



MID- PROJECT DISSEMINATION REPORT



ROBORDER
740593

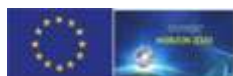
Deliverable Information**Deliverable Number:** D7.4**Work Package:** 7**Date of Issue:** 05/11/2018**Document Reference:** 740593-ROBORDER-D7.4_Mid_Project_Dissemination**Version Number:** 1.0**Nature of Deliverable:****Dissemination Level of Deliverable:**

Report

Public

Author(s): HMOD, TEK-AS, CPT, CERTH, ORFK, Copting, UoA, CNIT, Everis, SPP, PJ, CENTRIC, VTT**Keywords:** dissemination, events, publication, plan, strategy, target groups, results**Abstract:**

Dissemination reports provide an overview of the various dissemination activities of the project which have been completed by mid-project. It also reports on the activities of the User Group and their input into the direction of the project, as well as an exhaustive list of all the papers, presentations, publications and demonstrations published or performed within the first half of the ROBORDER project.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 740593.

Document History

Date	Version	Remarks
04/10/2018	0.1	Skeleton
05/10/2018	0.2	Content introduction
10/10/2018	0.3	Addition of final contributes
15/10/2018	0.4	Final formatting
31/10/2018	1.0	Issue

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Executive Summary

The Mid-Project Dissemination Report presents an overview of the communication and dissemination strategy envisioned for the ROBORDER project, and a list of relevant activities undertaken for the first thirty six months of the project.

The overview of the dissemination and communication plan summarizes the dissemination strategy, revises the target groups (European Union Officials, Public Entities, Border Security Researchers, Industry and General Public), and mentions the synergies that are happening between ROBORDER and other on-going research projects. The dissemination tools are also reported in this section of the deliverable.

The second part of this document presents a list of the dissemination activities that took place in the reporting period. This list identifies the partner that carried out the activity, identifies the type of activity, the target audience and an explanatory note on why such activity is deemed relevant.

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List of Acronyms

Acronym	Meaning
CERTH	Centre for Research and Technology, Hellas
HNP	Hungarian National Police
HMOD	Hellenic Ministry of Defence
UoA	University of Athens
CNIT	National Inter-University Consortium for Telecommunications
DoA	Description of Actions
TEK-AS	TEKEVER Autonomous Systems
EVERIS	Everis Spain SLU Succursale Belgique
CPT	Capritech Limited
VTT	Technical Research Centre of Finland Ltd
COPTING	Copting GmbH
SPP	Romanian Protection and Guard Service
PJ	Portuguese Criminal Police-Ministry of Justice

Table 1 – List of acronyms

1. Introduction

The Mid-Project Dissemination Report will provide an overview of the various dissemination activities that have been completed until the middle of the project (i.e. until M36 – April 2020). This overview will revise the Communication and Dissemination plan delivered in M3 and will present an exhaustive list of the publications and dissemination activities undertaken by the different partners of ROBORDER project.

It is worth mentioning that the communication and dissemination activities that took place in the thirty six months of the project were based on the strategic guidance provided by ROBORDER's Description of Action (DoA). This document outlined the objectives of ROBORDER dissemination and communication activities and how these supported the overall goals of the project to ensure a proper impact towards relevant stakeholders and interested parties.



2. Dissemination and Communication Plan Overview

The main objective behind ROBORDER's dissemination and communication work package (WP7) was to disseminate ROBORDER's progress and results in such way that it would raise awareness around target groups like end-users, academia, large industry and SMEs. To fulfil this objective, a comprehensive dissemination strategy was envisioned that would disseminate and promote the project activities, achieve high visibility within the scientific community and would share knowledge and lessons learned with other work groups under the same topic.

2.1. Dissemination Strategy

The dissemination strategy of ROBORDER project is based on a concentrated marketing strategy directed to target groups and possible future markets that can be interested in the outcomes of the project. Furthermore, it is the consortium understanding, that the results of the project are not of interest of a single market and as such, the project achievements should also be disseminated across general public. By doing so, a mass marketing dissemination action has been anticipated to inform as wide audience as possible about the results of the project.

This strategy enables the ROBORDER consortium to strongly position the project's results and achievements within the general community.

2.2. Dissemination Target Audience

In order to effectively disseminate the progress of project ROBORDER, the consortium identified groups of audience that should be targeted to ensure the maximum impact possible. Since these groups of target audience range from scientific experts to decision makers and from the end-users to general public, the consortium decided to split the information and content available to each group depending on the technical expertise to ensure that everyone would be able to exploit the information they received.

The selected target groups are identified in the following subsections:

2.2.1 Identified Target Communities

Establishing contact with the relevant communities allowed the consortium to gain sensitivity of the challenges and impact that the technologies developed in ROBORDER project could have. At this point, it should be highlighted that a part of those communities is not specifically related with defence/security or LEAs – including for instance aeronautics, robotics and other fields of application for radar and UxV technologies – and by incorporating them in ROBORDER's dissemination and exploitation process, the achievements of this project reached beyond that specific scope, in alignment with the defined project impacts.

ROBORDER's consortium partners established contact with a wide range of stakeholders in order to engage them at an initial project stage and ensure a closely aligned technical development.

2.2.2 European Union Officials

ROBORDER approached European Commission officials and experts at the levels of Units and Directorates as well as offices of the relevant Commissioners. Additionally, European parliament members and their offices were informed on the results of the project as well. Exchange with the EU officials assisted to adjust project activities, if required. On top of that,

such exchange induced a sustainable interest in continuing project activities, during and after ROBORDER project's completion.

2.2.3 Public Entities - Bodies - Agencies

ROBORDER partners maintained valuable contacts with national agencies in charge of Border Security in their countries. These contacts were used to disseminate ROBORDER knowledge. The project made efforts to reach akin entities in other member states too.

