



# Road-, Air- and Water-based Future Internet Experimentation

<b>Project Acronym: RAWFIE</b>			
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0.3		Final Version	

<sup>3</sup> Deliverable Distribution: PU (Public, can be distributed to everyone), CO (Confidential, for use by consortium members only), RE (Restricted, available to a group specified by the Project Advisory Board).



RAWFIE is a Research and Innovation Action (RIA) that addresses virtually every aspect raised by the FIRE+ (Future Internet Research & Experimentation) call, namely Collaboration on experimental infrastructures, the use of Europe’s Research and Education Network infrastructures and the development of the concept of Experimentation-as-a-Service (EaaS) in order to provide Experimenters with equipment, services, systems and tools on demand, seamlessly and regardless of their geographical location.

The present document describes the training events and the efforts undertaken by operators and experimenters on the RAWFIE platform into the testbed, so that the requested experiments can be successfully defined, executed and validated.

**Keywords:** RAWFIE, RAWFIE Community, FIRE, platform, UxV experimenters, UxV testbeds, Unmanned Vehicles operators



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## **Part III: Main Section**

### **1 INTRODUCTION**

#### **1.1 Scope and goal of Deliverable D7.3**

The RAWFIE Work Package 7 (WP7) is dedicated to “Training, Dissemination, Liaison” and aims at defining, maintaining and coordinating the appropriate mechanisms and tools ensuring broad visibility and impact of the project’s work and results. The main objective of the dissemination activities in the RAWFIE project is to promote the concepts and technologies developed in the project.

This document describes how RAWFIE follows a comprehensive and effective approach to dissemination and promotion activities so as to support project partners in their daily activities, by firstly elaborating on what are our main dissemination and promotion objectives.

This deliverable also presents the foundation of the dissemination and promotion strategy, which has been defined in the perspective of aligning the project activities with the overall FIRE/FIRE+ vision and programme-level community building and marketing activities led by the FIRE Dissemination Working Group. In relation to that, the deliverable goes on by presenting the set of tools which have been identified for the specific target groups. Then, the central part of this document presents the set of means and actions that are being implemented in the 30 months of the project to guide and assist the partners in their dissemination and communication actions, including preparation of promotional material, participation and organization to relevant conferences and workshops.

Following the introduction (Chapter 1), Chapter 2 provides a detailed description of all training setups. Chapter 3 contains general results, quantitative figures about the dissemination performed during the project and activities planned after the end of the project. Finally, Chapter 4 contains a short summary and conclusions.

#### **1.2 Common abbreviations**

Table 1: List of abbreviations

<b>Abbreviation</b>	<b>Meaning</b>
HMOD	Hellenic Ministry of Defence
UoA	University of Athens
MarEH4EU	Maritime Exploration Hall for Europe
RT-ART:	Robotic Testbed in an ART and Technology center
PlaDyPos	Platform for Dynamic Positioning
PlaDyFleet	A fleet of unmanned surface marine vehicles PlaDyPos
UAV	Unmanned Aerial Vehicle
UGV	Unmanned Ground Vehicle



UI	User Interface
UML	Unified Modelling Language
USV	Unmanned (Sea) Surface Vehicle

## 2 DISSEMINATION ACTIVITIES

This chapter gives an overview of the Dissemination tools and activities created by the RAWFIE partners from the beginning of the project in order to increase its visibility.

The main goal of the RAWFIE dissemination tools and activities are to provide visibility of the project’s work and its results and to further establish the RAWFIE community to experimenters, testbed operators, UxV manufacturers and suppliers, research institutes, universities, and other interested parties. Dissemination tools were used as communication channels conveying messages about the RAWFIE project, technologies, services and benefits to the general public. From the very beginning of the project, the RAWFIE Consortium has actively pursued various means to raise awareness, inform the target audience to follow the development of the platform, create interest in joining the RAWFIE community.

The subsections below provide an overview of every Dissemination and Communication activities of RAWFIE.

### 2.1 Dissemination Tools

The main objective of the dissemination activities has been to consolidate project’s awareness among the research ICT community, share the results achieved and liaise with related projects and initiatives, such as, FED4FIRE, etc. The subsections below aim to provide a detailed review of each of the main tools that were used to promote the RAWFIE project and its actions are the following:

#### 2.1.1 RAWFIE website.

The website of the project (<http://www.rawfie.eu/>) provides easy access to various information about the project, such as its main goal, its partners, its facilities, its latest news and events, etc. It is continuously updated and maintained throughout the whole development and duration of RAWFIE, in particular by publishing relevant news, available deliverables and scientific publications. The website offers a way for new members to be introduced to the RAWFIE concepts, services, achievements and community. It can be accessed at <http://www.rawfie.eu/>.



This project has received funding from “HORIZON 2020” the European Union’s Framework Programme for research, technological development and demonstration under grant agreement no 645220

