



PROJECT DELIVERABLE REPORT



Greening the economy in line with
the sustainable development goals

D1.5 NAIADES Ethics Helpdesk Reports (mid-Term)

A holistic water ecosystem for digitisation of urban water sector

SC5-11-2018

Digital solutions for water: linking the physical and digital world for water solutions



Document Information

Grant Agreement Number	820985	Acronym	NAIADES	
Full Title	A holistic water ecosystem for digitization of urban water sector			
Topic	SC5-11-2018: Digital solutions for water: linking the physical and digital world for water solutions			
Funding scheme	RIA - Research and Innovation action			
Start Date	1 st JUNE 2019	Duration	36 months	
Project URL	www.NAIADES-project.eu			
EU Project Officer	Alexandre VACHER			
Project Coordinator	CENTER FOR RESEARCH AND TECHNOLOGY HELLAS - CERTH			
Deliverable	D1.5 Ethics HelpDesk Reports - Mid-term			
Work Package	WP1 – T.1.4			
Date of Delivery	Contractual	M3	Actual	M3
Nature	R - Report	Dissemination Level	PU-PUBLIC	
Lead Beneficiary	VUB			
Responsible Author	Vagelis Papakonstantinou	Email	Evangelos.Papakonstantinou@vub.be	
	Dimitra Markopoulou	Phone		
Reviewer(s):	UDG, DISY			
Keywords	Ethics Helpdesk			

Revision History

Version	Date	Responsible	Description/Remarks/Reason for changes
0.1	July 1	Vagelis Papakonstantinou	Report write-up
0.2	August 1	Vagelis Papakonstantinou, Dimitra Markopoulou	Inclusion of partners' contributions
0.5	August 23	UDG, DISY	Internal Review

0.52	August 28	Dimitra Markopoulou	Comments of internal review incorporated
1.0	August 30	Vagelis Papakonstantinou	Review and Release
1.1	May 2021	Vagelis Papakonstantinou	Update and amendment upon rejection during interim review meeting. Addressed the following reviewers' finding: "The title is not on the front page, and the deliverable number is wrongly reported in the footnote (D1.)".
1.5	June 2021	UDGA, ICCS	Internal review
2.0	June 2021	Vagelis Papakonstantinou	Review and Release

Disclaimer: Any dissemination of results reflects only the author's view and the European Commission is not responsible for any use that may be made of the information it contains.

© NAIADES Consortium, 2019

This deliverable contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation or both. Reproduction is authorised provided the source is acknowledged.

Contents

1	Summary	1
2	Introduction: The Project’s management on ethics and related issues.....	2
2.1	The Ethics Helpdesk’s mandate and tasks	3
2.2	Reporting under the Project	4
3	Establishment of the Project’s Ethics HelpDesk.....	5
3.1	The Ethics HelpDesk members.....	5
4	Internal organisation of the Project’s Ethics HelpDesk	6
4.1	Rules of Procedure for the Project’s Ethics HelpDesk.....	6
5	First questionnaire by Project’s Ethics HelpDesk: Identification of Project’s ethics issues	7
5.1	Questionnaire on Project’s relevant ethics issues.....	7
6	Ethics HelpDesk’s forms and support to Project partners: DPO appointment, informed consent and DPA notification forms.....	7
6.1	Informed Consent Form.....	8
6.2	DPA notification form	8
7	Conclusions	9
8	ANNEX I. Ethics Helpdesk Questionnaire for Identification of Project’s Ethics Issues	10
9	ANNEX II. Informed Consent Form.....	12
10	ANNEX III. DPA Project Notification Form.....	14

Abbreviations

Art	Article (of law)
DPA	Data Protection Authority
GA	Grant Agreement
GDPR	The General Data Protection Regulation (EU Regulation 679/2016)
MS	Member States (EU)
Project	The NAIADES project

1 Summary

This report is the first Ethics Helpdesk report. As such, it focuses on the Project's Ethics HelpDesk establishment and placement into operation. Accordingly, it also includes the Ethics HelpDesk's rules of procedure. Furthermore, this same report provides to Project partners a questionnaire in order to identify the ethics issues that are relevant to the project, in view of follow-up within the Project's Ethics HelpDesk context. Finally, relevant forms are provided to Project partners, namely an informed consent form and a DPA notification document.

2 Introduction: The Project's management on ethics and related issues

The NAIADES project aims to transform EU's water sector through automated and smarter water resource management and environmental monitoring. In this context it is aimed both at residential and commercial consumers, offering to exploit the efficient use of physical and digital components of water ecosystem, particularly making use of big data in terms of sources, data types, and entities represented that is collected by such water monitoring and control systems in Europe.

