

# ASSISTANCE

**Adapted situation awareneSS tools and tallored training curricula for increaSing capabiliTie and enhANcing the proteCtion of first respondErs**



European Commission

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## Deliverable D1.5

### Risks & Opportunities Register 3

31/10/2021

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<sup>1</sup> PU: Public; PP: Restricted to other programme participants (including the EC services); RE: Restricted to a group specified by the Consortium (including the EC services); CO: Confidential, only for members of the Consortium (including the EC services).

### **ASSISTANCE**

Nowadays different first responder (FR) organizations cooperate together to face large and complex disasters that in some cases can be amplified due to new threats such as climate change in case of natural disasters (e.g., larger and more frequent floods and wildfires, etc) or the increase of radicalization in case of man-made disasters (e.g., arsonists that burn European forests, terrorist attacks coordinated across multiple European cities).

The impact of large disasters like these could have disastrous consequences for the European Member States and affect social well-being on a global level. Each type of FR organization (e.g., medical emergency services, fire and rescue services, law enforcement teams, civil protection professionals, etc.) that mitigate these kinds of events are exposed to unexpected dangers and new threats that can severely affect their personal safety.

ASSISTANCE proposes a holistic solution that will adapt a well-tested situation awareness (SA) application as the core of a wider SA platform. The new ASSISTANCE platform can offer different configuration modes for providing the tailored information needed by each FR organization while they work together to mitigate the disaster (e.g., real-time video and resource location for firefighters, evacuation route status for emergency health services and so on).

With this solution ASSISTANCE will enhance the SA of the responding organisations during their mitigation activities through the integration of new paradigms, tools and technologies (e.g., drones/robots equipped with a range of sensors, robust communications capabilities, etc.) with the main objective of increasing both their protection and their efficiency.

ASSISTANCE will also improve the skills and capabilities of the FRs through the establishment of a European advanced training network that will provide tailored training based on new learning approaches (e.g., virtual, mixed and/or augmented reality) adapted to each type of FR organizational need and the possibility of sharing virtual training environments, exchanging experiences and actuation procedures.

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### Executive Summary

There are two main components of the risks and opportunities (R&Os) management strategy for the ASSISTANCE project: the Risks and Opportunities Management Policy (ROMP), which describes how risks and opportunities (R&Os) are registered and handled by the ASSISTANCE project management; and the R&Os register, a document in which the identified R&Os are recorded.

The ROMP is described in detail in D1.3, submitted in M6, and there has been no need to change it since that time. Therefore, the focus of this document is on analysing the ongoing R&Os listed in the R&O register. Both the ROMP and the register are posted on the ASSISTANCE file repository so that all project participants can have access to them at any time.

The register is a spreadsheet into which the R&Os are recorded, analysed and tracked. There have been no new risks and 2 new opportunities since the last reporting period ended at M18.

This is the last of three R&O deliverables. For the sake of completeness, it includes an analysis of the status of all the R&Os identified throughout the project duration (M0 – M30).

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### Change control datasheet

Version	Changes	Chapters	Pages	Date
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### Acronyms

ASSISTANCE	Adapted situation awareneSS tools and tallored training curricula for increaSing capabiliTie and enhANcing the proteCtion of first respondErs
AB	Advisory Board
D#.#	Deliverable number #.# (D1.5 deliverable 5 of work package 1)
DoA	Description of Action of the project
EC	European Commission
EU	European Union
EUAB	End User Advisory Board
GA	Grant Agreement
H2020	Horizon 2020 Programme for Research and Innovation
IPR	Intellectual Property Rights
M#	Month of the project (M1=May 2019)
PC	Project Coordinator
PO	Project Officer
PIC	Project Implementation Committee
PSB	Project Security Board
PSC	Project Steering Committee
R&O	Risks and Opportunities
ROMP	Risks and Opportunities Management Policy
SA	Situational Awareness
TL	Task Leader
WP	Work Package
WPL	Work Package Leader

## 1. Introduction

There are two main components of the risks and opportunities (R&Os) management strategy for the ASSISTANCE project: the Risks and Opportunities Management Policy (ROMP), which was described in detail in D1.3 and submitted in M6, and the Risk and Opportunity Register. Both documents are posted on the ASSISTANCE file repository so that all project participants can have access to them at any time.