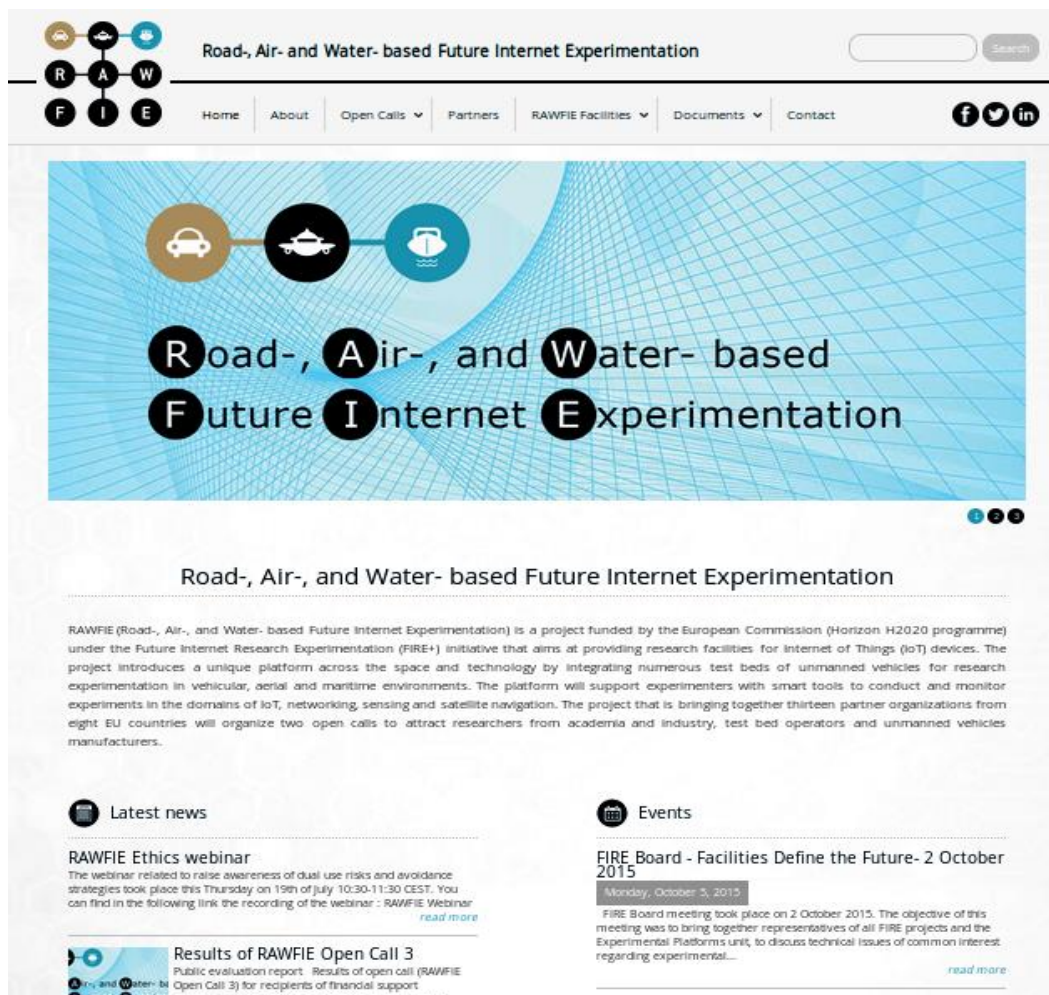


Figure 1 - RAWFIE website

## 2.1.2 Social media channels

Social media are a means of easy and significant dissemination of the project’s activities and achievements by providing visibility of the project to a wide range of users. They also provide easy interaction, which can help expand the RAWFIE community even further. Their ease of access, popularity, and rapid information flow make them a very efficient tool for disseminating the project. Thus, profiles on Twitter, LinkedIn, and Facebook were created for RAWFIE from an early stage of the project to share knowledge and experience about on-going and completed actions, technical details and results, services, benefits, etc. Posts and updates relating to the project’s development and news have been regularly publicized.

- 1) RAWFIE Twitter account has attracted 161 followers so far (including project partners, similar projects, and interested stakeholders, etc.).
- 2) Facebook account has 55 followers and is hosting 101 posts.
- 3) LinkedIn account exhibits 53 connections.



