

Novel Integrated Solution of Operating a Fleet of Drones with Multiple Synchronized Missions for Disaster Responses

# Project Deliverable Report

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Deliverable Title: Communication Plan

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## 2 Executive Summary

The communication plan sets out the strategy to maximise the impact of the ResponDrone Project, to increase its visibility, and to ensure that project results reach a wide audience of relevant stakeholders. Importantly, all partners are ambassadors of the project and are involved to different degrees in communication and dissemination efforts.

The communication plan addresses the following elements:

- Purpose ("why?")
- Messages ("what?")
- Key audiences ("who?")
- Methods ("how?")
- Time ("when?")

The abovementioned key elements of the Communication Plan are outlined and specific elements such as activities, events, target groups etc. are detailed in the tables provided. This list of activities will be updated continually throughout the project lifetime and results reported in the continuous reporting format of the EU Project Management site as required.

#### 3 Communication Plan

The five elements of the Communication Plan, namely: the purpose, messages, key audiences, methods for achieving the aims and the planned timeframe of activities are outlined below.

#### 3.1 Purpose ("why?")

The purpose of ResponDrone is to develop and apply a situational awareness system for emergency situations. The system aims to provide critical information and communication services in near/real time to first responders.

The three-year project aims to develop an integrated solution for first responders to easily enhance their situation assessment capacity and their own protection. This will, together with other means, include the integration of a fleet of drones that can be



operated by a single pilot, during multiple synchronized missions to enhance their effectiveness and safety during these events.

The ResponDrone system will simplify and accelerate situation assessment, information sharing, decision-making and operations management. Moreover, it will deliver high quality information to any involved control center through an intelligent, accessible web-based system that can be operated from a remote site. In addition, it will serve as an on-demand airborne communications network to allow people on the ground to communicate with the command center in case of cellular coverage collapse.

ResponDrone will disseminate the project results to key stakeholders including opinion leaders, regulators, the scientific community, manufacturers of security and defense-related equipment and technologies (including SMEs), integrators, media, emergency response authorities, policy makers and the general public.

The aim of the communication and dissemination activities of the ResponDrone Project are to ensure information about the project's objectives and results are effectively disseminated to relevant audiences.

# 3.2 Message ("what?")

In the early stages of the project, dissemination activities will focus on communicating the general messages - objectives of the project and the potential benefits of deploying the ResponDrone platform.

As project results become available, specific messages on the project's progress and achievements will be produced for each outreach activity and will be adapted to be accessible and understood by each of the relevant target audience listed below.

#### 3.3 Key audiences ("who?")

The ResponDrone project addresses a wide range of stakeholders and audiences, each requiring appropriate tailored information. The stakeholders include:

- Opinion leaders/regulators
- The scientific community
- Manufacturers of security and defense-related equipment and technologies and integrators
- Media
- Emergency response authorities
- Policy makers
- General public.



Table 1 below lists the target audiences which will be approached, the specific objectives of communicating with these groups and the envisaged approach to gaining their attention.

Target audience	Objective	Approach
First responders and industry	Increase awareness of the ResponDrone system's benefits  Create awareness of the project and promote the use of project results	Website, articles and leaflets, webinars and videos, e-newsletter, LinkedIn Stakeholders Forum, training workshops, open days, exchange of personnel, conferences and events.
General public	Increase awareness of the benefits of the ResponDrone project  Create dialogue with the public as a way of raising awareness  Promote the services, inform and engage the general public  Provide information about best practices and generate awareness of potential benefits that drone technology  Can bring to society	Website, popular media, articles, infographic, Twitter, Facebook, YouTube
Opinion leaders and regulators/policy makers	Create awareness of the project progress and results	Website, articles and leaflets, webinars and videos, infographic, social media, conferences and events, Stakeholders Forum



Scientific community	Create awareness of the project progress and results	E-newsletter, academic journal articles, conferences and events, Advisory Board, Twitter, LinkedIn
The media	Amplify outreach of project results to all other audiences	Website, press releases, articles, project events, Twitter, Facebook, YouTube

Table 1. Target audiences, specific objectives of communication with them and approach to reaching each group.

#### 3.4 Method ("how?")

Interteam will work closely with the project partners to ensure that the appropriate tools and channels (including relevant conferences and events) are selected and developed to meet the information needs of the target audiences and communication objectives of the project.