In addition, the Project's AI elements aim to provide multidimensional intelligence on the water ecosystem by introducing:

- Situational Intelligence (by collecting real-time data from the buildings as they are in operation and analysing it in three different dimensions; Spatial, Temporal and Nodal);
- Operational intelligence (by using the power of data and its capability to extract the right information at the right time to provide insight into water infrastructure operation and improve the effectiveness of maintenance activities); and,
- Asset intelligence: the continuous data streams produced from various sub-systems in buildings will help OEMs build digital twins that represent physical systems in real-time.

All of the above Project's components raise ethical issues. To this end, the Project's management of the above issues is outlined in Section 5 of its Grant Agreement:

“At its core the NAIADES project will collect and analyse large volumes of data coming from different sources. While a big portion of these data will originate from public sources, NAIADES may also process proprietary or confidential data such as financial reports and market analyses. To this end, a dedicated task is specified in NAIADES's work plan. Within its scope, a detailed data management plan (D1.8) will be devised ethics (D1.5) that will be revised according to any ethical issues that will have to be addressed during the project's lifecycle”.

The aforementioned task is Task 1.4 that particularly purports to:

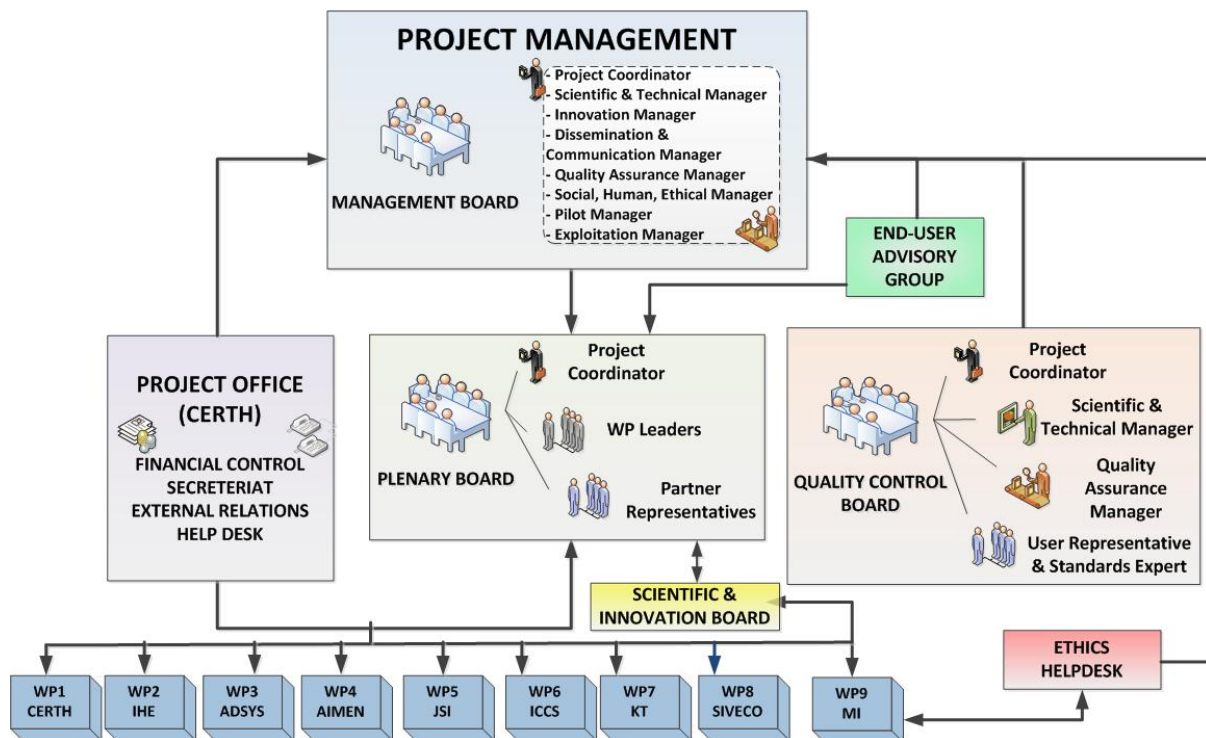
“foresee, monitor and examine the ethical requirements within the project activities and will monitor the personal data processing for research purposes within the project. This task will also examine the extent to which the project solutions and products affect and consider social and human, ethical, privacy and data protection issues. The monitoring of the requirements regarding ethical, privacy and data protection issues throughout the project lifetime will be achieved by means of designated audit forms and questionnaires and participation in meetings of other WPs as required. In order to properly conduct the monitoring activities, within this task an examination as identification of the state of the art of the legislation concerning data management and privacy protection in EU will be carried out as well as the on-going debate on ethical issues implied in the protection of citizens' rights while new monitoring technologies for safety and security are developed”.