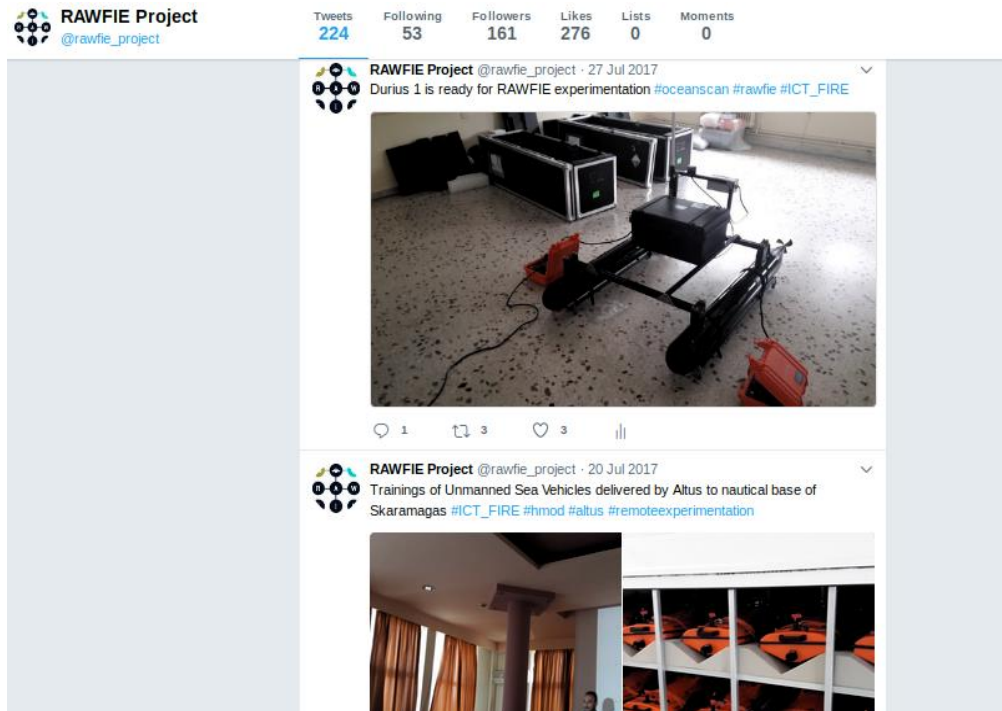


Figure 2 - RAWFIE Twitter account

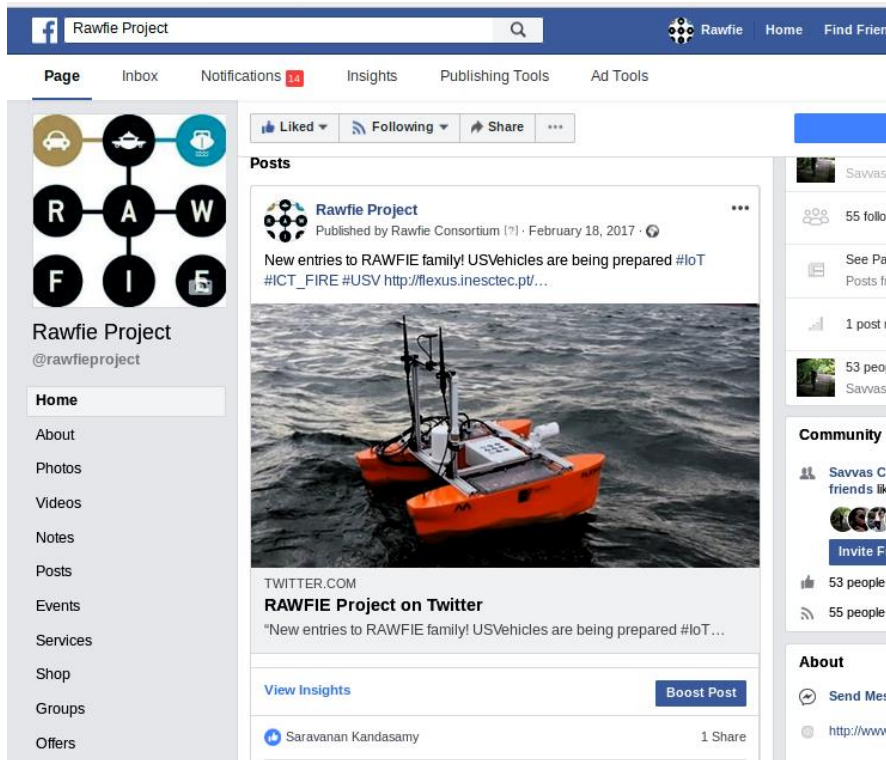


Figure 3 - RAWFIE Facebook page

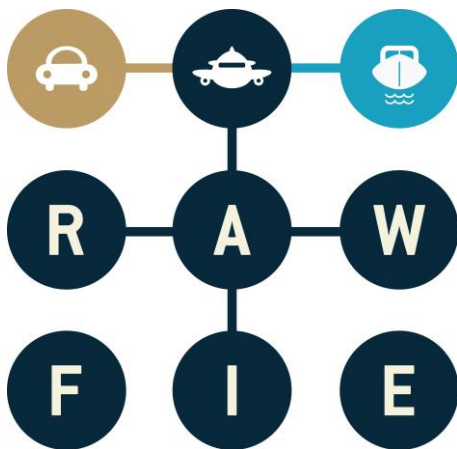
Social Network	Date of Creation	Followers	Posts	URL
Facebook	19/01/201	55	101	<a href="https://www.facebook.com/ra">https://www.facebook.com/ra</a>

	5			<a href="http://wfieproject">wfieproject</a>
<b>Twitter</b>	19/01/2015	161	224	<a href="https://twitter.com/rawfie_project">https://twitter.com/rawfie_project</a>
<b>LinkedIn</b>	20/01/2015	53 connections	-	<a href="https://linkedin.com/in/p-comp-lab-5422a184">linkedin.com/in/p-comp-lab-5422a184</a>

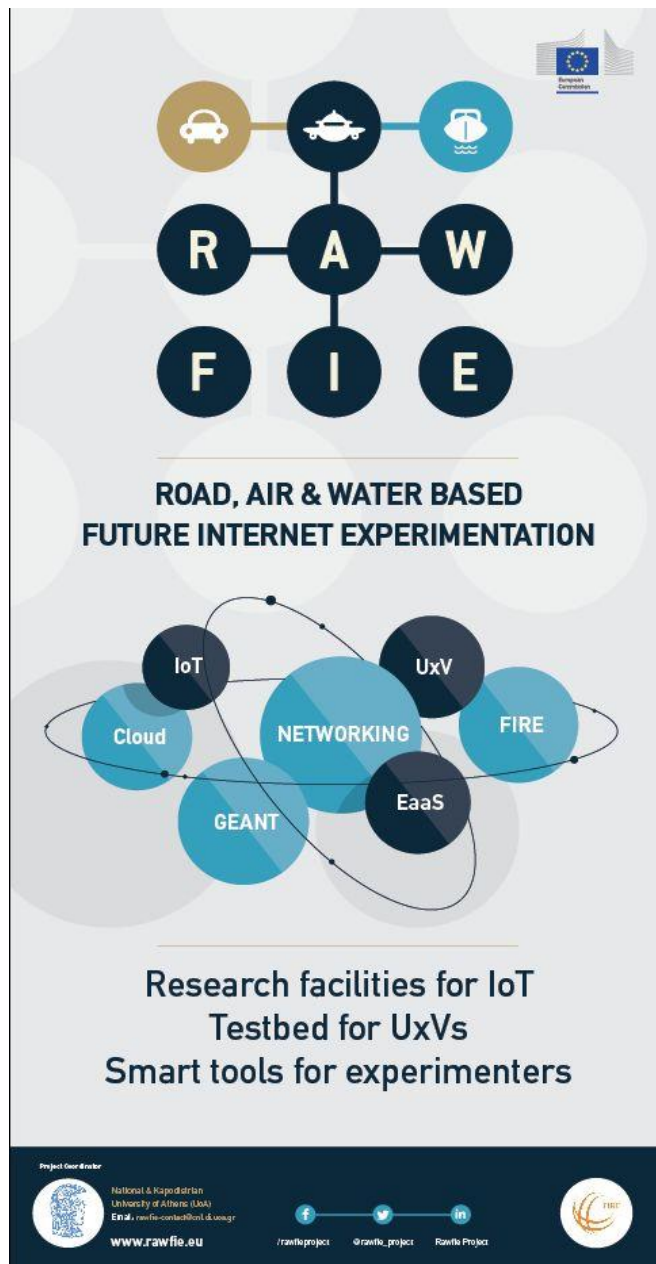
**Table 1: Social media information**

### 2.1.3 Publications and participation to events:

- 3 A broad community is informed about the RAWFIE project through various publications disclosed throughout the development of the project and the participation to multiple events.
  - **Brochures, flyer, logo, poster:** The unique RAWFIE logo was created and promoted as a unified image of the project. All dissemination and communication materials will carry the logo of the RAWFIE project. Also, a flyer, a banner, and a poster in English are available to promote RAWFIE and its impacts. Moreover, project brochures are intended to familiarize a broad spectrum of people, both users and technicians with the project and its goals.



