An enhanced pre-frontier intelligence picture to safeguard the European borders

D8.8
GEN-Requirement No.8

Project	NESTOR – 101021851
Work Package	WP8–Ethics Requirements
Deliverable	D8.8 - GEN-Requirement No.8
Editor(s)	KEMEA - [redacted], CENTRIC - [redacted], External Ethics Expert - [redacted] (VUB)
Lead Beneficiary	HP
Status	☒ Draft ☒ Peer reviewed ☒ Management Support Team reviewed ☒ Project Coordinator accepted
Version	1.0
Due Date	31/10/2022
Delivery Date	11/10/2022
Dissemination Level	CO

NESTOR is a project co-funded by the European Commission under the Horizon 2020 Programme (H2020-SU-SEC-2018-2019-2020) under Grant Agreement No. 101021851

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Contributor(s)	-
Reviewer(s)	HP - [redacted], KEMEA - [redacted]
Ethics Assessment	☒ Passed ☐ Rejected Comments (if any):
Security Assessment	☒ Passed ☐Rejected Comments (if any):

Abstract	D8.8 GEN-Requirement No.8 is the eighth deliverable of WP8-Ethics Requirements and the eighth ethics requirement that has been set out by the European Commission. According to the GA, due to the severity of the ethics issues raised by the proposed research, a report by the Ethics Board must be submitted as a deliverable in M12. Therefore, the purpose of this deliverable is to provide a report by the Ethics Advisory Board (EtAB) about how the NESTOR Consortium has dealt with the ethics issues in order to ensure compliance with ethical standards (national/EU), H2020 guidelines and applicable legislation.
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Version	Date	Partner	Description
0.1	01/08/2022	KEMEA	Skeleton
0.2	12/09/2022	KEMEA	First Draft
0.3	19/09/2022	KEMEA	Ready to send to the EtAB
0.3.1	22/09/2022	EtAB	Additions by the EtAB
0.3.2.	27/09/2022	EtAB	Additions by the EtAB
0.4	04/10/2022	KEMEA	Incorporation of EtAB's comments
0.5	05/10/2022	HP, KEMEA	Sent for security review and approval by the Project Manager and the Project Coordinator
1.0	11/10/2022	HP, KEMEA	Final version – Ready to submit

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21	INGENIERIA DE SISTEMAS PARA LA DEFENSA DE ESPANA SA-SME MP	ISDEFE	Spain

Executive Summary

NESTOR aims to demonstrate a fully functional next generation holistic border surveillance system providing pre-frontier situational awareness beyond maritime and land border areas following the concept of the European Integrated Border Management.

D8.8 GEN-Requirement No.8 is the eighth deliverable of WP8 'Ethics Requirements' and the eighth ethics requirement set out by the European Commission for the NESTOR Project. As it is described in the Grant Agreement under D8.8 GEN-Requirement No.8 [M12] "Due to the severity of the ethics issues raised by the proposed research, a report by the Ethics Board must be submitted as a deliverable at M12".

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Terms and Abbreviations

AR	Augmented Reality
D	Deliverable
DPO	Data Protection Officer
DU-Requirement	Dual Use - Requirement
EAB	External Advisory Board
EC	European Commission
EDPS	European Data Protection Supervisor
EtAB	Ethics Advisory Board
EU	European Union
GA	Grant Agreement
GEN-Requirement	General - Requirement
H-Requirement	Humans - Requirement
M	Month
M-Requirement	Misuse - Requirement
NEC-Requirement	Non-European Countries - Requirement
PEO	Project Ethics Officer
POPD-Requirement	Protection of Personal Data - Requirement
RF	Radio Frequency
T	Task
UAV	Unmanned Aerial Vehicle
UGV	Unmanned Ground Vehicle
USV	Unmanned Surface Vehicle
UUV	Unmanned Underwater Vehicle
UxVs	Unmanned Vehicles of all categories
VUB	Vrije Universiteit Brussel
WP	Work Package

1 INTRODUCTION

The present deliverable is the eighth (8th) deliverable of WP8 'Ethics Requirements' and the eighth ethics requirement within the NESTOR project.

According to the description of D8.8 GEN-Requirement No.8 in the NESTOR Grant Agreement:

"Due to the severity of the ethics issues raised by the proposed research, a report by the Ethics Board must be submitted as a deliverable at M12".

The purpose of this deliverable D8.8 is to provide a report by the Ethics Advisory Board (EtAB) about how the NESTOR Consortium has dealt with the ethics issues related to the project in order to ensure compliance of the research activities with ethical standards (national/EU), the H2020 guidelines and relevant applicable legislation. In view of that, in Section 2 the composition of the Ethics Advisory Board is presented, and its role and function are described. Section 3 provides for the work done for the fulfilment of the WP8 ethics requirements within the framework of the NESTOR project. Section 4 includes the general work progress while in Section 5 the recommendations by the EtAB are outlined. Finally, in Section 6 the concluding remarks are presented.