In view of the above, **management of the ethics topics under the Project** will take place in a *twofold* manner:

- ⇒ First, an **Ethics HelpDesk** will be established, that will hold the role of the ongoing Project's mechanism for monitoring, guidance, collaboration and coordination of the Project's ethics issues; and
- ⇒ Relevant, and updated, **reports** will be drafted and distributed to Project's partners, analysing all relevant policies and requirements.

2.1 The Ethics Helpdesk's mandate and tasks

The Ethics HelpDesk is the Project's permanent mechanism carrying the mandate of anticipating, monitoring, and providing guidance and support in view of conformity with all the Project's ethics issues. It is placed under the Project Management/Coordinator as follows:



In addition, the Project's **Social, Human and Ethical Manager (SSHEM)** will be Professor Vagelis Papakonstantinou of VUB.

Accordingly, the Ethics Helpdesk's tasks will be (an indicative list that may be complemented during Project execution as per partners' requirements and/or updates in relevant fields):

- ⇒ To map all applicable Project's ethics issues and topics;
- ⇒ To inform Project's partners on applicable ethical requirements;
- ⇒ To remain up-to-date and informed on any developments within its scope;
- ⇒ To provide guidance to Project partners on ethical issues during Project execution;
- ⇒ To address partners' questions on any ethical matter related to the Project;
- ⇒ To monitor compliance on all ethical matters within the Project;
- ⇒ To periodically convene the HelpDesk members;
- ⇒ To inform the Project Coordinator in the event of an ethical matter that cannot be addressed by the HelpDesk members;
- ⇒ To inform any third parties that may be interested in Project's ethical aspects/matters (after coordination with the Project Management).

The above tasks will be carried out by means of the following tools and methodologies:

- Periodic reports, as per Project's GA (see 2.2 below)
- Questionnaires that will be circulated among Project partners;
- Follow-up to said questionnaires;
- Periodic conference calls (when required)
- Periodic in-person meetings and exchanges (following Project's meetings);
- Forms to assist Project's implementation, that will be distributed to Project's partners.

2.2 Reporting under the Project

As per the Project's GA, the following deliverable reports relate to Project's ethical matters (including this Report, D1.5):

D1.4	NAIADES Data Collection & Ethical Plan	14 - VUB	Report	Public	9
D1.5	Ethical HelpDesk Reports - Mid-term	14 - VUB	Report	Public	3
D1.6	Ethical HelpDesk Reports -Final	14 - VUB	Report	Public	36

While the above reports will not be drafted by the Ethics HelpDesk *per se*, those that do not directly pertain to its operation will be communicated and consulted with the HelpDesk members.

3 Establishment of the Project's Ethics HelpDesk

In order to achieve maximum participation and awareness it has been decided that all of the Project's partners appoint a member to the Project's Ethics HelpDesk. In this way collective decision-making as well as immediate dissemination and awareness of HelpDesk's decisions and developments will be warranted among Project partners.

Evidently, the above does not replace the need for communication by Ethics HelpDesk with all Project participants whenever deemed necessary.

3.1 The Ethics HelpDesk members

The project's Ethics HelpDesk members are:

Part no.	Participant organization name	Participant short name	Name
1	Centre for Research and Technology-Hellas	CERTH	George Banias
2	KONNEKTABLE Technologies Ltd	KT	Angelos Liapis
3	Mandat International	MI	Anna Brekine
4	UDG Alliance	UDGA	Eunsook Eunah Kim
5	Asociación de investigación metalúrgica del noroeste	AIMEN	Rocio Pena
6	Institute of Communication and Computer Systems	ICCS	Dr Gregoris Mentzas
7	Jozef Stefan Institute	JSI	Marko Grobelnik
8	Advantic Sistemas y Servicios S.L.	ADSYS	Maria Mendoza
9	SIVECO Romanian SA	SIVECO	Dana Oniga
10	Disy Informations Systeme GmbH	DISY	Julian Bruns
11	IHE Delft Institute for Water Education	IHE	Leonardo Alfonso Segura
12	IBATECH Tecnología S.L.	IBA	Ramón Pericet
13	Guardtime AS	GT	Tuuli Lohmus
14	Vrije Universiteit Brussel	VUB	Dimitra Markopoulou
15	Eurecat Technology Centre	EUT	Aitor Corchero Rodriguez
16	Aguas Municipalizadas de Alicante, Empresa Mixta	AMAEM	Alejandro Garcia Monteagudo
17	S.C. Compania de Utilitati Publice Dunarea Braila	CUP	Oana Preda

	S.A		
18	Ville de Carouge	CAR	Laurent Horvath

4 Internal organisation of the Project's Ethics HelpDesk

The Ethics Helpdesk operates under its Rules of Procedure (the "Rules") as set out in par. 4.1 below, and as amended from time to time by its members. In the event that any of the Rules contradict the GA, the terms of the GA prevail.