An attractive, user-friendly project website has been developed in order to increase visibility of the project's outcomes and results to all target audiences. Mutual links between the partners' websites drive traffic to the project website. The project website includes:

- Information about the project such as the mission statement, about the system being built etc.
- Latest news about the project progress and results
- Details about the project partners
- Electronic materials (e-newsletter, webinars, infographic, blog posts, articles)
- Social media links/buttons/live feeds

Social media will be used to share project outcomes and redirect users to the website. Twitter, Facebook, LinkedIn and YouTube accounts have been established for the project and content related to ResponDrone will be posted regularly to increase outreach.

Online media platforms will be monitored to provide information on the numbers, sources, types of content and individuals/organisations that promote or disseminate project messages, allowing for optimisation and targeting of communication to ensure maximum outreach of news or results.



Printed material will also be produced in the form of two project leaflets that will present, in clear and simple language, the main elements of the project (the first leaflet will be to create awareness) and its achievements (final leaflet) for distribution at conferences and events.

Dissemination of project results will be enhanced by publication of articles in scientific journals, professional magazines, and popular articles in magazines for relevant audiences.

The plan for the dissemination of knowledge includes the following main dissemination areas of activities:

- Participation and presentation at conferences and industry-related events
- Publication of scientific papers and technical guiding documents
- Expanding the critical mass of ResponDrone end-users

# Conferences, workshops and events:

# Presence in international conferences and workshops:

Project partners will participate in sector related events, conferences and workshops with the purpose of raising awareness about the project objectives and main results. As the members of the consortium come from different disciplines, they will disseminate project results to diverse forums. In the first year, project presentations will concentrate on the project's goals and vision. Presentations of new results will be concentrated during the last year of the project

Participation in these types of events will be mostly driven by the opportunity for close contacts with the potential users.

# Publication of scientific papers in Journals and Magazines:

Scientific excellence and technical skills available within the consortium or built through the ResponDrone Project will be used for the preparation of scientific content for the benefit of dissemination to the scientific community. Both scientific papers will be submitted to peer-reviewed journals and popular articles in focused trade magazines will achieve this goal.

It is expected that the number of publications will increase as the project progresses with the full results being published during the latter part of the project.

Examples of journals focused on ResponDrone related issues include: Journal of Guidance, Control, and Dynamics, International Journal of Micro Air Vehicles, SESAR Innovation Days, AIAA/IEEE Digital Avionics Systems Conference (DASC), Integrated



Communications Navigation and Surveillance (ICNS), Ad hoc Networks; Computer Networks; Computer Communications; IEEE Access; Journal of Network and Computer Applications; Imaging Science Journal; IEEE Signal Processing Magazine; Information Fusion; Journal of Machine Learning Research. In general, the project will aim to create "open-access" publications to ensure maximum accessibility.

## **Open workshop:**

A two-day open workshop will be organized in Brussels to present the ResponDrone system and to demonstrate the business case. In addition to the members of the International Stakeholders Forum (ISF), additional stakeholders will be invited to foster open discussion and analysis of the project issues. The workshop will reflect on the rationale, scope and implementation of the developed technology. Conclusions are sought regarding effective development, coordination, design and implementation.

## **Exploitation events:**

Exploitation events will be identified for each set of stakeholders to promote the project outcomes. Among others, an Open Day will be organised at the demonstration sites to present the ResponDrone technology to the various groups of stakeholders. During these site events, the technology and its added value for both industry and general public will be displayed.

# **Networking and expanding the critical mass:**

To maximize impact all partners are encouraged to take all opportunities to disseminate and raise awareness of the project and to develop relationships with other research organizations to present and follow up on project results.

#### **Target group meetings:**

Meetings will be organized during the first phase of the project in order to engage the target groups selected mainly from the ISF, while during the execution phase the objective being to collect data and information and receive feedback on the project performance. The target group will also be informed regarding the project progress and outcomes.

#### **Closing Conference:**

A Closing Conference will be organized, where partners will present the project's final results and directly address the industry, the scientific community and stakeholder groups about the project results. The conference will reflect on the results of the project and conclusions are sought regarding future development, implementation and exploitation.



# **Advisory Board:**

An Advisory Board will be established with the participation of well-known experts specialising in the relevant fields, who will be kept informed of the project developments and the achieved results and provide scientific advice to the project.