**Figure 5 - RAWFIE Logo**



**Figure 6 - RAWFIE Banner**

# ROAD, AIR & WATER BASED FUTURE INTERNET EXPERIMENTATION

### MAIN OBJECTIVES

- Create a federation of UxV testbeds
- Provide smart tools for conducting large-scale experiments on IoT paradigm
- Integrate cloud services and networking facilities
- Promote the Experimentation-as-a-Service (EaaS)
- Support the entire experiment lifecycle with fully controllable conditions
- Assess the performance of different technologies in networking, sensing and autonomic application domains

### INNOVATIONS

<ul style="list-style-type: none"> <li>✓ - Heterogeneous UxV testbeds</li> <li>✓ - Wide class of networking technologies</li> </ul>	DIVERSITY
<ul style="list-style-type: none"> <li>✓ - Ease of incorporating additional technologies</li> </ul>	EXTENSIBILITY
<ul style="list-style-type: none"> <li>✓ - Use of cloud services (PaaS / IaaS)</li> </ul>	VIRTUALIZATION
<ul style="list-style-type: none"> <li>✓ - Designed for a long lifetime</li> </ul>	SUSTAINABILITY

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[www.rawfie.eu](http://www.rawfie.eu)

/rawfieproject    @rawfie\_project    Rawfie Project

Figure 7 - RAWFIE Poster





This project has received funding from “HORIZON 2020” the European Union’s Framework Programme for research, technological development and demonstration under grant agreement no 645220



### OPEN CALLS:

**Expected third parties**

- UxV manufacturers
- Testbed operators
- Experimenters

**Third parties funding**

- 3.4 M €
- Estimation for 23 third parties in total

**Important Dates**

**1st Open Call: December 2015**

- Submission deadline: February 2016
- Notification for successful proposals: May 2016

**2nd Open Call: December 2016**

- Submission deadline: February 2017
- Notification for successful proposals: May 2017

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/rawfieproject  
 @rawfie\_project  
 Rawfie Project

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## ROAD, AIR & WATER BASED FUTURE INTERNET EXPERIMENTATION

Figure 9 - RAWFIE Flyer front page

### ABOUT RAWFIE

RAWFIE is a project funded by the European Commission (Horizon H2020 programme) under the FIRE+ initiative that aims to provide research and experimentation facilities for mobile IoT devices. The project introduces a unique, mixed experimentation platform across the space and technology dimensions by integrating numerous testbeds for experimenting in vehicular, aerial and maritime environments. RAWFIE will be a great opportunity for experimenters to remotely perform experiments on different robotic devices (i.e., UAV, UGV, and USV) for assessing the performance in networking, sensing and mobile/autonomic application domains.

### MAIN OBJECTIVES

- Create a federation of UxV testbeds
- Provide smart tools for conducting large-scale experiments on IoT paradigm
- Integrate cloud services and networking facilities
- Promote the Experimentation-as-a-Service (EaaS)
- Support the entire experiment lifecycle with fully controllable conditions
- Assess the performance of different technologies in networking, sensing and autonomic application domains

### INNOVATIONS

- Heterogeneous UxV testbeds	DIVERSITY
- Wide class of networking technologies	EXTENSIBILITY
-Ease of incorporating additional technologies	VIRTUALIZATION
- Use of cloud services (PaaS / IaaS)	SUSTAINABILITY
- Designed for a long lifetime	

### IMPACT

RAWFIE platform is an important “instrument” that allows technology players of medium and small scale to experiment solidly on their prototypes. It will provide a number of benefits in the European society by facilitating the everyday life of citizens. Some indicative application areas are environmental monitoring, surveillance monitoring, and smart cities.

Figure 8 - RAWFIE Flyer back page



Figure 10 - Nefutures Brochure

### 3.1 Dissemination Events

During the project lifecycle, RAWFIE consortium has actively promoted the project, its activities and progress in various occasions, both in project organised workshops and a number of international and regional conferences. The following Table summarises all the events to which RAWFIE took part.

Table 2 - List of events to which RAWFIE took part

N.	Event Name	Date-Location	Description
1	Workshop at Hellenic Armed Forces Officers Club	Athens, 19.02.2015	RAWFIE poster was presented to the participants
2	IDEX15	February 19-27, 2015, Abu Dhabi, United Arab Emirates	
3	FIRE Workshop at Digital Catapult	London, 09.03.2015	“Future Internet Opportunities for Innovative European Businesses”. RAWFIE was presented in the section: “Looking Forward to the FIRE+ Projects” Liaison with potential experimenters
4	HOMSEC15	March 09-12,	