Purpose of the Rules is to provide clarity and transparency to the Ethics HelpDesk operation.

4.1 Rules of Procedure for the Project's Ethics HelpDesk

Article 1. The Ethics HelpDesk is composed of the members (natural) persons appointed by the Project partners. Each partner appoints one (1) member.

The Ethics HelpDesk monitors, updates and supports all ethical matters pertinent to the Project, as described in the GA.

Article 2. All members have the right to vote. Each member casts one (1) vote.

Article 3. The Ethics HelpDesk convenes either electronically or in person. It shall convene at the initiative of the Project's Social, Human and Ethical Manager (SSHEM), and also at the initiative of any one of its members, after invitation to all other members.

Article 4. The Ethics HelpDesk makes decisions by consensus of all its members present in the respective meeting. Voting by proxy is allowed. If this cannot be reached the Project's Management is notified in order to resolve the issue.

Article 5. The Ethics Helpdesk announces its decisions to the partners concerned. In the event of decisions of relevance or interest to all partners they will be announced to all the Project consortium.

Article 6. The Ethics Helpdesk's decisions are binding for the topics they concern. Any member can dispute these decisions to the Project Management, that will reach the final decision on the topic.

Article 7. The Ethics Helpdesk will be notified of any ethics matter or issue that comes to the attention of any of the Project partners. Notification may come either by the appointed partner member or by direct communication to the SSHEM.

Article 8. The Ethics HelpDesk shall deal with all matters that are brought to its attention by its members,

as per Article 7, and shall notify them of its decision. The Ethics HelpDesk may decide to deal with any matter, notwithstanding the above, at its own initiative.

Article 9. The Ethics HelpDesk shall deal with any issues or matters brought to its attention by third parties that are external to the Project. In such an event, the SSHEM shall notify all of its members accordingly, and shall forward them all relevant material. The matter will be discussed in the next planned meeting of the Ethics HelpDesk, unless earlier decision-making is considered necessary.

Article 10. The Ethics HelpDesk shall be dissolved automatically immediately at Project expiration.

5 First questionnaire by Project's Ethics HelpDesk: Identification of Project's ethics issues

According to Chapter 2.1 above, the Ethics HelpDesk shall execute its tasks through, among others, questionnaires that will be addressed to Project partners. In this context the following questionnaire has been drafted with the aim of identifying the ethics topics and fields that the partners consider relevant to the Project and, as such, need to be addressed within the Ethics HelpDesk.

Depending on partner response the questionnaire may be circulated either as an online or as an off-line form. Results will be processed and incorporated in the Ethics HelpDesk's work as demonstrated in other project deliverable reports (see 2.2 above).

5.1 Questionnaire on Project's relevant ethics issues

The Ethics HelpDesk questionnaire aimed at identifying the Project's relevant ethics issues is attached in **Annex I** of this report.

The questionnaire will be addressed to all project partners (technical, non-technical, pilot trials) by the Ethics HelpDesk with the approval and support of the Project Coordinator. Completion will be mandatory for all Project partners. Their responses will be assessed by the Ethics HelpDesk, and followed-up for clarifications, if needed. Findings will be incorporated into the Ethics HelpDesk scope of work, as demonstrated in its deliverable reports (see 2.2 above).

6 Ethics HelpDesk's forms and support to Project partners: DPO appointment, informed consent and DPA notification forms

The GDPR has by now harmonised applicable personal data protection law across all EU Member States. Article. Its Article 89 sets the "Safeguards and derogations relating to processing for archiving purposes in the public interest, scientific or historical research purposes or statistical purposes", leaving however substantial space for the national legislator to intervene. This is why it has been deemed essential that

Project partners are provided with the following two (2) forms, to better assist with their national (Member State) GDPR compliance practices:

- Informed Consent form,
- DPA Project Notification form.

These forms shall be made available to all partners by the Ethics HelpDesk. In addition, support and guidance as regards their filling in and submission to competent (Member State) authorities will also be provided, under the important clarification that particular legal compliance may be needed to be carried out locally by the partner concerned.

