“NOVEL INTEGRATED SOLUTION OF OPERATING A FLEET OF DRONES WITH MULTIPLE SYNCHRONIZED MISSIONS FOR DISASTER RESPONSES”

ResponDrone

D1.10 “POPD – Requirement No. 10”

Project Deliverable Report

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1 Executive Summary

This deliverable analyses the ethics risks within the RESPONDRONE project. It also provides an opinion on whether a data protection impact assessment is needed within the RESPONDRONE project.

2 Personal data processing in RESPONDRONE

Personal data processing in RESPONDRONE will mainly consist of end user interviews and trials of the RESPONDRONE technologies involving human participants. Most of these participants will be first responders, acting in their professional capacity. Recruitment will be focused on staff members of the end user partner organizations part of the RESPONDRONE consortium.

Personal data that will be processed on the human participants are the following:

1. Name, professional affiliation, age range and contact information.
2. Personal and professional views and experiences as they relate to the RESPONDRONE activities.
3. Photographs, audio, and/or video recordings of their participation in RESPONDRONE research activities (e.g. documentation of discussions in workshops or activities in demonstrations).

No sensitive personal data is processed.

Participation is entirely voluntarily and based on the participants' consent. Participation may be refused or terminated at any time without consequences.

3 Ethics risk assessment

As noted in the previous section, only limited personal data will be processed on selected human participants in the RESPONDRONE end user interview and trials. Despite the auxiliary nature of those personal data processing operations, they may give rise to some ethical concerns. In the table below we summarize the ethical risks and identify the necessary mitigation measures.

Risk	Probability	Impact	Mitigation
Unethical involvement of natural persons in the research activities	Low	High	Human participants are carefully selected from end user partner organizations. Procedures are in place to inform participants on the nature and extent of their participation.

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Data collection in excess of the data minimization principle	Low	Medium	Participants go through predefined interviews and trials. Information is provided on the extent of the data collection.
Adversarial actions against human participants	Low	Medium	All participation is out of free will and can be declined or terminated at any time. Results will be aggregated where possible to limit the risk of individual identification.
Unauthorized data sharing	Low	Medium	Data access is provided on a need-to-know basis only.
Disproportionate processing of personal data	Medium	Medium	All researchers will be informed on the extent to which the data can be used, to avoid any use disproportionate to the purposes of the processing.
Data transfers outside EU	High	Low	Data can be transferred to consortium partners outside of the EU. Such transfers are subject to strict agreements in line with the GDPR.
Lack of monitoring and ethics oversight	Low	Low	Timelex acts as ethics advisor, more people from the ethics field can be asked to join the Ethics Committee.
Misuse of RESPONDRONE results	Low	Medium	The Ethics Committee will oversee the use of all project results.
RESPONDRONE results violating human rights	Low	Low	All technologies developed within RESPONDRONE will be designed to meet human rights standards. EU export controls will furthermore apply.

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Export of dual-use items[1]	High	Low	The export outside of the EU of any dual-use items developed throughout RESPONDRONE will comply with the EU export control regime (as laid down in Council Regulation 428/2009), so as to avoid any malicious use of RESPONDRONE research results.

4 Data Protection Impact Assessment

4.1 General remarks

The European data protection framework is currently regulated by the General Data Protection Regulation (GDPR).[2] Article 35 of the GDPR concerns the data protection impact assessment (DPIA). In general, a DPIA is needed when "*a type of processing in particular using new technologies, and taking into account the nature, scope, context and purposes of the processing, is likely to result in a high risk to the rights and freedoms of natural persons*". When a set of similar processing operations presents similar high risks, a single DPIA can suffice. The data protection officer advises the controller in this operation.

A DPIA is particularly needed when the processing of personal data involves:

(a) a systematic and extensive evaluation of personal aspects relating to natural persons which is based on automated processing, including profiling, and on which decisions are based that produce legal effects concerning the natural person or similarly significantly affect the natural person;

(b) processing on a large scale of sensitive personal data or of personal data relating to criminal convictions and offences; or

(c) a systematic monitoring of a publicly accessible area on a large scale.

Supervisory authorities can define lists of processing operations that require a DPIA, or which do not require a DPIA.

A DPIA must contain:

[1] Dual-use items are goods, software and technologies that have legitimate civilian applications, but that can also be used for the development of weapons of mass-destruction, terrorist acts and human rights violations.