The ROMP describes how risks and opportunities (R&Os) are registered and handled by the ASSISTANCE project management. It provides guidance for all ASSISTANCE participants about how to bring a risk or opportunity to the attention of the appropriate people. It also enables decision-making that will reduce exposure to harmful events (risks) and increase exposure to beneficial events (opportunities). The ROMP provides the framework for a systematic and transparent approach to planning, assessing, and treating R&Os that have the potential to impact the ASSISTANCE project in a negative or positive way.

The ROMP is a living document that can be revised as needed during the project. There have been no revisions to the ROMP since D1.3 was submitted so there is no need to reproduce it again in this document.

The register is a spreadsheet into which the R&Os are recorded, analysed and tracked. There have been no new risks and two new opportunities since D1.4 was submitted. The focus of this document is to examine the status of all the R&Os listed in the R&O register.

## 2. Status of ongoing R&Os

There are currently 16 risks and 11 opportunities, including 3 new opportunities since the last report in M18, listed in the R&O register. Most of the risks have remained at the same acceptable level since they were identified. Three of the risks (R12, R13, and R15), associated with bringing and using drones and robots in Turkey, have been resolved and are therefore not included in the following discussion. There are two risks with a moderate rating that require continuous attention: R8 is the potential for a misalignment between the end user partners and the development of the technology, for which the action plan calls for increased efforts to connect the end user partners with the technology development partners; and R16 is the military situation in Turkey, which is outside the control of the project management but contingency plans for a different pilot location have been explored. The global COVID-19 pandemic (R9) is a severe risk to the project's ability to conduct the demonstration pilots in 2022. This risk

has been very difficult to resolve due to fluctuations in the COVID-19 situation. It requires increasing attention as the time for the pilots draws nearer.

Five of the 11 opportunities have either been resolved or were cancelled or postponed due to COVID-19 impacts on conferences and workshops. A more detailed discussion of the R&Os is presented in the following subsections.

## 2.1. Risk analysis

The 13 current risks are listed in Table 1. Note that R12, R13, and R15 have been resolved. R12 and R13 were resolved by AAHD, which purchased a drone and will use a local drone pilot at the demonstration. R15 was resolved by the decision to not use robots at the Turkish demonstration pilot.

All risks have been assigned ratings, owners and action plans. The former R9 risk was considered to be a duplicate of the R4 risk so it was deleted and a new risk, global pandemic effects, was inserted into the vacant position in the register.

<b>Risk Name</b>	<b>Category</b>	<b>Description</b>	<b>Statement</b>
R1	Management	Partner performance issues	If partners do not perform their work on time, then delays in dependent work and deliverables/milestones could occur.
R2	Management	Planning issues	If planning during the project is not adequate or timely, then resources may not be used efficiently, and deliverables/ milestones could be delayed.
R3	Management	Collaboration issues (conflict resolution)	If the consortium cannot work well together, then the quality of the project outcomes is likely to suffer.
R4	Innovation	Obsolete technology	If the state-of-the-art in FR technology evolves beyond the project technology, then the market for and scientific benefit of project results would not have as much impact as expected.
R5	Innovation	pilot/technology/FR needs mismatch	If the technological approach chosen for a pilot does not fulfil the needs of the FRs involved, then either the technological approach or the pilot must be modified.
R6	Innovation	Technology development delays	If development delays occur, then evaluation work later in the project could fall off schedule as well.
R7	Innovation	Insufficient resources for technology development	If resources are not sufficient to support technical development activities, then the technology may be unavailable or delayed.
R8	End User	Final results are not as expected by end users	If lack of communication between end users and technical partners happens, then the final project results may not be useful for the end users.
R9	Other	Global pandemic	If the pandemic continues, then some of the project activities could be delayed.

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R10	Business	Insufficient exploitation of results	Taking into account that the expected project results will be a fully operating prototype and not a commercial product, if the results of the project are not fully exploited by the partners, then the benefits of the project will not be fully realized.
R11	End User	Lack of female end users	If insufficient data about female FRs is available for the gender dimension analysis, then the technical and usability needs of female FRs cannot be fully understood and implemented in the ASSISTANCE technology and training systems.
R14	Security	Unauthorized access to repository	If an unauthorized person, e.g., a person that leaves the project and still has access to the repository through the partner's login, then that person can still get data/information that might be sensitive about the project.
R16	Other	Turkey increases its military conflict	If Turkey increase its military conflict on the Syrian border (or anywhere that could affect safety during the pilot), then travel to Turkey could be too dangerous.