As regards GDPR compliance, for internal Project execution purposes the **Project's DPO will be Professor Vagelis Papakonstantinou of VUB**. He will collaborate with the partners' respective appointed DPOs when any personal data protection issues arise that are related to the Project execution.

6.1 Informed Consent Form

An Informed Consent form is provided to all Project partners under **Annex II** of this report. While resorting to it the following are clarified:

- This is an indicative and not a mandatory Informed Consent form. In the event that Project partners already use their own template forms for their own purposes they are encouraged to continue doing so also for Project execution purposes;
- The Informed Consent form should be translated in the data subject's language, particularly in the event that English is not fluently understood by him/her;
- Section 5.1.2 of the GA clarifies the applicable methodology as regards the use of an Informed Consent form by any of the partners (only with regard to trial partners, but applicable for all other Project purposes); Here only the following are copied, for picture completeness purposes only – partners are strongly encouraged to consult with said Section prior to using the Informed Consent form:

1. "Initially the trial's leader will orally describe the pilot in which people will be involved and will also carefully describe the level of privacy infringement that the pilot involves. In case the person wants to exercise his/ her right not to know, he/ she will be excluded by the pilot.

2. Secondly, after a few days, subjects will be required to read and sign an informed consent form that will explain in plain English and in local language what the trial leader has already orally explained. Informed consent forms in English and in local language will be sent to the European Commission and included in the trial protocol".

- Any comments, queries, data subjects' requests (other than simple explanations) should be communicated by the relevant partner to the Ethics HelpDesk.

6.2 DPA notification form

In the event that any Project partner needs one (**this may be particularly applicable to pilot trial leader partners**) a DPA notification form is drafted within the Ethics HelpDesk context and attached to this report as **Annex II**.

While using the form Project partners should be aware and are advised of the following:

- Their national (Member State) law may or may not require that notification of Project-related personal data processing be made to their national competent DPAs; **Each partner, particularly trial project partners, should inquire at its own initiative and responsibility with its own legal/DPO counsel or competent DPA;**
- In the event that MS DPAs need to be notified, the respective Project partner should:
 - **undertake all necessary steps in a timely and lawful manner,**
 - **notify them to the Ethics HelpDesk.**
- The attached DPA Notification Form is indicative and may or may not comply with MS DPA requirements (if any). Each Project partner undertakes to fulfil the respective requirements at its own initiative and means.
- Any comments, questions or queries will be addressed to the Ethics HelpDesk.

7 Conclusions

This report provides initial guidance to Project partners as regards the ethics requirements and compliance for Project purposes and execution. To this end:

- It establishes the Project's Ethics HelpDesk;
- It introduces the Ethics HelpDesk's rules of procedure;
- It provides the first questionnaire to be distributed to all Project partners in order to identify the ethics issues that are relevant to the Project,
- It appoints the Project's DPO (for Project's internal purposes), and
- It provides two (2) forms, on informed consent and DPA notification, followed by applicable methodology, that are aimed to assist Project partners with regard to their first GDPR compliance requirements for Project purposes.

The Ethics HelpDesk will be an ongoing internal Project mechanism to warrant compliance with ethical and other relevant requirements applicable to the project. As such, it aims at constituting both a forum of relevant exchange and an information and support desk, in view of optimal Project compliance taking account of the Project's particular scope and subject-matter.

8 ANNEX I. Ethics Helpdesk Questionnaire for Identification of Project's Ethics Issues

Q no.	Question	Yes	No	Not applicable	Comments
1	Will your organization "process" (any operation or set of operations which is performed on personal data or on sets of personal data) any "personal data" (any information relating to an identified or identifiable natural person) during the Project execution?				
2	Has your organization undertaken all necessary measures to comply with the GDPR requirements (or any other applicable personal data protection requirements)?				
3	Could your research for the Project purposes provide knowledge, materials and technologies that could be channeled into crime or terrorism?				
4	Could your research for the Project purposes provide materials / methods / technologies and knowledge that could harm people, animals or the environment if modified or enhanced?				
5	Could your research for the Project purposes end up in the hands of malevolent individuals?				
6	Do you plan to carry out for the Project purposes any "sensitive personal data" processing (data revealing racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, and the processing of genetic data, biometric data for the purpose of uniquely identifying a natural person, data concerning health or data concerning a natural person's sex life or sexual orientation)?				
7	Does your research for the Project purposes involve minority or vulnerable groups or develop social, behavioural or genetic profiling technologies that could be misused to stigmatise, discriminate against, harass or intimidate people?				
8	Are all researchers recruited for the Project				