#### International Stakeholders Forum:

ResponDrone will invite the most relevant stakeholders to participate in an International Stakeholder Forum (ISF) to ensure the active involvement of key stakeholders that are not partners in the project.

The ISF has both a consultative role, on specific aspects of the project, and a dissemination and amplification role for the project results. Representatives of the relevant sectors and institutions including well-known scientists, specialising in the relevant fields will be invited to join the ISF to establish ongoing communication with target end users such as technology providers, non-commercial associations and government bodies, regarding the ResponDrone outputs.

Representatives of Ministries responsible for emergency response will be approached as well, in order to align development of the ResponDrone system with their policy expectations.

ResponDrone will take advantage of the consortium partners' existing networks as well as their collaboration with major stakeholders, including EU institutions, such as the DG ECHO (European Civil Protection and Humanitarian Aid Operations) of the EC, the European Parliament, the European Council, the European Aviation Safety Agency (EASA), the Emergency Response Coordination Centre (ERCC), EUROCONTROL and SESAR. Other major stakeholders include the national emergency response authorities and agencies of EU Member States and related international agencies, such as the United Nations Office for the Coordination of Humanitarian Affairs (OCHA) and the International Committee of the Red Cross (ICRC). Importantly, the consortium's commercial partners are associated with large networks of customers which will be informed of the project and involved, where relevant, in individual and group meetings to inform the project management of end user needs.

All project partners are expected to participate in dissemination activities to ensure that a wide range of stakeholders will be engaged throughout the lifetime of the project. Partners' activities may include but are not limited to: engaging with relevant national and local media (print, radio, television, web-based), contributing to social media, proactively sharing information about project results, listing their own communication activities in a shared file, and providing translations of lay materials in their local language. Where possible partners will translate press releases into their national languages and keep Interteam informed about plans, by creating lists of national media channels they will try to reach.



The respective actions and timings of WP 13 activities are listed in Table 2. Table 3 shows partners' dissemination activities; Table 4 groups the Public dissemination level deliverables ordered by due date.

# 3.5 Time ("when?")

Interteam will coordinate the project dissemination by ongoing updates to the project's website, e-newsletters, etc. Interteam will play a proactive role in checking with partners for updates and news, thus ensuring the regularity of the flow of information. Contents resulting from project outcomes and other activities will be published online as they become available.

At an early stage, when results are not yet available, the start of the project will be announced, general information on related news will be disseminated and the website will be promoted. The project's website has been accessible since the project's launch in May 2019.

Presence on social media has also been established and will be fed with regular updates on progress and activities. They promote the project actively and redirect readers to the main website.

Interteam together with the other partners of the consortium will keep ResponDrone in the public eye via both regular activities and special events that will run throughout the lifetime of the project. These events are listed in Table 5.

A concluding conference will directly address the industry, the scientific community and policy makers. The scientific and industrial communities will also be informed of ResponDrone's achievements face-to-face at international conferences.

# 4 Deliverables within the Communication activities

Table 2. details the WP13 Deliverables. Highlighted sections represent the areas where a major partner's involvement is expected.

Deliverable	What	Audience	Why	Actors and tasks	When
	Audience (who), message (what), purpose (why),		To meet the information	Interteam	
D13.1 Communication plan finalised	method (how), time (when) of project communication activities, with expected actions of all project partners.	Project partners	needs of the target audiences and communication objectives of the project	Partners input asked at kick-off meeting.	May 2019
D13.2 A project identity	A visual representation of the project, accompanied by an online	All stakeholders	To ensure common graphics/visuals that are easily identifiable, to	Interteam developed conceptual representations of the project.	May 2019
will be created	dissemination platform.		share information and engage target stakeholders	Interteam tailors to project needs & finalise	Sep 2019
				Interteam to develop	May 2019
D13.2				Project website online	May 2019
External project website	Highlight the project's main activities and outcomes.	All stakeholders	To increase visibility of the project's outcomes and results	Partners website to link to project website	Sep, Oct 2019
				Interteam finalise	Oct 2019



D13.3  Communication tools: press release	A summary of the project's main aims & outcomes presented in clear and simple language.	Website visitors (opinion leaders/regulators, the media, industry, professionals, general public and media)	To increase visibility of the project's main aims & outcomes.	Interteam to share on website/print & distribute to media channels  Partners share through networks and at events & record activity  Interteam develop content and publish  Partners to circulate to their networks  Partners to circulate to their networks	May 2019
D13.3  Communication tools: Press releases	Summary of the project's main outcomes and highlights of significant results.	Media – to reach target audiences: industry, policy makers and regulators, consumer/trade/a cademic organisations, general public	Increase visibility of the project's main outcomes	Partners to send Interteam contact details of press officers Partners may translate press release, to distribute nationally	ТВС