2.2.4 Border Security Researchers

Dissemination within the research community is needful for successful project implementation. Knowledge exchange is crucial for assessing the state-of-the-art, project planning and evaluating project results. This target group was addressed via different ways, individually and within the framework of international organisations in which researchers maintained international exchange and cooperation.

2.2.5 Industry

Innovative technology developers, data and digital experts and many other commercial branches might have a stake in this project. They were interested in learning more about existing and looming challenges and also contributed to address these challenges. Feedback from the industry was valuable for ROBORDER.

Business is a sensitive stakeholder. Innovations resulted from research induce a creation of new products and generation of profits. As such, informing the industry was an important prerequisite for increasing chances for the implementation of the research results.

2.2.6 Interested Public

The interested public in this context was everyone who was interested in the topic of border security. Those were scientists from related disciplines, private persons and also bloggers. In contrast to the general public this group knew precisely what information it needed and actively sought for this information.

2.2.7 General Public

The ultimate objective of the project was an improved assistance to the security of borders. Hence, the general public was an important recipient of the information that the project disseminated.

People in general had an interest in news concerning how their borders could be more safe and secure. Obviously, border security was not their main issue in their common life, but by a scientific way of communication that they paid attention and attracted to this innovative action. The broadly oriented media (printed and electronic) and bloggers were most likely to be successful in this role.

2.2.8 Synergies with related projects and initiatives

The members of the ROBORDER consortium are aware of the importance of having contact with other EU related programs and organizations. Other European related projects such as CAMELOT, MARISA and others comprised a good base knowledge and the exchange of information between them were good steps for a better and more accurate final results. Furthermore, a joint workshop between the aforementioned projects is being planned for the near future that will allow for an exchange of knowledge that will be valuable for the developments that are planned for the next eighteen months of the project.

Moreover, ROBORDER consortium contacted citizens, small groups or even organizations that contributed to the fields of ROBORDER whereas by participating in initiatives across Europe or through social media, newsletters and open workshops and, wrote down their ideas to be exploited inside the project.

2.3. Dissemination Content and Material

The dissemination plan clearly states which material should be disclosed in dissemination events. This material includes current developments, achieved milestones and results, published deliverables and publications, participation/organization of events, among others.

To facilitate this dissemination, the ROBORDER consortium has online available its own website, as well as its presence over the most used social media platforms, like Facebook, Twitter and LinkedIn. From these, the audience could be able to be up to date regarding the developments and progresses made so far within the project. The list of these dissemination tools and the respective links are provided below:

- **Website:** <http://roborder.eu>
- **Facebook:** <https://www.facebook.com/robordereu/>
- **Twitter:** https://twitter.com/roborder_eu
- **LinkedIn:** <https://www.linkedin.com/in/roborder/>

Furthermore, the consortium prepared a leaflet with basic information on the project and printed in the languages of the consortium members (English, Greek, Romanian, Hungarian and Portuguese) and a fact sheet to distribute in all the meetings, conferences and workshops that the members of ROBORDER attended to. The two sides of the leaflet are presented in Figures 1 and 2, while fact sheet is presented in Figure 3.



Figure 1 – ROBORDER Leaflet (Side 1)



Figure 2 – ROBORDER Leaflet (Side 2)



Figure 3 – ROBORDER Fact Sheet

The leaflet and the fact sheet can be found in the project's website:
<https://roborder.eu/resources/>

The ROBORDER consortium also prepared the following template for the presentations that took/will take place in dissemination events.

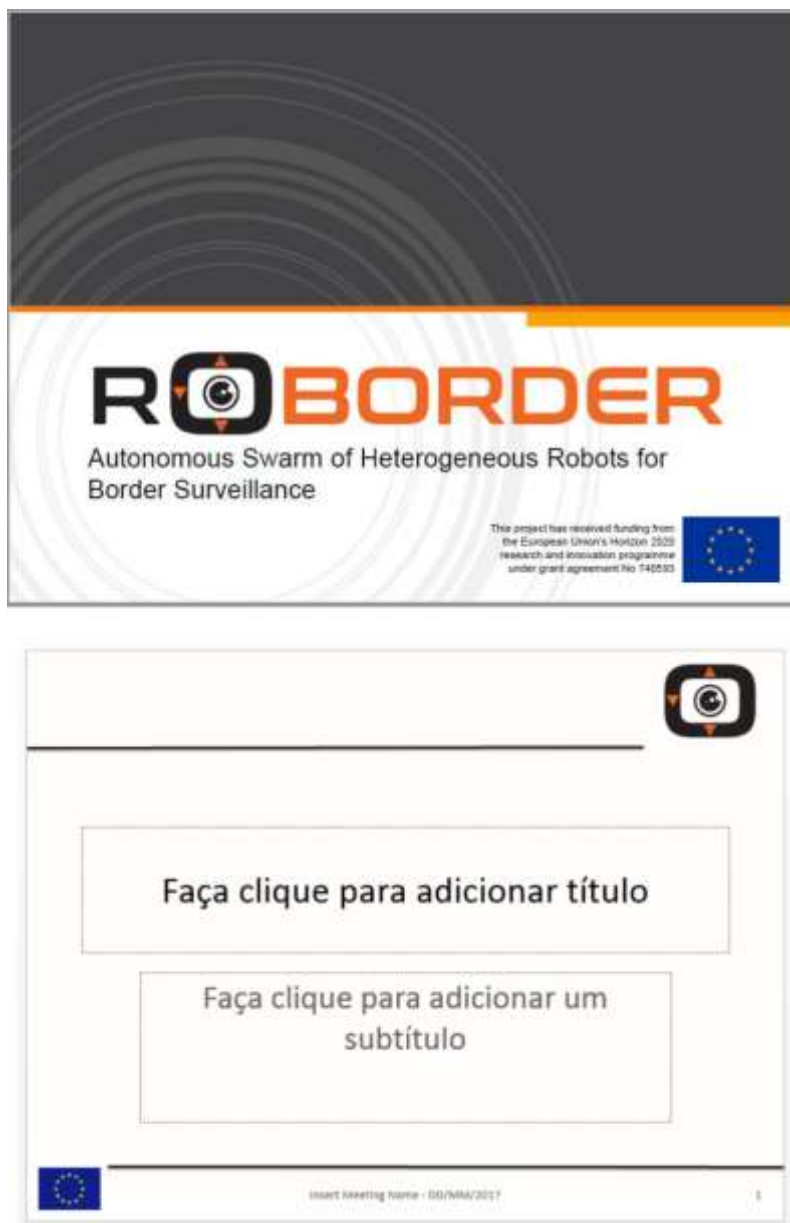


Figure 4 – ROBORDER Presentation Template

3. Dissemination Activities

In the following table, the dissemination reports that the ROBORDER partners have already performed during the first 36 months of the project will be presented:

No	Partner	Type of dissemination activity (e.g. article, conference, etc.)	Project Title	Date	Host (journal, blog, conference host, venue)	Audience	Explanatory note of the dissemination item
1	CapriTech Limited (CPT)	Website	ROBORDER	30/4/2017	CPT's Website Portal	General Public	Public Information about participating of CPT in the ROBORDER project.
2	CapriTech Limited (CPT)	Social Media	ROBORDER	30/4/2017	CPT's LinkedIn page	Social Media	Information about the initiation of CPT in the ROBORDER project
3	CapriTech Limited (CPT)	Social Media	ROBORDER	30/4/2017	CPT's Twitter's page	Social Media	Information about the participation of CPT in the ROBORDER project
4	CapriTech Limited (CPT)	Intranet	ROBORDER	4/5/2017	CPT's Intranet	Members of CPT only	Information about the participation of CPT in the ROBORDER project along with an invitation (link) to visit and explore the ROBORDER website.
5	CapriTech Limited (CPT)	Mailing	ROBORDER	16/9/2017	Mail dissemination	Industry, Stakeholders, Investors, Eventual customers	Information about the participation of CPT in the ROBORDER project along with an invitation (link) to visit and explore the ROBORDER website.

No	Partner	Type of dissemination activity (e.g. article, conference, etc.)	Project Title	Date	Host (journal, blog, conference host, venue)	Audience	Explanatory note of the dissemination item
6	CapriTech Limited (CPT)	Mailing	ROBORDER	12/2/2018	Mail dissemination	Industry, Stakeholders, Investors, Eventual customers	Invitation to visit the ROBORDER's website and check its factsheet and leaflet.
7	CapriTech Limited (CPT)	Peer Reviewed Article	ROBORDER	1/10/2018	Journal	Scientific Community	Journal publication summarising part of the work conducted by CPT about cyber-physical intrusion detection for vehicles.
8	CERTH-ITI	Press Article	"Robots...made in Greece will patrol the Aegean"	19/11/2017	Greek National NewsPaper "Ethnos"	General Public	Public information about the most significant aspects of the ROBORDER project
9	CERTH-ITI	Conference	A deep neural network for oil spill semantic segmentation in SAR images	10/10/2018	IEEE Int. Conf. on Image Processing	Research community	Present the initial results of the oil spill detector based on SAR representations
10	CERTH-ITI	Conference	Early identification of oil spills in Satellite Images using Deep CNNs	1/8/2019	25th Int. Conf. on Multimedia Modeling	Research community	Accepted for presentation. Major changes of the previous oil spill detector will be presented
11	CERTH-ITI	Conference, Challenge	VisDrone Challenge	-	-	Research community	Participate in a contest with the developed module of Object detection
12	CERTH-ITI	Workshop	Speed estimation and abnormality detection from surveillance	18/06/2018	Int. Conf. on Computer Vision and Pattern Recognition	Research community	Present the results of the object and activity identification module

No	Partner	Type of dissemination activity (e.g. article, conference, etc.)	Project Title	Date	Host (journal, blog, conference host, venue)	Audience	Explanatory note of the dissemination item
			cameras		Workshop on the AI City Challenge		
13	CERTH-ITI	Website	ROBORDER website	7/1/2017	-	General Public	Responsible for the project's website as the main dissemination mean
14	CERTH-ITI	Dissemination material	ROBORDER Presentation, Leaflet, Factsheet	7/1/2017	-	General Public	The files corresponds to the project's communication materials that has been and will be used in relevant events
15	CERTH-ITI	Press Article	"Robots...made in Greece will patrol the Aegean"	19/11/2017	Greek National NewsPaper "Ethnos"	General Public	Public information about the most significant aspects of the ROBORDER project
16	CERTH-ITI	Dissemination channels-Social media	LinkedIn, Facebook, Twitter	7/1/2017	-	General Public	Tha main social media channels that were developed in the context of D7.2
17	CERTH-ITI	Participation in a Summit	Innovation meets the Defence Industry	3/8/2018	Greek Ministry of Defence, General Directorate for Defence Investments & Armaments	Stakeholders, Eventual customers	Disseminate the projects objectives
18	CERTH-ITI	Conference	Continuously Informed Heuristic A* – Optimal Path Retrieval Inside an Unknown Environment	13/10/2017	IEEE International Symposium on Safety, Security and Rescue Robotics (SSRR)	Research community	Present an algorithm for dealing with the problem of physically retrieving the optimal path between two points inside an unknown environment
19	CERTH-ITI	Conference	Autonomous Trajectory Design System for Mapping of	14/6/2018	European Control Conference, International Federation of	Research community	Present a new on-line trajectory planning algorithm for a team of Autonomous Underwater