	execution under a contractual relationship (e.g. employees, contractors) within your organization?				
9	Are non-discrimination and equal opportunity policies and/or contractual clauses applicable within your organization?				
10	Are you using informed consent forms when recruiting researchers for the Project?				
11	Is there an amicable redress mechanism in place within your organization?				
12	Have you entered confidentiality agreements with researchers employed or participating in the Project?				
13	If involved in pilot trials, will you use existing personnel for your pilot trials execution?				
14	If involved in pilot trials, do you intend to use informed consent forms for personnel involved in pilot trials?				
15	Will end users other than Project partners be involved in pilot trials?				
16	Do you intend to use volunteer participants to assume any role during Project execution?				
17	Will children be involved in pilot trials or during Project execution?				
18	Will your organization transfer any data during the Project execution to third (non-EU) countries?				
19	Do you foresee any risk to public safety and security?				
20	Please list any standards (particularly, ISO 27001) applied within your organization that are relevant with the Project				

9 ANNEX II. Informed Consent Form

The NAIADES Informed Consent Form

NAIADES Project Background Information

Access to good quality water is essential for people, nature and economic activities while large amounts of water are required to produce energy, grow food and manufacture everyday goods. But freshwater sources are increasingly at risk from a variety of natural and human-induced stressors, including population growth, climate change, land-use changes and pollution.

The NAIADES Project (the “**Project**”) envisions transforming urban water management through automated and smarter water resource management and environmental monitoring, achieving a high level of water services for both residential and commercial consumers, exploiting the efficient use of physical and digital components of water ecosystem. NAIADES relies and builds upon on various types of big data collected from different water monitoring and control systems in Europe, in order to (i) establish more efficient water consumption in both retail and commercial environments, (ii) generate increased confidence of water consumers, (iii) measure the water quality in residential buildings, offices and public infrastructures, (iv) assure the safety and reliability through the detection of warning signs in near real time and other monitoring systems, and (v) enhance public awareness on water consumption and usage savings, and promote user engagement in water conservation activities through personalized persuasive feedback and recommendation services provided to the NAIADES App Users.

NAIADES aims to provide multidimensional intelligence on the water ecosystem through the introduction of Artificial Intelligence (AI) technologies:

- **Situational Intelligence** - by collecting real-time data from the buildings as they are in operation and analysing them in Spatial, Temporal and Nodal dimensions;
- **Operational intelligence** - by using the power of data and its capability to extract the right information at the right time to provide insight into water infrastructure operation and improve the effectiveness of maintenance activities; Asset intelligence: the continuous data streams produced from various sub-systems in buildings will help OEMs build digital twins that represent physical systems.

NAIADES Personal Data Processing

In this context [PARTNER NAME] executes the data collection you are involved in, and acts as “controller” in the meaning of data protection laws. Your answers/input/personal data will be processed only for the NAIADES purposes. Data transfers will take place only among NAIADES partners for Project

purposes. All applicable data protection laws and regulation will be observed and applied during Project execution. You will be given the opportunity to review (access) the data collected.

NAIADES lasts until June 2022; After Project end, the data will be stored for one (1) year.

If at any time during or after Project end you wish for your data to be deleted from the NAIADES dataset, you may contact the [PARTNER NAME], in writing (registered mail or fax), or in person, during working days/hours, at the address, tel.

If you choose to take part in NAIADES and provide your personal data, your participation is completely voluntary. If you choose not to participate, you will not be penalized, nor will you forgo any benefits to which you are otherwise entitled. If you choose to participate, and wish to discontinue participation at any time during the study, there will no penalty or loss of benefits to which you are otherwise entitled.

If you have any questions or comments regarding this study – now or at a later date – please do not hesitate to get in touch with the [PARTNER NAME]. The Project's website may be visited at <https://www.....>

By signing this consent form, you declare that you have been informed of the purpose and nature of the Project, that you understand what is expected of you and that you agree to voluntarily take part in it. Furthermore, you understand that you are free to stop at any time without penalty or loss of benefits and that your answers will be anonymous.

Date and place:

Participant's name:

Participant's signature:

For the [PARTNER NAME]

Partner's (lawful representative) signature:

10 ANNEX III. DPA Project Notification Form

NAIADES Project Description for Data Protection Authorities

PART A. General Project Information

I. Project Background Information

Access to good quality water is essential for people, nature and economic activities while large amounts of water are required to produce energy, grow food and manufacture everyday goods. But freshwater sources are increasingly at risk from a variety of natural and human-induced stressors, including population growth, climate change, land-use changes and pollution.