		2015, Madrid, Spain	
5	Net Futures 2015 Event	Brussels, 25-26.03.2015	RAWFIE was part of the “Experimental Platforms” section
6	NGCUV15	April 27-10, 2015, Girona, Spain	
7	OCEANS15	May 17-21, 2015, Genoa, Italy	
8	Internal workshop with the Fed4FIRE Community	June, Athens	
9	Athens Wireless Summit 2015	Athens, 26-27/09	RAWFIE was presented with special emphasis to Open Calls
10	PCI Conference 2015 – Research track ( <a href="http://pci2015.teia.th.gr/">http://pci2015.teia.th.gr/</a> )	19th Pan-Hellenic Conference on Informatics, Athens, Greece, 1-3 October, 2015	RAWFIE was part of the “State of the art technologies in next generation data networks IIt (Data Nets II)”
11	FIRE Board meeting	2 October 2015, Brussels	Discussing progress in RAWFIE, enabling Road-Air- and Water-based Future Internet Experimentation.  Session (5): Facilities Supporting Future Internet Experimenters, some Experiences Experimenter Support in the RAWFIE platform”
12	ICT2015	October 19-23, 2015, Lisbon, Portugal	
13	ICT Exhibition 2015		RAWFIE proposal was accepted to be shown in the ICT 2015 that was held in Lisbon, on 20-22 October. During the ICT event, parts of the RAWFIE experimentation suite were demonstrated (with UxV device simulator/emulator support)
14	ICT 2015 Innovate, Connect, Transform	Lisbon, 20-22 October 2015	RAWFIE participated as an exhibitor
15	FIRE Forum	9 December 2015, Brussels	RAWFIE participated in the relevant sessions discussing several issues
16	AthensIoTMeetup – Internet of Things		
17	Oceanology 2016	March 15-17, 2016, London, United Kingdom	



18	Patras IQ - Exhibitor	15-17/04/2016, Patra, Greece	A major technology transfer conference that took place on April 15-17th in Patras Greece. Many visitors to the conference and the exhibition were informed about the activities of our group and our research results Hellenic Open University Participated to the PatrasIQ Exhibition 2015, from 24-26 April 2015, at “Dimitris Tofalos” Athletic Center, Patras, Greece.
19	NetFutures - Exhibitor	20-21/04/2016, Brussels, Belgium	NET FUTURES aimed to maximize competitiveness of the European technology industry. The conference gathered over 1.000 attendees, to form an interconnected community involving companies, organizations and people in Research & Innovation, Market Validation & Living Lab Research, Business Development, Entrepreneurship & Enterprise Strategy and Policy Making.  <a href="http://netfutures2016.eu/">http://netfutures2016.eu/</a>
20	Aero'Nov Exhibitor in SAFE Cluster	18-19/05/2016, Marseille, France	The 5th edition of Aero'Nov, international Aerospace B2B meetings and conferences, took place on 18th and 19th May 2016 in Aix en- Provence, in partnership with the Safe Cluster, sponsored by Airbus Helicopters and Thales Alenia Space and was supported by Safran Snecma. First industrial field of the PACA region, the Aerospace sector presented major assets on this territory with highly innovative SMEs, start-ups, Research centers and large groups.  <a href="http://www.aeronov-connection.com/en/list-of-participants/22">http://www.aeronov-connection.com/en/list-of-participants/22</a>
21	Ocean Business Week	June 1-4, 2016, Lisbon, Portugal	
22	Jornadas de Automatica 2016	September 7-9, 2016, Madrid, Spain	Robotnik attended XXXVII Jornadas de Automatica 2016 <a href="http://ja2016.uned.es/">(http://ja2016.uned.es/)</a> (7th to 9th Sep. in Madrid)
23	Legal, Safe & Secure Use of Civil RPAS	September 22-23, 2016, Constanta, Romania	SAFE participated to the "Legal, Safe & Secure Use of Civil RPAS" Conference organized by DronEast.EU on 22-23 September in Constanta, Romania
24	Breaking the Surface – BtS 2016	October 2-9, 2016 Biograd na Moru, Croatia	
25	RosCon 2016	October 8-9, 2016, Seoul, S. Korea	Robotnik attended RosCon 2016 conference (8th and 9th October in Seoul)





26	International Conference on Intelligent Robots and Systems	October 9-14, 2016, Seoul, S. Korea	Robotnik attended IEEE/RSJ International Conference on Intelligent Robots and Systems (9 <sup>th</sup> to 14th Oct. in Seoul)
27	Project Management Forum - PlaDyFleet presentation	November 10, 2016, Croatia	All LABUST EU projects including PlaDyFleet were presented.
28	University of Zagreb Fair - PlaDyFleet presentation	November 17-19, 2016, Zagreb, Croatia	LABUST members Anja Babić, Filip Mandić, Ivan Lončar and Marin Stipanov presented PlaDyFleet project and vehicle PlaDyPos.
29	Zagreb Energy Conference - Invited talk	December 8-10, 2016, Zagreb, Croatia	Nikola Mišković gave an invited talk " <b>What are underwater robots used for?</b> "
30	Annual Conference on Neural Information Processing Systems 2016	December 7-12, 2016, Barcelona, Spain	Paper presented by HES-SO: Amina Mollaysa, Pablo Strasser, Alexandros Kalousis, Learning with Feature Side-information, Workshop on Learning in High Dimensions with Structure in the context of Advances in Neural Information Processing Systems 29: Annual Conference on Neural Information Processing Systems 2016, December 7-12, 2016, Barcelona, Spain.
31	Visit of the Catalonia Presidency Minister, the Secretary of ICT Governance and the General Manager of the European Space Agency - Business Incubation Centres (ESA BIC's) to the BCN Drone Center	December 15, 2016	
32	Visit of Catalan Minister for Business & Knowledge to the BCN Drone Center	February 10, 2017	
33	UPC ETSEIAAT aerospace university workshop	March 10, 2017	
34	8 <sup>th</sup> European Robotics Forum (ERF)	22-24 March 2017	RAWFIE was presented in Robotnik’s booth.