Table 1: Summary of risk register entries M0 – M30

Viewed from a probability/consequence perspective in Figure 1, most of the risks have been rated as acceptable (in the green zone), while only 3 of the risks are considered threatening to the project (yellow or red zone), although all risks are monitored periodically regardless of their rating. Recall from the ROMP (D1.3) that the scales for consequences and probabilities range from 1 to 5, where 1 is low and 5 is high. Each of the risks will be described in the following subsections, including a risk rating history if a risk has had a change of rating during its lifecycle.

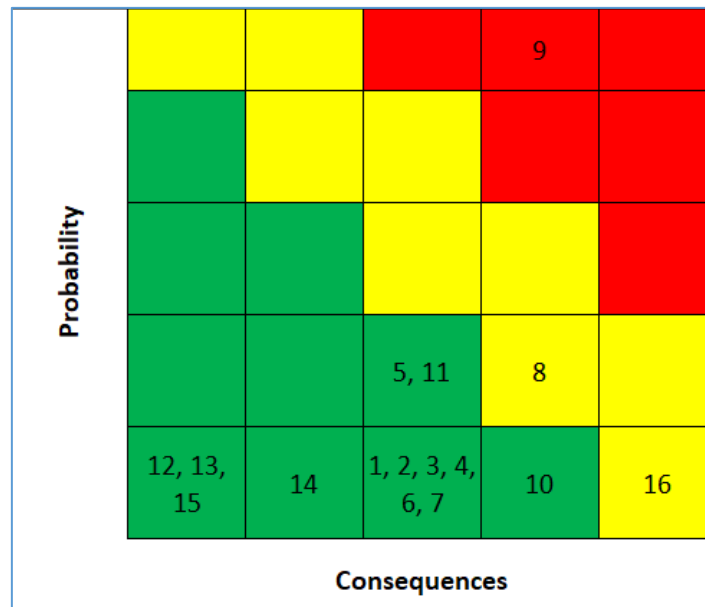


Figure 1: Probability/consequences depiction of the ASSISTANCE risks

### 2.1.1. Risk R1 Partner performance issues

**Risk statement:**

If partners do not perform their work on time, then delays in dependent work and deliverables/milestones could occur.

**Context:**

Partners can underperform or leave the project. Key personnel may be temporarily unavailable. This can happen to any partner at any time during the project.

**Impact on project:**

Delayed results can interrupt the flow of work elsewhere in the project, contribute to animosity between partners, and can cause delays in deliverables.

**Current rating:** probability 1, consequence 3 (overall 3). No change during R1 lifecycle.

**WPs affected:** All

**Overall status:** Monitoring

**Owner:** Federico Carvajal

**Monitoring dates:** 26/09/2019, 14/2/2020, 7/7/2020

**Action plan:**

- Have quarterly reports and plenary meetings to confirm that all partners are performing their tasks within the budget and schedule.
- If deviations are needed, the coordinator will inform the PO immediately for advice.

### 2.1.2. Risk R2 Planning issues

**Risk statement:**

If planning during the project is not adequate or timely, then resources may not be used efficiently, and deliverables/milestones could be delayed.

**Context:**

Poor planning can lead to wasting resources and delaying work, which in turn reduces the motivation of the partners. NOTE: See also R6.

**Impact on project:**

Partners may lose confidence in project management. They may also try to solve planning problems themselves, which could lead to chaos.

**Current rating:** probability 1, consequence 3 (overall 3). No change during R2 lifecycle.

**WPs affected:** All

**Overall status:** Monitoring

**Owner:** Federico Carvajal

**Monitoring dates:** 26/09/2019, 14/2/2020, 7/7/2020

**Action plan:**

- Have quarterly reports and plenary meetings to confirm that all tasks are performed within the schedule.
- Convene a PIC meeting/telco for detecting the origin of the delay and to take corrective actions.
- Apply the corrective actions agreed by the PIC.
- Monitor the issue periodically to ensure that the solution is working.

### 2.1.3. Risk R3 Collaboration issues (conflict resolution)

**Risk statement:**

If the consortium cannot work well together, then the quality of the project outcomes is likely to suffer.

**Context:**

Partners are expected to communicate their needs and ideas in a professional manner, and to treat each other with respect. When this does not happen, the project can become toxic for everyone.