The NAIADES Project (the “**Project**”) envisions transforming urban water management through automated and smarter water resource management and environmental monitoring, achieving a high level of water services for both residential and commercial consumers, exploiting the efficient use of physical and digital components of water ecosystem. NAIADES relies and builds upon on various types of big data collected from different water monitoring and control systems in Europe, in order to (i) establish more efficient water consumption in both retail and commercial environments, (ii) generate increased confidence of water consumers, (iii) measure the water quality in residential buildings, offices and public infrastructures, (iv) assure the safety and reliability through the detection of warning signs in near real time and other monitoring systems, and (v) enhance public awareness on water consumption and usage savings, and promote user engagement in water conservation activities through personalized persuasive feedback and recommendation services provided to the NAIADES App Users.

NAIADES aims to provide multidimensional intelligence on the water ecosystem through the introduction of Artificial Intelligence (AI) technologies:

- **Situational Intelligence** - by collecting real-time data from the buildings as they are in operation and analysing them in Spatial, Temporal and Nodal dimensions;
- **Operational intelligence** - by using the power of data and its capability to extract the right information at the right time to provide insight into water infrastructure operation and improve the effectiveness of maintenance activities; Asset intelligence: the continuous data streams produced from various sub-systems in buildings will help OEMs build digital twins that represent physical systems.

II. Purpose of data collection and sharing

The overall purpose of data collection is research within the EU H2020 Framework Programme.

The NAIADES solution will be validated as regards its proposed technology and business framework through real life demonstrations in three different water management infrastructures. The operational properties of the proposed ecosystem and overall solution will be validated and evaluated against performance, effectiveness and usability indicators. Water authorities participating in the project’s pilot tests

will deploy and evaluate the solution at business as usual and emergency situations across various environmental scenarios. Use cases will be supported by different architectures, which will be classified according to the operation mode.

NAIADES involves carrying out data collection (in the context of the piloting and validation phase) and a set of validation tests to assess the technology and effectiveness of the proposed framework in real life conditions. For this reason, human participants will be involved in certain aspects of the project and data will be collected concerning their personal info and the corresponding corporate Intellectual Property Rights (IPR).

III. Data protection and management

The EU General Data Protection Regulation defines the terms “data controller” and “data processor” as follows:

- “controller” means the natural or legal person, public authority, agency or other body which, alone or jointly with others, determines the purposes and means of the processing of personal data; where the purposes and means of such processing are determined by Union or Member State law, the controller or the specific criteria for its nomination may be provided for by Union or Member State law;
- “processor” means a natural or legal person, public authority, agency or other body which processes personal data on behalf of the controller.

In the NAIADES project, the following roles have been allocated:

- The Project Coordinator is responsible for running and executing the NAIADES project;
- A Project Security Officer (PSO) has been appointed with the task of overseeing all security-related aspects of the Project;
- The Security Advisory Board (SAB), chaired by the Project Security Officer (PSO), acts as overall reviewer in terms of security and document classification. All Project deliverables will undergo security scrutiny organised by the PSO in collaboration with the SAB who will decide the classification level and to whom the data can be disseminated, ensuring that no sensitive information will be disclosed;
- The Pilot (use-case) Partner Leader will be responsible for executing the use-case/pilot within its respective jurisdiction.
- Consortium Partners (or “partner(s)”), meaning all other Project partners apart from the above, are not expected to process personal data during execution of the Project;
- An Ethics Helpdesk is also to be established as an integral part of FORTIKA to assist with relevant issues;
- Any employee or third party participating in the pilots/use-cases or in any other way involved in Project execution will do so voluntarily, on an anonymity guarantee (whenever applicable), together with the right to get more information about the respective trials, after signing a detailed Informed Consent document (as annexed).

IV. General data protection considerations

NAIADES will rely on the participation of stakeholders to obtain essential information about the domain and about appreciation of the proposed solutions. Through elicitation activities the Project may obtain information from end-users that might be of a private nature, or may not be shared with other parties.

To protect the privacy of individuals, and to prevent unauthorized access to data, the project consortium will implement proper procedures to safeguard the privacy of invited stakeholders, and will implement information sharing policies that prevent unauthorized access to data that is available within the consortium.

The project will work in full accordance with the provisions of (a) Regulation 679/2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data (General Data Protection Regulation), (b) its respective Member State implementation(s), as well as, (c) with any applicable ethical conditions, as among others set out in Decision No 2013/743/EU of the EU H2020 Programme Rules.