All the information included in the present deliverable will be made available to the NESTOR Consortium through a dedicated session during the 3rd Project Meeting in October 2022.

2 COMPOSITION, ROLE AND FUNCTION OF THE ETHICS ADVISORY BOARD

The NESTOR Consortium is conscious of the significance of the legal and ethical aspects, envisages all related challenges which may arise during the lifetime of the project and commits itself to uphold ethical standards. To this end, specific tasks have been developed to tackle all potential related issues; at the same time, the Ethics Advisory Board (EtAB) has been set up, which consists of internal and external ethics advisors and its main responsibility is to conduct the ethics monitoring throughout the project's lifespan.

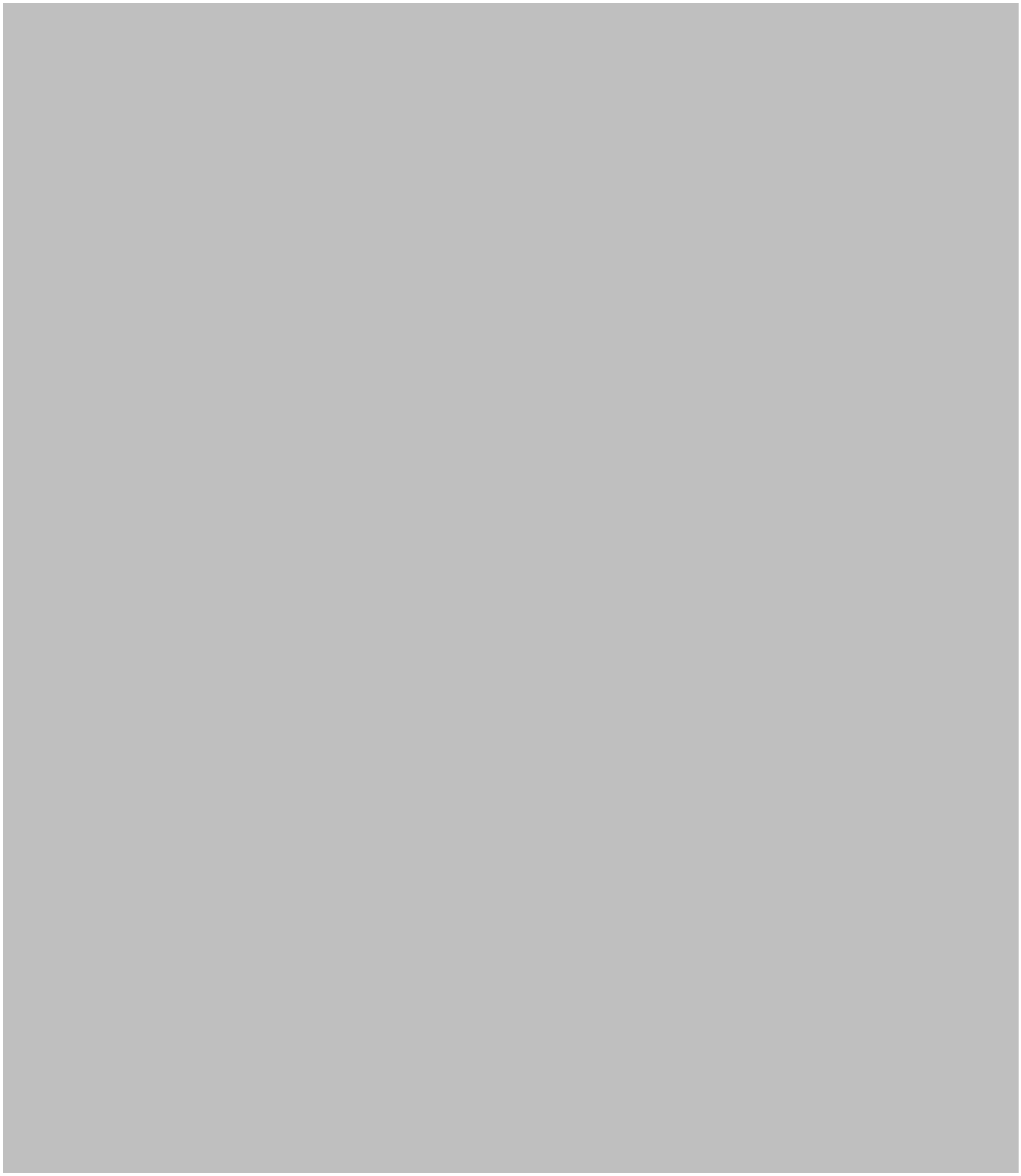
The EtAB is chaired by the Project Ethics Officer (PEO) and consists of three members (the PEO, one more internal expert from the NESTOR Consortium and an external ethics advisor). The external ethics advisor is independent with no link to the Consortium, hence, has signed a Confidentiality Undertaking as a prerequisite for his participation in the project's and the EtAB's meetings and his access to the project deliverables that are confidential amongst the consortium and the European Commission.