No	Partner	Type of dissemination activity (e.g. article, conference, etc.)	Project Title	Date	Host (journal, blog, conference host, venue)	Audience	Explanatory note of the dissemination item
			<i>Unknown Sea-Floors Using a Team of AUVs</i>		<i>Automation and Control (IFAC)</i>		<i>Vehicles (AUVs)</i>
20	HNP	Presentation	ROBORDER project	13/6/2017	HNP High Commissioners		ROBORDER was presented to the HNP High Commissioners (heads of national and regional level units) on their annual compulsory training session.
21	HNP	Presentation	ROBORDER project	9/10/2017	ROBORDER workshop held at NUPS		ROBORDER was presented to the registered participants of the ROBORDER workshop held at NUPS, only registration from consortium partners and people with appropriate level of security clearance (HNP and NUPS officials) was accepted, a short press release on the project was presented on the NUPS website.
22	HNP	Presentation	ROBORDER project	10/10/2017	Beregsurány Border Outpost		ROBORDER was presented to local border guard officers at the Beregsurány Border Outpost
23	HNP	Presentation	ROBORDER project	10/5/2018	Advisory Board for Border Police Education		ROBORDER was presented at the quarterly meeting of the Advisory Board for Border Police Education for Heads of

No	Partner	Type of dissemination activity (e.g. article, conference, etc.)	Project Title	Date	Host (journal, blog, conference host, venue)	Audience	Explanatory note of the dissemination item
							<i>Border Police Services of HNP and directors of education and training institutions at NUPS. All participants were HNP officers.</i>
24	HNP	Presentation	ROBORDER project	16/1/2018	HNP HQ		<i>ROBORDER progress was presented at the HNP HQ during the regular yearly scientific progress report of the HNP Scientific Council, only HNP officials, NSA agents and RPAS experts with appropriate security clearance were present</i>
25	Copting	Presentation	ROBORDER project		Client presentation		<i>Integration of ROBORDER into client presentation, when presenting the portfolio of Copting</i>
26	Copting	Exhibition	ROBORDER project		UTSec 2017-2018		<i>Roborder during exhibitions, Copting participated as exhibitor</i>
27	Copting	Information	ROBORDER project		social media		<i>Copting shared project information, as publicly available via social media</i>
28	HMOD	Presentation	ROBORDER project	5/6/2018	Hellenic Naval Academy		<i>Presentation of ROBORDER project to the upcoming Navy officers</i>
29	HMOD	Presentation	ROBORDER project	18/6/2018	POSIDONIA ANCHORS MARITIME		<i>Presentation and exhibition of ROBORDER project to the Members of</i>

No	Partner	Type of dissemination activity (e.g. article, conference, etc.)	Project Title	Date	Host (journal, blog, conference host, venue)	Audience	Explanatory note of the dissemination item
					WORLD		Greek and International Shipping Community
30	HMOD	Presentation	ROBORDER project	10/5/2018	Communications & Electronics Military Signal Officers School		Disseminations activities at the Communications & Electronics Military Signal Officers School.
31	HMOD	Presentation	ROBORDER project	9/3/2018	Kapodestrian University of Athens		Presentation of ROBORDER Project to PHD Candidates
32	UoA	Scientific Publication	Event correlation and forecasting over high-dimensional streaming sensor data", 2018 IEEE 14th International Conference on Wireless and Mobile Computing, Networking and Communications (WiMob 2018)	15-17 /10/2018	2018 IEEE 14th International Conference on Wireless and Mobile Computing, Networking and Communications		Scientific publication: V. Papataxiarhis, S. Hadjiefthymiades, "Event correlation and forecasting over high-dimensional streaming sensor data", 2018 IEEE 14th International Conference on Wireless and Mobile Computing, Networking and Communications (WiMob 2018), Limassol, Cyprus, October 15-17, 2018.
33	UoA	Reference and short presentation			website of the Pervasive Computing Research Group of UoA (http://p-comp.di.uoa.gr/)		
34	UoA	Post Graduate Thesis	implementation of STANAG 4586 standard using OWL2 ontologies				

No	Partner	Type of dissemination activity (e.g. article, conference, etc.)	Project Title	Date	Host (journal, blog, conference host, venue)	Audience	Explanatory note of the dissemination item
			<i>and semantics for automated interoperable communication of UAVs</i>				
35	UoA	Post Graduate Thesis	<i>swarm intelligence for unmanned robotic devices</i>				
36	UoA	Synergy					<i>Liaison with RAWFIE project and consortium (www.rawfie.eu)</i>
37	CNIT	Journal	<i>A Photonically-enabled Compact 0.5 - 28.5 GHz RF Scanning Receiver</i>				<i>D. Onori, F. Scotti, F. Laghezza, M. Bartocci, A. Zaccaron, A. Tafuto, A. Albertoni, A. Bogoni, P. Ghelfi, "A Photonically-enabled Compact 0.5 - 28.5 GHz RF Scanning Receiver," J. Lightwave Technol., Vol. 36, n. 10</i>
38	CNIT	Journal	<i>Photonics-Based Dual-Band Radar for Landslides Monitoring in Presence of Multiple Scatterers</i>				<i>[1] S. Melo, S. Maresca, S. Pinna, F. Scotti, M. Khosravanian, A. Cerqueira S., F. Giannetti, A. Das Barman, A. Bogoni, "Photonics-Based Dual-Band Radar for Landslides Monitoring in Presence of Multiple Scatterers", J. Lightwave Technol., Vol. 36, Issue 12, pp. 2337-2343 (2018)</i>
39	CNIT	Conference papers	<i>A Software-</i>				<i>[1] Onori D., Scotti</i>

No	Partner	Type of dissemination activity (e.g. article, conference, etc.)	Project Title	Date	Host (journal, blog, conference host, venue)	Audience	Explanatory note of the dissemination item
			<i>defined and Filter-free 0 26.5 GHz Ultra wideband RF Transmitter Enabled by Photonics</i>				<i>F., Laghezza F., Bogoni A., Ghelfi P. "A Software-defined and Filter-free 0 26.5 GHz Ultra wideband RF Transmitter Enabled by Photonics", EuRAD 17, Nuremberg, Germany, Oct. 2017</i>
40	CNIT	Conference papers	<i>Performance Analysis of Auto-Regressive UWB Synthesis Algorithm for Coherent Sparse Multi-Band Radars</i>				<i>[1] Hussain B., Malacarne A., Laghezza F., Meresca S., Scotti F., Ghelfi P., Bogoni A., "Performance Analysis of Auto-Regressive UWB Synthesis Algorithm for Coherent Sparse Multi-Band Radars", International Conference on Radar Systems 2017, Belfast, Ireland 2017.</i>
41	CNIT	Conference papers	<i>High precision displacement measurements in presence of multiple scatterers using a photonics-based dual-band radar</i>				<i>S. Melo, S. Maresca, S. Pinna, F. Scotti, M. Khosravanian, A. Cerqueira S. Jr., F. Giannetti, A. Das Barmann, A. Bogoni, "High precision displacement measurements in presence of multiple scatterers using a photonics-based dual-band radar", International Conference on Radar Systems 2017, Belfast,</i>

No	Partner	Type of dissemination activity (e.g. article, conference, etc.)	Project Title	Date	Host (journal, blog, conference host, venue)	Audience	Explanatory note of the dissemination item
							<i>Ireland 2017</i>
42	CNIT	Conference papers	<i>Design and Characterization of a Photonic Integrated Circuit for Beam Forming in 5G Wireless Networks</i>				<i>G. Serafino, C. Porzi, V. Sorianello, P. Ghelfi, A. D'Errico, S. Pinna, M. Puleri, M. Romagnoli, A. Bogoni, "Design and Characterization of a Photonic Integrated Circuit for Beam Forming in 5G Wireless Networks", Int. Top. Meet. Microwave Photonics (MWP) 2017, Mo1.4, Beijing, 2017.</i>
43	CNIT	Conference papers	<i>A Photonics-based RF Scanning Receiver Exploiting Digital Feed-forward Lasers Noise Cancellation</i>				<i>Onori D., Bogoni A., Ghelfi P., "A Photonics-based RF Scanning Receiver Exploiting Digital Feed-forward Lasers Noise Cancellation", IEEE MWP 2017 (International Topical Meeting on Microwave Photonics), Beijing China Oct. 2017</i>
44	CNIT	Journal	<i>A Photonically-enabled Compact 0.5 - 28.5 GHz RF Scanning Receiver</i>				<i>D. Onori, F. Scotti, F. Laghezza, M. Bartocci, A. Zaccaron, A. Tafuto, A. Albertoni, A. Bogoni, P. Ghelfi, "A Photonically-enabled Compact 0.5 - 28.5 GHz RF Scanning Receiver," J. Lightwave Technol., Vol. 36, n. 10</i>
45	CNIT	Journal	<i>Photonics-Based Dual-Band Radar</i>				<i>[1] S. Melo, S. Maresca, S. Pinna, F.</i>

No	Partner	Type of dissemination activity (e.g. article, conference, etc.)	Project Title	Date	Host (journal, blog, conference host, venue)	Audience	Explanatory note of the dissemination item
			<i>for Landslides Monitoring in Presence of Multiple Scatterers</i>				<i>Scotti, M. Khosravanian, A. Cerqueira S., F. Giannetti, A. Das Barman, A. Bogoni, "Photonics-Based Dual-Band Radar for Landslides Monitoring in Presence of Multiple Scatterers", J. Lightwave Technol., Vol. 36, Issue 12, pp. 2337-2343 (2018)</i>
46	CNIT	Conference papers	<i>A Software-defined and Filter-free 0 26.5 GHz Ultra wideband RF Transmitter Enabled by Photonics</i>				<i>[1] Onori D., Scotti F., Laghezza F., Bogoni A., Ghelfi P. "A Software-defined and Filter-free 0 26.5 GHz Ultra wideband RF Transmitter Enabled by Photonics", EuRAD 17, Nuremberg, Germany, Oct. 2017</i>
47	CNIT	Conference papers	<i>Performance Analysis of Auto-Regressive UWB Synthesis Algorithm for Coherent Sparse Multi-Band Radars</i>				<i>[1] Hussain B., Malacarne A., Laghezza F., Meresca S., Scotti F., Ghelfi P., Bogoni A., "Performance Analysis of Auto-Regressive UWB Synthesis Algorithm for Coherent Sparse Multi-Band Radars", International Conference on Radar Systems 2017, Belfast, Ireland 2017.</i>
48	CNIT	Conference papers	<i>High precision displacement measurements in</i>				<i>S. Melo, S. Maresca, S. Pinna, F. Scotti, M. Khosravanian, A.</i>

No	Partner	Type of dissemination activity (e.g. article, conference, etc.)	Project Title	Date	Host (journal, blog, conference host, venue)	Audience	Explanatory note of the dissemination item
			<i>presence of multiple scatterers using a photonics-based dual-band radar</i>				<i>Cerqueira S. Jr., F. Giannetti, A. Das Barmann, A. Bogoni, "High precision displacement measurements in presence of multiple scatterers using a photonics-based dual-band radar", International Conference on Radar Systems 2017, Belfast, Ireland 2017</i>
49	CNIT	Conference papers	<i>Frequency-Agile and Filter-Free Wireless Communication Transceiver based on Photonics</i>				<i>Scotti F., Onori D., Bogoni A., Ghelfi P., "Frequency-Agile and Filter-Free Wireless Communication Transceiver based on Photonics", OFC 2018, San Diego, USA, March 2018</i>
50	CNIT	Conference papers	<i>Intelligent Remote Sensing Systems Based on Microwave Photonic Technologies</i>				<i>A. Bogoni, "Intelligent Remote Sensing Systems Based on Microwave Photonic Technologies", invited paper, OFC 2018, San Diego, USA, March 2018</i>
51	CNIT	Conference papers	<i>Auto-regressive spectral gap filling algorithms for photonics-based highly sparse coherent multi-</i>				<i>Hussain B., Malacarne A., Maresca S., Scotti F., Ghelfi P., Bogoni A., "Auto-regressive spectral gap filling algorithms for photonics-based highly</i>

No	Partner	Type of dissemination activity (e.g. article, conference, etc.)	Project Title	Date	Host (journal, blog, conference host, venue)	Audience	Explanatory note of the dissemination item
			<i>band radars in complex scenario</i>				<i>sparse coherent multi-band radars in complex scenario", IEEE International Radar Conference 2018, Oklahoma City, USA, April 2018</i>
52	CNIT	Conference papers	<i>Ultra-short optical pulses for coherent ultra-wide band RF signal sampling</i>				<i>Onori D., Scotti F., Serafino G., Ghelfi P., Bogoni A., "Ultra-short optical pulses for coherent ultra-wide band RF signal sampling", Invited paper, CLEO 2018, San José, USA, May 2018</i>
53	CNIT	Conference papers	<i>Photonics for high-frequency ultra-wideband and frequency-agile RF transmitters</i>				<i>Serafino G., Scotti F., Onori D., Falconi F., Amato F., Ghelfi P., Bogoni A., "Photonics for high-frequency ultra-wideband and frequency-agile RF transmitters", Invited paper, 2nd URSI Atlantic Radio Science Meeting (AT-RASC) 2018, Gran Canaria, Spain, May 2018</i>
54	CNIT	Conference papers	<i>Remote Sensing Systems Based on Photonics</i>				<i>Bogoni A., Serafino G., Ghelfi P., "Remote Sensing Systems Based on Photonics", Invited paper, 23th OptoElectronics and Communications</i>

No	Partner	Type of dissemination activity (e.g. article, conference, etc.)	Project Title	Date	Host (journal, blog, conference host, venue)	Audience	Explanatory note of the dissemination item
							Conference (OECC) 2018, Jeju, Korea, July 2018
55	CNIT	Conference papers	Microwave Photonics in Radar				Lembo L., Serafino G., Scotti F., Ghelfi P., Bogoni A., "Microwave Photonics in Radar", Invited paper , IEEE Photonics Conference (PIC) 2018, Reston, USA, October 2018
56	CNIT	Conference papers	Compact 0.5-40GHz RF Scanning Receiver based on photonics				Scotti F., Bogoni A., Ghelfi P., "Compact 0.5-40GHz RF Scanning Receiver based on photonics", Invited paper , Progress In Electromagnetics Research Symposium (PIERS) 2018, Toyama, Japan, August 2018
57	CNIT	Conference papers	Analysis of a Coherent Distributed MIMO Photonics-Based Radar Network				Lembo L., Ghelfi P., Bogoni A., "Analysis of a Coherent Distributed MIMO Photonics-Based Radar Network", European Radar Conference (EuRAD) 2018, Madrid, Spain, September 2018
58	CNIT	Conference papers	Photonics for mmW signal generation				Serafino G., Scotti F., Onori D., Falconi F., Amato F., Ghelfi P., Bogoni A., "Photonics for mmW signal generation"

No	Partner	Type of dissemination activity (e.g. article, conference, etc.)	Project Title	Date	Host (journal, blog, conference host, venue)	Audience	Explanatory note of the dissemination item
							<i>International Radar Symposium 2018, Bonn, Germany June 2018.</i>
59	EVERIS	Conference					<i>17/07/17 Conference on Free Movement of Data</i>
60	EVERIS	Event					<i>High Level Event "Digital Day 2018"</i>
61	EVERIS	Conference	<i>Maximizing use of public data whilst safeguarding privacy and security</i>				<i>2018 10 10 E-governance and Cyber Security:</i>
62	SPP	Conference/workshop		<i>Bucarest 15/06</i>			<i>COMM 2018 International Conference/ International Workshop on Research & Innovation for Secure Societies - RISS 2018</i>
63	TEKEVER	Presentation	ROBORDER PROJECT	8 /6/ 2017			<i>- Presentation of ROBORDER project (objectives, concept, approach and expected results) at the Workshop on EU funded border security research projects organized by and held at FRONTEX. Feedback was very positive and several representatives of member states demonstrated interest in following the project and its results.</i>
64	TEKEVER	Presentation	ROBORDER	7 /2 2018			<i>- Presentation of</i>

No	Partner	Type of dissemination activity (e.g. article, conference, etc.)	Project Title	Date	Host (journal, blog, conference host, venue)	Audience	Explanatory note of the dissemination item
			PROJECT				ROBORDER project with emphasis on the dialogues between industry/academia and end-users and challenge of requirements definition at the EUROSUR industry workshop organized by and held at the European Commission. Feedback from the audience was positive.
65	TEKEVER	Presentation	ROBORDER PROJECT	5 June 2018			- Presentation of ROBORDER project with special emphasis on the issues of interoperability at the 11TH MEETING OF THE COMMUNITY OF USERS ON SECURE, SAFE AND RESILIENT SOCIETIES THEME 8 – INFORMATION EXCHANGE AND INTEROPERABILITY organized by the Commission and held in Brussels.
66	PJ	Mailing	ROBORDER PROJECT	20/11/2017		Portugese LEAS. Stakeholders,eventual customers	Information about participating of PJ in Project ROBORDER and invitation, with link to LEAS to visit and explore ROBORDER website
67	PJ	Mailing	ROBORDER	20/11/2017		Portugese LEAS.	Information about