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D13.3 Communication tools: Popular articles & blog posts	Messages to be developed	Industry, scientific community, policy makers and regulators, industry, first responders, general public	Increase outreach & promote awareness of project outcomes, maintain interest in project	Interteam	TBC
D13.3  Communication tools: Articles in professional magazines	Messages to be developed	Scientific community, Industry, first responders, policy makers and regulators	Increase visibility of the project's main outcomes	Interteam will create based on agreed website content.	ТВС
D13.3  Communication tools: Webinars (video recording of conference presentations)	Messages to be developed. Webinars will highlight significant project results.	Industry, policy makers and regulators, scientific community	To further disseminate outcomes of project presented at final conference	Interteam to manage social media accounts	TBC





D13.3  Communication tools: Infographics	Audio/visual presentation of aspects of the project. Potential topics include.	Policy makers and regulators, industry, media, first responders, general public	To better communicate complicated concepts, and to engage the audience.	Partners to tweet/re-tweet #ResponDrone , join LinkedIn groups, invite contacts, and participate in discussions	ТВС
D13.3  Communication tools: Social media presence	Messages to be developed ad hoc (to show the project is alive, and is important, and needs stakeholder input).	LinkedIn and Professional audience  Twitter: Professional & lay audiences  Facebook: General public  YouTube: General public	Increase outreach, raise awareness and engage key stakeholders, maintain interest in project	Interteam and partners to develop content.  Partners to circulate to networks.	Ad-hoc
D13.3  Communicati on tools: E- newsletter	Highlight the project's main activities and outcomes.	Industry, scientific community, first responders	Increase outreach, maintain interest.	Interteam to develop  Partners to distribute	ТВС



D13.4 Final dissemination report	An evaluation of the dissemination activities, and sustainability strategy outlining what should happen to the project outputs at the end of the project.	Project partners	Explore how the dissemination achievements can be sustained	
D13.5 Protocol concluding conference	Presentation of the results of the project to selected key stakeholders.	Industry, policy makers and regulators, first responders, scientific community, and media	To present the final results to key target audiences	ТВС

Table 2. Dissemination deliverables detailed



Table 3 details specific activities to further enhance awareness of the project.

WP	Activity	Dissemination	Audience	Why	Who/How	When	Deadline		
All	events (specific conferences are listed in Table 5)	vents (specific onferences re listed in conferences stakeholders		To raise awareness and increase	Interteam to create standard PPT for all partners at events	May 2019			
					Identify future conferences/events that may be relevant for the stakeholders				
					Partners distribute leaflets at events	ТВС			
						outreach.	outreach	Partners take photos at events (and tweet)	ТВС
				stakeholders	Partners summarise key information about event for website/newsletter	ТВС			
				Partners record activity for reporting (event, date, place, audience type, audience number).	ТВС				





					Interteam share information on website/newsletter /social media	ТВС	
	Scientific papers	The main outcomes of the project, and key findings presented and discussed in scientific papers.		To disseminate scientific results	Partners submit final copy and related information	ТВС	Ad-hoc
All			Scientists		Interteam add scientific papers on website and social media	ТВС	
		Interviews with media e.g. main elements of the		To increase visibility and outreach. To be	Partners inform Interteam on press activities		
All	Media exposure project, objectives, activities, or outcomes.	Media	leveraged in project communication s, and multiplied	Interteam share on website/social media	ТВС	Ad-hoc	

Table 3. Types of activities, target audiences, venue for communication, objectives, which partner and timeframes.



Table 4 lists all of the project deliverables that will be disseminated to the public. These activities are part of increasing outreach of the project to stakeholders.

Deliverable	Description	Lead(s)	Delivery Month	Date
D13.2	A project identity and specific project website	Agora	M6	Oct-19
D12.1	Exploitation strategy and business planning	IAI	M6	Oct-19
D7.1	General Architecture Design	Alpha	M8	Dec-19
D12.2	Legal, ethics, privacy & security framework	IAI	M8	Dec-19
D8.1	The regulatory landscape - first iteration	Time.lex	14	Jun-20
D12.1	Exploitation strategy and business planning	IAI	M18	Oct-20
D12.4	Public behaviour studies and strategy report	IAI	M18	Oct-20
D14.4	Midterm report	DLR	M18	Oct-20



-				
D10.1	Requirement Analysis Report	HCFDC	M23	Mar-21
D4.4	Overview of available payloads	Alpha	M24	Apr-21
D9.1	Operational process and system maps	AUAF	M24	Apr-21
D10.3	Valid and reliable indicators and benchmarks	HCFDC	M25	May-21
D8.1	The regulatory landscape - first iteration	Time.lex	M30	Oct-21
D10.4	Protocol and report pilot project	HCFDC	M30	Oct-21
D8.2	Ethical principles and dilemmas	Time.lex	M36	Apr-22
D12.1	Exploitation strategy and business planning	IAI	M36	Apr-22
D12.4	Public behaviour studies and strategy report	IAI	M36	Apr-22



D13.3	A mix of communication tools	Agora	M36	Apr-22
D13.4	A final dissemination report	Agora	M36	Apr-22
D13.5	Protocol concluding conference Protocol concluding conference	Agora	M36	Apr-22
D14.8	Final report	DLR	M36	Apr-22

Table 4. List of public deliverables

# 5 Specific Outreach and Communication Activities

Table 5. Lists specific relevant conferences and events which ResponDrone partners may attend as participants or presenters for further outreach. This table is to be updated regularly as events are announced and planned.

Event (location, if announced)	Date
Kick off meeting (Madrid Spain)	May 20-22, 2019
Inmarsat UAV BVLOS Conference (London UK)	May 30, 2019
IEEE International Conference on Communications	TBD



IEEE Global Communications Conference	TBD
IEEE Globecom Wi-UAV Workshop	TBD
Drone Days	TBD
Global Foundation for First Responders	TBD
IEEE International Conference on Fuzzy Systems	TBD
WCIT 2019 - World Congress on Information Technology (Yerevan, Armenia)	October 6-9, 2019
Digitec Expo 2019 (Yerevan, Armenia)	October 5-7, 2019
STC - Science and Technology Convergence Conference 2019 (Yerevan, Armenia)	October 11-12, 2019
Integrated Communication, Navigation and Surveillance Conference (ICNS)	April 21-23, 2020
Aerospace Europe Conference (CEAS)	February 25-28, 2020

Table 5. Events where ResponDrone can be presented to various stakeholder groups



# 6 Specific Outreach and Communication Activities

Table 6. lists the relevant scientific journals which could be used to publish project results to the specific target groups within the scientific community. Consortium partners which may be involved in producing these publications are suggested for each.

Target Groups	Potential Journals	Who
Al scientific community	Expert Systems and Applications	CEA
Al scientific community	Fuzzy Sets and Systems	CEA
Risk and hazard scientific community	Fire Safety Journal	Any partner
Industrial and drone scientific community	Drones	IAI, DLR, KAT, Alpha, AUA
Drone developers	International Journal of Micro Air Vehicles	IAI, DLR, KAT, Alpha, AUA
Navigation system engineers	Journal of Advanced Navigation Technology	INHA, DLR, CEA. Thales,
Computer scientists	Wireless Communication and Mobile Computing	Thales, KAT,
Electrical and mechanical Engineers	IEEE	IAI, DLR, CEA, NEMA, Thales, KAT, AUA, INHA,
Systems engineers	Journal of Guidance, Control and Dynamics	DLR, Alpha, Thales





Computer scientists	Journal of Network and Computer Applications	INESC-TEC, CEA, KAT
Computer systems engineers	International Journal of Systems Science	INHA, DLR, INESC-TEC, CEA
Computer scientists	Expert Systems and Applications	CEA, Thales, KAT, AUA
Computer scientists	Fuzzy Sets and Systems	CEA, KAT,
Computer scientists	Journal of Machine Learning Research	Thales, INESC-TEC, KAT
Emergency response experts	Journal of Emergency Management	DLR, NEMA, HCFDC, SIS2B, VRH
Emergency response experts	International Journal of Risk Assessment and Management	DLR, NEMA, HCFDC, SIS2B
Legal and Regulatory experts	International Review of Law, Computers & Technology	Time.Lex
Legal and Regulatory experts	Computer Law & Security Review	Time.Lex

This list will be expanded and refined as the project progresses.