V. Categories of project activities implicated with data protection considerations

There will be a certain level of data collection undertaken during the course of the project. This will lead to the consideration of legal requirements relating to data protection and privacy. In NAIADES, these considerations specifically apply to the following project activities:

- Use-case Project pilots;
- Project execution.

VI. General approach to data protection

To ensure that all data collected will be undertaken with regard to the highest level of ethical consideration the following will be our approach:

- No automatic data collection or data collection without project-related intent. Data collection activities in the project are limited in scope, not done in an automatic fashion, and only done with justifiable project-related cause;
- Differentiation between unprocessed, processed and public data. In the project, there is a strict separation between unprocessed data, processed data, and public data. Unprocessed data are data that are collected by consortium partners, that may contain personal information. Processed data are unprocessed data that are shared among consortium partners under applicable legal requirements. Public data is data that is based upon processed (consortium-shared) data, but presented to the public at an aggregated level;
- Local responsibility for data protection and privacy. With regard to Project Pilots (use-cases), the respective Pilot (use-case) Partner Leader acts as “data controller”, within its respective jurisdiction, for Project personal data processing purposes. The location where a personal data processing operation takes place within the context of a Project pilot (use-case), determines which project partner is responsible for safeguarding data protection and privacy (in relationship to national regulations). The respective Pilot (use-case) Partner Leader is responsible for safe and secure storage of data, processing and transmitting that data, and ensuring that applicable data protection legislation is observed;
- Informed consent is mandatory. Individuals participating in Project activities will be asked to sign an 'Informed Consent Form' (annexed). This form describes how personal information will be processed under the Project, and how the participant can review this information — and, if necessary, ask for correction or deletion.

PART B. Pilot / use-case particular information [**IF APPLICABLE****]**

The following description is specific to Use Case/Pilot[INSERT HERE USE-CASE / PILOT TITLE]..... executed by[INSERT HERE ENTITY NAME]..... as Pilot (use-case) Partner Leader.

I. Project Pilot / use-case brief description

.....[PLEASE INSERT A BRIEF DESCRIPTION OF THE USE-CASE-PILOT, no more than 3-4 lines].....
.....
.....
.....

II. Categories of data subjects (indicative list)

- Employees of the Pilot Partners that will participate in the trials (pilots),
- Any data from external sources emanating from the respective communication of the Pilot Partners during the trials,
- Authorities.

III. Categories of data types collected

The expected types of personal data to be collected are, indicatively, the following:

- (1) Name and surname
- (2) Address
- (3) Affiliation to organisation/employer
- (4)
- (5)
- (6)
- (7)

IV. Transfer to Third Countries

No data transfers to third, non-EU Member States, will be carried out under the Project.

V. Security Measures

The following measures are in place at the organizational level of the Pilot (use-case) Partner Leader:

[PLEASE PUT INSERT THE SECURITY MEASURES IN PLACE AT YOUR ORGANISATION.
E.G.:]

- A comprehensive security policy
- Overview of security registrations/certifications (e.g., ISO)
- Classification of information
- Informed Personnel
- Security of physical access
- Security of networks
- Logical security of entrances and exits

VI. Informed Consent for data collection from participants

The Pilot Partner Leader will acquire the informed consent of any and all individuals providing information for Project purposes under the relevant Project Pilot. This will be performed by means of prior signature by respective individuals of the Informed Consent Form (annexed). When presented to them, individuals will be provided with explanations on personal data collection and processing as well as their individual rights, including the right to withdraw from participation in the Project at any time, without any disadvantage to themselves of any kind.

Before any data collection can commence, the individuals participating in the Project will need to have given their confirmation of their understanding of Project personal data processing, and consent for use of data stemming from the interaction by signing the Informed Consent Form.

- The project will require signed Informed Consent Forms from all external participants in data collection activities before they take place;
- The participant will be given a copy of his signed Informed Consent Form;
- The Pilot Partner Leader is responsible for securing the signed Informed Consent Form, and storing it in a secure location for possible future verification and use.

.....[PLACE & DATE – REGISTERED SEAT OF Pilot Partner Leader].....

ORGANISATION – PILOT (USE-CASE) PARTNER LEADER

NAME:

ADDRESS:

TELEPHONE:

Contact person {INSERT THE NAME OF THE PERSON RESPONSIBLE FOR THE PROJECT IN YOUR ORGANISATION

Name:

Address:

Telephone:

Email:

Company Lawful Representative [CEO / DIRECTOR / PERSON REPRESENTING YOUR ORGANISATION, WHO IS ACTUALLY SUBMITTING THIS TO YOUR DPA]

Name:

Organisation:

Address:

Telephone:

Email: