropriate level of information, a constant and open dialogue with the research participants should be fostered. Templates of the informed consent form can be found in D11.1 H – Requirement No. 1.

## 3 Guidelines

### 3.1 Roles

In this section, names are not included due to the public nature of the report. A confidential version of this report has been created and will be available in the SYNERGY Alfresco repository containing all the names: LEPI, DPO, and EAC members. This will be useful for the consortium to be aware of the persons assigned with such responsibilities and to be able to contact them if needed. The confidential version will be shared with the SYNERGY Project Officer if needed.

#### 3.1.1 LEPI Officer

The Legal and Policy Issues Officer (LEPI) is the coordinator of all the activities in SYNERGY related to legal and policy issues that may arise in the project.

The LEPI has been appointed by the Project Coordinator.



### 3.1.2 Data Protection Officer

According to the GDPR, Article 39, the role of the Data Protection Officer is to:

- inform the staff involved in data processing of their legal obligations;
- monitor compliance with legal requirements, including the assignment of responsibilities, awareness-raising and training of staff involved in processing operations, and the related audits;
- provide advice where requested as regards the data protection impact assessment and monitor its performance;
- cooperate with the supervisory authority;
- act as the contact point for the supervisory authority on issues relating to processing, including the prior consultation, and to consult, where appropriate, with regard to any other matter.

The Data Protection Officer (DPO) has been appointed by the Project Coordinator with the main role of supervising the data protection and information security aspects also including the alignment with the GDPR regulation.

### 3.1.3 Ethical Advisory Committee

The Ethical Advisory Committee is responsible for guiding and monitoring that ethic issues are properly handled in the project. The EAC has been appointed by the PMB during the project kick-off phase and is composed of representatives of the different demo partners in the consortium. Although the EAC members are chosen among the members of the consortium, a requirement for membership is to not be involved directly in the activities of the project. In this manner, the EAC members will be able to act as independent consultants regarding SYNERGY.

The following partners have nominated one person to be part of the EAC: CAV, CIRCE, COBRA, ENES, EPA, FVH, HEDNO, URB, VERD. The rest of demos partners are in the process of completing this nomination. Once the EAC is completed, its members will internally appoint a chair, with rotating roles along the project duration.

The EAC is expected to also invite independent consultants, for example legal and ethics experts, to provide feedback and review ethics and data sharing-related topics in the project deliverables.



Independent consultants will also be asked advice should some unforeseen or serious ethical issue occur during the project. These (external) consultants will be contacted through the existing network of the Ethics Committees or legal departments of each of the demo partners.

### 3.2 Overview of research ethics

Three areas can be distinguished: ethics issues regarding legal, privacy and policy. These potential ethics issues should be addressed at the task level. In the end the task leader is responsible for assuring the compliance with legal and ethical requirements.

With respect to the legal issues, all the activities during the course of *the* SYNERGY project must be in compliance with the law of the land. Also, basic principles of law, such as proportionality must be observed.

The relevance of privacy issues is rooted in European basic rights:

- Article 8 Charter of Fundamental Rights of the EU
- Article 16 Treaty on the Functioning of the EU.

These legal principles as well as the regulation based upon them must be observed and should shape the actions in the project.

Fundamental rights also form the framework for any policy related issues which will be considered.

These three areas will be covered in detail in section 4 of this document.

### 3.3 Practical procedure for ethics issues management

A procedure of self-assessment with support of the LEPI-Officer will provide compliance with the European standards for research ethics. Therefore, during the project period all ethical issues shall be treated according to this procedure.

The **ethics self-assessment chart** provides guidance for identifying ethical issues (see ANNEX A. Ethics Issue self-assessment chart). According to the chart first steps of mitigation can be implemented. Nevertheless, the chart can only provide a first indication for handling the issue and the specific characteristics must be taken into account.



Once an ethics issue is identified, the specific partner should create an **ethics issue memo** (see ANNEX B. Ethics issue memo template) to prepare further mitigation. At this stage the partner can contact the LEPI-Officer in order to specify the ethics issue. As part of the memo the partner should draft a proposed solution for the issue and screen the relevant legal framework.

The completed ethics issue memo is then submitted to the LEPI-Officer, who will evaluate the issue and provide feedback regarding the proposed mitigation. Based on the LEPI-Officer's assessment the project partner can either implement the proposed mitigation or consult the SYNERGY Data Protection Officer. Any statement regarding the ethics issues memo should be documented and attached to the ethics issue memo.

Before a conclusion is reached upon the proposed mitigation for the ethics issue, the Ethical Advisory Committee can be consulted.

It is the responsibility of the submitting partner to decide on the specific mitigation and to ensure that no activity takes places before the ethics issue is mitigated.

Once the process is completed, the final version of the ethics issue memo shall be uploaded to the SYNERGY project repository Alfresco and sent to the LEPI-Officer in order to be available for the course of the project and to be considered for the selection of possible best practices.

### **3.4 Ethics Risks Management**

As part of the process of ethics issues management described in the previous section, relevant ethical risks will be identified, evaluated and closely monitored, during the course of the project in a collaborative manner between the EAC, the project DPO and the LEPI and according to the principles and guidelines provided in Article 34 of the SYNERGY Grant Agreement described in section 3.3.

To this end, SYNERGY has already defined a preliminary list of the key risks associated with ethical issues and are relevant to the nature of activities introduced in the implementation of the project. The table below, provides an overview of such ethical risks in the frame of SYNERGY, along with an initial evaluation of their Impact to the project activities, an assessment of their Likelihood to Occur, the Proposed Mitigation Actions and the activities of the project they are related to.



Risk	Impact/ Likelihood to occur	Proposed Counter Measures / Contingency Plans	Relevant WPs
Legal provisions regarding the collection and processing of personal sensitive information	High / Low	Any original records or data to be collected from the demo partners for the project needs will be destroyed after that, if keeping them is forbidden by law of the country in which the information was collected, stored and analysed.	WP2, WP3, WP4, WP8, WP9
Difficulty in ensuring the security of personal data in the pilot sites	High / Low	Special attention will be given to ensure confidentiality and for incorporating PET technologies to ensure protection from data breaches. Consortium partners have the capacity and the experience to cope with the delivery of security mechanisms, if needed.	WP2, WP3, WP4, WP8, WP9
Lack of Transparency in the pilot sites	High / Low	The Ethics Monitoring Report and the Data Management Plan will foresee the necessary provisions in order to both minimize this risk as well any other similar that may arise during the project lifetime. Furthermore, during the pilot trials the responsible partners will inform participants and relevant authorities on the details, the scope and the purposes of the data collection process and the necessary documents will be created by the consortium pilot partners in order to get an ethical approval.	WP2, WP3, WP4, WP8, WP9

Risk	Impact/ Likelihood to occur	Proposed Counter Measures / Contingency Plans	Relevant WPs
Use of IT Equipment - Installation and use of equipment on the pilot sites	Medium / Low	The demonstration partners have previous experience and expertise to coordinate and successfully complete the necessary technological installations. They can ensure that any equipment will be installed with minimum intrusion to the relevant actors and within the provisions of the respective legal provisions of each country.	WP2, WP3, WP4, WP8, WP9
Official Authorizations (where appropriate)	High / Low	Refers to cases where relevant pilot site authorities will need to be notified in order to provide official authorizations. A careful study of local/national legislative constraints will be performed early in the project. Based on these findings, within the work of WP1 and WP2, the consortium and especially the demonstration partners will proactively notify relevant stakeholders and ensure appropriate authorizations based on the provisions of the Data Management Plan.	WP1, WP2, WP3, WP4, WP8, WP9

Table 1 - Ethics Risks Table

The ethical risks table will be continuously updated during the project and will comprise a valuable tool in the hands of the Ethics Management team of SYNERGY towards promptly launching mitigation actions and ensuring the avoidance of critical negative impacts to the project caused by ethics issues. In this context, the SYNERGY Ethics Management team will regularly consult the table and will provide appropriate and informed advice and support around ethical issues that may arise during the project lifecycle.



## 4 Legal, Privacy and Policy Issues

This section provides a short overview of the covered ethics issues: legal, privacy and policy. Due to the multinational and innovative nature of the SYNERGY project, the overview might not be fully comprehensive. It is supposed to serve as a starting point for the mitigation of potential ethics issues.

### 4.1 Legal

As a very basic requirement, all activity taking place under the SYNERGY project must comply with the law of the land. All research activities within the course of SYNERGY must be lawful. Of especial relevance is the European Law and as part of it the European codifications of fundamental rights: The Charter of Fundamental Rights of the EU and the European Convention on Human Rights.

Besides the European Law, the activities must observe national laws of the specific member state as well, depending on the particular tasks.

The lawfulness also requires taking the proportionality principle into account. As a fundamental principle of law, it limits the action taken to what is necessary to achieve the aspired objectives. The chosen form of action must be in keeping with the aim pursued.

As part of the work that it is taking place in the task T2.2 “Analysis of socio-economic and regulatory obstacles to innovation”, even though no results have been produced yet, an initial list of the regulations and the legal/policy issues that are relevant to SYNERGY with regards to ethics, data privacy and data protection is already available and can be provided in this report. This list is extracted from both state of-the-art review at the EU level and knowledge acquired from the five pilots of the SYNERGY project:

- **General Data Protection Regulation (GDPR)** [1]: with respect to smart metering, the processing may be based on various purposes such as the improvement of energy efficiency, metering accuracy, customer information, grid stability, as well as timely billing. Therefore, the data collected by smart meters could be legitimately processed for different purposes and, as a consequence, might be subject to different restrictions of processing and transmission.
- **Energy Consumers Rights** : The European Commission has summarized the ten main European Energy Consumers 'Rights established under EU law' [26], among them we find the right to



clear contract information and right of withdrawal, the right for vulnerable consumers to be identified and measures put in place to protect them, which are relevant to ethics issues.

- **Electronic Identification and Trust Services for Electronic Transactions in the Internal Market and Repealing Directive (eIDAS) [27]:** The Regulation aims to enhance trust in electronic transactions between businesses, citizens and public authorities by providing a common legal framework for the cross-border recognition of electronic ID and consistent rules on trust services across the EU.
- **Smart Contracts & Blockchain [28]:** Smart legal contracts, which are smart contracts on a blockchain that represent - or that would like to represent - a legal contract as well as smart contracts with legal implications, which are artefacts/constructs based on smart technology that clearly have legal implications, for instance in the form of digital assets, or decentralised autonomous organisations (DAOs) or other kinds of autonomous agents.
- **Ethics in artificial intelligence [29]:** The guidelines are addressed to all AI stakeholders designing, developing, deploying, implementing, using or being affected by AI in the EU, including companies, researchers, public services, government agencies, institutions, civil society organisations, individuals, workers and consumers.

A thorough analysis is being undertaken in T2.2 in order to determine the relevance of these regulations in the context of each Demo Case. The results will be published in D2.3 Socio-economic and regulatory analysis of obstacles to innovation v1 and later updated in D2.4 Socio-economic and regulatory analysis of obstacles to innovation v2. Following the analysis performed under T2.2, the project demo activities will be properly adapted to comply with EU and national regulation, thus avoiding any possible implications created by the violation of key regulations and policies.

## 4.2 Privacy

Privacy or more precisely the right to privacy and the right to the protection of personal data are core elements relating to ethics issues.

Since the European General Data Protection Regulation (GDPR) [1] came into force, it is now the most important body of law regarding privacy. According to the GDPR the processing of personal data is generally prohibited, unless it is explicitly allowed by law or the data subject has consented to the



processing. Nevertheless, the GDPR is only applicable as long as personal data is processed. Personal data is defined as “any information relating to an identified or identifiable natural person” (Art. 4 Nr. 1 GDPR). Alongside the European GDPR national legislation also exists, as detailed in section 2.1.

The SYNERGY project involves the carrying out of household, building, DER, network and market data collection in a set of 5 demonstrators in Greece, Spain, Finland, Austria and Croatia. For this reason, and as previously stated, consumers participants and individual representatives of business stakeholders will be involved in certain aspects of the project and data will be collected. This will be done in full compliance of the main legislation and more specifically the GDPR.

This means that ethical standards and guidelines compatible with, and equivalent to, those of H2020 will be rigorously applied, regardless of the country in which the research is carried out. Moreover, GDPR Chapter 3 (Articles 12 to 23) related to the rights of the data subject, will be applied to ensure the rights of the human participants.

Involvement of humans at the Demo Sites of SYNERGY includes energy, contextual and demographic data collection. It has also been recognized that some ethical issues related to humans, needing confirmation of informed consent, are related to the interaction with stakeholders and users as part of the Living Lab Activities (see SYNERGY report D9.1 [31]), since variety users and energy sector stakeholders' representatives will be interviewed and invited to participate in surveys, workshops and focus groups.

Where testimonials of involved stakeholders and users are used, their specific agreement will be requested, and a written confirmation is necessary. As a general rule, all humans who take part in surveys, interviews and test experiments conducted in the project will be fully informed and will be asked to sign an informed consent form.

### **4.3 Policy**

The third aspect of ethics issues is policy. In the activities of the SYNERGY project, several policies of the European Commission must be taken into account. As highlighted in section 2.3, according to Article 34 of the SYNERGY GA , the beneficiaries in the project must carry out the action in compliance with:

- (a) ethical principles (including the highest standards of research integrity) and



(b) applicable international, EU and national law.

Furthermore, the beneficiaries must respect the fundamental principle of research integrity (see section 2.3).

SYNERGY will be implemented around three main principles:

- Ensure transparency on all data collection and management practices performed by the project and notify all stakeholders that act as data producers
- Confirm the (explicit and written) Informed Consent of the business actors that are the owners of the data and involved in the project pilot evaluation phase
- Safeguard data protection, security and privacy issues through an integrated security and ethics management policy throughout technologies as well as data management practices in the project's field of research (household energy consumption data & respective profiles)

Furthermore, the right to non-discrimination is a leading principle of European law. Its aim is to allow equal and fair prospect to access opportunities available in a society. It is fixed in Chapter 3 of the Charter of Fundamental Rights of the EU as well as in the Treaty on the Functioning of the EU (Article 8). According to Article 10 of the Treaty on the Functioning of the EU, the Union shall aim to combat discrimination based on sex, racial or ethnic origin, religion or belief, disability, age or sexual orientation in defining and implementing its policies and activities.

Considerable European directives on the field of non-discrimination are for example:

- Directive 2000/43/EC against discrimination on grounds of race and ethnic origin,
- Directive 2000/78/EC against discrimination at work on grounds of religion or belief, disability, age or sexual orientation,
- Directive 2006/54/EC equal treatment for men and women in matters of employment and occupation,
- Directive 2004/113/EC equal treatment for men and women in the access to and supply of goods and services.



#### 4.3.1 Gender Equality Plan

Of particular relevance is the policy of gender equality, which is also part of the Grant Agreement (Article 33). There are several approaches to foster gender equality in research, most notably the European Commission's strategy on gender equality in research and innovation policy [30].

The SYNERGY consortium acknowledges the "gender issue" as stated in Article 16 "Gender Equality" of the EU regulation 1291/2013 [18], and is implementing a Gender Equality Plan which addresses two main issues:

1. The setup of SYNERGY Management structure, with the inclusion of female researchers in key management positions: Project Management, Technical Coordinator and WP leaders such as in WP4. Moreover, the increased inclusion of female researchers in the implementation of the project will be permanently monitored. The consortium is comprised of a multi-national team of both male and female experts, which will ensure that gender issues will be paid great attention throughout the project, by questioning ingrained gender roles and ways of thinking and working, thus enhancing project creativity and innovation.
2. The effort towards including a balanced mix (in terms of gender) of end-users in the demo activities of the project. The project will monitor the level of gender equality achieved with regards to the end-users participating in the trials (in the case of consumers). The group of consumers involved must be balanced, not only in gender, but also in age and social backgrounds. Moreover, the SYNERGY applications will be designed to be used by all users, regardless of gender or socio-cultural factors.

The project is keen to promote gender equality during the implementation cycle through the following specific steps:

- (i) developing and implementing equal opportunities policy;
- (ii) implementing selection procedures transparent and free of gender bias;
- (iii) setting targets to achieve a gender balance less/equal skewed compared to the present representation of female/male personnel participating in decision-making



## 5 Conclusions

The core ethical issues within SYNERGY are addressed by fully complying with EU and national legislation. This SYNERGY Ethics Monitoring Report together with the Data Management Plan are properly addressing all ethics and data sharing-related issues since ethical, social and data protection considerations are crucial to this project and will be given all due attention.

This document provides guidance for the ethics monitoring concerning Legal, Privacy and Policy Issues in the Horizon 2020 project SYNERGY. The guidelines have been elaborated to provide a procedure for handling these ethical issues. In doing so, these guidelines will safeguard compliance with legal and ethical requirements under the Horizon 2020 Programme.

Most importantly, the document clarifies the role of the LEPI Officer, the DPO and the Ethical Committee in the SYNERGY project and outline the modus operandi for managing arising ethical issues involving the relevant stakeholders in the project.