35	Ocean Business 2017	April 4-6, 2017 Southampton, United Kingdom	
36	AISTATS	May 9-11, 2017, Fort Lauderdale, Florida, USA Brussels	Paper submitted by HES-SO: Magda Gregorova, Stephane Marchand-Maillet, Alexandros Kalousis, Forecasting and Granger modelling with non-linear dynamical dependencies, under review in 20th International Conference on Artificial Intelligence and Statistics, AISTATS, 2017, Fort Lauderdale, Florida, USA.
37	MIPRO conference	May 22-26, 2017, Opatija, Croatia	The poster of the PLADYFLEET project was presented during the MIPRO projects exhibition.
38	Training for DFKI and MoD Greece testbed personnel	May 22-24, 2017, Bremen, Germany	The training covered all topics important for successful operation of the PlaDyPos USVs, from deployment/recovery procedures, manual and remote operation, to basic maintenance.
39	Fixed wing UAV course: 6th Edition (May 15th-19th, 2017), 7th Edition (June 19th-23rd, 2017) and 8th Edition (June 4th-8th, 2018)	May 15-19, 2017 June 19-23, 2017 June 4-8, 2018	
40	Catalan Government Course: 3rd edition	May 23-25, 2017	
41	Encontro Ciencia 2017	July 3-5, 2017 Lisbon, Portugal	
42	Spanish Robotics Conference 2017	Valencia, June 2017	RAWFIE was presented in Robotnik’s booth
43	International UAV Remote Sensing Courses: 7th Edition (June 12th-16th, 2017) and 8th edition (June 11th-15th, 2018)	June 12-16, 2017 June 11-15, 2018	
44	ROSCon and IROS 2017	Vancouver 21-28 Sep 2017	RAWFIE was presented in Robotnik’s booth.
45	SECPho (Photonics Cluster)	November 11, 2017	



	& Catalonia SmartDrones Cluster workshop		
46	Marine Technologies Workshop 2017	November 14-17, 2017, Porto, Portugal	
47	7 <sup>th</sup> Conference on Marine Technology	November 17, 2017, University of Rijeka, Croatia	<b>PlaDyFleet</b> project and its recent results were presented.
48	ROBOT' 2017 - Third Iberial Robotics Conference	Seville, 22-24 Nov 17	RAWFIE was presented in Robotnik’s booth.
49	Mobile World Congress Expo 2017 and 2018 editions	4 days during February 2017 and 2018	All details about the facilities, including the RAWFIE project and their goals were presented
50	9 <sup>th</sup> European Robotics Forum (ERF)	13-15 March 2018	RAWFIE was presented in Robotnik’s booth.
51	Oceanology 2018	March 13-15, 2018, London, United Kingdom	
52	RAWFIE- PlaDyFleet presentation at Oceanology International 2018	March 14, 2018, London	Presented the application of unmanned surface vehicle PlaDyPos delivered to H2020 RAWFIE infrastructure as a part of PlaDyFleet project.
	Geomatics event by GeoCuba	March 16, 2018, La Habana, Cuba	Presentation of RAWFIE project and impressive goals involved in it
53	Global Robot Expo	Madrid 18-20 April 2018	RAWFIE was presented in Robotnik’s booth
54	Spanish Robotics Conference 2018	Valladolid, June 2018	RAWFIE was presented in Robotnik’s booth
55	Meeting between RAWFIE and Roborder project ( <a href="https://roborder.eu">https://roborder.eu</a> )	Athens, June 8, 2018	The meeting had as main goal the exchange of prior knowledge related to the technical difficulties during the experimentation period and the design actions like the Portuguese Ministry of Defence - Naval Research Centre – Marinha, Bulgarian Defence Institute “Professor Tsvetan Lazarov”, NATO Science and Technology Organisation - Centre for Maritime Research & Experimentation etc and technical partners specialized in AR field like VTT Technical Research Centre of Finland, raise arguments and reached a productive

			discussion based on the complementarity of the partners.
56	Catalonia Digital Policies Minister visit to inaugurate the BCN Drone Center new extended facilities	June 9, 2018	
57	Visits to the BCN Drone Center, the RAWFIE testbed facilities owned by CATUAV		Explanation of how the RAWFIE project can be a new paradigm in UxV operations worldwide, an approach with similarities on how astronomers are using extremely costly resources like astronomical observatories placed in specific and selected sites but used from worldwide scientific teams

### 3.1.1 ICT Event

RAWFIE was presented in ICT 2015 Innovate, Connect, Transform. Parts of the RAWFIE experimentation suite were demonstrated with simulated mobile devices. Simulation involved the (controlled) movement of UxV and the device-produced data set. The visitors of the RAWFIE booth had the ability to draft a certain experiment using the project’s experiment definition language and view the outcome in the relevant visualization tool. Moreover, the visitors had the opportunity to visualize the device movement and the produced data through a Graphical User Interface (GUI). A video of the ICT is available at the following URL: <https://rawfie-owncloud.di.uoa.gr/index.php/s/Zh00EjltDBL6kz>



Figure 11 - ICT booth presentation

### 3.1.2 NetFutures Event 2016

Netfutures 2016 was the opportunity for a significant and effective dissemination of RAWFIE. The presentation in the booth included an unmanned ground vehicle that was used for remote experimentation.

The live device experimentation indoors is presented in two of the following videos

