Project Title	AN OPEN, TRUSTED FOG COMPUTING PLATFORM FACILITATING THE DEPLOYMENT, ORCHESTRATION AND MANAGEMENT OF SCALABLE, HETEROGENEOUS AND SECURE IOT SERVICES AND CROSS-CLOUD APPS
Project Acronym	RAINBOW
Grant Agreement No	871403
Instrument	Research and Innovation action
Call / Topic	H2020-ICT-2019-2020 / Cloud Computing
Start Date of Project	01/01/2020
Duration of Project	36 months

D7.2 – Open-Source Contributions, Dissemination, Clustering and Workshop Activities Report - Version 1

Work Package	WP7 – Dissemination, Exploitation and Communication
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Contributing Author(s) (Org)	Vasileios Psomiadis (AUTH) Frank Scherber (IFAT)
Due Date	30.06.2021
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Dissemination Level

X	PU: Public (*on-line platform)
	PP: Restricted to other programme participants (including the Commission)
	RE: Restricted to a group specified by the consortium (including the Commission)
	CO: Confidential, only for members of the consortium (including the Commission)

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Executive Summary

This document contains a comprehensive report on RAINBOW's dissemination activities conducted in the first 18 months of the project (up to June 20, 2021 - the final numbers of June 2021 with regards to dissemination KPIs and accomplishments will be depicted in the dedicated section of the first periodic report to be delivered in July 2021). Deliverable D7.2 builds on the initial planning and methodology set in D7.1 "Communication Roadmap and Data Management Plan" with extensions or refinements where necessary. It presents the collective effort of the consortium on the project's dissemination front and summarizes all the recorded results of the ongoing dissemination monitoring. Details are provided on the foreseen dissemination mechanisms and the relevant actions that were followed up by the partners during this period as well as the project's open-source contributions and the establishment of the Fog Adoption Industrial Focus Group. Additionally, it includes the evolution of the original dissemination strategy with further planning and roadmaps for the second half of the project. Finally, monitoring and progress of the dissemination KPIs and their target goals is presented and analysed.

1 Introduction

1.1 Purpose of the Report

The present deliverable is prepared in the context of Work Package 7 "Dissemination, Exploitation and Communication" and it is associated with the work being done within tasks T7.1 "Dissemination, Clustering and European-wide Workshops Organization" and T7.5 "Fog Adoption Industrial Focus Group".

WP7 focuses on the planning, coordination, and implementation of a sound strategy for RAINBOW's communication, dissemination, and exploitation activities. The goal of WP7 is to raise awareness of the project amongst the industrial and research community and to achieve wide communication and scientific dissemination of its innovative outcomes. Thus, ultimately leading to high and measurable impact for the RAINBOW developed concepts and tools in the European and international cloud computing markets. Towards this direction, WP7 also aims at the elaboration of an exploitation plan that will examine the business opportunities of the proposed RAINBOW platform and solutions.

This deliverable should be viewed as the next instalment of Deliverable D7.1 "Communication Roadmap and Data Management Plan", and in particular of its "PART A – Dissemination and Communication Plan", in the context that on one hand it reports on the implementation of the dissemination strategy defined there and on the other hand it compliments the original planning and charts new course where required. D7.2 is the first dissemination report covering RAINBOW's dissemination progress and status at mid-term, while a second version, namely D7.3, is scheduled for release at the end of the project.

This document will be continuously evaluated and updated throughout the project's lifetime and revised at every project meeting, if deemed necessary. As such, it needs to be seen as a "living" document, with several revisions throughout the duration of the project. Major updates and reporting of the activities will also be included in the Periodic Reports.

1.2 Field of application - Scope

The carefully targeted dissemination and communication strategy defined in the beginning of the project has been followed to maximise the impact of the project. The identified target groups and key stakeholders along with the dissemination mechanisms, clear objectives and KPIs that were described in the dissemination plan were instrumental for planning and executing the activities that took place on the first 18 months of the project and are included in this report.

In this context, the present report includes the following aspects:

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- The dissemination strategy with the revised dissemination plan and aligned approach taken (Section 2).

- A detailed report on the activities fulfilled under each dissemination mechanism utilized by the project (Section 3).

- An overview of the published project's newsletters (Section 4).

- The open-source contributions of RAINBOW (Section 5).

- The establishment and setup of the Fog Adoption Industrial Focus Group (Section 6).

- The dissemination monitoring process and tracking of all KPIs and target goals (Section 7).

- Conclusions on the progress of the dissemination effort and plans for the next period (Section 8)

The deliverable is aligned with the Grant Agreement as signed by the project coordinator GIOUMPITEK MELETI SCHEDIASMOS YLOPOIISI KAI POLISI ERGON PLIROFORIKIS ETAIREIA PERIORISMENIS EFTHYNIS (UBITECH), the rest of the consortium members and the European Commission. The full grant agreement has been made available for partners.

2 Dissemination Strategy

2.1 Dissemination approach

The dissemination and communication plan presented in D7.1 remains the cornerstone behind all actions pursued by the consortium during the entire course of the project. The steering of the RAINBOW's dissemination strategy is based on the methodology and guidelines set out in the original plan, while any improvements and optimizations are incorporated when deemed necessary.

According to the dissemination roadmap, three distinct phases, each one lasting 12 months, are considered. Each phase has its own focus and target objectives while the intensity of the dissemination activities is progressively increasing along with the project maturity. By M18 the project has completed Phase I and reached the middle of Phase II (Figure 1).
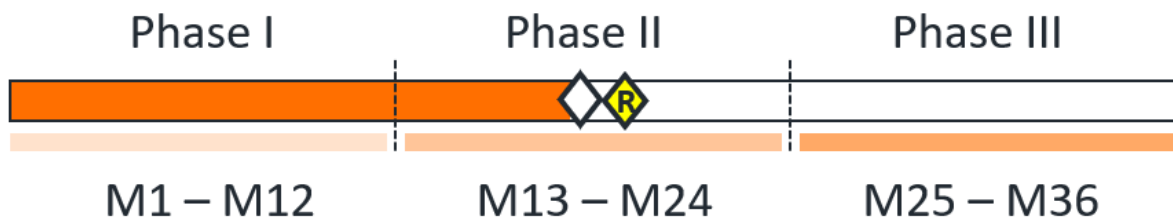
Figure 1: Timeline according to RAINBOW's dissemination roadmap

For the first year of the project (see Table 1) the focus was on raising awareness about RAINBOW's vision and objectives, its contributions, and outcomes as well as its expected impacts. To achieve this RAINBOW had to reach out and mobilize the identified target groups, audiences that share interest in the project's goals, and at the same time build followers that could act as dissemination ambassadors but also future potential clients. Entering the second year, the attention of the dissemination effort turned towards the engagement and interaction with the targeted stakeholders, by beginning to propagate the initial outcomes of the research work (see Table 2).

The dissemination team at AUTH has implemented a structured approach for its coordination with all WP7 task leaders and maintains open communication with all members of the consortium and especially with K3Y, as the partner responsible for the overseeing of the Communication activities, and UBITECH, the project's coordinator. Since February 2021 a regular bi-weekly meeting among WP7 task leaders has been established to better coordinate and align all actions related with dissemination, communication, and exploitation of the project. All partners get support through the established dissemination tools and mechanisms and are strongly encouraged to provide the dissemination team with up-to-date information about the on-going impact of their activities. On every plenary meeting, held every 3-4 months, the dissemination strategy

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and progress are reassessed along with the general assembly and corrective actions are applied if needed to ensure activities remain current and focused on the set objectives.

Phase I: Raise awareness and mobilize audiences	
Description	Targets at raising awareness about the project and inform all target audiences about what is being researched and what is expected in terms of project's outcomes. Mobilizing audiences that share interest in the project's goals will help in building followers and potential ambassadors for its dissemination.
Duration	M1 – M12
Related dissemination objectives	**DO.I**: Maximize outreach of the project via appropriate key messages **DO.III**: Establish liaisons with other projects and initiatives for knowledge and innovation transfer.
Target Audiences	All

Table 1: Description of Dissemination Phase I

Phase II: Engage and interact with targeted stakeholders	
Description	Considers the first results of the project and tries to communicate them in order to provide more information to potential target audiences towards the direction of establishing interactions and collaborations. Aiming at providing stronger connections and better understanding of the project and its benefits directly for the target groups.
Duration	M13 – M124
Related dissemination objectives	**DO.I**: Maximize outreach of the project via appropriate key messages **DO.II**: Diffuse the generated scientific and technological knowledge within and beyond the consortium **DO.III**: Establish liaisons with other projects and initiatives for knowledge and innovation transfer **DO.IV**: Engage audiences to get feedback, validate and ensure broad applicability of results
Target Audiences	All

Table 2: Description of Dissemination Phase II

2.2   Update of the original Dissemination Plan

To better coordinate and balance the dissemination effort, to further widen the reach of the activities as well as strengthen their impact, a consistency update of the dissemination plan was conceived at the beginning of the second year. This update aimed at supporting the partners to set mid-to-long term groundwork and goals on specific dissemination actions that would allow them to streamline their individual dissemination planning and at the same time contribute to fulfilling the overall objectives of the project's dissemination.

Thus, tools were created to organize specific implementation plans for each of the seven dissemination mechanisms and also gather input with regards to forthcoming actions of the project partners. Assignments to partners were done based on their specific expertise and capacity as well as their role and involvement in the project's tasks. Deadlines were also agreed for providing inputs and achieving the planned results, in order to allow for an optimized workflow and efficient monitoring of the dissemination KPIs.

2.3   Targeted Audience

RAINBOW has identified seven groups from various domains that correspond to the target audience for its dissemination and communication activities (Table 3). All dissemination phases aim for a wide reach among these groups. Obviously, as the dissemination activities are progressing key stakeholders of the Cloud ecosystem and possible market uptake players, gain extra attention. Thus, while in the beginning the dissemination and communication activities had initially an audience mainly belonging in groups B, C, D, G, progressively stakeholders from groups A, E and F were also attracted.

Target Groups			
A. Software and Application Developers	**B.** ICT Industry	**C.** Researchers and Academia	**D.** Industry Associations & Technology Clusters
E. Standardisation Organisations	**F.** Policymakers	**G.** General public	

Table 3: RAINBOW's target groups

2.4   Targeted Dissemination Actions

The dissemination approach foresees a mixture of activities, channels and mechanisms to reach the different target groups. These include: a) live activities where there is direct engagement with the audience, e.g., demonstrations, webinars, workshops, events and working groups; and b) non-interactives activities, such as publications. Unfortunately, the unprecedented situation introduced by the COVID-19 pandemic has impacted all

participatory activities worldwide in the last one-and-a-half year and made the shift to virtual online events a necessity. This affected the initial planning of actions but RAINBOW identified this risk in a timely manner and responded by prioritizing the remote and online activities.

The main aim of the dissemination actions is to maximise the visibility, awareness and engagement of the project's identified stakeholders in order to closely follow RAINBOW's developments, provide their feedback and get engaged into the RAINBOW activities.

3 Dissemination Mechanisms

For RAINBOW to achieve the objectives of its dissemination strategy, a set of dissemination mechanisms had been defined. Under this categorization various activities and tasks are assigned to each of the dissemination phases (Table 4).

Dissemination Mechanism	Phase I	Phase II
DM1 Organization of project events	• Organization of workshops in scientific conferences	• Organization of workshops in scientific conferences, industry events and fairs • Organization of hackathons
DM2 Participation to conference and workshops	• Participation to events • Presentations of project's scope • Interaction with participants	• Presentation of project's results to events • Representation in booths
DM3 Scientific publications	• Publication of position and review papers in conferences	• Publications of methodology papers in conferences
DM4 Engagement with stakeholders and community building	• Establishment of contact points • Liaison with industry communities and networks • Promotion of project's communication material	• Validation of results with key stakeholders in events or online • Interaction with industry communities and networks • Invitation to project's events
DM5 Collaboration and synergies with projects and initiatives	• Synergies identifications • Establishment of contact points • Exchange of ideas and intentions	• Periodic bilateral exchange of news and results (cross dissemination) • Joint presence in events
DM6 Internal dissemination in partners' networks	• Project's links and news in partners' online and other media • Distribution of project's newsletters	• Inclusion of project's results in partners' events
DM7 Standardization contributions	• Registration and/or participation to relevant working groups • Alignment with existing standards	• Participation to working groups' telcos and events • Presentation of project's outcomes

Table 4: Set of Dissemination Mechanisms for Phases I & II

Although all the above mechanisms have the potential to reach all the targeted groups, to increase effectivity of the approach and the coherence of the messages conveyed, the mechanisms are mapped to highlight the ones considered more adequate for one or more of the identified target groups (Table 5).

Dissemination Mechanism	Target Groups							Related dissemination effect
	A	**B**	**C**	**D**	**E**	**F**	**G**	
	Software Developers	ICT Industry	Researchers & Academia	Technology Clusters	Standardisation Organisations	Policy-makers	General public	
DM1 Organization of project events	●	●	●	●		●	●	Awareness, mobilisation, understanding & take-up
DM2 Participation to conference and workshops	●	●	●	●				Mobilisation, understanding & take-up
DM3 Scientific publications			●	●	●			Understanding & take-up
DM4 Engagement with stakeholders and community building	●	●		●			●	Awareness & mobilisation
DM5 Collaboration and synergies with projects and initiatives		●	●	●	●	●		Understanding & take-up
DM6 Internal dissemination in partners' networks	●	●	●	●			●	Awareness & mobilisation
DM7 Standardization contributions		●			●	●		Take-up

Table 5: Map of dissemination mecanisms versus target groups and effect

3.1 Events

AUTH has created – and maintains with contributions from all partners – a database of events and activities that are of interest to RAINBOW (see a snapshot at Annex I – Events

& activities database). The aim of this tool is to track a pool of selected European and international events that are candidates for performing various dissemination activities within the project framework. The list is constantly updated with further additions and new information on upcoming events.

3.1.1 Attended events

Members of the consortium attended various events of interest to RAINBOW (Table 6).

Event	Dates	URL	Partner(s) who participated
ACM SIGMOD International Conference on Management of Data 2020	June 14-19, 2020	https://sigmod2020.org/	AUTH
25th European Symposium on Research in Computer Security (ESORICS) 2020	September 14-18, 2020	https://www.surrey.ac.uk/esorics-2020	DTU
1st Workshop on Dependability and Safety Emerging Cloud and Fog Systems (DeSECSyS)	September 17-18, 2020	https://desecsys.futuretpm.eu/	DTU, UBITECH, AUTH
EGI Conference 2020	November 2-5, 2020	https://indico.egi.eu/event/5000/overview	UBITECH
European Big Data Value Forum 2020	November 3-5, 2020	https://www.european-big-data-value-forum.eu/	AUTH

Event	Dates	URL	Partner(s) who participated
IEEE/ACM Symposium on Edge Computing 2020	November 11-13, 2020	http://acm-ieee-sec.org/2020/	UCY
5th International Conference on System-Integrated Intelligence Intelligent, flexible and connected systems in products and production 2020	November 11-13, 2020	http://www.sysint-conference.org/	BIBA
IEEE/ACM 13th International Conference on Utility and Cloud Computing 2020	December 7-10, 2020	https://www.cs.le.ac.uk/events/UCC2020/index.htm	UCY
Data Week 2021	May 25-27, 2021	https://www.big-data-value.eu/data-week-2021/	AUTH, SUITE5, UCY, UBITECH
H-CLOUD Community Event: Open Source Initiatives for Cloud Computing	June 15, 2021	https://www.h-cloud.eu/event/horizon-cloud-community-event/?instance_id=73	AUTH

Table 6: Attended events

3.1.2 Events with project's presentation

To assist partners with presenting the project in various events AUTH has created a generic RAINBOW presentation (see Annex II) that can be used as the basis for building a customized version towards the specific scope and audiences of each event. Table 7 lists the events and occasions where the RAINBOW project was presented.

Event	Dates	URL	Audience Groups / Reach	Partner(s) who participated
EGI Conference 2020	November 2-5, 2020	https://indico.egi.eu/event/5000/overview	B, C, D / 120	UBITECH
REGAIN Workshop in Data Week 2021	May 27, 2021	https://datalab.csd.auth.gr/regain/	A, B, C, D, F / 75	AUTH, SUITE5, UCY, UBITECH
4th annual International CURPAS Conference	June 10-11, 2021	https://curpas.de/en/international-annual-conference.html	A, C, D, F, G / 80+	MSP

Table 7: Events with project's presentation

3.1.3 **Organised workshops**

RAINBOW's member Technical University of Denmark (DTU) and UBITECH were co-organizers of the **1st Workshop on Dependability and Safety Emerging Cloud and Fog Systems** (**DeSECSys**) that took place in September 17-18, 2020, in Guildford, United Kingdom, co-located with the 25th European Symposium on Research in Computer Security (ESORICS 2020).

The goal of the DeSECSys workshop was to foster collaboration and discussion among cyber-security researchers and practitioners to discuss the various applications, opportunities and possible shortcomings of these technologies and their integration with a focus on cloud, edge, and fog systems. Effectively the DeSECSys workshop aimed to produce a collection of state-of-the-art research about emerging security technologies, their applications, their shortcomings, and their verification with a focus on their uncompromised, in terms of security, safety and dependability, integration.

Due to the pandemic situation DeSECSys was an entirely virtual event and offered an all-digital experience. The peak attendance was 53 participants mainly coming from the ICT Industry, the Academia and Technology Clusters (groups B, C, D).

3.2   Publications

The publications that were contributed by RAINBOW in the first half of the project are listed below.

3.2.1   Conference Papers

Published by UCY

- M. Symeonides, Z. Georgiou, D. Trihinas, G. Pallis and M. D. Dikaiakos, "Demo: Emulating Geo-Distributed Fog Services," *2020 IEEE/ACM Symposium on Edge Computing (SEC)*, 2020, pp. 187-189, DOI: 10.1109/SEC50012.2020.00031

- M. Symeonides, Z. Georgiou, D. Trihinas, G. Pallis and M. D. Dikaiakos, "Fogify: A Fog Computing Emulation Framework," *2020 IEEE/ACM Symposium on Edge Computing (SEC)*, 2020, pp. 42-54, DOI: 10.1109/SEC50012.2020.00011

- Z. Georgiou, C. Georgiou, G. Pallis, E. M. Schiller and D. Trihinas, "A Self-stabilizing Control Plane for Fog Ecosystems," *2020 IEEE/ACM 13th International Conference on Utility and Cloud Computing (UCC)*, 2020, pp. 13-22, DOI: 10.1109/UCC48980.2020.00021

Published by DTU

- Larsen B., Debes H.B., Giannetsos T. (2020) "CloudVaults: Integrating Trust Extensions into System Integrity Verification for Cloud-Based Environments". In: Boureanu I. et al. (eds) Computer Security. ESORICS 2020. Lecture Notes in Computer Science, vol 12580. Springer, Cham. DOI: 10.1007/978-3-030-66504-3_12

Published by AUTH

- Theodoros Toliopoulos, Christos Bellas, Anastasios Gounaris, and Apostolos Papadopoulos. 2020. "PROUD: PaRallel OUtlier Detection for Streams". In Proceedings of the 2020 ACM SIGMOD International Conference on Management of Data (SIGMOD '20). Association for Computing Machinery, New York, NY, USA, 2717–2720. DOI: 10.1145/3318464.3384688

Published by BIBA

- Karthik Shenoy Panambur, Shantanoo Desai, Amit Kumar Singh, Klaus-Dieter Thoben, "A Hybrid Approach for Digital Representation of Sensors in Real-Time Applications", Procedia Manufacturing, Volume 52, 2020, Pages 14-19, ISSN 2351-9789, DOI: 10.1016/j.promfg.2020.11.004

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Published by IFAT (*accepted for publication*)

- Raphael Schermann and Ronald Toegl (2021). "Managing Anonymous Keys in a Fog-Computing Platform". 16th International Conference on Availability, Reliability and Security (ARES 2021)

3.2.2 Journal Papers

Published by POLITO

- A. Abdellatif, C. F. Chiasserini, F. Malandrino, A. Mohamed and A. Erbad, "Active Learning With Noisy Labelers for Improving Classification Accuracy of Connected Vehicles," in IEEE Transactions on Vehicular Technology, vol. 70, no. 4, pp. 3059-3070, April 2021, DOI: 10.1109/TVT.2021.3066210

- F. Malandrino, C. F. Chiasserini and G. M. Dell'Aera, "Edge-powered Assisted Driving For Connected Cars," in IEEE Transactions on Mobile Computing, DOI: 10.1109/TMC.2021.3084291

3.2.3 Articles in Corporate & Industrial publications

Published by BIBA

- Bremer Institut für Produktion und Logistik 2019/2020 Annual Report. ISSN 2626-9007. Available online for download at: https://www.biba.uni-bremen.de/fileadmin/user_upload/BIBA-Jahresbericht_2019-20.pdf

3.2.4 Other publications

RAINBOW is participating in the Future Cloud Cluster (FCC), a pan-European committee of projects and experts in Cloud Computing and has contributed to the FCC's recently released position paper on Federated Cloud Reference Architecture. With this paper, the FCC inputs to the European Commission its vision and rationale for realizing federated clouds comprised of multiple and heterogeneous cloud and edge computing layers, while also highlighting necessary building blocks and features. Most importantly, the FCC identifies key research challenges in cloud computing, relevant to the new Horizon Europe framework. This paper is available here: https://bit.ly/3kAfn15

RAINBOW's partner DTU has co-supervised a Master's Degree in Computer Engineering thesis at Politecnico di Torino by post-graduate student Paride D'Angelo on the "Remote Attestation and Integrity Verification Solution in a Cloud Based Environment". Available from here: https://webthesis.biblio.polito.it/16754/1/tesi.pdf

3.3 Engagement and community building

Engaging with specific communities and stakeholders within the target audience of RAINBOW is important to raise awareness about the project's vision and concepts. At the same time establishing such open communication channels will help RAINBOW to gain access within the industry and domains where the project's findings and outcomes are applicable. Thus, increasing the visibility of RAINBOW within the market and potential future clients for its solutions.

3.3.1 Industrial contact points

To fulfil this goal a list of industrial contact points has been built with the help of RAINBOW's partners. Currently this list includes 70 contacts spanning from software developers and system engineers to CTOs and founders of various SMEs, large enterprises, and industries active in either national, European or even global level. New contacts are constantly added as the project builds momentum among the cloud community and ecosystem. A number of these industry contacts have already contributed to RAINBOW by providing their insights in the stakeholders' requirements questionnaire in WP1. Further interaction with many of them has been established through subscriptions in the project newsletter and RAINBOW's social media.

3.3.2 Organization of webinars

RAINBOW aims to organize a series of webinars to further increase the reach and interaction with our target audiences. The webinars will be a mix of presentations of the project's research outcomes, collective audience feedback and engagement utilizing tools such as live polls and quizzes, questions, and answers session as well as open discussion of the future implications of the research. Additionally, these webinars will also be available through the project's website and YouTube channel and can be utilized as reference material for other activities such as workshops.

The current plan targets two different strands of RAINBOW webinars:

a) one led by the project's technical teams aiming to deliver some insights on the interworking of the platform 's main components & services (Table 8);
b) the other one led by the demonstrators and their supporting partners with the objective to highlight how RAINBOW is utilized on the 3 use cases and what are the benefits offered (Table 9).

Technical Strand

- **Duration**: 2h (1.5h presentations and 30mins open discussion)
- **Timeline**: Material ready by M25 (January 2022) / Webinars organized on M26 (February 2022)

Webinar 1	
Topic	*RAINBOW Fog Service Orchestration*
Responsible partner(s)	TUW / UBITECH / UCY
Webinar 2	
Topic	*RAINBOW Distributed Data Management and Fog Analytics*
Responsible partner(s)	UCY / AUTH / SUITE5
Webinar 3	
Topic	*RAINBOW Security and Trust in Fog Computing*
Responsible partner(s)	IFAT / DTU / POLITO

Table 8: RAINBOW webinars planning - Technical strand

Demonstrators Strand

- **Duration:** 1h15m (45min presentations + 30mins open discussion)
- **Timeline**: Material ready by M29 (May of 2022) / Webinars organized on M30 (June 2022)

Webinar 4	
Topic	*RAINBOW strengthening safety in Industrial Human-Robot Collaboration*
Responsible partner(s)	BIBA
Webinar 5	
Topic	*RAINBOW as enabler of Digital Transformation of Urban Mobility*
Responsible partner(s)	CRF / LINKS / POLITO
Webinar 6	
Topic	*RAINBOW supporting Power Line Surveillance via Swarm of Drones*
Responsible partner(s)	MSP / K3Y

Table 9: RAINBOW webinars planning - Demonstrators strand

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RAINBOW has also participated in the online webinar called "Strengthening EU Cloud Providers: Paving the Way for Edge and Green ICT" organized by the H-CLOUD CSA project on April 24, 2020, to discuss challenges and opportunities of Cloud Computing for the next work programmes spanning from research and innovation (Horizon Europe) to deployment (Digital Europe and Connecting Europe Facility 2) of Cloud technologies. UBITECH as a Cloud Computing expert and coordinator of RAINBOW has provided feedback based on its extended experience in Cloud related research projects as well as its expertise in Security, Networks and Cloud/Edge computing.

3.4   Clustering and collaboration with other initiatives

The build-up of liaison with other projects and initiatives relevant to the scope of RAINBOW was an important part of the dissemination effort up to now. Through this connection RAINBOW will promote stakeholders clustering, focus on targeted engagement, and perform cross-dissemination activities. The aim is to disseminate project's outcomes, ensure exchange of knowledge and best practices to the mutual benefit of all parties involved, and increase visibility of RAINBOW within the market and potential future clients for its solutions.

3.4.1   Synergies with projects

RAINBOW has established links and synergies with the following projects and initiatives (Table 10 - Table 17).

Project/Initiative: Horizon CLOUD – The Forum for Strategy Focused Cloud Stakeholders **URL**: https://www.h-cloud.eu	
Description H-CLOUD leads coordination and support activities for the consolidation and growth of the Cloud Computing research and innovation community in Europe, bringing together innovators, policy makers, cloud computing research, industry and users into an open, participatory and sustainable forum. The H-CLOUD Forum will strengthen collaboration to address challenges and opportunities at research, technological, policy, standardisation and organisational level to unlock the potential of cloud computing for all European stakeholders.	

Collaboration
RAINBOW is an active member of the H-CLOUD community and regularly participates in the monthly H-CLOUD Task Force meetings. RAINBOW and H-CLOUD engage in cross-dissemination activities such as project news and outcomes sharing (social media posts, newsletters, blog posts). Additionally, RAINBOW has submitted a technical workshop proposal to present its first platform release in the upcoming H-CLOUD community event (September 2021).

Table 10: Synergy with the H-CLOUD project

Project/Initiative: PLEDGER **URL**: http://www.pledger-project.eu/	
Description	
PLEDGER aims to deliver a new architectural paradigm that will pave the way for next generation edge computing infrastructures, tackling the modern challenges and coupling the benefits of low latencies on the Edge with the robustness and resilience of cloud infrastructures. It will also allow edge computing users to understand the nature of their applications, research understandable quality of service metrics and optimise the competitiveness of their infrastructures. PLEDGER aims to deliver a set of tools and processes that will enable: a) Edge Computing Providers to enhance the stability and performance effectiveness of their edge infrastructures, through modelling the overheads and optimal groupings of concurrently running services, runtime analysis and adaptation, b) Edge Computing Adopters to understand the computational nature of their applications, investigate abstracted and understandable QoS metrics, facilitate trust and smart contracting and identify how they can balance their cost and performance to optimise their competitiveness and monitor their SLAs, and c) Other industries to act as independent validators of QoS features in IoT applications, enabling new decentralised applications and business models, thus filling a large gap in the emerging Edge/IoT computing market landscape.	
Collaboration	
RAINBOW and PLEDGER have agreed on cross-dissemination actions among projects, that include the following: • A dedicated section on each project website with references (logo, short description and URL) to the other project • Shares and retweets of each other posts in social media • Distribution of each other newsletters • Exchange of blog posts • Participation and support of each other events	

Table 11: Synergy with the PLEDGER project

Project/Initiative: Future Cloud Cluster **URL**: https://eucloudclusters.wordpress.com/future-cloud	
Description The aim of Future Cloud Cluster is to provide a forum for discussion and collaboration for research and innovation initiatives that address next generation Cloud Computing challenges and issues, including diverse forms of distributed computing (Cloud, Multi-Cloud, Edge, Fog, Ad-hoc and Mobile computing). The goal of the cluster is to create a critical mass of projects so as to share experiences, collaborate on approaches, discuss challenges for adoption and future research and elaborate a broad EU perspective for cloud technology roadmapping.	
Collaboration RAINBOW is an active member of the Future Cloud Cluster and has contributed to the FCC's recently released position paper on Federated Cloud Reference Architecture for the European Commission.	

Table 12: Synergy with the Future Cloud Cluster

Project/Initiative: MORPHEMIC **URL**: https://www.morphemic.cloud/	
Description MORPHEMIC is a unique way of adapting and optimizing Cloud computing applications. The project is an extension of MELODIC which is a multi-cloud platform developed in the H2020 project. MELODIC is the simplest and easiest way to use Cross-Cloud. Now this open-source platform is extended to MORPHEMIC with 2 main innovative pillars: • Polymorphing architecture: when a component can run in different technical forms, i.e., in a Virtual Machine (VM), in a container, as a big data job, or as serverless components. • Proactive adaptation: aims to forecast future resource needs and possible deployment configurations -adaptation can be done effectively and seamlessly for the users of the application.	
Collaboration RAINBOW and MORPHEMIC have agreed on cross-dissemination actions among projects, that include the following: • A dedicated section on each project website with references (logo, short description and URL) to the other project • Shares and retweets of each other posts in social media	

- Distribution of each other newsletters
- Exchange of blog posts
- Participation and support of each other events
- Co-organization of a technical workshop

Towards these goals, the project teams have had a series of meetings to better understand the research challenges and value proposition of each project as well as pinpoint the exact topics they can act complementary and thus go forward with synergies among them.

Table 13: Synergy with the MORPHEMIC project

Project/Initiative: DataVaults - Persistent Personal Data Vaults Empowering a Secure and Privacy Preserving Data Storage, Analysis, Sharing and Monetisation Platform **URL**: https://www.datavaults.eu/	DataVaults

Description

Big Data lay at the core of the strong data economy that is emerging in Europe. Although both large enterprises and SMEs acknowledge the potential of Big Data in disrupting the market and business models, this is not reflected in the growth of the data economy. The lack of trusted, secure, ethical-driven personal data platforms and privacy-aware analytics, hinders the growth of the data economy and creates concerns. The main considerations are related to the secure sharing of personal and proprietary/industrial data, and the definition of a fair renumeration mechanism that will be able to capture, produce, release and cash out the value of data, always for the benefit of all the involved stakeholders.

DataVaults aims to address this kind of concerns that pertain privacy, ethics and intellectual property rights, by allowing individuals to take ownership and control of their data and share them at will, through flexible data sharing and fair compensation schemes with other entities (companies or not).

Collaboration

RAINBOW and DataVaults have agreed on cross-dissemination actions among projects, that include the following:

- A dedicated section on each project website with references (logo, short description and URL) to the other project
- Shares and retweets of each other posts in social media
- Distribution of each other newsletters
- Exchange of blog posts
- Participation and support of each other events
- Explore ways that each project outcomes can be utilized for joint exploitation

Table 14: Synergy with the DataVaults project

Project/Initiative: HUB4CLOUD **URL**: https://www.h-cloud.eu/ict_40-projects/hub4cloud/	

Description

HUB4CLOUD is a Coordination & Support Action project aiming to contribute to transform the current community of Cloud Computing researchers and innovators in Europe into an increasingly cohesive, dynamic, participatory and sustainable ecosystem.

The objective of HUB4CLOUD is to help grow the impact and relevance of Cloud Computing research, innovation, and policy-driven efforts, while accelerating its adoption and deployments in Europe. By running dedicated activities, including road mapping, dissemination, organisation of events, mapping of open source/ (pre-) standardisation initiatives, and business acceleration activities, HUB4CLOUD will ensure the creation of an open, inclusive, and sustainable ecosystem.

One of the key activities of HUB4CLOUD is to set up a Strategic Coordination Board (SCB), whose main role is to help align on the strategic objectives across the European Cloud Computing (ECC) ecosystem. This strategic body coordinates the contribution of various Cloud Computing (CC) projects, identifies potential synergies, collaboration opportunities, including how to best position next generation CC infrastructures and services for unleashing the potential of outcomes generated within the ECC context.

Collaboration

RAINBOW was invited to join and become a member of the HUB4CLOUD SCB initiative. The main activities of engagement for the SCB members include:

- Participation in regular SCB meeting to keep track of progress, align on priorities and synergise activities across the involved projects within the wider ECC ecosystem
- Development of position papers and other material for the ECC strategic direction
- Organisation a dedicated meeting with the EC, to present the final ECC roadmap and policy recommendations
- Coordination with the HUB4CLOUD Advisory Board and alignment with planned events and common activities to ensure close synergies.

Table 15: Synergy with the HUB4CLOUD project

Project/Initiative: GLASS **URL**: https://www.glass-h2020.eu	

Description
GLASS is a Horizon 2020 project funded by the European Union aiming to create a new paradigm for the sharing and transfer of personal information, with the citizen in control. It will provide a distributed framework for sharing common services of public administrations across the EU for citizens, businesses and governments. GLASS introduces novel governance services facilitating free movement of citizens and businesses, producing strong social, societal, economic, technological and scientific impact and leading to an advanced e-government solution aligned fully with the EU eGovernment Action Plan 2016-2020 and the EU Digital Single Market strategy.
Collaboration
RAINBOW and Glass have agreed on cross-dissemination actions among projects, that include the following: • A dedicated section on each project website with references (logo, short description and URL) to the other project • Shares and retweets of each other posts in social media • Distribution of each other newsletters • Exchange of blog posts • Participation and support of each other events • Explore ways that each project outcomes can be utilized for joint exploitation

Table 16: Synergy with the GLASS project

Project/Initiative: inGOV **URL:** https://ingov-project.eu	
Description	
inGOV's vision is to provide innovative ICT-supported governance models, where public authorities and relevant stakeholders can collaborate in co-creating inclusive and accessible integrated public services. On one hand, authorities increasingly strive to provide better services to end-users (citizens and businesses), but reality shows a low take-up. On the other hand, end-users don't associate themselves with the offered public e-services, considering them of low value in many respects. inGOV will use multidisciplinary scientific methods, including design science, to suggest how government authorities can exploit co-creation methodology and technologies (i.e., mobile apps, virtual assistance) to improve user experience and take-up rates by offering personalised secure and trustful services, of increased value for the end-user.	
Collaboration	
RAINBOW and inGov have agreed on cross-dissemination actions among projects, that include the following: • A dedicated section on each project website with references (logo, short description and URL) to the other project • Shares and retweets of each other posts in social media • Distribution of each other newsletters	

- Exchange of blog posts
- Participation and support of each other events
- Explore ways that each project outcomes can be utilized for joint exploitation

Table 17: Synergy with the inGOV project

3.4.2 Joint activities

The following activities (Table 18) together with other projects and initiatives have been completed or are in progress.

Activity	Date	Status
RAINBOW provided feedback on the draft of the Green Paper entitled "Cloud Computing in Europe: Landscape Analysis, Adoption Challenges and Future Research and Innovation Opportunities", developed by the H-CLOUD project. To support the European Commission's work on the definition of priorities for the upcoming European digitalisation programmes, the Green Paper explores the question of how supply and demand can be improved in terms of quality and conditions of use, and increased to boost European innovation in fast-growing cloud computing areas such as federation models, edge computing and green computing. The final paper is available here: https://h-cloud.eu/download/green-paper/?wpdmdl=764&masterkey=5fad315e7100d	November 2020	Completed
Release of a position paper on Federated Cloud Reference Architecture communicated to the European Commission under the Future Cloud Cluster initiative. https://drive.google.com/file/d/1Kw6j41bcGw8v_o8KW18TkE0xe4kxBMlR/view?usp=sharing Participating projects were: mOSAIC, PHYSICS, CloudButton, BEACON, SPARTA, ACCORDION, SODALITE, PLEDGER, DECENTER, DECIDE, PIACERE, MEDINA, RAINBOW, SWITCH, ARTICONF, FogProtect, SmartCLIDE, Elastest	February 2021	Completed

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Activity	Date	Status
REGAIN Workshop on the topic of "Big Data as key driver for circular digital transformation" organized during the BDVA/DAIRO Data Week 2021 https://datalab.csd.auth.gr/regain/ Participating projects and initiatives were: PTWIST, CUREX, RAINBOW, INCENTIVE, HEART, ENEDI, TERMINET, InoFA, Smart Farming Initiative, BigMedilytics, CLARIFY, P4-LUCAT, unCoVer, POCITYF	May 27, 2021	Completed
3rd International Workshop on Cyber-Security Threats, Trust and Privacy Management in Software-defined and Virtualized Infrastructures (SecSoft) co-hosted at the 7th IEEE International Conference on Network Softwarization (NetSoft2021). https://www.astrid-project.eu/secsoft/ Participating projects are: ASTRID, CYBER-TRUST, GUARD, SIMARGL, DATAVAULTS, RAINBOW, PALANTIR, SPEAR	June 28 to July 2, 2021	In-progress
3rd Workshop on Cyber-Security Arms Race (CYSARM) co-hosted at the annual ACM Conference on Computer and Communications Security (CCS2021). https://cysarm.org/ Participating projects are: ASTRID ASSURED, PUZZLE, RAINBOW, C4IIoT	November 14 to 19, 2021	In-progress
Joint technical workshop on cloud computing Participating projects are: MORPHEMIC, RAINBOW	Late 2021	In-planning

Table 18: Joint activities

3.5 Internal dissemination

Internal dissemination within the RAINBOW partners' networks and channels is important to increase awareness and visibility, as well as ensure that the project maintains a high profile among the consortium's organizations.

To pursue this direction internal partners' events that communicate the project concept and news as well as validate the project's findings are to be organized. UBITECH held a

presentation of RAINBOW during a physical internal event on February 2020 and again on March 2021 during a company virtual event. On September 2020, RAINBOW's partner SUITE5 held an internal company presentation of the RAINBOW project in its Limassol and Athens offices.

Also, presentations were done at UCY on the completion of the following theses:

- Master's Thesis, "Workload Generator for IoT Devices for Fog Computing" by Andreas Ioannou, (2020-12-21)
- Bachelor's Thesis "Implementation, Simulation and Evaluation of Monitoring Application Performance from a flight of drones (ΥΛΟΠΟΙΗΣΗ ΠΡΟΣΟΜΟΙΩΣΗ ΚΑΙ ΑΞΙΟΛΟΓΗΣΗ ΑΠΟΔΟΣΗΣ ΕΦΑΡΜΟΓΗΣ ΠΑΡΑΚΟΛΟΥΘΗΣΗΣ ΑΠΟ ΕΝΑ ΣΜΗΝΟΣ ΑΠΟ DRONES)" by Andreas Vasileiou, (2021-5-30)
- Bachelor's Thesis, "Application of Robotic Arm (ΕΦΑΡΜΟΓΕΣ ΡΟΜΠΟΤΙΚΟΥ ΒΡΑΧΙΟΝΑ)" by Panayiotis Kyriakou, co-supervised a master's degree in Computer Engineering, (2021-6-1)

An additional indicator for the visibility of the project concerns the mentions and links to the project's official website. The table below (Table 19) provides a list of the pages linking to RAINBOW's website.

Links from within the consortium	
Partner	**Link**
AUTH	https://datalab.csd.auth.gr/projects/rainbow-an-open-trusted-fog-computing-platform-facilitating-the-deployment-orchestration-and-management-of-scalable-heterogeneous-and-secure-iot-services-and-cross-cloud-apps/
BIBA	https://www.biba.uni-bremen.de/forschung/projekte/laufende-projekte.html
DTU	https://digitalsecurity.dtu.dk/funded-projects
K3Y	https://www.k3y.bg/projects/
MSP	https://uav.com.pl/en/_54/_73
POLITO	https://www.telematica.polito.it/projects/
SUITE5	https://www.suite5.eu/rainbow
TUW	https://dsg.tuwien.ac.at/projects.html
UBITECH	https://ubitech.eu/research/research-projects/
UCY	http://linc.ucy.ac.cy/index.php?id=226
Links from outside the consortium	
Name	**Link**
H-CLOUD	https://www.h-cloud.eu/ict-15-projects/rainbow/

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FUTURE CLOUD	https://eucloudclusters.wordpress.com/future-cloud/
PLEDGER	http://www.pledger-project.eu/content/clustering
MORPHEMIC	https://www.morphemic.cloud/clustering/
DATAVAULTS	https://www.datavaults.eu/material/liaisons-relevant-links/
Connected Autonomed Driving	https://www.connectedautomateddriving.eu/standards/contribution-eu-projects/
GLASS	https://www.glass-h2020.eu/rainbow

Table 19: Links to RAINBOW's official website

3.6   Standardization contributions

RAINBOW has established contact for possible synergies and contributions with the following organizations/groups:

- **LF Edge – Open Horizon**, is a platform for managing the service software lifecycle of containerized workloads and related machine learning assets. It enables autonomous management of applications deployed to distributed web-scale fleets of edge computing nodes and devices without requiring on-premise administrators. LF Edge is a new umbrella organization of The Linux Foundation that aims to establish open, interoperable frameworks for edge computing independent of hardware, silicon, cloud, or operating system.
  Link: https://www.lfedge.org/projects/openhorizon/

  On March 20, 2021, project partners DTU and UCY presented RAINBOW during the LF Edge - Open Horizon Committee meeting in order to discuss collaboration and possible contributions.

- **Trusted Computing Group** (TCG)**,** a not-for-profit organization formed to develop, define, and promote open, vendor-neutral, global industry specifications and standards, supportive of a hardware-based root of trust, for interoperable trusted computing platforms. TCG's core technologies include specifications and standards for the Trusted Platform Module (TPM), Trusted Network Communications (TNC) and network security and self-encrypting drives. TCG also has work groups to extend core concepts of trust into cloud security, virtualization and other platforms and computing services from the enterprise to the Internet of Things.
  Link: https://trustedcomputinggroup.org

A detailed report of RAINBOW's activity towards standardization contributions is available in Deliverable "D7.4 – Standardization Activities Report" led by TUW.

4 Newsletters

While newsletters are part of the project's communication quiver, the approach taken in
RAINBOW exploits them as a tool servicing both the dissemination and communication
needs of the project. AUTH, responsible for the dissemination strategy of RAINBOW, has
devised a release plan and is preparing the newsletter content in a way that closely
follows the progress of the project's research, the delivery of outcomes and the
accomplishments of major milestones. Additional informative content and news of
project activities and events are also part of each issue. At the same time, K3Y, which
caters for RAINBOW's communication activities, is responsible for publishing and driving
the diffusion of the newsletters through the project's communication channels.

4.1 Published issues

The newsletters published up to M18 remain in line with the original planning and are
described in Table 20.

Phase	Newsletter	Release	Content
I (M1-M12)	Issue 1	July 2020	Contained an introduction of the project as well as a reference to RAINBOW's main stakeholder groups.
	Issue 2	November 2020	Provided an overview of RAINBOW's high-level architecture and its value propositions.
II (M13-M24)	Issue 3	February 2021	Included presentations of the use cases and their challenges. Also, an introduction of RAINBOW's Advisory Board.
	Issue 4	May 2021	Presented RAINBOW's security and trust attestation model and design.

Table 20: Published newsletters

4.2 Planned issues

For the remaining of Phase II, the release schedule for the next issues is laid out in Table
21.

Phase	Newsletter	Release	Content
II (M13-M24)	Issue 5	September 2021	This issue will introduce the first release of the RAINBOW platform.
	Issue 6	December 2021	This issue will focus on the early results and prototypes delivered by the project's use cases.

Table 21: Planned newsletter issues

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5 Open-Source Contributions

RAINBOW aspires to provide an open and applicable-by-anyone solution in the market, contributing in practice to the competence of the whole EU software industry, with additional emphasis to cloud and edge/fog computing domains. RAINBOW already capitalizes on and benefits from open-source projects and frameworks (with some of those developed by the consortium members themselves) and thus part of its research efforts are towards extending the open-source ecosystem with high-quality contributions tailored to the unique requirements of fog and cross-cloud execution environments. These open-sourced contributions will further strengthen RAINBOW's dissemination efforts by building community-awareness and helping to increase adoption of the project's outcomes.

5.1 Available open-source repositories

As of M18 of the project, RAINBOW has contributed the following open-source software components:

Title:	Fogify: A Fog Computing Emulation Framework
Responsible partner:	University of Cyprus (UCY)
Link to public repository:	https://ucy-linc-lab.github.io/fogify/
License:	Apache 2.0
Description:	Fogify is an emulation Framework easing the modelling, deployment and experimentation of fog testbeds. Fogify provides a toolset to: model complex fog topologies comprised of heterogeneous resources, network capabilities and QoS criteria; deploy the modelled configuration and services using popular containerized infrastructure-as-code descriptions to a cloud or local environment; experiment, measure and evaluate the deployment by injecting faults and adapting the configuration at runtime to test different "what-if" scenarios that reveal the limitations of a service before introduced to the public.
Target groups:	IoT service developers especially those with big data services to be deployed in geo-distributed environments
Relevance to RAINBOW:	Fogify is used by RAINBOW partners to rapidly design experimentation testbeds in order to test their software in an emulated fog environment.
Title:	PROUD: PaRallel OUtlier Detection for streams
Responsible partner:	Aristotle University of Thessaloniki (AUTH)

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Link to public repository:	https://github.com/tatoliop/PROUD-PaRallel-OUtlier-Detection-for-streams
License:	Apache 2.0
Description:	PROUD is an open-source high-throughput distributed outlier detection engine for intense data streams that is implemented in Scala on top of the Apache Flink framework. It supports distance-based outlier detection algorithms while providing two different ways of partitioning incoming data with an automated adaptive mechanism to balance the workload of each node.
Target groups:	IoT service developers and operators especially those with big data services to be deployed in distributed environments.
Relevance to RAINBOW:	PROUD is used in analytics to help identify anomalies over the monitoring metrics of fog/edge nodes.
Title:	RAINBOW Orchestration Components (repository access permissions need to be changed to grant public access)
Responsible partner:	TU Wien (TUW)
Link to public repository:	https://gitlab.com/rainbow-project1/rainbow-orchestration
License:	Apache 2.0
Description:	The RAINBOW Orchestration Components encompass i) the Service Graph abstraction, which is used to model and deploy applications in RAINBOW, ii) the Kubernetes controllers, needed to deploy and manage Service Graphs, iii) the RAINBOW fog-aware Kubernetes scheduler, which managed the placement of services on the cluster's nodes, iv) the definitions and controllers for Service Level Objectives (SLOs) available in RAINBOW, and v) the elasticity strategy controllers used to correct violated SLOs.
Target groups:	Fog/IoT cluster operators and fog/IoT service developers, who want to deploy applications on RAINBOW.
Relevance to RAINBOW:	The Orchestration Components handle the deployment and management of applications on the RAINBOW platform.

Table 22: Available open-source repositories

5.2   Open-source roadmap

The RAINBOW team has established a source code repository in GitLab (https://gitlab.com/rainbow-project1) to allow for Agile software development, issue

tracking, generation of software documentation and managing the continuous integration and continuous deployment of the developed framework during the project. The RAINBOW project source code is organised in multiple repositories as described below (also see Figure 2):

- **rainbow-scheduler** - source code of the RAINBOW Scheduler, maintainer TUW
- **rainbow-orchestration** - source code of the RAINBOW Orchestrator, maintainer TUW
- **rainbow-analytics** - source code of the RAINBOW analytics service, maintainer UCY
- **rainbow-monitoring** - source code of the RAINBOW monitoring applications, maintainer UCY
- **rainbow-storage** - source code and configurations of the RAINBOW storage mechanisms, maintainer AUTH
- **rainbow-attestation** - source code of the RAINBOW attestation mechanisms, maintainer DTU
- **rainbow-integration** – repository on the RAINBOW platform integration, maintainer INTRA
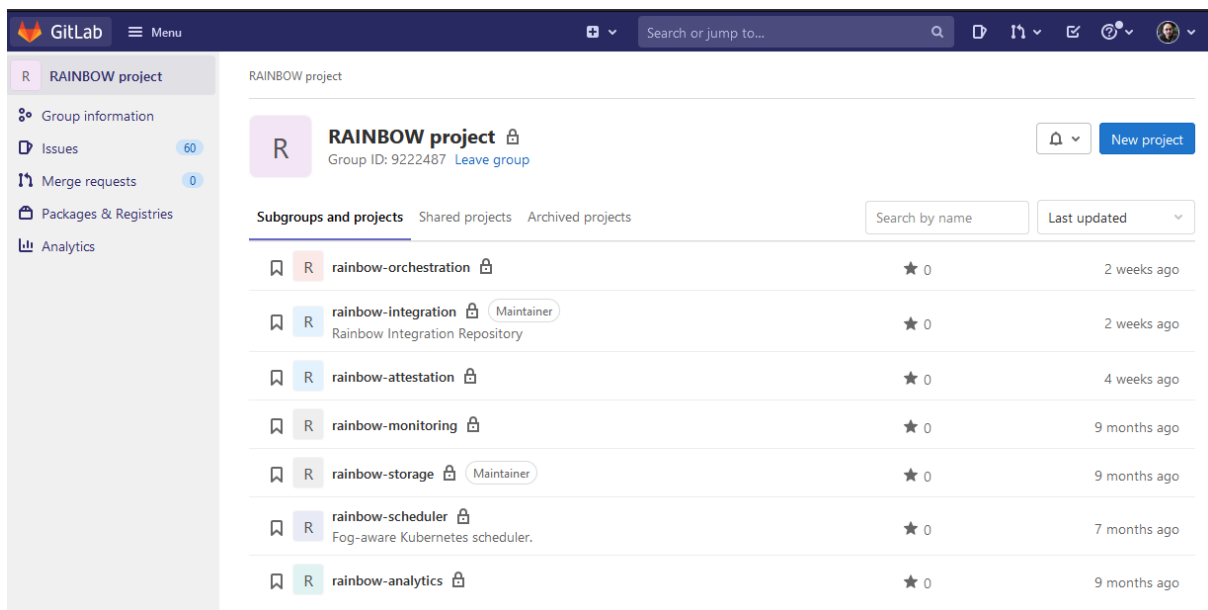
Figure 2: RAINBOW GitLab source-code repositories

For the time being, access to these repositories is limited only to RAINBOW's developers. However, based on the decision of the partners who are responsible for maintaining each repo, when the development reaches a mature state during the third year of the project several of these components will be open-sourced and made publicly available.

6 Fog Adoption Industrial Focus Group

RAINBOW is currently establishing an Industrial Focus Group (SIG), called Fog Adoption Industrial Focus Group (FA-IFG).

As already defined in the RAINBOW proposal, members of the FA-IFG should be:

- Digital SMEs and Start-ups,

- Cloud and IoT services and platforms providers,

- Fog-enabled application developers and end-user organizations,

- Fog and Cloud experts, companies, and institutes.

As the leader of task T7.5, Infineon Technologies Austria (IFAT) will be in charge of operating and maintaining the FA-IFG together with the RAINBOW consortium. The group's mission, scope, objectives, responsibilities and timeline have been aligned and an invitation to potential FA-IFG members has been sent out. First feedback has already been received.

6.1 Mission and responsibilities

The RAINBOW consortium agreed upon the mission of the FA-IFG. The scope, objectives and timeline have been defined as follows:

- The FA-IFG shall be mainly an information hub for its members. This can be accomplished e.g., by provisioning of restricted reports, favoured and insider access to the RAINBOW platform, information via mailing list and blogs as well as invitations to project's demonstrations. This way the FA-IFG members will be able to closely follow and monitor the RAINBOW project's research and development activities compared to the public.

- Even if there is no concrete need seen at the moment, the consortium is also open for inputs from the FA-IFG members which could be used e.g., for further validation of the RAINBOW concepts and tools. In any case, feedback is very valuable since it constitutes a form of guidance to the RAINBOW project by industrial stakeholders directly involved with the market.

- The FA-IFG shall exist as long as the RAINBOW project. Post-project activities will be the responsibility of the Sustainability Board defined in the Grant Agreement.

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6.2   Core membership

In the course of task T1.1 the RAINBOW consortium compiled a list of SMEs, start-ups and research institutes in the domain which interests RAINBOW. These stakeholders filled a questionnaire or participated in an interview and showed in this way their interest in the RAINBOW project. Therefore, IFAT decided together with the partners to invite them to join also the FA-IFG. Based on the experience gained in another EU funding project the necessary legal documents (consent form) have been set up and invitations have been sent out. In the meantime, RAINBOW received positive answers from:

- Andreas Menychtas, BioAssist SA, Greece
- Stavros Tekes, Draxis Environmental SA, Greece
- Emmanuel Kafetzakis, Eight Bells (8BELLS) LTD, Cyprus
- Tilemahos Efthimiadis, EU Science Hub, the Netherlands

Since the invitation was only sent out in May 2021, we expect to get much more feedback over the next weeks. Based on this RAINBOW consortium will decide which stakeholders will be finally accepted as members of the FA-CFG and will prepare Non-Disclosure Agreements (NDAs) if needed.

6.3   Tasks and planned activities

The idea is to involve the FA-IFG members already based on an early RAINBOW platform version and collect their feedback to this and the following releases.

Furthermore, the RAINBOW consortium plans to:

- invite them to open discussions during webinars, demos or other events;
- provide them restricted reports and information via mailing list and blogs;
- ask them to support RAINBOW with a wider access to industrial communities and by this to help with the exploitation of RAINBOW.

Aside from that, some more information about the FA-CFG members will be published on RAINBOW's website.

7 Monitoring and Reporting

The dissemination plan included specific provisions for the monitoring and reporting of all dissemination actions performed in RAINBOW. The importance of a continuous monitoring and reporting process was highlighted from the beginning in order to build a mechanism that allows for the timely and effective coordination of the dissemination effort. All partners recognise that active contribution towards the dissemination and communication tasks is an essential activity throughout the project's lifetime and integrated with all other work conducted in the project's work packages.

7.1 Methodology and approach

The main pair of tools specified in the original dissemination plan included:

- An internal database tracking opportunities for the project's dissemination and communication activities such as conferences, workshops, journals and magazines special issues, industry demo sessions, and other relevant events. This database is maintained by AUTH and is shared online among all consortium members for staying up to date on the identified events and also contributing their own updates. Up to month 18 of the project, a total of 35 events have been identified (see a snapshot at Annex I – Events & activities database).
- A dedicated log for each partner to continuously record their dissemination and communication activities. This allows for an immediate overview of the current dissemination status of the project as well as for the individual involvement of each member. Based on this, AUTH and K3Y can stir the dissemination and communication effort towards strengthening areas with weak coverage and provide guidance and assistance to partners. Additionally, it provides a reliable tool to constantly monitor the performance of the dissemination indicators. Annex III contains the current versions of the dissemination logs of each RAINBOW partner.

As described in Section 2.2 additional tools were introduced to facilitate and better organize planning on several aspects of the joint dissemination effort. These additions in the dissemination toolkit include:

- A publications planner to keep track of the consortium's dynamics in this area and support the partners with their own short-midterm scheduling (see a snapshot at Annex IV – Publications Planner).
- A potential synergies matrix where projects and initiatives for possible liaison and cooperation with RAINBOW are identified (see a snapshot at Annex V – Synergies Matrix).
- An online contacts list with industry contact points from sectors that would be interested to learn of RAINBOW's solutions and offerings (see section 3.3.1).

7.2 Evaluation of the dissemination Key Performance Indicators

The Key Performance Indicators (KPIs) presented in Table 23 correspond to specific dissemination mechanisms and they aim to quantify the success and effectiveness of RAINBOW's dissemination activities. The evolution of these KPIs is continuously monitored by AUTH during the project's lifetime while their overall status is internally discussed during plenary meetings and officially reported on M18 and M36 under the planned WP7 deliverables.

Dissemination KPIs	Related Dissemination Mechanism
• Workshops organized • Demo events	DM1 Organization of project events
• Attended events • Events with project's presentation • Project's demo booths	DM2 Participation to conference and workshops
• Conference papers • Journal papers • Articles in corporate magazines	DM3 Scientific publications
• Industry contact points • Industry communities informed about the project • Webinars	DM4 Engagement with stakeholders and community building
• Synergies with projects • Joint activities	DM5 Collaboration and synergies with project and initiatives
• Internal partners' events • Links to the project's website	DM6 Internal dissemination in partners' networks
• Participation in working groups • Project's presentations in standardization meetings	DM7 Standardization contributions

Table 23: Dissemination KPIs

There is also an additional KPI that relates with the open-source contributions of RAINBOW which is monitored towards achieving parts of the Strategic Impacts of the Work Programme (Table 24).

Description	Target Value	Verification Means
KPI.3: Contribution to open-source initiatives and standardization groups dealing with cloud, fog and edge computing paradigms	4	Open-source components delivered for fog services

Table 24: Open-source contributions KPI

7.2.1 Status report

Table 25 reports the status of the Dissemination KPIs in June 2021 (M18 of the project implementation).

Mechanism	KPI	Target Value (M36)	Current Value (M18)
DM1	• Workshops organized	3	**1**
	• Demo events	1	**0**
DM2	• Attended events	>20	**10**
	• Events with project's presentation	>10	**3**
	• Project's demo booths	1	**0**
DM3	• Conference papers	>15	**7**
	• Journal papers	>5	**2**
	• Articles in corporate magazines	>4	**1**
DM4	• Industry contact points	200	**70**
	• Industry communities informed about the project	10	**0**
	• Webinars	6	**1**
DM5	• Synergies with projects	>8	**8**
	• Joint activities	>2	**3**
DM6	• Internal partners' events	12	**6**
	• Links to the project's website	12	**17**
DM7	• Working groups	3	**0**
	• Project's presentations in standardization meetings	1	**1**
Strategic Impact	• Open-source contributions	4	**3**

Table 25: KPIs status on M18

7.2.2 Observations and comments

Based on the dissemination plan schedule and the evolution of the KPIs by M18 of the project the following observations can be made:

- **Indicators related to events** (DM1 & DM2)
  Despite the impact of the pandemic that caused many cancellations or time shifts of scheduled events especially in mid 2020, RAINBOW managed satisfactory rates of participation to events. With regards to RAINBOW workshops organization according to the dissemination plan three (3) scientific workshops, led by DTU, TUW and AUTH respectively, are foreseen before April 2022 (M28). Also, demo events and demo booths are considered in Phase III that spans from M25 to M36 of the project.

- **Indicators related to publications** (DM3)
  The RAINBOW academic partners have already produced a good number of scientific publications by M18 with at least 6 more in the pipeline for the forthcoming semesters of the project according to the planner. Publication of overall project's results in journals and industry magazines are foreseen mostly for Phase III (M25 to M36) after validated results from the use cases are made available.

- **Indicators related to stakeholders' engagement** (DM4)
  The shift to online and digital activities has narrowed down the interaction options with its audiences but RAINBOW has mobilized its consortium networks to engage stakeholders. The focus up to this time was to establish initial contact and raise awareness while for the next period, when more project results will also surface, key stakeholders and communities will be invited in project's events, webinars and involved in other activities to witness RAINBOW's achievements. The increased engagement will further expand RAINBOW's reach and attract more stakeholders to the project.

- **Indicators related to synergies** (DM5)
  The RAINBOW has been actively involved with the H-CLOUD community and established synergies with other H2020-funded projects, especially from the ICT15 call topic. For now, these activities mostly concern cross-dissemination between the projects but also events have been co-organized, knowledge and feedback exchanged and scheduled joint activities are pending or new ones are in the planning phase.

- **Indicators related to internal dissemination** (DM6)
  RAINBOW members are active in sharing project's links and news within their own online networks and channels as well as distributing the project's newsletters. In the next period the consortium will need to actively disseminate RAINBOW's work in their internal events as well as demonstrate or provide training on project's advanced outcomes.

- **Indicators related to standardization** (DM7)
  While RAINBOW has made initial contact with two groups involved with key stakeholders of the cloud and edge ecosystem advancing its standardization activities will require careful syncing with the development and validation of its own outcomes.

A detailed planning towards RAINBOW's forthcoming standardization contributions can be found in Deliverable "D7.4 – Standardization Activities Report" led by TUW.

- **Indicators related to open-source contributions**
  RAINBOW with three components already made available as open-source and with more landing in the next period is determined to actively contribute useful resources to the EU software industry and developers who are working on the cloud and edge/fog computing domains.

8 Conclusions and Future Course of Action

The present report provides a detailed overview of the dissemination actions performed during the first period of the project along with the open-source contributions, clustering activities as well as the Fog Adoption Industrial Focus Group set up. All these are key factors in widening the project's reach within its targeted stakeholder groups and for maximizing RAINBOW's impact.

RAINBOW had formed a comprehensive dissemination plan already by its third month of operation (submitted with deliverable D7.1 in March 2020) that provided the dissemination strategy and guided its implementation. This strategy proved effective and flexible enough to encompass the necessary adaptations that were enforced by the unprecedented effects of the pandemic crisis. Considered that the first year was dedicated on mobilization our audiences and raising awareness about the project, RAINBOW managed successfully to build and develop strong digital dissemination channels while leveraging on its own members networks and collaborations. The engagement and interaction with the targeted stakeholders that is the focus of the project's second year is prioritized through the various events and activities the partners are being involved with.

Another crucial aspect of RAINBOW's impact among the cloud ecosystem and especially within the edge/fog application developers and the Kubernetes communities, relates to the open sourcing of its components. The availability of source code and documentation along with the unique features of the RAINBOW platform is expected to act as a dissemination catalyst and attract the strong interest of these groups.

In the first 18 months RAINBOW maintains a strong research profile with a total of 9 scientific publications – with the two of them on peer-reviewed journals – already delivered. A strong effort is also evident within the clustering activities of RAINBOW where ties have been established with many EU-funded projects and other initiatives with joint publications, co-organized events and further synergies planned down the road. Based upon the monitoring of the reach and impact of the dissemination activities of RAINBOW during the first period of the project against the initial set of target KPIs, it is clear that important advancements have been made. For almost all the KPIs that were targeted in the first period goals have been reached and there are cases the results are beyond the targets set (Table 26).

The imminent release of the first integrated RAINBOW platform on M18, marks an important milestone for the project's results that will fuel a round of increased dissemination activities. In the next half of the second year the project will intensify the engagement with the targeted stakeholders, continue to build on old and new liaisons, exchange knowledge and demonstrate the generated outcomes to collect feedback. The final dissemination phase, concerning the third year of the project where the use cases will have begun to validate RAINBOW's result, will focus on promoting the actual results and paving the way for the project's exploitation and take-up. The foreseen dedicated RAINBOW workshops will target the first months of this period and along with the

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planned training webinars and carefully picked project demonstrations, the consortium expects to generate a significant boost in the project's impact. At the same time, close collaboration with the Fog Adoption Industrial Focus Group and exploiting all established synergies and channels in the research, innovation and industry domains will further add to and amplify on this effort.

KPI	Targeted Dissemination Phase	Coverage on M18 (mid of Phase II)	Progress
• Workshops organized	I, II, III	33%	On track
• Demo events	III	-	On track
• Attended events	I, II, III	48%	On track
• Events with project's presentation	II, III	27%	On track
• Project's demo booths	III	-	On track
• Conference papers	I, II, III	44%	On track
• Journal papers	III	33%	Advanced
• Articles in corporate magazines	III	20%	Advanced
• Industry contact points	I, II	35%	Need to step-up
• Industry communities informed about the project	I, II, III	-	Need to step-up
• Webinars	III	17%	Advanced
• Synergies with projects	I, II, III	89%	Advanced
• Joint activities	II, III	100%	Advanced
• Internal partners' events	I, II, III	50%	On track
• Links to the project's website	I	142%	Advanced
• Working groups	I, II, III	-	Need to step-up
• Project's presentations in standardization meetings	II, III	100%	Advanced
• Open-source contributions	II, III	75%	On track

Table 26: Summary of the dissemination KPIs progress

Annex I – Events & activities database

Event/Activity Title	Short Description	Type	URL	Dates	Partner	How can RAINBOW participate?	Additional Info / Comments	Status
ACM SIGMOD/PODS '20 International Conference on Management of Data	The annual ACM SIGMOD/PODS Conference is a leading international forum for database researchers, practitioners, developers, and users to explore cutting-edge ideas and results, and to exchange techniques, tools, and experiences in all aspects of data management.	Conference	https://sigmod2020.org/	Conference dates are 14-19 June 2020	AUTH	- Scientific papers and demos papers on data management topics suitable for cloud/edge applications	AUTH paper was accepted and published in the proceedings	COMPLETED
1st Workshop on Dependability and Safety Emerging Cloud and Fog Systems (DeSECSyS)	Information security and privacy have already been established as some of the most crucial aspects of technology especially in a world that is migrating to digital applications by the day. This has inevitably led to the emergence of technologies that support the safety and dependability of the ever-increasing sensitive data handled by these applications. Additionally, besides these technologies which target security by their design, there are other technologies, such as machine learning, which could potentially be applied to security in innovative schemes. The goal of this workshop is to foster discussions among researchers on these timely topics. Members of DTU and UBITECH are in the organization committee of DeSECSyS	Workshop	https://desecsys.futuretpm.eu/	Submission deadline: June 21st, 2020 Notification to Authors: July 26th, 2020 Camera-ready versions: August 2nd, 2020 The workshop is co-located with this year's ESORICS conference and will take place online at 17-18 September, 2020	DTU and UBITECH as part of the organization committee	- RAINBOW partners can consider submitting scientific papers, presenting some of the core technology pilars and concepts of the RAINBOW project. - Check to see, if possible, for RAINBOW to get an allocated slot in the context of an invited talk. - DTU has an accepted paper that will be presented.	AUTH attended	COMPLETED
IEEE Cloud Summit 2020	IEEE Technical Committee on Cloud Computing initiated the Cloud Summit conference in 2017. After two consecutive successful years, Cloud Summit has grown to become a flagship conference with high-quality academic research presentations and industrial best practices. Cloud	Scientific & Industrial Conference	https://www.ieeecloudsummit.org/	Paper Due: June 29, 2020 Conference: October 21-22, 2020, Harrisburg, USA		- RAINBOW partners can submit scientific papers		COMPLETED

Event/Activity Title	Short Description	Type	URL	Dates	Partner	How can RAINBOW participate?	Additional Info / Comments	Status
	Summit 2020 features close interactions between industry and academia							
EGI Conference 2020	The conference theme is "Federated infrastructures for connected communities"	Conference	https://indico.egi.eu/event/5000/overview	Call for papers is open until September 11, 2020 Conference dates are 2-4 November 2020		Articles, presentations, demonstrations, services, use cases.		COMPLETED
European Big Data Value Forum 2020	With a central theme "Towards a strong European Data and AI Ecosystem", the EBDVF 2020 edition brings together the German and European communities on AI and Data. It aims to contribute to the discussions on the European Data and AI Strategy, specifically addressing key topics for Europe such as the development of European Data Spaces, the importance of Technology Platforms and Trust, the opportunities for market uptake and the new challenges ahead for Data and AI within the society. It will be a mixed format event (Berlin + Virtual)	Forum/Conference	https://www.european-big-data-value-forum.eu/	3-5 November 2020			H-CLOUD and other EU cloud projects will attend. AUTH attended	COMPLETED
IEEE/ACM SEC 2020 conference	Symposium on Edge Computing (SEC) presents exciting, innovative research related to the design, implementation, analysis, evaluation, and deployment of computer systems and applications at the network edge. SEC is a forum for top researchers, engineers, students, entrepreneurs, and government officials who come together under one roof to discuss the opportunities and challenges that arise from rethinking cloud	Conference	https://acm-ieee-sec.org/2020/	11-13 November 2020	UCY	- UCY paper is accepted to the conference and will be presented. The work is supported by RAINBOW, so we included an acknowledgment of the RAINBOW both in the paper and the presentation.	UCY presented both demo & regular papers	COMPLETED

Event/Activity Title	Short Description	Type	URL	Dates	Partner	How can RAINBOW participate?	Additional Info / Comments	Status
	computing architectures and embracing edge computing.							
ACM/IEEE Symposium on Edge Computing (SEC 2020)	The ACM/IEEE Symposium on Edge Computing (SEC) seeks to present exciting, innovative research related to the design, implementation, analysis, evaluation, and deployment of computer systems and applications at the network edge. SEC is a forum for top researchers, engineers, students, entrepreneurs, and government officials come together under one roof to discuss the opportunities and challenges that arise from rethinking cloud computing architectures and embracing edge computing. SEC takes a broad view of edge computing and solicits contributions from many fields of systems practice that embrace any aspect of edge computing	Scientific Conference	http://acm-ieee-sec.org	Paper Submission: June 26, 2020 Conference: Virtual November 12-14, 2020		- RAINBOW partners can submit scientific papers or position papers		COMPLETED
H-Cloud Summit	"Shaping the New Strategy for Cloud Computing in Europe". A virtual event aimed at connecting the EU Cloud Community	Conference	https://www.h-cloud.eu/event/1st-horizon-cloud-summit-2020/?instance_id=25	25 & 26 November 2020 Submission deadline: Theme 1 & 3: 30 October 2020; Theme 2: 23 October 2020; Notification by 6 November 2020				COMPLETED

Event/Activity Title	Short Description	Type	URL	Dates	Partner	How can RAINBOW participate?	Additional Info / Comments	Status
13th IEEE/ACM International Conference on Utility and Cloud Computing (UCC 2020)	UCC2020 is the premier IEEE/ACM conference for areas related to Cloud Computing as a Utility and provides an international forum for leading researchers and practitioners in this important and growing field.	Conference	https://www.cs.le.ac.uk/events/UCC2020/	7-10 December, 2020	UCY	- UCY paper is accepted to the conference and will be presented. The work is supported by RAINBOW, so we included an acknowledgment of the RAINBOW both in the paper and the presentation.	UCY presented regular paper	COMPLETED
IEEE/WIC/ACM International Joint Conference on Web Intelligence and Intelligent Agent Technology (WI-IAT 2020)	The 2020 IEEE/WIC/ACM International Joint Conference on Web Intelligence and Intelligent Agent Technology (WI-IAT '20) provides a premier international forum to bring together researchers and practitioners from diverse fields for presentation of original research results, as well as exchange and dissemination of innovative and practical development experiences on Web intelligence and intelligent agent technology research and applications.	Scientific Conference	http://wi2020.vcrab.com.au/	Paper Submission: Jul 1, 2020 Conference: Dec 14-17, 2020, Melbourne, Australia		- RAINBOW partners can submit scientific papers or participate in a demo sessions & workshops		
IT FUTURE EXPO	IT Future Expo is the annual meeting of the Polish IT elite, entirely dedicated to state-of-the-art technology solutions for the enterprise sector. Current technology trends and latest developments for enterpises and the industry, exchange experiences and best practices, create business relationships and establish important partnerships.	Industrial / business focus conference/ meeting	https://itfuture.pl/	Fall/Winter 2020, Warsaw, Poland		- Demonstration or workshop around the RAINBOW solution with emphasis in industrial applications and market value - Opportunities for networking	Exact dates for the 2020 event are not officially announced yet	CANCELLED
ICIN 2021	24th Conference on Innovation in Clouds, Internet and Networks	Conference	https://www.icin-conference.org/	1-4 March 2021 Submission deadlines: Workshop 4 October 2020, paper 8 October 2020				COMPLETED
DIGITAL FUTUREcongress	Conference for SMEs, start-ups and market decision-makers to discover future	Industrial / business	https://www.digital-	DFC virtual Global 25		- Demonstration or workshop around the RAINBOW solution		COMPLETED

Event/Activity Title	Short Description	Type	URL	Dates	Partner	How can RAINBOW participate?	Additional Info / Comments	Status
	thinking and find out about trends and solutions in digitalization and transformation, digital business process optimization and infrastructure, cyber security & data security.	focus conference with exhibition and workshops	futurecongress.de/	February 2021 DFC virtual 22-15 March, 2021		with emphasis in industrial applications and market value - Opportunities for networking		
CloudFest 2021	CloudFest is more than just a conference, and more than just a festival—it's an experience! Meet professionals from across the Cloud whose lives and careers have been changed by CloudFest over the years. If you've been to one of our events in the past, you're probably smiling as you get ready to watch these videos. If 2021 will be your first time, get ready to deepen your network, broaden your horizons, and have a great time doing it!	Industry Event	https://www.cloudfest.com/	March 22, 2021 – March 25, 2021		- Networking opportunities for RAINBOW		COMPLETED

Event/Activity Title	Short Description	Type	URL	Dates	Partner	How can RAINBOW participate?	Additional Info / Comments	Status
5th IEEE International Conference on Fog and Edge Computing 2021	The Fog/Edge computing paradigm is expected to improve the agility of service deployments, make use of opportunistic and cheap computing, and leverage the network latency and bandwidth diversities between these resources. Numerous challenges arise when using edge resources, which requires the re-examination of operating systems, virtualization and containers, and middleware techniques for fabric management. Extensions to current programming and storage models are required and new abstractions that will allow developers to design novel applications that can benefit from massively distributed and data-driven systems need to be developed. Addressing security, privacy and trust of the edge resources is of paramount importance while managing the resources and context for mobile, transient and hardware constrained resources. Lastly, emerging domains like autonomous vehicles and machine/deep learning need to be supported over such platforms.	Scientific Conference	https://icfec2021.eeecs.qub.ac.uk/	Papers due: 03 January 2021 Author notifications: 08 February 2021 Camera ready paper: 03 March 2021 Virtual Conference: 10 May 2021		- RAINBOW partners can submit scientific papers or participate in a demo sessions		COMPLETED
IEEE International Conference on Computer Communications (INFOCOM 2021)	IEEE INFOCOM is a top ranked conference on networking in the research community. It is a major conference venue for researchers to present and exchange significant and innovative contributions and ideas in the field of networking and closely related areas. IEEE INFOCOM covers both theoretical and systems research. For INFOCOM, the conference includes a main technical program, a number of workshops, a keynote speech, panels, a student poster session, and demo/poster sessions.	Scientific Conference	https://www.ieee-infocom.org	May 10-13, 2021, Vancouver, Canada		- RAINBOW partners can submit scientific papers or participate in a demo sessions		COMPLETED

Event/Activity Title	Short Description	Type	URL	Dates	Partner	How can RAINBOW participate?	Additional Info / Comments	Status
International Conferences on Web Engineering (ICWE 2021)	ICWE aims to bring together researchers and practitioners from various disciplines in academia and industry to tackle the emerging challenges in the engineering of Web applications and in the problems of its associated technologies, as well as the impact of those technologies on society, media and culture.	Scientific Conference	https://icwe2021.webengineering.org/	Online, May 18-21, 2021		- RAINBOW partners can submit scientific papers or participate in a demo sessions & workshops		COMPLETED
BDVA Data Week 2021	Data Week is the spring gathering of the European Big Data and Data-Driven AI research and innovation community. The 2021 edition of the Data Week aims at bringing together the research and innovation community working on Data, Big Data and Data-Driven AI, promoting opportunities for this community to grow and strengthening the ties with the Portuguese ecosystem.	Forum/Conference	https://www.big-data-value.eu/data-week-2021/	25-27 May 2021	AUTH		AUTH organized the REGAIN workshop on the theme of big data as key driver for circular digital transformation. RAINBOW was among the involved projects.	COMPLETED
DockerCon 2021	DockerCon is the worlds largest container industry conference for makers and operators of next generation distributed applications built with containers.	Tech Industry / Developers Conference	https://www.docker.com/dockercon/	May 27th, 2021		- Demonstrate RAINBOW solutions & approaches utilizing Docker and Kubernetes technology (Container Ecosystem / Devs in Action)		COMPLETED
Special Issue in Future Internet Journal - "Information and Future Internet Security, Trust and Privacy"	This Special Issue will focus on information and Internet security with the attempt to solicit the latest technologies, solutions, case studies, and prototypes on this topic. This Special Issue is open to all submissions, while some outstanding papers from the 22nd International Conference on Information and Communications Security (ICICS 2020, Copenhagen, Denmark, 24-27 August 2020, https://icics2020.compute.dtu.dk/) will be invited to this Special Issue.	Scientific Journal	https://www.mdpi.com/journal/futureinternet/special_issues/ICICS2020	Deadline for manuscript submissions: 30 May 2021.	DTU (Thanassis Giannetsos) is one of the special issue editors	- RAINBOW partners can submit scientific papers		COMPLETED
AIS European Conference on Information Systems (ECIS 2021)	The annual European Conference on Information Systems (ECIS) is viewed as one of the leading conferences on information systems and the only AIS	Scientific Conference	https://www.ecis2021.com/	Call for Workshops: October 6, 2020		- RAINBOW partners can submit scientific papers or participate in a demo sessions & workshops	The main theme of the 2021 conference will be the digitisaztion and the	Forthcoming

Event/Activity Title	Short Description	Type	URL	Dates	Partner	How can RAINBOW participate?	Additional Info / Comments	Status
	conference dedicated to the European Region.			Paper submission: November 27, 2020 Virtual Conference: June 14–16, 2021			digital transition in Europe	
HORIZON CLOUD Open Source Cloud Initiatives Community Event	Community Event on Open Source Initiatives for Cloud Computing. During this event, the three Open Source Cloud Initiatives Eclipse Foundation, OpenNebula, and Sovereign Cloud Stack will present their work and engage with European Cloud Community. The event is part of a series of Technical Community Events organised by HORIZON CLOUD for the European Cloud Community. Aim of the event series is to foster synergies and collaboration between European Cloud Projects.	Community Event	https://www.h-cloud.eu/event/horizon-cloud-community-event/?instance_id=73	15 June 2021, 15:00 – 16:30 pm CEST		- RAINBOW partners participation / make contact with open source initiatives	AUTH attended	COMPLETED
ACM International Conference on Management of Data (SIGMOD/PODS 2021)	The annual ACM SIGMOD/PODS Conference is a leading international forum for database researchers, practitioners, developers, and users to explore cutting-edge ideas and results, and to exchange techniques, tools, and experiences in all aspects of data management.	Scientific Conference	https://2021.sigmod.org/	20-25 June 2021		- RAINBOW partners can submit scientific papers		Forthcoming

Event/Activity Title	Short Description	Type	URL	Dates	Partner	How can RAINBOW participate?	Additional Info / Comments	Status
IEEE International Conference on Network Softwarization (NETSOFT 2021)	The theme of the IEEE NetSoft 2021 "Accelerating Network Softwarization in the Cognitive Age" reflects the current trend of research in the area of network softwarization. The IEEE NetSoft 2021 will showcase the latest research and development results including artificial intelligence / machine learning, self-driving and autonomic networking, policy-based network management, dynamic network slice provisioning, among other promising research areas for the sake of robust, reliable and cognitive softwarized networks.	Scientific Conference	https://netsoft2021.ieee-netsoft.org/	28 June - 2 July 2021	DTU	- RAINBOW partners can submit scientific papers	DTU (under the EU project ASTRID) will co-organize the SecSoft workshop together with RAINBOW and other EU-funded projects	Workshop proposal accepted
IEEE International Conference on Data Engineering (ICDE 2021)	ICDE aims to bring together leading academic scientists, researchers and research scholars to exchange and share their experiences and research results on all aspects of Data Engineering. It also provides a premier interdisciplinary platform for researchers, practitioners and educators to present and discuss the most recent innovations, trends, and concerns as well as practical challenges encountered and solutions adopted in the fields of Data Engineering	Scientific Conference	https://waset.org/data-engineering-conference-in-july-2021-in-vienna	Abstracts/Full-Text Paper Submission: May 31, 2021 Notification of Acceptance/Rejection: June 15, 2021 Final Paper (Camera Ready) Submission & Early Bird Registration: June 30, 2021 Conference Dates: July 29-30, 2021			- RAINBOW partners can submit scientific papers or participate in a demo sessions & workshops		Forthcoming
International Conference on Availability, Reliability and Security (ARES 2021)	ARES brings together researchers and practitioners in the area of dependability since 2006. ARES highlights the various aspects of security – with special focus on the crucial linkage between availability, reliability and security. ARES aims at a full and detailed discussion of the research issues of security as an integrative concept	Scientific Conference	https://www.ares-conference.eu/	Submission Deadline: March 25, 2021 Author Notification: May 10, 2021 Camera-ready:			- RAINBOW partners can submit scientific papers or participate in a demo sessions & workshops	IFAT's submitted paper is accepted	Forthcoming

Event/Activity Title	Short Description	Type	URL	Dates	Partner	How can RAINBOW participate?	Additional Info / Comments	Status
	that covers among others availability, safety, confidentiality, integrity, maintainability and security in the different fields of applications.			June 13, 2021 Conference: August 17 – August 20, 2021				
IoT Week 2021	The IoT Week 2021 conference will welcome the industry leaders, lead researchers and public service representatives not only from Europe but from around the world to share their views on how the technology can serve society better and identify what are the technological and societal challenges today. Previous editions of IoT Week were held, respectively, in Barcelona, Venice, Helsinki, London, Lisbon, Belgrade, Geneva, Bilbao and Aarhus. The last edition brought together over 1500 participants from 50 countries specialized in the IoT domain, including research centers, research projects, large industries, SMEs, developers, standards development organizations and policymakers, including the European Commission to exchange their knowledge.	Industrial Conference	https://iotweek.org/	Workshop application deadline is March 1, 2021 Cofnerence dates: August 31, 2021 – September 3, 2021		- RAINBOW partners can participate in demonstrations & workshops		Forthcoming
IEEE CLOUD 2021	The IEEE International Conference on Cloud Computing has been a prime international forum for both researchers and industry practitioners to exchange the latest fundamental advances in the state of the art and practice of cloud computing, identify emerging research topics, and define the future of cloud computing. All topics regarding cloud computing align with the theme of CLOUD. In 2021, we will gather to strive to advance the largest international professional forum on cloud computing.	Scientific Conference	https://conferences.computer.org/cloud/2021/	Optional early paper submission: March 1, 2021 Improvement suggestions to early papers: April 1, 2021 Normal paper submission: April 15, 2021 April 30, 2021 Rebuttal phase: June 1 - 7, 2021 June		- RAINBOW partners can submit scientific papers or participate in a demo sessions & workshops	TUW's submitted paper is accepted	Forthcoming

Event/Activity Title	Short Description	Type	URL	Dates	Partner	How can RAINBOW participate?	Additional Info / Comments	Status
				15-21, 2021 Final notification to authors: June 17, 2021 June 30, 2021 Camera-ready paper and registration due: July 1, 2021 July 15, 2021 Conference dates: September 5-10, 2021				
IoT Tech Expo	IoT Tech Expo brings together key industries from across the globe for two days of top-level content and discussion across 5 co-located events covering IoT, 5G, cyber security, cloud, blockchain, AI and big data, exploring the future of enterprise technology.	Industrial /enterprise / business focus conference	https://www.iottechexpo.com	~~November 24-25, 2020 Amsterdam, Netherlands~~ Live 6-7 September, 2021 London / Virtually 13-15 September, 2021		- Demonstration or workshop around the RAINBOW solution with emphasis in industrial applications and market value - Opportunities for networking		Forthcoming

Event/Activity Title	Short Description	Type	URL	Dates	Partner	How can RAINBOW participate?	Additional Info / Comments	Status
International Conference on Edge Computing (EDGE 2021)	EDGE aims to become a prime international forum for both researchers and industry practitioners to exchange the latest fundamental advances in the state of the art and practice of Edge computing, identify emerging research topics, and define the future of Edge computing. EDGE covers the localized resource sharing and connections with the cloud.	Scientific Conference	http://theedgecomputing.org/	Early-birds paper submission due: April 9, 2021 Review comments to Early-birds paper submission: May 13, 2021 Regular paper submission due: May 14, 2021 Review comments to Regular paper submission: June 18, 2021 Second round paper submission due: June 15, 2021 Review comments to Second round paper submission: July 5, 2021 Camera ready manuscripts due: July 16, 2021 Conference dates: September 18 - 22, 2021		- RAINBOW partners can submit scientific papers or participate in a demo sessions & workshops		Forthcoming

Event/Activity Title	Short Description	Type	URL	Dates	Partner	How can RAINBOW participate?	Additional Info / Comments	Status
11th IEEE International Conference on Big Data and Cloud Computing (BDCloud 2021)	Big data is an emerging paradigm applied to datasets whose size is beyond the ability of commonly used software tools to capture, manage, and process the data within a tolerable elapsed time. Cloud computing is positioning itself as an emerging platform for delivering information infrastructures and resources as IT services. Topics of particular interest include, but are not limited to: Cloud Computing Algorithm, Theory and Application; Big Data Algorithm, Theory and Application; and Big Data Mining and Analytics on Cloud	Scientific Conference	http://www.cloud-conf.net/ispa2021/BDCloud21/	Submission: June 15 (extended), 2021 Notification: August 1, 2021 Camera-Ready: August 15, 2021 Registration: August 15, 2021 Conference Date: October 1-3, 2021		- RAINBOW partners can submit scientific papers or participate in a demo sessions & workshops		Forthcoming
EGI Conference 2021	The conference theme is: "Beyond the Horizon: Shaping the Digital Future". Looking at how EGI Federation is contributing to shaping the digital future: with EOSC growing more mature, the new EU research funding programme Horizon Europe on its way, and an exciting range of advanced services and innovative computing models supporting research, a new landscape for research is being shaped.	Scientific Conference	https://www.egi.eu/egi-conference/2021-beyond-the-horizon/	Call for Abstracts (deadline July 1st, 2021) includes: - Long presentations (25 mins) - Short presentations (15 mins) - Posters - Demonstrations (30 mins) - Workshops/Sessions (90 mins) Conferance		- RAINBOW partners can submit presentations or demomstrations		Forthcoming

Event/Activity Title	Short Description	Type	URL	Dates	Partner	How can RAINBOW participate?	Additional Info / Comments	Status
				dates: October 19-21, 2021				
ACM Conference on Computer and Communications Security (CCS 2021)	The annual ACM Computer and Communications Security Conference is a leading international forum for information security researchers, practitioners, developers, and users to explore cutting-edge ideas and results, and to exchange techniques, tools, and experiences. We invite submissions from academia, government, and industry presenting novel research on all theoretical and practical aspects of computer security, as well as case studies and implementation experiences.	Scientific Conference	https://www.sigsac.org/ccs/CCS2021/	Worskhops proposals submission deadline: March 26th, 2021 Conferance dates: November 14-19, 2021	DTU	- RAINBOW partners can submit scientific papers or participate in a demo sessions & workshops	DTU (under the EU project ASSURED) will co-organize the CYSARM workshop together with RAINBOW and other EU-funded projects	Workshop proposal accepted
International Conference on Service Oriented Computing (ICSOC 2021)	The aim of the ICSOC is to provide an International forum for researchers, professionals, and industrial practitioners to report and share groundbreaking work in the vibrant discipline of Service-Oriented Computing (SOC). ICSOC aims at fostering cross-community scientific excellence by gathering experts from various disciplines, such as business-process management, distributed systems,	Scientific Conference	http://www.icsoc.org/	Early paper submissions due: May 31st, 2021 Review comments to authors of early submission papers: July		- RAINBOW partners can submit scientific papers or participate in a demo sessions & workshops		Forthcoming

Event/Activity Title	Short Description	Type	URL	Dates	Partner	How can RAINBOW participate?	Additional Info / Comments	Status
	computer networks, wireless and mobile computing, cloud/edge/fog computing, cyber-physical systems, networking, scientific workflows, services science, data science, management science, software engineering, to mention just a few.			13th, 2021 Normal paper submission due: August 13th, 2021 Final notification to authors: September 20th, 2021 Camera ready manuscripts due: October 3rd, 2021 Author registration: October 3rd, 2021 Conference dates: November 22nd-25th, 2021				
Cloud Expo Europe	Covering the entire technology ecosystem. Located in Germany's data, finance and security hub, Germany's largest disruptive technology event, TechWeek, returns to Messe Frankfurt on the 4 – 5 November 2020, incorporating Cloud Expo Europe, DevOps Live, Cloud & Cyber Security Expo, Smart IoT, Big Data World, Blockchain Technology World and Data Centre World. The 7 co-located events offer an unmissable opportunity to help you navigate the best route to your digital transformation. As you can explore, over 2 days in 1 location, ALL the latest emerging technologies to help YOUR business.	Industry Expo	https://www.cloudexpoeurope.de	December 8, 2021 – December 9, 2021		- RAINBOW partners can attend for networking		Forthcoming

Event/Activity Title	Short Description	Type	URL	Dates	Partner	How can RAINBOW participate?	Additional Info / Comments	Status
6th ACM/IEEE Symposium on Edge Computing (SEC2021)	The ACM/IEEE Symposium on Edge Computing (SEC) seeks to present exciting, innovative research related to the design, implementation, analysis, evaluation, and deployment of computer systems and applications at the network edge	Scientific Conference	http://acm-ieee-sec.org/2021/	Second deadline for abstracts is June 17, 2021 Paper submission: June 24, 2021 Conferance dates: December 14-17, 2021 (tentative)		- RAINBOW partners can submit scientific papers or participate in a demo sessions & workshops		Forthcoming

Annex II – Generic RAINBOW presentation

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STAKEHOLDERS

End Users: Users interested in solving a problem and outperforming the competition

Service Developers: Developers or SMEs looking to reach new market segments using SotA tech

Infrastructure Providers: Producers of hardware devices in the ICT ecosystem

End Users – Service Developers
Developers must meet customers' demands. Users expect quality service.

Service Developers - Infrastructure Providers
Providers need be dev-friendly. Developers test & report issues

Infrastructure Providers – End Users
Providers must guarantee high availability of services to the end users.

Slide 7

USE CASES

RAINBOW will demonstrate its wide applicability in various domains which are **safety-critical** and require **guaranteed extra-functional properties**

These include:

- real-time responsiveness
- high availability
- data freshness
- efficient data protection and management
- energy-efficiency
- industry-specific security standards

Slide 8

Human-Robot Collaboration in Industrial Ecosystems

Indoor positioning for safety-critical industrial IoT requires the propagation of telemetry data from thousands of objects, human workers and robotic machinery; all this occurring within millisecond range. At the same time, it requires the execution of complex AI algorithmic models to continuously assess and prevent collisions among objects. Because of the delay-sensitive nature of these tasks, propagating data to central cloud infrastructure, results in cycles, where often coordination assessment and planning are derived too late. These challenges require processing of positioning data directly on or near the sensing entities to guarantee faster reaction.

Slide 9

Digital Transformation of Urban Mobility

Aims to create a real-time geo-referenced notification system for vehicles in urban areas about critical situations for the mobility network. Mobility actors are turned into producers and consumers of mobility data, creating virtual local dynamic communities.

Challenges include:

- identification of the "subject" in charge of reporting and updating local information
- dynamic configuration for the optimal splitting of functions between the on-board application, the edge and the cloud backend
- geographical location of MEC servers to support different user populations and densities
- support of emerging C-V2X PC5 wireless technology
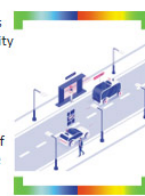
Slide 10

Power Line Surveillance via Swarm of Drones

Using a swarm of drones to scan power lines posses significant challenges such as drone autonomy and optimization of flight plans. Also, surveillance of critical infrastructure requires data protection, high performance, optimized resource allocation, energy reduction and specific restrictions. As such the main innovation concerns the move of data processing on board the UAV. Thus, coordination of routing alteration, image exchanging, terrain overlapping avoidance, etc. can lead to higher energy autonomy and monitoring capacity while reducing overlapping during the image gathering process.

Slide 11

IMPACT

- Accelerate production of successful ICT products and services for the fog paradigm
- Lower the entry point of researchers and DevOps engineers to reuse and build on RAINBOW's results
- Empower innovation by making fog services more efficient and effective
- Contribute to open standards for fog services
- Strenghten competitiveness of EU cloud industry in fog and edge services
- Benefit end users and the public sector due to the adoption of decentralized, edge and fog computing applications

Slide 12

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Annex III – Dissemination Logs

Instructions for completing the logs:

- ACTIVITIES: Type of activity (selected from a predefined list).

- DESCRIPTION: Few words concerning the activity (e.g. for a conference the title and its website URL).

- DATES: Dates of the activity (DD/MM/YYYY). Also, the end date should be provided only if the activity had a duration larger than 1 day.

- PLACE: Location (City, Country) where the activity took place (use 'Online' for non-physical locations).

- LEVEL: The scope / level of reach of the activity.

- AUDIENCE: Characteristics of the activity's target audience. Please use target groups A, B, C, D, E, F and G as defined in the Dissemination Plan.

- REACH: Size of the reached audience (provide an approximation if exact number is not known).

III.1 UBITECH

Reference	Activities	Short description (name, title, URL, etc.)	Date (start date - end date)	Place	Level (L = local / R = regional / N = national / E = EU / W = worldwide)					Audience (characteristics of the target group)	Reach (size / no of organisations / persons reached approximately)
					L	R	N	E	W		
R1	Conferences / Seminars	Present Rainbow project in EGI Conference 2020 https://indico.egi.eu/event/5000/sessions/4525/#20201104	4/11/2020	Online					x	B, C, D	120
R2	Presentations / Demos	Internal Presentation in UBITECH event, presenting key info of the project	2/2020	Physical Internal event	x					A, B, C	65
R3	Presentations / Demos	Internal Presentation in UBITECH event, presenting key info of the project	4/2021	Remote internal event	x					A, B, C	85

III.2 TUW

Reference	Activities	Short description (name, title, URL, etc.)	Date (start date - end date)	Place	Level (L = local / R = regional / N = national / E = EU / W = worldwide)					Audience (characteristics of the target group)	Reach (size / no of organisations / persons reached approximately)
					L	R	N	E	W		
R1	Internet / Social Media	Share of RAINBOW's stakeholders questionnaire post using personal Facebook account	09/07/2020	Online					x	G	
R2	Internet / Social Media	Share of RAINBOW's 1st newsletter post using personal LinkedIn account	31/07/2020	Online					x	G	
R3	Internet / Social Media	Link to RAINBOW's 1st newsletter in the news section of the website of the TUW Distributed Systems Group (https://dsg.tuwien.ac.at/news/2020/09/14/jobs.html)	14/09/2020	Online					X	C	
R4	Internet / Social Media	Listing and short description of RAINBOW on the active projects page of the TUW Distributed Systems Group (https://dsg.tuwien.ac.at/projects.html)	14/09/2020	Online					X	C	
R5	Internet / Social Media	Share of RAINBOW's post using personal LinkedIn account	15/09/2020	Online					X	G	
R6	Internet / Social Media	Share of RAINBOW's 2nd newsletter post using personal LinkedIn account	03/12/2020	Online					X	G	
R7	Internet / Social Media	Share of RAINBOW's 2nd newsletter post using personal Facebook account	03/12/2020	Online					X	G	
R8	Internet / Social Media	Link to RAINBOW's 2nd newsletter in the news section of the website of the TUW Distributed Systems Group (https://dsg.tuwien.ac.at/news/2020/12/09/news.html)	09/12/2020	Online					X	C	
R9	Internet / Social Media	Share of RAINBOW's post about 3rd plenary meeting using personal LinkedIn account	10/02/2021	Online					X	G	
R10	Internet / Social Media	Share of RAINBOW's blog post announcement using personal LinkedIn account	26/02/2021	Online					X	G	
R11	Internet / Social Media	Share of RAINBOW's 3rd newsletter announcement using personal LinkedIn account	01/03/2021	Online					X	G	

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Reference	Activities	Short description (name, title, URL, etc.)	Date (start date - end date)	Place	Level (L = local / R = regional / N = national / E = EU / W = worldwide)					Audience (characteristics of the target group)	Reach (size / no of organisations / persons reached approximately)
					L	R	N	E	W		
R12	Internet / Social Media	Link to RAINBOW's 3rd newsletter in the news section of the website of the TUW Distributed Systems Group (https://dsg.tuwien.ac.at/news/2021/03/01/news.html)	01/03/2021	Online					X	C	
R13	Internet / Social Media	Write RAINBOW LinkedIn post about SLOs and share it using personal LinkedIn account	18/03/2021	Online					X	G	
R14	Internet / Social Media	Write RAINBOW Facebook post about SLOs and share it using personal Facebook account	18/03/2021	Online					X	G	
R15	Internet / Social Media	Write RAINBOW Twitter post about SLOs and share it using official Twitter account	18/03/2021	Online					X	G	
R16	Presentations / Demos	Present RAINBOW to Open Horizon Project of Linux Foundation Edge (https://www.lfedge.org/projects/openhorizon/)	29/03/2021	Online					X	D	
R17	Internet / Social Media	Write official RAINBOW Blog post about "Fog Orchestration Mechanisms" (https://rainbow-h2020.eu/fog-orchestration-mechanisms-an-overview/)	14/05/2021	Online					X	G	
R18	Internet / Social Media	Share of RAINBOW's annoncement of R17 blog post using personal LinkedIn account	15/05/2021	Online					X	G	
R19	Internet / Social Media	Share of RAINBOW's annoncement of R17 blog post using personal Facebook account	15/05/2021	Online					X	G	
R20	Internet / Social Media	Share of RAINBOW's post about 4th plenary meeting using personal LinkedIn account	18/05/2021	Online					X	G	
R21	Internet / Social Media	Share of RAINBOW's post about 4th plenary meeting using personal Facebook account	18/05/2021	Online					X	G	
R22	Internet / Social Media	Share of RAINBOW's 4th newsletter announcement using personal Facebook account	31/05/2021	Online					X	G	
R23	Internet / Social Media	Share of RAINBOW's 4th newsletter announcement using personal LinkedIn account	31/05/2021	Online					X	G	

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Reference	Activities	Short description (name, title, URL, etc.)	Date (start date - end date)	Place	Level (L = local / R = regional / N = national / E = EU / W = worldwide)					Audience (characteristics of the target group)	Reach (size / no of organisations / persons reached approximately)
					L	R	N	E	W		
R24	Internet / Social Media	Link to RAINBOW's 4th newsletter in the news section of the website of the TUW Distributed Systems Group (https://dsg.tuwien.ac.at/news/2021/06/01/news.html)	01/06/2021	Online					X	C	

III.3 POLITO

Reference	Activities	Short description (name, title, URL, etc.)	Date (start date - end date)	Place	Level (L = local / R = regional / N = national / E = EU / W = worldwide)					Audience (characteristics of the target group)	Reach (size / no of organisations / persons reached approximately)
					L	R	N	E	W		
R1	Internet / Social Media	Dissemineation of Issue 1 of Proejct Newsletter on social media	August 4, 2020	LinkedIn					x	A; B; C; D; G	200
R2	Scientific Publications	Active Learning with Noisy Labelers for Improving Classification Accuracy of Connected Vehicles	March 11, 2021	IEEE Transactions on Vehicular Technology			-		x	B,C	
R2	Scientific Publications	Edge-powered Assisted Driving For Connected Cars	May 25, 2021	IEEE Transactions on Mobile Computing					x	B,C	
R4	Internet / Social Media	Facebook/LinkedIn and Twitter posts on RAINBOW-related technical issues	March 1, 2021	Facebook, LinkedIn, Twitter					x	A; B; C; D; G	350
R5	Workshops	Organization of NetSoft workshop (SecSOFT) with RAINBOW involvement	July 2, 2021	Virtual					x	A; B; C; D; G	150
R6	Internet / Social Media	Contribution to writing of Issue 4 of Project Newsletter and its dissemination on social media	May 21, 2021	LinkedIn					x	A; B; C; D; G	200

III.4 UCY

Reference	Activities	Short description (name, title, URL, etc.)	Date (start date - end date)	Place	Level (L = local / R = regional / N = national / E = EU / W = worldwide)					Audience (characteristics of the target group)	Reach (size / no of organisations / persons reached approximately)
					L	R	N	E	W		
R1	Internet / Social Media	Post on our new lab website http://linc.ucy.ac.cy/index.php?id=226	20/07/2020	Online					X	G	
R2	Internet / Social Media	Post on CS UCY facebook account https://www.facebook.com/csdeptucy/posts/3196193930442590	08/07/2020	Online					x	G	
R2	Internet / Social Media	Retweet of RAINBOW's post NEWSLETTER ISSUE 1 via LInC's account	31/07/2020	Online					X	G	
R4	Internet / Social Media	Retweet of RAINBOW's post on datalab's-Drones and #EdgeComputing- via LInC's account	29/09/2020	Online					X	G	
R5	Internet / Social Media	Retweet of RAINBOW's post on datalab's-Drones and #EdgeComputing- via LInC's account	15/09/2020	Online					x	G	
R6	Internet / Social Media	Post on LInC's Twitter account FOGIFY demo	14/10/2020	Online					x	G	
R7	Internet / Social Media	Post on LInC's YouTube account FOGIFY demo https://www.youtube.com/watch?v=PthMM6rC89o	14/10/2020	Online					X	G	
R8	Internet / Social Media	Retweet of Edge Computing/The SEC20 - Best Demo Award/Emulating Geo-Distributed Fog Services	13/11/2020	Online					X	G	
R9	Internet / Social Media	Retweet of Rainbow's post - UCY Best Demo Award/Emulating Geo-Distributed Fog Services	13/11/2021	Online					X	G	
R10	Internet / Social Media	Post on LInC's YouTube account FOGIFY presentation - A Fog Computing Emulation Framework https://www.youtube.com/watch?v=d_6bJzJidas	13/11/2020	Online					X	G	
R11	Internet / Social Media	Retweet of RAINBOW's post NEWSLETTER ISSUE 2 via LInC's account	2/12/2020	Online					X	G	
R12	Internet / Social Media	Retweet Rainbow's consortium progressing discussions during the 2nd plenary project meeting with our demonstrator partners BIBA Bremer Institut für Produktion und Logistik, Centro Ricerche Fiat, MSP & K3Y presenting the	24/11/2020	Online					X	G	

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					L	R	N	E	W		
		developments in their use cases									
R13	Conferences / Seminars	**A Self-stabilizing Control Plane for Fog Ecosystems,** Proceedings of the 13th IEEE/ACM International Conference on Utility and Cloud Computing" (IEEE/ACM UCC '20), 2020	7-10/12/2020	Online Leicester, UK					X	G	
R14	Conferences / Seminars	**Demo: Emulating Geo-Distributed Fog Services** Proceedings of the 5th ACM/IEEE Symposium on Edge Computing" (SEC '20), San Jose, CA, USA Association for Computing Machinery, New York, NY, USA, 2020	11-13/11/2020	Online					x	G	
R14(B)	Conferences / Seminars	Fogify: A Fog Computing Emulation Framework, Proceedings of the 5th ACM/IEEE Symposium on Edge Computing" (SEC '20), San Jose, CA, USA Association for Computing Machinery, New York, NY, USA, 2020	11-13/11/2021	Online					X	G	
R15	Internet / Social Media	Retweet Rainbow's consortium progressing discussions during the **3rd** plenary project meeting	11/2/2021	Online					X	G	
R16	Internet / Social Media	Retweet Rainbows' post @datalab_auth has published a distributed outlier detection engine for data streams, called PROUD	3/3/2021	Online					X	G	
R17	Internet / Social Media	Retweet Rainbow's post Modern cars are equipped with numerous sensors which #EdgeComputing can make use of. Some examples of decentralized applications are: predictive maintenance, traffic management, vehicle security and remote sensing	8/3/2021	Online					X	G	
R18	Internet / Social Media	Retweet Rainbow's post from blog post #RAINBOW_H2020. It's about a new position paper entitled "Federated Cloud Reference Architecture" from Future Cloud Cluster (FCC).	10/3/2021	Online					X	G	
R19	Internet / Social Media	Retweeted Rainbow's post @dsg_tuwien together with Futurewei have published the SLOC project https://slocloud.github.io/SLOC to bring high-level Service Level Objectives and complex	17/3/2021	online					x	G	