Specifically, the EtAB consists of three members:

- [redacted] from KEMEA, who has been assigned with the role of PEO and chairs the Board,

- , as an internal ethics expert from CENTRIC and
- as an external ethics advisor from VUB.

For reasons of completeness, it should be mentioned that had initially undertaken the role of internal ethics expert from CENTRIC and then was replaced by . In addition, is part of KEMEA's ethics team responsible for the ethics management of the NESTOR project and works in close collaboration with the PEO.



The EtAB is responsible for the ethical and legal monitoring of the project's activities and its aim is to ensure their compliance with the relevant applicable laws and ethical standards. In this context, the role of the EtAB is to address all potential ethical and legal risks including privacy risks and to prevent or mitigate them by giving advice and guidance to the Consortium. Therefore, the EtAB members participate in all project's meetings and other project's activities and review deliverables that may raise ethical or legal concerns. In order to plan and distribute their work, they schedule dedicated EtAB meetings. Extended reference is made in Section 4 below.

The ethical challenges of NESTOR that had been identified from the proposal phase and have been set out by the European Commission as post-grant requirements are related to the following categories:

- Human beings;
- Protection of personal data;
- Environment, health and safety;
- Third countries;
- Dual use;
- Potential misuse of research results.

3 COMPLIANCE WITH ETHICS REQUIREMENTS

All ethics requirements of the WP8 -including the present report- have been prepared by KEMEA in close collaboration with the EtAB members and have been submitted as deliverables.

In the following table, the deliverable number and title are outlined as well as the status of every deliverable.

Table 1. Ethics Requirements submitted as Deliverables

Deliverable Number	Deliverable Title	Status
D8.1	H-Requirement No.1	Submitted
D8.2	H-Requirement No.1	Submitted
D8.3	POPD-Requirement No.3	Submitted
D8.4	NEC-Requirement No.4	Submitted
D8.5	EPQ-Requirement No.5	Submitted
D8.6	DU-Requirement No.6	Submitted
D8.7	M-Requirement No.7	Submitted
D8.8	GEN-Requirement No.8	Submitted

3.1.1 Humans, Requirement No. 1

D8.1 H-Requirement No. 1 is focused on the research with humans and on the consent of the participants which is the cornerstone for research ethics. The NESTOR research activities include interviews, workshops/conferences/events and trainings/pilot demonstrations. In this context, the informed consent procedures are described both for the participation of humans in the project's research activities and for the processing of their personal data. It is highlighted that the participation will be on a voluntary basis based on consent and the participants will be well informed about the research details before deciding whether they wish to take part and whether they agree with the processing of their personal data. They will have the right to withdraw their consent at any time without any consequences. Templates of Information Sheets and Informed Consent Forms have been prepared and are included in D8.1.

The recruitment criteria (inclusion and exclusion criteria) for the participation of humans in the pilot demonstrations have been presented. It has been also confirmed by the NESTOR partners that children, adults unable to give their informed consent, or other vulnerable individuals/groups will not be involved in the pilot demonstrations.

Finally, given that, apart from the planned findings, also unintended / incidental findings may occur during the carrying out of some testing activities and pilot demonstrations, an Incidental Findings Policy has been drafted which includes the types of anticipated incidental findings and the procedures to be followed by the NESTOR Consortium upon their detection. Depending on the nature of the findings, different procedures will be followed *ad hoc* in accordance with the relevant international, European and national legislation. Upon detection of incidental findings, consultation by the PEO and the EtAB will be sought. The reporting

procedures will be followed in accordance with the relevant applicable national laws. The participation of public authorities in the project constitutes an additional safeguard to the rights and freedoms of the individuals. For incidental findings unanticipated at this stage, it is confirmed that D8.1 will be updated accordingly during the lifetime of the project.

3.1.2 Humans, Requirement No. 2

According to D8.2 H-Requirement No. 2, the NESTOR partners that are obliged by law to establish an ethics committee should provide a copy of opinion/approval by their committee prior to the start of research activities with humans. In absence of an ethics committee, the NESTOR partners should provide a relevant opinion/approval by a competent authority.

In NESTOR, four partners have established an ethics committee as required by their national legislations.

The ethics committee of and the ethics committee of are not competent to issue approvals for the types of research activities conducted by these partners during the lifetime of the NESTOR project. Therefore, a declaration of compliance has been signed by and to ensure that applicable laws and ethics standards will be respected during the carrying-out of research activities with humans. With respect to , the procedure of approval by its ethics committee is in progress.

DBAM does not conduct research with humans as part of the NESTOR project. Nevertheless, this partner has signed a declaration of compliance considering its participation in a scientific research project.

The remaining NESTOR partners have signed a declaration of compliance where they have confirmed (a) that there is no obligation by national law to establish an ethics committee and that they are not subject to a competent authority and (b) that they will conduct research activities with humans by respecting the relevant applicable legislation and ethics standards.

3.1.3 Protection of Personal Data, Requirement No. 3

D8.3 POPD-Requirement No.3 includes information and confirmations provided by the NESTOR partners with respect to the necessary procedures that are stipulated by the GDPR, national data protection laws and relevant guidelines and aim to ensure protection of personal data and to safeguard the data subject's rights and freedoms. In particular:

1. In compliance with the respective GDPR requirement, the NESTOR partners that are obliged by law to appoint a Data Protection Officer have provided the contact details of their DPO. In case the NESTOR partners are not required by law to have designated a DPO, their detailed data protection policy for the project has been included in this deliverable.

2. The technical and organisational measures for the protection of personal data as well as the security measures for the prevention of accidental or unlawful destruction, loss, alteration, unauthorised disclosure or access or transfer of personal data have been described by each NESTOR partner separately.

3. The pseudonymisation/anonymisation techniques that will be implemented by specific NESTOR partners (CENTRIC, CERTH) are also included in this deliverable.

4. With respect to data transfers to/from non-EU countries, the relevant confirmations are included in this deliverable. Any transfer of personal data from the EU partners to CENTRIC (UK), to DBAM (Republic of North Macedonia), or to DCD (Switzerland) will be in compliance with the relevant Chapter V of the GDPR. Any transfer of personal data from CENTRIC, DBAM, or DCD will be in compliance with the national data protection legislations.

5. In case of further processing of previously collected personal data during the research period, the NESTOR partners involved in secondary use of personal data (KEMEA, CENTRIC and CERTH) have declared the lawful basis and have described the technical and organisational measures that will be implemented.

6. With respect to processing that constitutes profiling, no such processing is carried out in the context of the NESTOR project. The data processing operations that are performed by CENTRIC and CERTH as part of T3.4 are not considered automated given that human oversight and human intervention are ensured. Nevertheless, extended reference to the possible consequences of these data processing operations and to the appropriate safeguards is made in this deliverable as part of the assessment and evaluation of the ethics risks that require a data protection impact assessment.

7. In case of the use of publicly available data (non-personal or personal) during the research period, the NESTOR partners involved in such use have provided the necessary confirmations.

8. An assessment and evaluation of the ethics/privacy risks has been carried out which has taken into consideration each data processing operation separately. Following the risk assessment and evaluation, an opinion has been drafted which considers necessary the conducting of a data protection impact assessment in two cases: (a) for the web monitoring operated by CENTRIC as part of T3.4 and (b) for the social media monitoring operated by CERTH as part of T3.4. Albeit not mandatory according to the GDPR requirements, CERTH has also included the data processing operations as part of T3.1 in their carried out DPIA.

Based on the measures that are implemented and according to CENTRIC's and CERTH's Data Protection Officers, the output of each DPIA is that no high risks are anticipated for the rights and freedoms of the data subjects.

Further to the confirmations provided by the NESTOR partners, the PEO and the EtAB members appointed for the NESTOR project will closely collaborate with the Consortium, will advise the partners and monitor the research activities from an ethical and legal point of view during the lifetime of the project. Each and every deliverable that includes information about data processing operations which could raise ethical and legal concerns are reviewed by the EtAB.

3.1.4 Third Countries, Requirement No. 4

D8.4 NEC-Requirement no. 4 is focused on research that involves non-EU countries and on specific requirements that must be met in this case.

In the second chapter it has been explained that fair-benefit sharing arrangements are not required in the NESTOR project since neither low-income countries nor lower-middle income countries participate in NESTOR, hence, this requirement is rendered not applicable.

The third chapter focuses on the materials that are imported to or exported from a non-EU country during the lifetime of the project. It has been clarified that no materials are planned to be imported to non-EU countries. the necessary export authorisations have been already obtained and their copies are included in D8.6 DU - Requirement No. 6.

For the avoidance of overlaps, this deliverable does not include information about the import/export of personal data given that extended reference to all personal data related issues including data transfers from/to non-EU countries is made in D8.3 POPD-Requirement No.3.

3.1.5 Environmental Protection and Safety, Requirement No. 5

D8.5 EPQ-Requirement No.5 is focused on research activities that may entail risks related to the health and safety of the staff and the research participants. Depending on the types of the risks that have been identified, adequate and effective mitigating measures must be implemented in accordance with the relevant EU and national laws.

Considering the operation of the aforementioned technologies and tools by certified and experienced operators, the authorisations that will be obtained where necessary prior to the start of the relevant research activities, the carrying-out of the activities in a controlled environment, security-by-design functions of the technologies and tools and the procedures that will be followed by the operators themselves and by the entire Consortium, as they have been presented in this deliverable, in accordance with the applicable international, EU and national laws and with the safety instructions issued by the manufacturers, the likelihood of harm appears to be remote, and the mitigating measures are considered to be adequate and effective. The participation of trained staff and of highly qualified LEA staff members constitute an additional safeguard and are an indicator that each pilot demonstration will be performed with professionalism under the safest conditions.