<https://rawfie-owncloud.di.uoa.gr/index.php/s/SWE2On7wWn9TQ1I>

<https://rawfie-owncloud.di.uoa.gr/index.php/s/YGUQ5hwLhgZSSHc>



Figure 12 - Netfutures 2016 booth

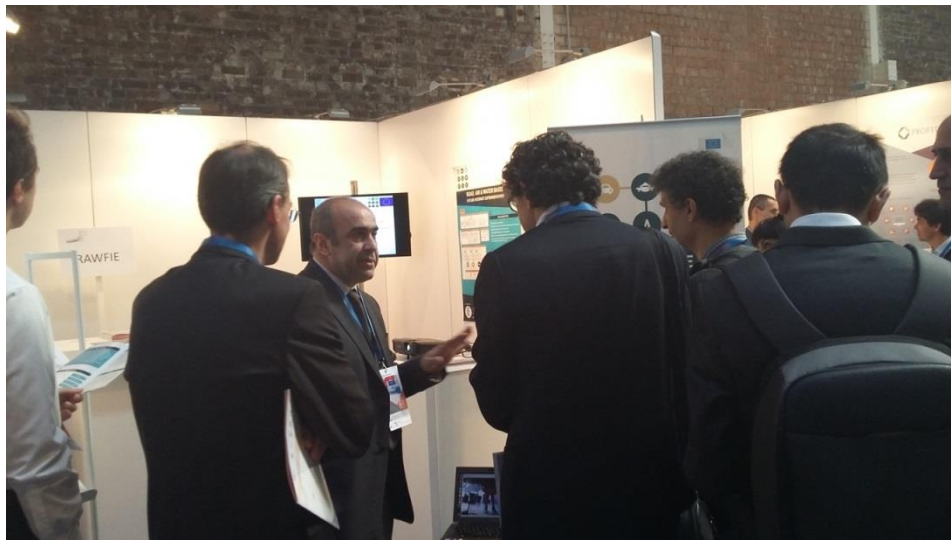


Figure 13 – Netfutures 2016 Demo

### 3.2 Dissemination related deliverables

Table 3 - Deliverables

Deliverable Number	Name	Abstract	Submitted on
D7.4	Data Management Plan 1		30/06/2015 (01/07/2015)



D7.1	Community Building	This report contains the initial results on establishing the RAWFIE community and the strategy to further expand it to the target members, including experimenters, testbed operators, UxV manufacturers and suppliers, research institutes, universities, and other interested parties. In the elapsed 15 months from the beginning of the project, the RAWFIE Consortium has actively pursued various means to raise awareness, inform the target audience to follow the development of the platform, create interest in joining the RAWFIE community, and to inform the broader audience of the first Open Call.	08/04/2016 (31/03/2016)
ROC2 kickoff meeting	November 24, 2017		A meeting for the 2nd Open Call subprojects took place on November 24, 2017 in Athens, at Skaramagkas Naval Base, hosted by HMOD
D7.5	Data Management Plan (b)	The deliverable provides the second version of the data management plan that will be adopted by the RAWFIE project. The plan follows the Horizon 2020 Work Program 2014-15 directives for Data Management Plan (DMP).	31/12/2016 (09/02/2017)

### 3.3 Publications

**Table 4 - Publications**

1	P. Dallemagne, D. Piguet, J.- D. Decotignie, Publish-Subscribe Communication for Swarms of Unmanned Vehicles, CSEM Scientific and Technical Report, p. 116; 2016
2	K. Kolomvatsos, C. Anagnostopoulos, S. Hadjiefthymiades, ‘Distributed Localized Contextual Event Reasoning under Uncertainty’, accepted for publication in <i>IEEE Internet of Things</i>





	<i>Journal</i> , 2017
3	Md Fasiul Alam, Stathes Hadjiefthymiades, Advanced, Hardware Supported In-Network Processing for the Internet of Things, to be presented in ICC 2017 (2nd international conference on Internet of things, Data and cloud computing), March 2017, Cambridge UK.
4	Papadopoulou, P., Kolomvatsos, K, Panagidi, K. and Hadjiefthymiades, E. (2017). Internet of Things Applications and Services: The Case of RAWFIE project. 11th Mediterranean Conference on Information Systems (MCIS), 4-5 September 2017, Genova, Italy.
5	Magda Gregorova, Alexandros Kalousis, Stephane Marchand-Maillet: Forecasting and Granger Modelling with Non-linear Dynamical Dependencies. Machine Learning and Knowledge Discovery in Databases - European Conference, ECML/PKDD, 2017, Skopje, FYROM.
6	Amina Mollaysa, Pablo Strasser, Alexandros Kalousis: Regularising Non-linear Models Using Feature Side-information. Proceedings of the 34th International Conference on Machine Learning, ICML, 2017, Sydney, 2508-251
7	Magda Gregorova, Alexandros Kalousis, Stephane Marchand-Maillet: Learning Predictive Leading Indicators for Forecasting Time Series Systems with Unknown Clusters of Forecast Tasks. Proceedings of the 9th Asian Conference on Machine Learning, {ACML} 2017, Seoul, South Korea.
8	A. Ch. Kapoutsis, Ch. M. Malliou, S. A. Chatzichristofis, E. B. Kosmatopoulos, “Continuously Informed Heuristic A*–Optimal Path Retrieval Inside an Unknown Environment”, «15th IEEE International Symposium on Safety, Security, and Rescue Robotics 2017 (SSRR 2017)», October 10-13 2017, Shanghai, China.
9	T. Kontos and S. Hadjiefthymiades, “An optimized cross-layer scheme for wireless ad hoc networking”, Ad hoc networks, Elsevier, Under Review.
10	T. Kontos, C. Anagnostopoulos, E. Zervas and S. Hadjiefthymiades, "Adaptive Epidemic Dissemination as a Finite-Horizon Optimal Stopping Problem," to be published in Wireless Networks (WINET), Springer, 2018.
11	Amina Mollaysa, Pablo Strasser, Alexandros Kalousis, Learning with Feature Side-information, Workshop on Learning in High Dimensions with Structure in the context of Advances in Neural Information Processing Systems 29: <i>Annual Conference on Neural Information Processing Systems 2016</i> , December 7-12, 2016, Barcelona, Spain
12	Magda Gregorova, Stephane Marchand-Maillet, Alexandros Kalousis, Forecasting and Granger modelling with non-linear dynamical dependencies, under review in 20th International Conference on Artificial Intelligence and Statistics, AI STATS, 2017, Fort Lauderdale, Florida, USA.
13	Md Fasiul Alam, Serafeim Katsikas, Olga Beltramello, and Stathes Hadjiefthymiades, "Augmented and Virtual Reality Based Monitoring and Safety System: A Prototype IoT Platform", <i>Journal of Network and Computer Applications</i> (JNCA), Elsevier, 2017.
14	K. Kolomvatsos, M. Tsiroukis, and S. Hadjiefthymiades, "An Experiment Description Language for Supporting Mobile IoT Applications", <i>2016 FIRE Book, European Commission</i> , River Publishers, November, 2017.