No	Partner	Type of dissemination activity (e.g. article, conference, etc.)	Project Title	Date	Host (journal, blog, conference host, venue)	Audience	Explanatory note of the dissemination item
			<i>PROJECT</i>			Stakeholders,eventual customers	participating of PJ in Project ROBORDER and invitation, with link to LEAS to visit and explore ROBORDER website
68	<i>PJ</i>	<i>Mailing</i>	ROBORDER PROJECT	17/7/18		Portugese LEAS. Stakeholders,eventual customers	Invitation to visit ROBORDER site and check the ROBORDER's fafactsheets and leaflets website
69	<i>PJ</i>	<i>Mailing</i>	<i>ROBORDER project</i>	16/7/18			<i>Invitation to visit ROBORDER site and check the ROBORDER's fafactsheets and leaflets</i>
70	<i>PJ</i>	<i>Intranet</i>	<i>ROBORDER project</i>	4/9/2017	<i>PJ's Intranet</i>	<i>Members of PJ only</i>	<i>Information about participating of PJ in Project ROBORDER and invitation, with link to LEAS to visit and explore ROBORDER website</i>
71	<i>PJ</i>	<i>Social Media</i>	<i>ROBORDER project</i>	4/9/2017	<i>PJ's twitter page</i>		<i>Information about participating of PJ in Project ROBORDER and invitation, with link to LEAS to visit and explore ROBORDER website</i>
72	<i>PJ</i>	<i>Web site</i>	<i>ROBORDER project</i>	4/9/2017	<i>PJ's twitter page</i>		<i>Information about participating of PJ in Project ROBORDER and invitation, with link to LEAS to visit and explore ROBORDER website</i>
73	<i>CENTRIC</i>	<i>Website</i>	<i>ROBORDER project</i>	28/03/2017	<i>CENTRIC's Website</i>	<i>General Public</i>	<i>Information about ROBORDER project</i>

No	Partner	Type of dissemination activity (e.g. article, conference, etc.)	Project Title	Date	Host (journal, blog, conference host, venue)	Audience	Explanatory note of the dissemination item
74	CENTRIC	Social Media	ROBORDER project	16/05/2017	CENTRIC's Twitter page	Social Media	Information about the participation of CENTRIC in ROBORDER
75	CENTRIC	Social Media	ROBORDER project	13/07/2017	CENTRIC's Twitter page	Social Media	Information about the participation of CENTRIC in ROBORDER
76	CENTRIC	Conference	ROBORDER project	14/11/2017	SRIEE, Tallinn	Security Experts, Academics	Information about ROBORDER project
77	CENTRIC	Social Media	ROBORDER project	13/02/2018	CENTRIC's Twitter page	Social Media	Information about the participation of CENTRIC in ROBORDER
78	VTT	Poster	ROBORDER project	22-23/10/2018	EuroVR2018 15 th Annual EuroVR Conference	Research community	VTT had a poster in EuroVR2018 15 th Annual EuroVR Conference 22-23 October, 2018 London, UK
79	VTT	Seminar	ROBORDER project	01/06/2017	VTT	Specialists	Finnish defense force research council seminar
80	VTT	Face-To-Face meeting	ROBORDER project	21/12/2017	Finnish border guard	Specialists	-

Table 2 – Dissemination activities during first half of the project

In the following table, the dissemination reports that the ROBORDER partners have already performed during 2019-2020 will be presented:

No	Partner	Type of dissemination activity (e.g. article, conference, etc.)	Project Title	Date	Host (journal, blog, conference host, venue)	Audience	Explanatory note of the dissemination item
1	CERTH-ITI	workshop	Autonomous swarm of heterogeneous robots for surveillance operations.	2019	Workshop on Vision-enabled UAV and counter-UAV technologies for surveillance and security of critical infrastructures (UAV4S), Thessaloniki, Greece	Research community	Orfanidis G., Apostolidis S., Kapoutsis A., Ioannidis K., Kosmatopoulos E., Vrochidis S., & Kompatsiaris I.
2	CERTH-ITI	conference	EUCISE-OWL: An Ontology-based Representation of the Common Information Sharing Environment (CISE) for the Maritime Domain	2020	Semantic Web-Interoperability, Usability, Applicability Journal, Accepted for Publication	Research community	M. Riga, E. Kontopoulos, K. Ioannidis, S. Kintzios, S. Vrochidis, I. Kompatsiaris
3	CERTH-ITI	conference	A distributed, plug-n-play algorithm for multi-robot applications with a priori non-computable objective functions.	2019	The International Journal of Robotics Research, 38(7), 813-832.	Research community	Kapoutsis, A. C., Chatzichristofis, S. A., & Kosmatopoulos, E. B.
4	CNIT	Journal	In-Field Demonstration of a Photonic Coherent MIMO Distributed Radar Network	2019	IEEE Radar Conference (RadarConf), Boston, MA, USA, 2019, pp. 1-6, doi: 10.1109/RADAR.2019.8835849.	Research community	L. Lembo, S. Maresca, G. Serafino, F. Scotti, F. Amato, P. Ghelfi, and A. Bogoni
5	CNIT	conference	Microwave Photonics for a Radar Network	2019	OSA Advanced Photonics Congress (AP) 2019 (IPR, Networks, NOMA, SPPCom, PVLED), OSA Technical Digest (Optical Society of America, 2019), paper NeTh2D.2.	Research community	L. Lembo, S. Maresca, G. Serafino, F. Scotti, A. Malacarne, P. Ghelfi, and A. Bogoni
6	CNIT	conference	Photonics for	2019	International Topical Meeting on Microwave	Research	A. Bogoni