Health risks related to the COVID-19 pandemic have been also taken into consideration. Albeit the Consortium is fully aware of the anti-COVID measures, and all partners are already implementing those measures internally, due to its nature this specific risk does not allow us to feel certain about the effectiveness of the mitigation actions. The Consortium commits to take all appropriate measures in accordance with the relevant local rules and guidelines as they are constantly updated and to exclude from the recruitment process any participants with COVID-19 symptoms or, if necessary, depending on the circumstances, any participants that have not been medically tested prior to the start of a research activity. The research activities that cannot be carried out remotely will involve a low number of participants (the minimum number needed for the operation of the tools and technologies and for the project's objectives to be successfully served) for the avoidance of unnecessary assemblies.

Only rational and healthy adults that will follow the informed consent procedure will participate in the pilot demonstrations and in all research activities. The Information Sheets that will be distributed to the research participants before the start of each pilot demonstration or other testing activity will include inter alia a separate section dedicated to the potential health and safety risks and the mitigation actions. Informed Consent Forms will be signed afterwards provided that the participants have read, understood and agreed with the information given to them. The participants will also be informed that they have the right to withdraw their consent at any time without any justification or consequences.

Compliance to the health and safety procedures will be monitored by the PEO and the EtAB members that will guide and assist the partners leading the relevant research activities and will collaborate with the Safety Officer responsible at each pilot site.

3.1.6 Dual-Use, Requirement No. 6

D8.6 DU-Requirement No. 6 includes detailed information regarding the use, production or development of dual-use goods, software and technology in the sense of the Regulation 2021/821 within the NESTOR project, based on the input provided by all partners through the relevant questionnaire. It was demonstrated that three partners deal with dual-use items while the other members of the NESTOR Consortium have clarified that they do not produce

nor develop any dual-use items. For the three non-EU partners this deliverable is not applicable.

It was explained that there will be no export from EU to non-EU countries, as foreseen in the Regulation 2021/821, given that the NESTOR trials where the transferred items will be utilised will take place in the territory of the Union (Lithuania, Cyprus and Greece). The only applicable case is this of intra-Union transfers; [redacted] In addition, it was clarified that no transfer of dual-use items will take place between the NESTOR Consortium and the External Advisory Board members.

D8.6 also outlined the potential dual-use implications and the risk-mitigation strategy. In view of the limited potential implications, the mitigation measures have already been identified. It is worth mentioning that for the above-mentioned three items, the responsible partners have already taken all appropriate measures to obtain the relevant authorisations (where needed).

A dedicated section of D8.6 (section 6) is related to deliverable D8.4 NEC-Requirement No.4 and included the necessary copies of export licenses that are required for the transfer [redacted]

Given that all deliverables of WP8 refer to the ethics requirements that must be fulfilled by the NESTOR Consortium during the research period, in order to ensure compliance of the research activities with applicable legal framework and ethics standards, it should be pointed out that any transfers of dual-use items after the end of the project and potential implications are out of the scope of D8.6 and have to be examined again under the new circumstances. Nevertheless, it needs to be highlighted that the NESTOR research results will rely upon existing technologies and market products and will build on the results of previous EU projects with an exclusive focus on civil applications.

3.1.7 Misuse, Requirement No. 7

D8.7 M-Requirement No.7 explains the notion of ‘misuse’ to the NESTOR partners, includes a risk assessment as regards the technologies and knowledge generated or used during the research that could be misused, i.e., could be used for unintended malicious and unethical purposes and presents a mitigation strategy.

The potential undesirable events have been identified and described by the Consortium, their occurrence level has been assessed by the risk holders after taking into consideration the nature of the risks and the effectiveness of the preventive procedures already established in the NESTOR project (ex-ante mechanisms), the severity level has been assessed after considering the nature of the risks and their impact upon potential materialisation, the implemented measures were described and, finally, their level of effectiveness was presented.

The identified risks belong to the following three categories:

- Research provides knowledge and technologies that could be channeled into crime or terrorism;
- Research involves developing surveillance technologies that could curtail human rights and civil liberties;
- Research develops social or behavioural profiling technologies that could be misused to stigmatise, discriminate against, harass or intimidate people.

The risk related to research resulting in chemical, biological, radiological or nuclear weapons and the means for their delivery is not applicable in the NESTOR research.

No vulnerable individuals or groups are involved in the project's research activities as further described in D8.1 H-Requirement No.1, hence, relevant risks have not been identified.

No automated decision making is involved, and human intervention and oversight are ensured. NESTOR takes an intelligence-led approach to focus on detecting events that are highly correlated with known illicit activity on the borders and there is always human-in-the-loop decision making, hence, relevant risks have not been identified.