**Impact on project:**

The quality and timeliness of the deliverables can be affected. Important decisions may be delayed or blocked. WP and/or task interactions could be insufficient or misunderstood. Resources could be wasted.

**Current rating:** probability 1, consequence 3 (overall 3). No change during R3 lifecycle.

**WPs affected:** All

**Overall status:** Monitoring

**Owner:** Federico Carvajal

**Monitoring dates:** 26/09/2019, 14/2/2020, 7/7/2020

**Action plan:**

- Project coordinator discusses the issue with partners involved to find a quick/easy solution



- Project coordinator will apply appropriate decision-making and conflict resolution procedures.
- If necessary, involve the management of the affected organisations, together with the ASSISTANCE project coordinator.

### 2.1.4. Risk R4 Obsolete technology

**Risk statement:**

If the state-of-the-art in FR technology evolves beyond the project technology, then the market for and scientific benefit of project results would not have as much impact as expected.

**Context:**

SA and FR training technology is evolving at a fast pace. The project could fall behind, and the results will not have as much value as anticipated. End users are very careful with their technological choices.

**Impact on project:**

The results of the ASSISTANCE project could be viewed as obsolete by end users, in which case they will not implement them.

**Current rating:** probability 1, consequence 3 (overall **3**). No change during R4 lifecycle.

**WPs affected:** WP2 – WP7

**Overall status:** Monitoring

**Owner:** Eva Muñoz Navarro (ETRA)

**Monitoring dates:** 26/09/2019, 14/2/2020, 7/7/2020

**Action plan:**

- The consortium is continuously analysing the market, see T9.1, to detect technology obsolescence.
- If some technology is found to be phasing out, then the replacement technology will be adopted by the project if possible.
- The project Innovation Manager will conduct a market analysis to ensure that market trends are considered in a timely manner.
- An exploitation plan that includes business analysis (in WP9) will monitor user needs and market trends.

### 2.1.5. Risk R5 Pilot/technology/FR needs mismatch

**Risk statement:**

If the technological approach chosen for a pilot does not fulfil the needs of the FRs involved, then either the technological approach or the pilot must be modified.

**Context:**

First, the pilots should be designed to demonstrate how the project solutions satisfy the needs of the end users. Second, the technological approach for the pilots must satisfy the needs of the FRs. NOTE: See also R8.

**Impact on project:**

The pilots may not demonstrate the full potential of the technological approaches to meet the needs of the end users. The end users may not, therefore, implement the ASSISTANCE solutions.

**Current rating:** probability 2, consequence 3 (overall 6). No change during R5 lifecycle.

**WPs affected:** WP2 – WP5, WP7

**Overall status:** Monitoring

**Owner:** Federico Carvajal

**Monitoring dates:** 26/09/2019, 14/2/2020, 7/7/2020

**Action plan:**

- Special care must be placed on the evaluation of the requirements and existing solutions for each pilot. Possible assessment devices include questionnaires and rating the technology using a system usability index.
- A proof of concept based on a technology can be created if its capacity is not fully understood.

### 2.1.6. Risk R6 Technology development delays

**Risk statement:**

If development delays occur, then evaluation work later in the project could fall off schedule as well.

**Context:**

The technical development work must be completed before evaluation work can begin. Delays in the technical work could propagate delays in evaluation, which does not have much scheduling flexibility. NOTE: See also R2.

**Impact on project:**

Worse case: there is no time left in the project for evaluation. The project end date may need to be postponed. Partners may need to work beyond their budgeted time.

**Current rating:** probability 1, consequence 3 (overall **3**). No change during R6 lifecycle.

**WPs affected:** WP3 - WP5, WP7

**Overall status:** Monitoring

**Owner:** Federico Carvajal

**Monitoring dates:** 26/09/2019, 14/2/2020, 7/7/2020

**Action plan:**

- Have quarterly reports and plenary meetings to confirm that all tasks are performed within the schedule.
- Convene a PIC meeting/telco for detecting the origin of the delay and to take corrective actions.
- Apply the corrective actions agreed by the PIC.
- Monitor the issue periodically to ensure that the solution is working.

### 2.1.7. Risk R7 Insufficient resources for technology development

**Risk statement:**

If resources are not sufficient to support technical development activities, then the technology may be unavailable or delayed.

**Context:**

The affected partners would not have estimated their budgets/resources correctly during the proposal preparation phase.

**Impact on project:**

The technological results of the project could be unsatisfactory.

**Current rating:** probability 1, consequence 3 (overall **3**). No change during R7 lifecycle.

**WPs affected:** WP3 – WP5

**Overall status:** Monitoring

**Owner:** Federico Carvajal

**Monitoring dates:** 26/09/2019, 14/2/2020, 7/7/2020

### Action plan:

- The consortium will prioritize the technological needs of the project, focusing firstly on the components necessary for the implementation of the pilots.
- If the problem is severe, the coordinator will inform the PO to determine if resources or tasks must be restructured/reassigned.

### 2.1.8. Risk R8 Final results are not as expected by end users

#### Risk statement:

If lack of communication between end users and technical partners happens, then the final project results may not be useful for the end users.

#### Context:

The testing stakeholders are primarily the end users of the technology and training platforms. The project results must fulfil their needs. Some end users have expressed their concern for the lack of fluent and direct communications between end users and technical partners. NOTE: See also R5.

#### Impact on project:

The testing stakeholders (end users) will not use the ASSISTANCE solutions if they do not believe that sufficient value has been added to their operations.

**Current rating:** probability 2, consequence 4 (overall 8). No change during R8 lifecycle.

**WPs affected:** WP6, WP7

**Overall status:** Active

**Owner:** Federico Carvajal

**Monitoring dates:** 26/09/2019, 6/11/2019, 14/2/2020, 7/7/2020

#### Action plan:

- ASSISTANCE strategy implements a permanent feedback loop in order to prevent misalignment between user needs and platform specifications.
- Arrange more opportunities (telcos, meetings, workshops) for productive interactions to promote a constant dialog between research teams and end users.
- Reach out to the End Users Group for input and feedback as technology develops.

### 2.1.9. Risk R9 Global pandemic

#### Risk statement:

If the pandemic continues, then some of the project activities could be delayed.

**Context:**

Some of the partners could be isolated or even become infected. It is possible that some partners will not be able to perform their project duties on time due to restrictions imposed by responses to the pandemic.

**Impact on project:**

The impact has shifted from the technical developments in the project to the demonstration pilots. Travel restrictions due to the pandemic are changing rapidly and it is very uncertain whether all key partners will be able to attend. Also, there is the ongoing risk of personnel being infected by the new COVID-19 variants, such as Omikron. The end user partners may have difficulty scheduling time for the pilots when their COVID-related duties are increasing.

**Current rating:** probability 5, consequence 5 (overall **20**). No change during R9 lifecycle.

**WPs affected:** All

**Overall status:** Active

**Owner:** Federico Carvajal

**Monitoring dates:** 18/3/2020, 7/7/2020, 16/10/2020, 25/1/2021, 17/3/2021, 11/6/2021, 27/9/2021

**Action plan:**

- Maintain communication channels within the whole consortium
- Increase the number of bilateral contacts for early detection of potential problems regarding the partner's ability to perform their activities.
- Contingency plans for conducting the pilots will be made if the pandemic situation prevents the pilots from being conducted according to the original plan.

### 2.1.10. Risk R10 Insufficient exploitation of results

**Risk statement:**

Taking into account that the expected project results will be a fully operating prototype and not a commercial product, if the results of the project are not fully exploited by the partners, then the benefits of the project will not be fully realized.

**Context:**

Maximizing the benefits of participating in the project is in the best interest of the consortium, the project as a whole, and the EU.

**Impact on project:**

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The partners/consortium may not experience the full benefits of participating in the project.

**Current rating:** probability 1, consequence 4 (overall 4). No change during R10 lifecycle.

**WPs affected:** WP1, WP9

**Overall status:** Monitoring

**Owner:** Federico Carvajal

**Monitoring dates:** 26/09/2019, 14/2/2020, 7/7/2020

**Action plan:**

- Clear individual exploitation plans will be defined in order to identify an exhaustive list of future exploitation opportunities.
- A clear coordinated business plan will be triggered with the support of two procurements (PCP and PPI) prepared in T9.4.

### 2.1.11. Risk R11 Lack of female end users

**Risk statement:**

If insufficient data about female FRs is available for the gender dimension analysis then the technical and usability needs of female FRs cannot be fully understood and implemented in the ASSISTANCE technology and training systems.

**Context:**

There tends to be much fewer female FRs than male FRs, especially firefighters. It is important to include the technical and user needs of women FRs but it could be difficult to collect a statistically valid number of women end users to do the gender dimension analysis.

**Impact on project:**

The validity of the gender dimension analysis will be questioned.

**Current rating:** probability 2, consequence 3 (overall 6). No change during R11 lifecycle.

**WPs affected:** WP2, WP6 – WP8

**Overall status:** Active

**Owner:** Federico Carvajal

**Monitoring dates:** 7/05/2019, 14/2/2020, 7/7/2020

**Action plan:**

- Ask project partners for contact information for female FRs.

- Ask UC whether they have received enough information about female participation in FR teams.

### 2.1.12. Risk R12 Unable to fly drones in Turkey

This risk has been resolved.

### 2.1.13. Risk R13 Drone arrival delay/stoppage due to Turkish customs procedures

This risk has been resolved.

### 2.1.14. Risk R14 Unauthorized access to repository

#### **Risk statement:**

If an unauthorized person, e.g., a person that leaves the project and still has access to the repository through the partner's login, then that person can still get data/information that might be sensitive about the project.

#### **Context:**

When partners have a single login to the repository it is hard to control who has access to it. Also, people that have left the organization or project can still access the repository. There should be a protocol for notifying someone, maybe the assigned DPO within each organization, to ensure data security.

#### **Impact on project:**

Sensitive data in the repository that should not spread beyond the consortium could be compromised.

**Current rating:** probability 1, consequence 2 (overall 2). No change during R14 lifecycle.

**WPs affected:** WP1

**Overall status:** Monitoring

**Owner:** Federico Carvajal

**Monitoring dates:** 31/10/2019, 14/2/2020, 7/7/2020

#### **Action plan:**

- Inform partners that they must control access to the repository so that no sensitive data is compromised.
- In case a person leaves a partner in a bad manner, the main contact for that organization shall immediately inform the coordinator to change the credentials for accessing the repository.
- If necessary, establish a regular change of passwords.

### 2.1.15. Risk R15 Robots arrival delay/stoppage due to Turkish customs procedures

This risk has been resolved.

### 2.1.16. Risk R16 Turkey increases its military conflict

**Risk statement:**

If Turkey increase its military conflict on the Syrian border (or anywhere that could affect safety during the pilot), then travel to Turkey could be too dangerous.

**Context:**

The current situation analysis describes a short military conflict on the Syrian border, but if the conflict goes larger, travel to Turkey could be much too dangerous. As of October 2020, the military conflict has reduced significantly.

**Impact on project:**

Turkish pilot could be suspended.

**Current rating:** probability 1, consequence 5 (overall 5). No change during R16 lifecycle.

**WPs affected:** WP7

**Overall status:** Monitoring

**Owner:** Zeynep Sofuoglu

**Monitoring dates:** 5/11/2019, 14/2/2020, 7/7/2020

**Action plan:**

- Continuously check the conflict status.
- Scout for a potential place for performing the first project pilot (e.g.,Sweden).

## 2.2. Opportunities analysis

The current opportunities are listed in Table 2. Five of the previous opportunities (O1, O2, O4, O5, and O8) were meetings, conferences, workshops, or exhibitions that are now in the past are not included in this discussion. Unfortunately, only the first Drone Tech conference (O1) and the new demonstration with robots and electric cars (O9) were possible to attend in person due to the COVID-19 situation.

The second Drone Tech conference (O2) was held online. Interschutz (O4) and the Civil Security Research event (O5) were cancelled. The DRS Community of Users (CoU) Workshop (O8) had a reduced number of sessions that were presented online.



<b>Opportunity Name</b>	<b>Category</b>	<b>Description</b>	<b>Statement</b>
O3	Innovation	Possible use of ATMON FL sensor for design purposes	If a new sensing technology can be used on the ASSISTANCE drones and compatible with the ASSISTANCE platform, then a feasibility study should be conducted to determine possible costs and benefits to the ASSISTANCE project.
O6	End User	NL platform for female firefighters	If ASSISTANCE can connect to the platform for female firefighters in The Netherlands, then the resulting information about the needs and opinions of female firefighters can be included in the Gender Dimension work in WP8.
O7	End User	Renewed interest in VR training due to pandemic	If more first responders are interested in VR training, then there could be a better market for the new training being developed in the ASSISTANCE project.
O9	End User	Demonstration with robots and electric cars	If robots can be used to help extinguish electric car battery fires, as verified in the demonstration, then it will show end users that robots can be used for their protection.
O10	Business	IPS-PCP participation	If ASSISTANCE partners are involved in PCPs associated with other projects during the ASSISTANCE project, then their experience can help the ASSISTANCE partners understand the benefits of participating in a PCP action.
O11	Innovation	Security Research Event (SRE2022)	If the ASSISTANCE partners exhibit at this face-to-face event in spring 2022, then the project will have an opportunity to disseminate and demonstrate some of the key exploitable results.