			Microwave Systems		Photonics (MWP), Ottawa, ON, Canada, 2019, pp. 1-4, doi: 10.1109/MWP.2019.8892249	community	
7	CNIT	conference	Photonics for Coherent MIMO Radar: an Experimental Multi-Target Surveillance Scenario	2019	20th International Radar Symposium (IRS), Ulm, Germany, 2019, pp. 1-6, doi: 10.23919/IRS.2019.8768096	Research community	S. Maresca, G. Serafino, F. Scotti, F. Amato, L. Lembo, A. Bogoni, and P. Ghelfi
8	CNIT	conference	Antenna Position Optimization in a MIMO Distributed Radar Network through Genetic Algorithms	2019	20th International Radar Symposium (IRS), Ulm, Germany, 2019, pp. 1-6, doi: 10.23919/IRS.2019.8768101	Research community	L. Lembo, P. Ghelfi, and A. Bogoni
9	CNIT	Journal	Toward a New Generation of Radar Systems Based on Microwave Photonic Technologies	2019	Journal of Lightwave Technology, vol. 37, no. 2, pp. 643-650, 15 Jan.15, 2019, doi: 10.1109/JLT.2019.2894224.	Research community	G. Serafino, F. Scotti, L. Lembo, B. Hussain, C. Porzi, A. Malacarne, S. Maresca, D. Onori, P. Ghelfi, and A. Bogoni, in
10	Copting	Fair		2019	Fair Intergeo, Stuttgart, Germany		
11	Copting	Fair		2019	Fair Sicherheitsexpo 2019, Munic Germany		
12	EASS	Presentation		24/09/2019		EASS personnel	EASS internal seminar/ information day
13	EASS	Social media		10/2019			mention on personal wall on LinkedIn
14	EASS			24/01/2020	Ministry of the Interior.		Vision seminar on artificial intelligence (AI) in the area of internal security
15	EASS	website			https://www.sisekaitse.ee/en/projects		Descriptive overview on the EASS website
16	EASS	website		12/2019	https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwis2PfsourpAhUJr4sKH99KCfEQFjAAegQIARAB&url=https%3A%2F%2Fwww.hm.ee%2Fsites%2Fdefault%2Ffiles%2Fkrn_visionidokument_2035.pdf&usg=AOvVaw390A5QRros7Gf9xXCyAy7B ; p35		mention in the vision document "APPLIED HIGHER EDUCATION IN 2035" in Estonia

17	Everis	Workshop		2018	ICT2018	Research community	
18	EVADS	website		2019	https://scrddrones.com/en/scr- and-everis-ads-participate-in-roborder-project-for-autonomous-border-surveillance/		
19	EVADS	website		2019	http://www.infodron.es/id/2020/05/13 /noticia-everis-roborder-proyecto-europeo- vigilancia-autonoma-fronteras.html		
20	EVADS	website		2019	https://www.linkedin.com/feed/update/urn:li:activity:6665900645125619712/		
21	GNR	website		2019	https://www.gnr.pt/ficheiros/projCofinanciados/horizonte/Autonomousswarmheterogeneou sRobotsBORDERsurveillance.pdf		
22	VVT	conference		2019	VTT Technical Research Centre of Finland. VTT Technology, No. 357 https://doi.org/10.32040/2242-122X.2019.T357	Research community	Helin, K., Kuula, T., Karjalainen, J., & Kemppe, P. (2019). Laboratory Evaluation of AR / VR Based User Interface for Drones Control. In The application track, posters and demos of EuroVR: Proceedings of the 16th Annual EuroVR Conference - 2019 (pp. 13-15).
23	VVT	conference		2020	Advances in Intelligent Systems and Computing, Vol.. 962 https://doi.org/10.1007/978-3-030-20467-9_19	Research community	Väätäinen, A., Laarni, J., & Höyhty, M. (2020). Development of a Concept of Operations for Autonomous Systems. In J. Chen (Ed.), Advances in Human Factors in Robots and Unmanned Systems (pp. 208-216). Springer.
24	VVT	video	ROBORDER - Proof-of-concept of Drone control with Hololens		https://youtu.be/wcCZUW2-K3Y		
25	VVT	video	H2020-		https://youtu.be/p60zgnG2eos		

			ROBORDER: Drone control with Mixed Reality - User tests				
26	VVT	Demo				100 person	Several Demos of AR / VR Based Novel User Interface for Drone Swarms Mission Control at VTT's Mixed Reality labs
27	UoA	Scientific Publication	Event correlation and forecasting over high- dimensional streaming sensor data", 2018 IEEE 14th International Conference on Wireless and Mobile Computing, Networking and Communications (WiMob 2018)	15-17 /10/2018	2018 IEEE 14th International Conference on Wireless and Mobile Computing, Networking and Communications		Scientific publication: V. Papataxiarhis, S. Hadjiefthymiades, "Event correlation and forecasting over high- dimensional streaming sensor data", 2018 IEEE 14th International Conference on Wireless and Mobile Computing, Networking and Communications (WiMob 2018), Limassol, Cyprus, October 15-17, 2018.
28	UoA	Reference and short presentation			website of the Pervasive Computing Research Group of UoA (http://p-comp.di.uoa.gr/)		
29	UoA	Post Graduate Thesis	implementation of STANAG 4586 standard using OWL2 ontologies and semantics for automated interoperable communication of UAVs				
30	UoA	Post Graduate Thesis	swarm intelligence for unmanned robotic devices				
31	UoA	Synergy					Liaison with

							RAWFIE project and consortium (www.rawfie.eu)
32	UoA	Article Submission (under review)	Stepwise correlation of multivariate IoT event data based on first-order Markov chains				Authors: V. Papataxiarhis, T. Vassilopoulou, S. Kostakonti, S. Hadjiefthymiades, Computer Communications Journal, Elsevier, Special Issue "Machine Learning over IoT"
33	UoA	Under Graduate Study	Event correlation over IoT data				
34	UoA	Synergy					Liaison with ARESIBO project and consortium (www.aresibo.eu)



4. Conclusion

In this document, an analysis of the target groups, the dissemination and communication strategy and the activities report, is presented. It is noted that different types of target groups can give multiple and useful information, contribution and ideas for the ROBORDER platform, involving various stakeholders and interested organizations of different types and background, offering them at the same time different levels of involvement.

Finally, this document reports the dissemination and communication actions undertaken by the members of ROBORDER consortium during the thirty six months of project's execution. It is clear that the coordinated and supported actions from all members of the consortium contributed to the execution of the dissemination and communication strategy by providing a unified report and complete picture of activities made so that any weak points identified and corrective actions are taken.

Summarizing, the sophisticated and methodological dissemination strategy, correctly explored in all the potential areas of interest, led to an effective dissemination throughout the first thirty six months of the project