The Consortium will take all necessary safeguards to prevent or mitigate the potential misuse of technologies and knowledge generated or used during the project's activities. The mitigation strategy includes a variety of ex-ante and ex-post protective measures that are considered effective and can ensure a high level of security of any sensitive information used or produced within the project. The ex-ante mechanisms are procedures that have been already established and will be collectively followed in the project for the prevention of all types of potential risks of misuse, while the ex-post mechanisms are additional measures that will be implemented by the NESTOR Consortium collectively or the risk holders individually to avoid potential materialisation of risks or to minimise their severity upon occurrence.

4 WORK PROGRESS

In order to effectively perform its role, the EtAB has regular meetings, participates in all project's meetings and other research activities (workshops, trainings, pilot demonstrations), provides guidance to the NESTOR Consortium, reviews the deliverables raising ethical and/or legal concerns via an Ethics Review Table and co-drafts the ethics deliverables.

- **EtAB Meetings**

Considering its important role, the EtAB meets regularly (every 3 months or similar), in order to discuss the ethical issues that have been raised and the next steps that need to be followed. Up to now, four (4) online ordinary EtAB meetings have been held out of the total six (6) ordinary meetings that have been scheduled during the lifetime of the NESTOR project. Extraordinary meetings may be also held upon request of any of the EtAB members.

The ordinary meetings that have been held so far are the following, also reported in the relevant project's reports:

- 1st EtAB meeting : 24/11/2021
- 2nd EtAB meeting : 24/03/2022
- 3rd EtAB meeting : 31/05/2022
- 4th EtAB meeting : 20/09/2022

- **Deliverable Ethics Review Procedure**

The WP8 deliverables, as analysed above, are drafted by KEMEA and reviewed by the other two EtAB members prior to submission. The deliverables of the other WPs are also reviewed by the EtAB prior to submission through the Ethics Review Form/Table that has been prepared by the EtAB and is attached to all project's deliverables. According to this process, each deliverable author has to respond to the questions included in the Ethics Review Form/Table prior to the submission of their deliverable. In case of at least one affirmative response, the deliverable is sent for ethics review and the EtAB members make comments and propose modifications if needed.

- **Human Participation in Research Activities and Protection of Personal Data**

The recruitment of human participants including both recruitment and exclusion criteria, the procedures followed within pilot demonstrations, workshops, and other research activities will be subject to the approval by the EtAB.

The templates of Information Sheet for Research Participation and the template of the Informed Consent Form for Research Participation, as well as the Information Sheet for Data Processing and the Informed Consent Form for Data Processing have been drafted and prepared. They are included in the D8.1 H-Requirement No. 1 that has been already submitted.

Depending on the nature and the specific conditions of each research activity the above-mentioned documents can be modified accordingly. With respect to the 2nd NESTOR Project Meeting that took place on June 15-17, 2022, in Alexandroupolis, Greece, the PEO had drafted and modified accordingly the Information Sheet for Data Processing and the Informed Consent Form for Data Processing that were distributed to all the participants. Same procedure will be followed for all upcoming project meetings and workshops.

In addition, online Information Sheet and online Informed Consent Form (check boxes) have been prepared by the PEO as part of the online registration the NESTOR training program in the context of T6.2 *Training Courses*.

The informed consent procedure will be followed prior to the start of the NESTOR pilot demonstrations and of any other tests that will involve human participants.

- **Data Protection Impact Assessments**

A risk assessment has been conducted in order to evaluate the privacy risks in the framework of D8.3 POPD-Requirement No. 3. Following the risk assessment, an opinion of whether a Data Protection Impact Assessment (DPIA) is necessary according to Article 35 GDPR has been included in the D8.3.

An assessment and evaluation of the ethics/privacy risks has been carried out which has taken into consideration each data processing operation separately. Following the risk assessment and evaluation, an opinion has been drafted which considers necessary the conducting of a DPIA in two cases: (a) for the web monitoring operated by CENTRIC as part of T3.4 and (b) for the social media monitoring operated by CERTH as part of T3.4.

Based on the measures that are implemented and according to the opinion of CENTRIC's and CERTH's DPOs, the output of each DPIA is that no high risks are anticipated for the rights and freedoms of the data subjects.

Further to the confirmations provided by the NESTOR partners, the Project Ethics Officer and the EtAB members appointed for the NESTOR project will closely collaborate with the Consortium, will advise the partners and monitor the research activities from an ethical and legal point of view during the lifetime of the project. Each and every deliverable that includes information about data processing operations which could raise ethical and legal concerns are reviewed by the EtAB".

- **Other documentation**

In the context of D8.3 POPD-Requirement No.3, a template of Data Protection Policy has been prepared in case the members of the NESTOR Consortium are not obliged by law to designate a Data Protection Officer (DPO). This template has been drafted by the PEO and the EtAB members in order to facilitate the NESTOR partners. The detailed Data Protection Policy

includes the types of the processed data, the lawful basis and the purposes, the procedures for data handling, the applicable law, and the contact details of the controller.