Table 2: Summary of opportunity register entries

Viewed from a probability/consequence perspective in Figure 2, most of the opportunities are considered quite advantageous to the project for different reasons. Each of the opportunities will be described in the following subsections.

Probability		1	2, 4, 8, 11	5, 10	
				6, 7	
				3	
Consequences					

Figure 2: Probability/consequences depiction of the ASSISTANCE opportunities

### 2.2.1. Drone Tech conference and end user meeting 2019

This opportunity has been resolved.

### 2.2.2. Drone Tech conference and end user meeting 2020

This opportunity has been resolved.

### 2.2.3. Possible use of ATMON FL sensor for design purposes

**Opportunity statement:**

If a new sensing technology can be used on the ASSISTANCE drones and compatible with the ASSISTANCE platform, then a feasibility study should be conducted to determine possible costs and benefits to the ASSISTANCE project.

**Context:**

A new sensor technology (ATMON FL) can measure many hazardous gaseous substances that are of interest to the project. This system is made for use on light weight drones.

**Impact on project:**

Depending on the costs and benefits of using this technology, it could fulfil an important need for the project.

**Current rating:** probability 2, consequence 4 (overall 8). No change during O3 lifecycle.

**WPs affected:** WP3 – WP5, WP7

**Overall status:** Active

**Owner:** Federico Carvajal

**Monitoring dates:** 2/3/2020, 7/7/2020

**Action plan:**

- Conduct a cost benefit analysis to determine whether the technology is good for the project.

2.2.4. Participation in Interschutz event

This opportunity has been resolved.

2.2.5. Participate in Civil Security Research event

This opportunity has been resolved.

2.2.6. NL platform for female firefighters

**Opportunity statement:**

If ASSISTANCE can connect to the platform for female firefighters in The Netherlands, then the resulting information about the needs and opinions of female firefighters can be included in the Gender Dimension work in WP8.

**Context:**

Eric (IFV) knows about a platform for female firefighters in The Netherlands that could be a great source of information for the Gender Dimension work being done in WP8. Eric will contact the chairwoman and ask her if she would like to discuss this with Arturo (UC). After a few internal meetings, the association chairwoman (Claudia Prins) has shown her interest of involvement in the project and even in the Dutch pilot. Zeynep (AAHD) is also aware of this and we will contact them soon.

**Impact on project:**

It is very difficult to get statistical (or other) information about female firefighters because there aren't many of them. Having a substantial source of information about their needs and concerns would be very helpful to WP8.

**Current rating:** probability 4, consequence 4 (overall 16). No change during O6 lifecycle.

**WPs affected:** WP8

**Overall status:** Active

**Owner:** Federico Carvajal

**Monitoring dates:** 7/7/2020, 9/24/20

**Action plan:**

- Eric will try to connect the chairwoman of the platform with Arturo.

- Arturo (UC) and Zeynep (AAHD) will contact the chairwoman of the platform to discuss further their involvement.

### 2.2.7. Renewed interest in VR training due to pandemic

**Opportunity statement:**

If more first responders are interested in VR training, then there could be a better market for the new training being developed in the ASSISTANCE project.

**Context:**

Since most organizations are trying to avoid close contact among their people, opportunities to do things such as training remotely or virtually are being considered more seriously now. Eric has noticed a difference at IFV.

**Impact on project:**

First responder organizations may be looking for new ways to train their people. This could increase the impact of the results of the training part of the ASSISTANCE project.

**Current rating:** probability 4, consequence 4 (overall 16). No change during O7 lifecycle.

**WPs affected:** WP6, WP9

**Overall status:** Monitoring

**Owner:** Federico Carvajal

**Monitoring dates:** 7/7/2020

### 2.2.8. Participation in DRS community of users workshop

This opportunity has been resolved.

### 2.2.9. Demonstration with robots and electric cars

**Opportunity statement:**

If robots can be used to help extinguish electric car battery fires, as verified in the demonstration, then it will show end users that robots can be used for their protection.