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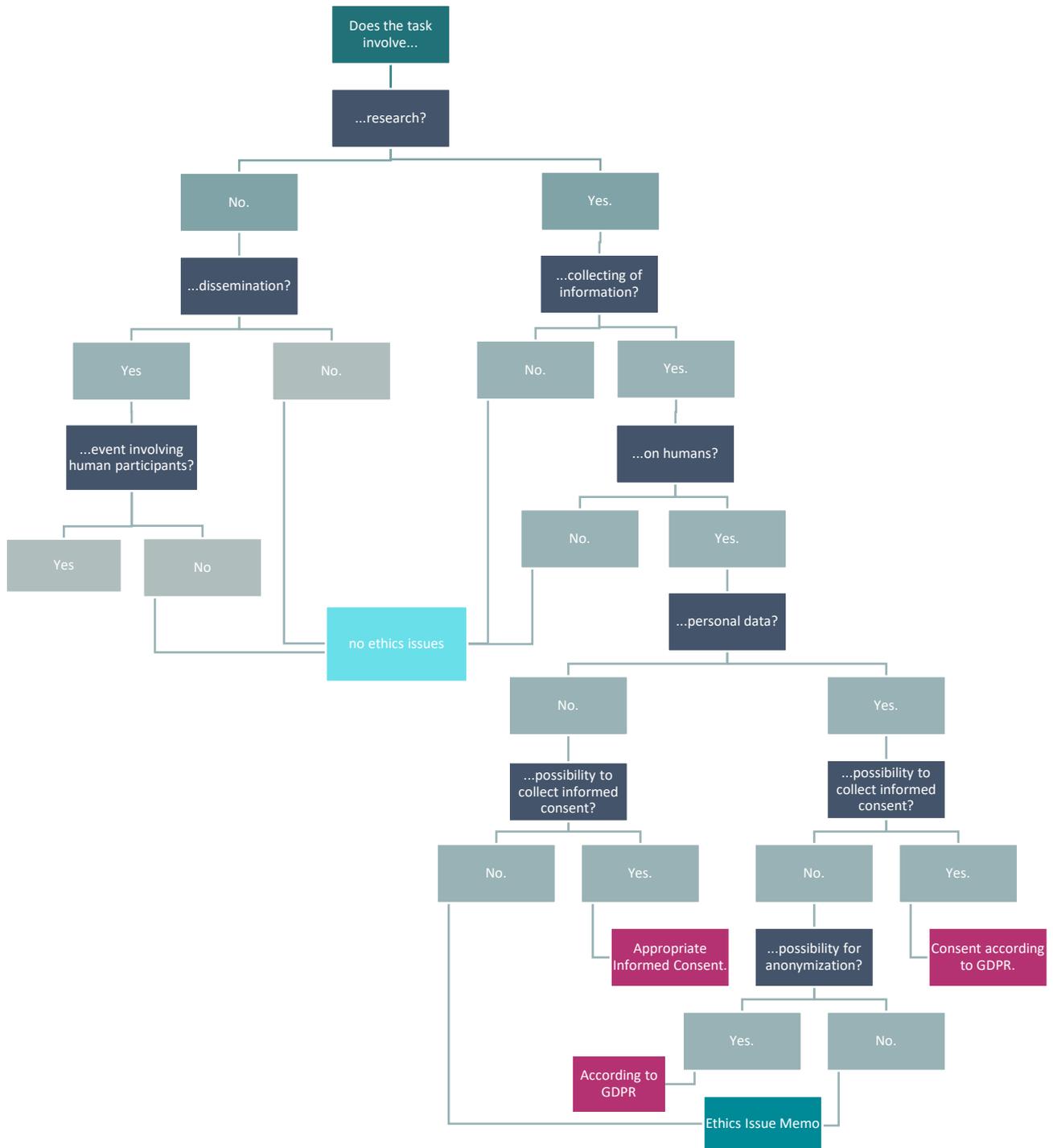
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## ANNEXES

### I. ANNEX A. Ethics Issue self-assessment chart



**II. ANNEX B. Ethics issue memo template**

<b>Date:</b>	
<b>Work Package:</b>	
<b>Specific Task:</b>	
<b>Project partner:</b>	
<b>Site:</b>	
<b>Contact:</b>	
<b>Description:</b>	
<b>Specific ethics issue:</b>	
<b>Relevant legal aspects:</b>	
<b>Proposed Solution/ Mitigation:</b>	

<b>LEPI-Officer's assessment:</b>	
<b>Decision on proposed solution:</b>	
<b>Reasons:</b>	
<b>Date of decision:</b>	