In the context of D8.2 H-Requirement No.2, a template of Declaration of Compliance has been prepared in case the members of the NESTOR Consortium are not obliged by law to establish an ethics committee. This template has been drafted by the PEO and the EtAB members in order to facilitate the NESTOR partners. The Declaration of Compliance contains all requirements and relevant legislation that must be fulfilled by the partners conducting research activities with human participants during the lifetime of the NESTOR project.

- **Ethics Guidance**

All the ethics deliverables are based on the input provided by the partners of the NESTOR Consortium. The input is based on questionnaires drafted and issued by the PEO as reviewed by the other EtAB members. The questionnaires are very analytical and contain the relative legislation so that the members of the NESTOR Consortium can be effectively informed and to provide precise responses in relation to the ethics issues, such as misuse, dual-use, personal data, etc.

Furthermore, Ethics Guidelines have been drafted by the PEO for the T6.2 training courses based on the content of deliverables D8.5 and D8.7 (summarised information in the form of bullet points). The ethics guidelines accompany the On-the-Job Training Guidelines drafted by STWS and aim to ensure that both trainers and trainees will strictly follow the health and safety procedures and the misuse mitigation strategy during the training. Copies of the guidelines have been distributed to the participants prior to the start of the training courses. Ethics Guidelines will be also distributed to the trial participants prior to the start of the trials.

Finally, the information included in the ethics deliverables are communicated and they are made available to the NESTOR Consortium through dedicated sessions during the project meetings in order to ensure that the partners are aware of any ethical/legal risks and of the recommended or necessary actions in accordance with applicable EU and national laws and ethics standards. Any ethical issues that arise during the NESTOR project are discussed among the members of the NESTOR Consortium and guidance is provided on a constant basis either when considered necessary by the EtAB or whenever asked by a partner.

5 RECOMMENDATIONS BY THE ETHICS ADVISORY BOARD

The EtAB is determined to continue aligning all activities including research and developments within the NESTOR project with ethical principles of the highest standard for research integrity as well as to ensure compliance with all applicable international, EU and national laws.

The members of NESTOR Consortium have been sufficiently informed about the ethical and legal issues that have arisen in the framework of the NESTOR project and they have followed the guidance from the EtAB. Concrete examples can be found in the analysis of the above-mentioned deliverables of the WP8 'Ethics Requirements' in Section 3 as well as in the description of the general guidance provided to the NESTOR Consortium in Section 4.

From the perspective of the EtAB, no specific recommendations for improvement seem necessary at this stage of the NESTOR project. As a final recommendation could be mentioned that the partners should continue to align with the advice and guidance of the EtAB with respect to national and EU legal framework and to ensure compliance with all applicable international, EU and national law during the upcoming three trials foreseen to take place within the NESTOR project.

6 CONCLUSION

The purpose of this Deliverable D8.8 is to provide a report by the Ethics Advisory Board (EtAB) about how the NESTOR Consortium has dealt with any ethics issues in order to ensure compliance with ethical standards, the H2020 guidelines and with applicable legislation.

In view of that, in Section 2 the composition of the Ethics Advisory Board has been presented as well as its role and function.

In Section 3 the compliance with Ethics Requirements within the framework of the NESTOR project has been described in detail.

In Section 4 the work progress has been presented and the role of EtAB and its contribution have been outlined in a precise way.

Finally, in Section 5 the recommendations by the EtAB are included.

The EtAB is determined to continue devoting special attention and providing guidance to the Consortium in the form of written guidelines or orally during the project meetings and other project's events and activities.

All the information included in the present deliverable will be made available to the NESTOR Consortium through a dedicated session during the 3rd Project Meeting on October 24-26, 2022, in Larnaca, Cyprus.

7 REFERENCES

- Grant Agreement No 101021851 – Annex A Description of the action
- Grant Agreement Amendment AMD-101021851-3
- European Commission, Horizon 2020 Programme, Guidance How to complete your ethics self-assessment, v6.1 04/02/2019, available at https://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/ethics/h2020_hi_ethics-self-assess_en.pdf

Appendix A: Quality Review Report

NESTOR Consortium uses this Quality Review Report process internally in order to assure the required and desired quality assurance for all project's deliverables and consequently the consistency and high standard for documented project results.

The Quality Review Report is used individually by each deliverable's peer reviewers with allocated time for the review to be 7 calendar days. The author of the document has the final responsibility to reply on the comments and suggestions of the peer reviewers and decide what changes are needed to the document and what actions have to be further undertaken.