[2] Regulation (EU) 2016/679 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), *OJ* L 119 of 4 May 2016.

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1. a systematic description of the envisaged processing operations and the purposes of the processing;
2. an assessment of the necessity and proportionality of the processing operations in relation to the purposes;
3. an assessment of the risks to the rights and freedoms of data subjects; and
4. the measures envisaged to address the risks, including safeguards, security measures and mechanisms to ensure the protection of personal data and to demonstrate compliance, taking into account the rights and legitimate interests of data subjects and other persons concerned.

When the processing is required by law and if a general impact assessment was already conducted in adopting that legal basis, a DPIA is not necessary.

If the processing will result in a high risk, the controller should contact the supervisory authority. If the authority finds that the processing would infringe upon GDPR, or that the risks are insufficiently mitigated, it may provide a negative advice to the processing. Member States may allow authorities to require controllers to obtain prior authorization.

4.2 Article 29 Working Party guidance

The Article 29 Working Party has adopted guidelines on when a processing operation is likely to result in a high risk to the data subject.[3]

1. Evaluation or scoring

Evaluation or scoring, including profiling and predicting, especially from "aspects concerning the data subject's performance at work, economic situation, health, personal preferences or interests, reliability or behavior, location or movements" (recitals 71 and 91). Examples of this could include a financial institution that screens its customers against a credit reference database or against an anti-money laundering and counter-terrorist financing (AML/CTF) or fraud database, or a biotechnology company offering genetic tests directly to consumers in order to assess and predict the disease/health risks, or a company building behavioural or marketing profiles based on usage or navigation on its website.

RESPONDRONE will not conduct such activities.

2. Automated-decision making with legal or similar significant effect

Processing that aims at taking decisions on data subjects producing "legal effects concerning the natural person" or which "similarly significantly affects the natural person" (Article 35(3)(a)). For example, the processing may lead to the exclusion or discrimination against individuals.

[3] Article 29 Working Party (2017) "Guidelines on Data Protection Impact Assessment (DPIA) and determining whether processing is "likely to result in a high risk" for the purposes of Regulation 2016/679", WP248.rev01.

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Processing with little or no effect on individuals does not match this specific criterion. Further explanations on these notions will be provided in the upcoming WP29 Guidelines on Profiling.

RESPONDRONE will not conduct such activities.

3. Systematic monitoring

Processing used to observe, monitor or control data subjects, including data collected through networks or "a systematic monitoring of a publicly accessible area" (Article 35(3)(c)). This type of monitoring is a criterion because the personal data may be collected in circumstances where data subjects may not be aware of who is collecting their data and how they will be used. Additionally, it may be impossible for individuals to avoid being subject to such processing in public (or publicly accessible) space(s).

RESPONDRONE will not conduct such activities. All participating data subjects participate on their own accord and having been informed of the processing.

4. Sensitive data or data of a highly personal nature

This includes special categories of personal data as defined in Article 9 (for example information about individuals' political opinions), as well as personal data relating to criminal convictions or offences as defined in Article 10. An example would be a general hospital keeping patients' medical records or a private investigator keeping offenders' details. Beyond these provisions of the GDPR, some categories of data can be considered as increasing the possible risk to the rights and freedoms of individuals. These personal data are considered as sensitive (as this term is commonly understood) because they are linked to household and private activities (such as electronic communications whose confidentiality should be protected), or because they impact the exercise of a fundamental right (such as location data whose collection questions the freedom of movement) or because their violation clearly involves serious impacts in the data subject's daily life (such as financial data that might be used for payment fraud). In this regard, whether the data has already been made publicly available by the data subject or by third parties may be relevant. The fact that personal data is publicly available may be considered as a factor in the assessment if the data was expected to be further used for certain purposes. This criterion may also include data such as personal documents, emails, diaries, notes from e-readers equipped with note-taking features, and very personal information contained in life-logging applications.

RESPONDRONE will not process sensitive personal data.

5. Data processed on a large scale

The GDPR does not define what constitutes large-scale, though recital 91 provides some guidance. In any event, the WP29 recommends that the following factors, in particular, be considered when determining whether the processing is carried out on a large scale: a. the number of data subjects concerned, either as a specific number or as a proportion of the relevant population; b. the volume

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of data and/or the range of different data items being processed; c. the duration, or permanence, of the data processing activity; d. the geographical extent of the processing activity.