15	Athanasios Kapoutsis, Savvas Chatzichristofis, and Elias Kosmatopoulos, “DARP: Divide Areas Algorithm for Optimal Multi-Robot Coverage Path Planning”, <i>Journal of Intelligent &amp; Robotic Systems</i> , Springer, June 2017.
16	Magda Gregorova, Alexandros Kalousis, Stephane Marchand-Maillet: Forecasting and Granger Modelling with Non-linear Dynamical Dependencies. Machine Learning and Knowledge Discovery in Databases - European Conference, CML/PKDD, 2017, Skopje, Macedonia.
17	Papadopoulou, P., Kolomvatsos, K, Panagidi, K. and Hadjiefthymiades, E. (2017). Internet of things: A business perspective. Internet of Things: Concepts, Technologies, Applications and Implementations, Q. Hassan, A.R. Khan and S. Madain (eds), CRC Press
18	A. Ch. Kapoutsis, Ch. M. Malliou, S. A. Chatzichristofis, E. B. Kosmatopoulos, “Continuously Informed Heuristic A*–Optimal Path Retrieval Inside an Unknown Environment”, «15th IEEE International Symposium on Safety, Security, and Rescue Robotics 2017 (SSRR 2017)», October 10 -13 2017, Shanghai, China.
19	T. Kontos · C. Anagnostopoulos · E.Zervas · S. Hadjiefthymiades, “Adaptive epidemic dissemination as a finite-horizon optimal stopping problem”
20	“Analysis of Hybrid Geographic /Delay-Tolerant Routing Protocols for Wireless Mobile Networks “, Infocom 2018, Honolulu, Hawaii, USA
21	“Asymptotics of the Packet Speed and Cost in a Mobile Wireless Network Model”, IEEE ISIT 2018,Vail, Colorado, USA
22	“Analysis of a One-Dimensional Continuous Delay-Tolerant Network Model”, IEEE SPAWC 2018, Kalamata, Greece
23	Harth, N. and Anagnostopoulos, C. (2018) Edge-centric Efficient Regression Analytics. In: 2018 IEEE International Conference on Edge Computing (EDGE), San Francisco, CA, USA, 02-07 Jul 2018
24	Ali, A., Anagnostopoulos, C. and Pezaros, D. P. (2018) On the Optimality of Virtualized Security Function Placement in Multi-Tenant Data Centers. In: IEEE International Conference on Communications (ICC 2018), Kansas City, MO, USA, 20-24 May 2018
25	R. Cziva, C. Anagnostopoulos, D. P. Pezaros, (2018) Dynamic, Latency-Optimal vNF Placement at the Network Edge. IEEE Conference on Computer Communications (INFOCOM 2018), Honolulu, HI, USA
26	Harth, N., Anagnostopoulos, C., (2017) Quality-aware Aggregation & Predictive Analytics at the Edge. IEEE International Conference on Big Data (IEEE Big Data 2017), December 11-14, 2017, Boston, MA, USA.
27	Gregorová, Magda, Ramapuram, Jason and Kalousis, Alexandros "Large-scale Nonlinear Variable Selection via Kernel Random Features." ECML PKDD 2018

### 3 OVERALL RESULTS

The RAWFIE partners have been prominently involved in over 50 multiple dissemination activities at top international conferences, in the organization of workshops, presentation of keynote speeches,



In the development of multiple promotional campaigns, presentation at booth exhibitions promoting the project at different international venues, publications in scientific journals as well as publications for future disseminations to name just a few prominent activities.

There have been 27 papers published in various scientific journals and in conference proceedings.

Following the objectives and planned activities as detailed in D7.2, the consortium has been actively involved in several dissemination and communication activities, led by UOA (Leader of WP7). From the first year the consortium has ensured a heavy promotion of the RAWFIE project and its results, in order to reach the KPI targets set at the proposal stage as well as in WP7, as shown in the following Table.

**Table 5: Quantitative indicators for RAWFIE**

Quantitative indicators for RAWFIE as defined in DoA	Goal	Results
Scientific Papers (journals/magazines)	>20	26
Theses (B.Sc., M.Sc., Ph.D.)	>20	30
Open Call 2 proposals (oversubscription ratio)	>300% (33% of proposals gets funded)	10/14=71.5% funded
Expressions of Interest for platform use in the self-sustainability period	>20	N/A
Different UxV technologies integrated	>6	9
Reuse of other FIRE project outcomes	>3 projects	Compatible of the Sflce Federation Architecrure of FIRE projects, SAMANT
Simultaneous experimenters in a single facility	>2	N/A for security issues UOA, CERTH, HMOD, CMRE, TEK, VTT, etc.
Federation-wide network connectivity	>98%	
Infrastructure availability (for end users)	>98%	
Accumulated data (sensor readings, position) for further processing, post-experiment analysis (last year of the project)	>1 TB	
UxV fault incidents	<20	2

### 3.1 PLAN OF ACTIVITIES AFTER PROJECT END

At the end of the project, a workshop related with the results of the completed experiments will be organized. The main goal of this workshop is to raise project awareness and thus stimulate further use of the platform after the conclusion of the project.





## 4 CONCLUSIONS

This document presents in detail the RAWFIE dissemination and promotion activities conducted during the full project lifecycle (with the exception of its very end), the cumulated results and lessons learnt through the project life time. The various types of promotional activities of WP7, led by UoA and with active contribution by the entire RAWFIE consortium, kept up the momentum created in the first year of the project and continued especially in terms of promoting, promoting showcases, on top of achieving major planned KPIs.

This various RAWFIE results have led to a broad and effective impact, engaging and benefiting a wide array of relevant stakeholders.