**Context:**

One of the goals of ASSISTANCE is to use robots and drones for situational awareness to help protect first responders. While using robots to extinguish fires is not exactly on this target, it is still beneficial to show end users that robots can be used in real situations. It is also a good opportunity to test the robots in real training grounds.

**Impact on project:**

## D1.5 Risks & Opportunities Register 3

There are two benefits: first, it is a dissemination opportunity. There will be Polish first responders participating in this event. Second, it is a testing opportunity for PIAP to use their robots in a realistic training situation.

**Current rating:** probability 4, consequence 2 (overall 8). No change during O9 lifecycle.

**WPs affected:** WP4, WP7

**Overall status:** Complete

**Owner:** Federico Carvajal

**Monitoring dates:** 17/12/2020

**Action plan:**

- PIAP will participate in the demonstration and use the opportunity to test their robots and disseminate the ASSISTANCE project

### 2.2.10. IPS-PCP participation

**Opportunity statement:**

If ASSISTANCE partners are involved in PCPs associated with other projects during the ASSISTANCE project, then their experience can help the ASSISTANCE partners understand the benefits of participating in a PCP action.

**Context:**

AAHD is currently participating in a PCP action for a medical project called Innovative Triage Management Systems Strengthening Resilience and Interoperability of Emergency Medical Services (IPS-PCP). This project has similarities with the emergency medical aspects of the ASSISTANCE project and can be used as an example of how the PCP process works. A PCP-PPI workshop with ETRA and the ASSISTANCE end users was held on 16 July.

**Impact on project:**

Through AAHD's first-hand experience, the PCP advantages and disadvantages (if any) can be communicated with ASSISTANCE partners that might potentially be interested in forming a PCP action following the conclusion of the ASSISTANCE project. This information could be used to improve the exploitation of the project results.

**Current rating:** probability 5, consequence 3 (overall 15). No change during O10 lifecycle.

**WPs affected:** WP9

**Overall status:** Active

**Owner:** Federico Carvajal

**Monitoring dates:** 24/9/2021

**Action plan:**

- Workshop with ETRA (as leader of T9.4) and the ASSISTANCE end users.

### 2.2.11. Security Research Event (SRE2022)

**Opportunity statement:**

If the ASSISTANCE partners exhibit at this face-to-face event in spring 2022, then the project will have an opportunity to disseminate and demonstrate some of the key exploitable results.

**Context:**

ASSISTANCE was selected to participate in this event by the EC.

**Impact on project:**

It is beneficial to the project to display, disseminate and demonstrate the key exploitable results in this type of forum. The timing currently works, as it is between pilots, so the interested partners should be able to participate.

**Current rating:** probability 3, consequence 4 (overall 12). No change during O11 lifecycle.

**WPs affected:** WP9

**Overall status:** Active

**Owner:** Federico Carvajal

**Monitoring dates:** 22/11/2021

**Action plan:**

- All interested partners shall prepare for and participate in the event..

## 3. Conclusions

- All R&Os must be reviewed on a regular basis to ensure that the risks are minimized and the opportunities are maximized.
- The 10 basic management risks that were identified during the proposal phase of the project have maintained their acceptable ratings.
- The three risks related to using drones and robots in the Turkish pilot have been resolved.
- There is a continuing moderate risk for which the action plan calls for increased efforts to connect the end user partners with the technology development partners to avoid a potential misalignment.

### D1.5 Risks & Opportunities Register 3

- Two risks have been identified with sources that are outside the control of project management. These are the military conflict in Turkey and the global pandemic.
  - Contingency plans are being explored for relocating the Turkish pilot if necessary, although the military conflict has reduced significantly during the past two years and is mainly active in a part of Turkey that is distant from the pilot location.
  - Social distancing procedures are in effect for project meetings. The project has been extended by three months for tasks dependent on the pilots. The COVID pandemic situation is currently getting worse again and there is high uncertainty regarding the pilots. A consortium meeting will take place in mid-December to discuss contingency plans.
- Of the seven opportunities to disseminate project results and gain feedback from end user and technical communities, three have been cancelled due to the global pandemic (O4, O5 and O8), three were attended either face-to-face or online (O1, O2 and O9), and one has not occurred yet (O11).
- A positive outcome of the global pandemic is that there is increased interest in virtual training for first responders.