RESPONDRONE adheres to the data minimization principle, only the personal data necessary for the purposes of the processing will be collected. This will include a limited set of participants, a limited set of personal data, in limited geographic areas.

6. Matching or combining datasets

For example originating from two or more data processing operations performed for different purposes and/or by different data controllers in a way that would exceed the reasonable expectations of the data subject.

RESPONDRONE will not conduct such activities.

7. Data concerning vulnerable data subjects (recital 75)

The processing of this type of data is a criterion because of the increased power imbalance between the data subjects and the data controller, meaning the individuals may be unable to easily consent to, or oppose, the processing of their data, or exercise their rights. Vulnerable data subjects may include children (they can be considered as not able to knowingly and thoughtfully oppose or consent to the processing of their data), employees , more vulnerable segments of the population requiring special protection (mentally ill persons, asylum seekers, or the elderly, patients, etc.), and in any case where an imbalance in the relationship between the position of the data subject and the controller can be identified.

No vulnerable data subjects will be involved. While the employers of the human participants are partners in the RESPONDRONE consortium, these do not define the processing activities.

8. Innovative use or applying new technological or organisational solutions

Like combining use of finger print and face recognition for improved physical access control, etc. The GDPR makes it clear (Article 35(1) and recitals 89 and 91) that the use of a new technology, defined in "accordance with the achieved state of technological knowledge" (recital 91), can trigger the need to carry out a DPIA. This is because the use of such technology can involve novel forms of data collection and usage, possibly with a high risk to individuals' rights and freedoms. Indeed, the personal and social consequences of the deployment of a new technology may be unknown. A DPIA will help the data controller to understand and to treat such risks. For example, certain "Internet of Things" applications could have a significant impact on individuals' daily lives and privacy; and therefore require a DPIA.

While the RESPONDRONE project of course foresees in the development of new technologies, such development will be in line with data protection principles. It is therefore unlikely that a significant impact on individuals' lives and privacy will arise.

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9. When the processing in itself "prevents data subjects from exercising a right or using a service or a contract" (Article 22 and recital 91).

This includes processing operations that aims at allowing, modifying or refusing data subjects' access to a service or entry into a contract. An example of this is where a bank screens its customers against a credit reference database in order to decide whether to offer them a loan.

All human participants can freely exercise their data subjects' rights.

4.3 Further criteria

As noted, national data protection authorities may adopt further criteria for when a DPIA is needed. These criteria can be summarized as follows.

1. Sensitive personal data

In particular, the additional criteria target the processing of sensitive personal data – including health data, genetic data and biometrics. This may apply even when the processing is not on a large scale.

No sensitive personal data will be processed within RESPONDRONE.

2. Monitoring of public spaces

This can be systematic monitoring, large scale monitoring, camera surveillance, etc. It may also include the processing of certain location data or covert monitoring.

No such activities are envisioned within RESPONDRONE.

3. Financial and/or fraud data

While not considered as sensitive personal data, financial data can reveal a lot about a particular person. Large scale processing of this data may therefore need to be subjected to a DPIA

No such data will be processed within RESPONDRONE.

4. Evaluation, scoring, profiling, automated decision-making

Data protection authorities have further refined the criteria regarding evaluation, scoring, profiling and automated decision-making.

No such activities will be conducted within RESPONDRONE.

5. Others

Data protection authorities have also refined other criteria, for instance with regard to merging datasets, processing employee data, large scale processing and use of novel technologies.

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All personal data processing within RESPONDRONE will be subjected to strict requirements and performed in controlled settings. Therefore, these activities do not fall within the ambit of the criteria as stipulated by the data protection authorities.

4.4 Findings

Having assessed the criteria provided by the Article 29 Working Party and additional criteria provided by national data protection authorities, it can be concluded that – at the present state of affairs – no DPIA is needed for the RESPONDRONE project.

5 Conclusion

This deliverable has assessed the ethical risks that may arise within the RESPONDRONE framework and the mitigating measures that have been foreseen. The Ethics Committee will closely follow any developments in this area, as well as the implementation of the mitigating measures.

Furthermore, this deliverable has assessed whether there is a need to conduct a DPIA. While at the present moment there does not appear to be a need to conduct a DPIA, this matter will have to be re-evaluated throughout the project.

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