1.1 Reviewers

Project Coordinator	HP-
Management Team Member	KEMEA –
Internal Peer Reviewer(s) (who have also drafted this deliverable)	CENTRIC – (EtAB member), External ethics expert– (EtAB Member)

1.2 Overall Peer Review Result

The Deliverable is:

☒ Fully accepted

☐ Accepted with minor corrections, as suggested by the reviewers

☐ Rejected unless major corrections are applied, as suggested by the reviewers

1.3 Consolidated Comments of Quality Reviewers

General Comments	
Deliverable contents thoroughness	Reviewers' comments: Good Author's reply:
Innovation level	Reviewers' comment: Good Author's reply:
Correspondence to project and programme objectives	Reviewers' comment: Good Author's reply:
Specific Comments	
Relevance with the objectives of the deliverable	☒Yes ☐ No ☐ Partially ☐ Not applicable Reviewers' comment: Author's reply:
Completeness of the document according to its objectives	☒Yes ☐ No ☐ Partially ☐ Not applicable Reviewers' comment:

	Author's reply:
Methodological framework soundness	☒Yes ☐ No ☐ Partially ☐ Not applicable Reviewers' comment: Author's reply:
Quality of the results achieved	☒Yes ☐ No ☐ Partially ☐ Not applicable Reviewers' comment: Author's reply:
Structure of the deliverable with clear objectives, methodology, implementation, results and conclusions	☒ Yes ☐ No ☐ Partially ☐ Not applicable Reviewers' comment: Author's reply:
Clarity and quality of presentation, language and format	☒Yes ☐ No ☐ Partially ☐ Not applicable Reviewers' comment: Author's reply:

Detailed Comments (please add rows if needed)		
No.	**Reference**	**Remark(s)**
1		
2		
3		

Appendix B: Deliverable Ethics Review

Ethical and Legal Issues	Yes/No by Partner & EtAB comments (if needed)
General	
This deliverable includes the opinion/input of a DPO, Legal or Ethics Advisor.	**Yes** **EtAB comments: Due to its nature the deliverable is drafted by the PEO and the EtAB members.**
Human Participation in research activities (questionnaires, workshops, pilots or other research activities)	
This deliverable is based on research activities (questionnaires, workshops, pilots or other tasks) that involve human participants.	**No** **EtAB comments:**
This deliverable is based on research activities (either during pilots or during the execution of other tasks) that may involve children or adults unable to give informed consent or vulnerable individuals/groups.	**No** **EtAB comments:**
Informed Consent Forms for the participation of humans in research have been/will be signed.	**No** **EtAB comments:**
Measures for the protection of vulnerable individuals/groups have been/will be implemented.	**No** **EtAB comments:**
Incidental findings, i.e., findings that are outside the research's scope, may be detected as part of the research activities described in this deliverable (criminal activity or personal data of non-volunteers during trials).	**No** **EtAB comments:**
Data Protection	
This deliverable is based on research activities that involve processing of personal data.	**No** **EtAB comments:**
This deliverable is based on research activities that involve processing of special categories of personal data according to Article 9 GDPR. Special categories of personal data means personal 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).	**No** **EtAB comments:**
This deliverable is based on research activities that involve further processing of previously collected personal data or publicly available personal data.	**No** **EtAB comments:**
Informed Consent Forms for the personal data processing have been/will be signed and data subjects have been duly informed about their rights.	**No** **EtAB comments:**
The conditions for consent cannot be fulfilled. Another legal basis exists.	**No** **EtAB comments:**
This deliverable is based on research activities that involve transfer of personal data from/to non-EU/EEA countries (non-EU/EEA partner sor advisory board members from non-EU/EEA countries) or processing of personal data during the use of platforms regulated by non-EU/EEA law.	**No** **EtAB comments:**
This deliverable implements appropriate technical measures that constitute safeguards (encryption or anonymisation or pseudonymisation).	**No** **EtAB comments:**

This deliverable implements other security measures for the prevention of unauthorized access to, unauthorized transfer of, loss or erasure of personal data.	**No** **EtAB comments:**
This deliverable is based on research activities that involve profiling of data subjects. Profiling means any form of automated processing of personal data consisting of the use of personal data to evaluate certain personal aspects relating to a natural person, in particular toanalyse or predict aspects concerning that natural person's performance at work, economic situation, health, personal preferences, interests, reliability, behaviour, location or movements.	**No** **EtAB comments:**
Health and Safety procedures (for the staff and the participants in the pilots or other research activities)	
This deliverable refers to activities that may raise health and safety concerns (e.g., from the use of UAVs or from other risks during the pilots).	**No** **EtAB comments:**
This deliverable integrates the measures and mitigation actions presented in D8.5 EPQ-Requirement No.5.	**No** **EtAB comments:**
Dual use	
This deliverable refers to research activities that involve dual-use items in the sense of Regulation (EC) 428/2009, or other items for which an authorization is required.	**No** **EtAB comments:**
Potential misuse of the research findings	
This deliverable includes methodology, knowledge or references to tools and technologies that could be misused if they ended up to the wrong hands or could lead to discrimination and stigmatization of humans.	**No** **EtAB comments:**
This deliverable integrates the mitigation actions presented in D8.7 M-Requirement No.7.	**No** **EtAB comments:**