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Reference	Activities	Short description (name, title, URL, etc.)	Date (start date - end date)	Place	Level (L = local / R = regional / N = national / E = EU / W = worldwide)					Audience (characteristics of the target group)	Reach (size / no of organisations / persons reached approximately)
					L	R	N	E	W		
		elasticity strategies to the cloud. As part of #RAINBOW_H2020, it will do so in #FogComputing as well									
R20	Internet / Social Media	Retweeted Rainbow's post on Methodologies and techniques for extracting functional and non-functional requirements used for RAINBOW project.	29/3/2021	Online					X	G	
R21	Internet / Social Media	Retweeted post re: the public deliverable "Data Management Services – Early Release". The aim of this Deliverable is to provide a comprehensive overview and documentation report for the early release of the #RAINBOW_H2020 Data Management Services https://rainbow-h2020.eu/deliverables/ #EdgeComputing	05/04/2021	Online					x	G	
R22	Internet / Social Media	Retweeted post for Mark Gilmour, Global Head of 5G, Colt Technology Services, in @rcrwirelessnews , explains why complementary 5G and #EdgeComputing technologies will optimize businesses. https://bit.ly/3gfGqyJ	14/04/2021	Online					x	G	
R23	Internet / Social Media	Retweeted post on the collaboration prospect between @RainbowH2020 and morphemic The MORPHEMIC project is an extension of MELODIC, which is a multi-cloud platform developed in the H2020 project	19/04/2021	Online					X	G	
R24	Internet / Social Media	Retweeted post to join the webinar hosted by @morphemic and watch some very interesting presentations regarding #Multicloud computing	23/04/2021	Online					X	G	
R25	Internet / Social Media	Retweeted post on updated website of #RAINBOW_H2020. Changes occured in the landing page, while more details about the @RainbowH2020 Platform relating to the project's Motivation, Impact, Open Challenges plus Mission & Vision were added. https://rainbow-h2020.eu #FogComputing	05/05/2021	Online					X	G	

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					L	R	N	E	W		
R26	Internet / Social Media	Retweeted post re: new blog post which presents key concepts driving the innovative technological axes of the #RAINBOW_H2020 : Scalable trust establishment & attestation and Geo-distributed data processing	07/05/2021	Online					X	G	
R27	Internet / Social Media	Retweeted post on #RAINBOW_H2020 evaluation framework (led by our partners from @suite5eu), aims to assess the actual added value of the RAINBOW methodology and platform, whereas its elaboration is based on the principles of V. & V. methodologies of software products (IEEE Standard 1012-2016)	10/05/2021	Online					x	G	
R28	Internet / Social Media	Retweeted post of colleagues from @Pledgerproject who shared an interesting analysis that is describing 5 ways developers can get the most out of #EdgeComputing platforms.	11/05/2021	Online					X	G	
R29	Internet / Social Media	Retweeted blog post from Rainbow which presents an overview of Fog Orchestration Mechanisms	14/05/2021	Online					X	G	
R30	Internet / Social Media	Retweeted: Edge #AI is the combination of #EdgeComputing and #artificialintelligence (AI). Our colleagues from the @Pledgerproject have shared an interesting analysis that is trying to investigate applications of Edge AI.	17/05/2021	Online					X	G	
R31	Internet / Social Media	Retweeted post related to the 4th plenary meeting of the project. The technical teams presented the progress of their components towards the first release of RAINBOW's #FogComputing platform.	18/05/2021	Online					X	G	
R32	Internet / Social Media	Retweeted: post from the @Pledger who have shared an interesting analysis presenting 4 reasons why #EdgeComputing is relevant for #Industry40	26/05/2021	Online					X	G	
R33	Internet / Social Media	Retweeted press release post related to the 4th Plenary Meeting of the Rainbow Project that took place virtually on 18-19th of May 2021.	28/05/2021	Online					X	G	

Reference	Activities	Short description (name, title, URL, etc.)	Date (start date - end date)	Place	Level (L = local / R = regional / N = national / E = EU / W = worldwide)					Audience (characteristics of the target group)	Reach (size / no of organisations / persons reached approximately)
					L	R	N	E	W		
R34	Internet / Social Media	Retweeted post on the 4th issue of Rainbow's newsletter	31/05/2021	Online					X	G	
R35	Internet / Social Media	Retweeted post to Join the #DevOps #conference and workshop organized by the colleagues of the @_morphemic_ project. The topic is: "Proactive and polymorphic adaptation of multi-cloud deployments"	04/06/2021	Online					X	G	
R36	Internet / Social Media	Retweeted post REGAINDataWeek workshop @datalab_auth @suite5eu highlighted the example of #RAINBOW_H2020 and the importance of #EdgeComputing #FogComputing acting as enablers in the circular transformation. Find the REGAIN outcomes : indexhttps://datalab.csd.auth.gr/regain/outcomes	09/06/2021	online					X	G	
R37	Internet / Social Media	Retweeted 3rd #SecSoft workshop: July 2, 2021 in Tokyo Cyclone. A joint initiative from EU #CyberSecurity projects, among them is #RAINBOW_H2020	11/06/2021	Online					x	G	
R38	Internet / Social Media	Retweeted post that Rainbow will co-chair the 3rd Workshop on Cyber-Security Arms Race (CYSARM) (CCS, South Korea, Hybrid Event), on November 19th, 2021.	14/06/2021	Online					X	G	
R39	Internet / Social Media	Retweeted post Rainbow attended the community event organized by @HCLOUD_Project where insightful presentations were given on the value of opensource to the future of the cloudcomputing ecosystem!	15/6/2021	Online					X	G	
R40	Presentations / Demos	Seminar talk given at the Univeristy of Pittsburgh by Demetris Trihinas providing an overview of self-adaptive monitoring techniques tackling data management and energy-efficiency for the internet of things: 'Low-Cost Approximate and Adaptive Monitoring Techniques' - https://www.slideshare.net/DemetrisTrihinas	16/2/2021	Online					X	G	

Reference	Activities	Short description (name, title, URL, etc.)	Date (start date - end date)	Place	Level (L = local / R = regional / N = national / E = EU / W = worldwide)					Audience (characteristics of the target group)	Reach (size / no of organisations / persons reached approximately)
					L	R	N	E	W		
R41	Presentations / Demos	Presentation of Fogify to Rajkumar Buyya and his Laboratiory at the University of Melbourne, Australia	18/11/2020	Online, zoom					x	C	
R42	Presentations / Demos	Presentation of a Master's Thesis at UCY by Andreas Ioannou, Workload Generator for IoT Devices for Fog Computing (2020-12-21)	21/12/2020	Online	x					C	
R43	Presentations / Demos	Presentation of a Bachelor's Thesis at UCY by Andreas Vasileiou, 'Implementation, Simulation and Evaluation of Monitoring Application Performance from a flight of drones' (ΥΛΟΠΟΙΗΣΗ ΠΡΟΣΟΜΟΙΩΣΗ ΚΑΙ ΑΞΙΟΛΟΓΗΣΗ ΑΠΟΔΟΣΗΣ ΕΦΑΡΜΟΓΗΣ ΠΑΡΑΚΟΛΟΥΘΗΣΗΣ ΑΠΟ ΕΝΑ ΣΜΗΝΟΣ ΑΠΟ DRONES)	30/05/2021	Online	x					C	
R44	Presentations / Demos	Presentation of a Bachelor's Thesis at UCY by Panayiotis Kyriakou, 'Application of Robotic Arm' (ΕΦΑΡΜΟΓΕΣ ΡΟΜΠΟΤΙΚΟΥ ΒΡΑΧΙΟΝΑ)	01/06/2021	Online	x					C	

III.5 DTU

Reference	Activities	Short description (name, title, URL, etc.)	Date (start date - end date)	Place	Level (L = local / R = regional / N = national / E = EU / W = worldwide)					Audience (characteristics of the target group)	Reach (size / no of organisations / persons reached approximately)
					L	R	N	E	W		
R1	Conferences / Seminars	CloudVaults: Integrating Trust Extensions into System Integrity Verification for Cloud-based Environments, Proceedings of ESORICS 2020	14-18/09/2020	Online					x	G	150
R2	Scientific Publications	Remote Attestation and Integrity Verification Solution in a Cloud Based Environment	12/2020	Online	x					C	
R2	Conferences / Seminars	SecSoft Workshop 2021 - to be organized together with NetSoft 2021	07/2021	Online					x	G	

Reference	Activities	Short description (name, title, URL, etc.)	Date (start date - end date)	Place	Level (L = local / R = regional / N = national / E = EU / W = worldwide)					Audience (characteristics of the target group)	Reach (size / no of organisations / persons reached approximately)
					L	R	N	E	W		
R4	Conferences / Seminars	CYSARM 2021 - to be organized together with CCS 2021	14-19/11/2021	Online					x	G	

III.6 AUTH

Reference	Activities	Short description (name, title, URL, etc.)	Date (start date - end date)	Place	Level (L = local / R = regional / N = national / E = EU / W = worldwide)					Audience (characteristics of the target group)	Reach (size / no of organisations / persons reached approximately)
					L	R	N	E	W		
R1	Internet / Social Media	Post about RAINBOW project in Datalab's official Facebook page	22/5/2020	Online					x	G	306
R2	Internet / Social Media	Post about RAINBOW project in Datalab's official Facebook page	27/5/2020	Online			-		x	G	176
R2	Internet / Social Media	Post about RAINBOW project in Datalab's official LinkedIn account	2/6/2020	Online					x	G	779
R4	Internet / Social Media	Retweet of RAINBOW's post by personal account	10/6/2020	Online					x	G	22
R5	Internet / Social Media	Post about RAINBOW project in Datalab's official Facebook page	10/6/2020	Online					x	G	140
R6	Conferences / Seminars	Demo paper in ACM SIGMOD/PODS International Conference on Mangement of Data (https://dl.acm.org/doi/10.1145/3318464.3384688)	14/6/2020 - 19/6/2020	Online					x	C	160
R7	Internet / Social Media	Share of RAINBOW's post by LinkedIn personal account	16/6/2020	Online					x	G	103
R8	Internet / Social Media	Post about RAINBOW project in Datalab's official LinkedIn account	16/6/2020	Online					x	G	421
R9	Internet / Social Media	Retweet of RAINBOW's post by personal account	17/6/2020	Online					x	G	22
R10	Internet / Social Media	Post about RAINBOW in LinkedIn personal account	18/6/2020	Online					x	G	39
R11	Internet / Social Media	Share of RAINBOW's post by Datalab's official LinkedIn account	18/6/2020	Online					x	G	124

Reference	Activities	Short description (name, title, URL, etc.)	Date (start date - end date)	Place	Level (L = local / R = regional / N = national / E = EU / W = worldwide)					Audience (characteristics of the target group)	Reach (size / no of organisations / persons reached approximately)
					L	R	N	E	W		
R12	Lobbying / Networking	Post in H-CLOUD community forum	7/7/2020	Online					x	C, D	27
R13	Internet / Social Media	Share of RAINBOW's post by Datalab's official Facebook account	8/7/2020	Online					x	G	157
R14	Internet / Social Media	Share of RAINBOW's post by Datalab's official LinkedIn account	9/7/2020	Online					x	G	618
R15	Internet / Social Media	Share of RAINBOW's post in LinkedIn personal account	9/7/2020	Online					x	G	46
R16	Internet / Social Media	Retweets of RAINBOW's posts by personal account	9-10/7/2020	Online					x	G	54
R17	Internet / Social Media	Post about the 1st issue of RAINBOW's newsletter by Datalab's official Facebook account	31/7/2020	Online					x	G	150
R18	Internet / Social Media	Post about the 1st issue of RAINBOW's newsletter by Datalab's official LinkedIn account	1/8/2020	Online					x	G	639
R19	Internet / Social Media	Post about the 1st issue of RAINBOW's newsletter in LinkedIn personal account	1/8/2020	Online					x	G	48
R20	Internet / Social Media	Tweet about the 1st issue of RAINBOW's newsletter in personal account	1/8/2020	Online					x	G	270
R21	Lobbying / Networking	Post in H-CLOUD community forum	1/8/2020	Online					x	C, D	27
R22	Internet / Social Media	Post about the 1st issue of RAINBOW's newsletter by Datalab's official webpage	3/8/2020	Online					x	C	276
R23	Internet / Social Media	Share of RAINBOW's participation in the DeSECSys Workshop on Datalab's official Facebook page	3/9/2020	Online					x	G	158
R24	Internet / Social Media	Share of RAINBOW's participation in the DeSECSys Workshop on Datalab's official LinkedIn page	5/9/2020	Online					x	G	270
R25	Internet / Social Media	Share of RAINBOW's post on Datalab's official Facebook page	8/9/2020	Online					x	G	144
R26	Internet / Social Media	Share of RAINBOW's post on Datalab's official LinkedIn page	8/9/2020	Online					x	G	269
R27	Internet / Social Media	Share of RAINBOW's post on Datalab's official Facebook page	16/9/2020	Online					x	G	135
R28	Internet / Social Media	Share of RAINBOW's post on Datalab's official LinkedIn page	16/9/2020	Online					x	G	334

Project No 871403 (RAINBOW)

D7.2 – Open-Source Contributions, Dissemination, Clustering and Workshop Activities Report - Version 1
Date: 30.06.2021
Dissemination Level: PU

Reference	Activities	Short description (name, title, URL, etc.)	Date (start date - end date)	Place	Level (L = local / R = regional / N = national / E = EU / W = worldwide)					Audience (characteristics of the target group)	Reach (size / no of organisations / persons reached approximately)
					L	R	N	E	W		
R29	Workshops	Attendance of the 1st Workshop on Dependability and Safety Emerging Cloud and Fog Systems (DeSECSys) organized under the ESORICS 2020 Conference	17/9/2020	Online				x		C	45
R30	Internet / Social Media	Share of RAINBOW's post on Datalab's official Facebook page	29/9/2020	Online					x	G	138
R31	Internet / Social Media	Share of RAINBOW's post on Datalab's official LinkedIn page	29/9/2020	Online					x	G	333
R32	Internet / Social Media	Share of RAINBOW's post on Datalab's official Twitter account	29/9/2020	Online					x	G	99
R33	Internet / Social Media	Posts and shares about RAINBOW in Datalab's members social media personal accounts	1/10/2020	Online					x	G	351
R34	Scientific Publications	Publication in the proceedings of the 2020 ACM SIGMOD International Conference on Management of DataJune 2020 (https://doi.org/10.1145/3318464.3384688)	18/10/2020	Online					x	C	187
R35	Conferences / Seminars	Attendance of the European Big Data Value Forum 2020	5/11/2020	Online				x		A, B, C, D, F	154
R36	Internet / Social Media	Post about RAINBOW's 2nd plenary meeting by Datalab's official Linkedin account	24/11/2020	Online					x	G	337
R37	Internet / Social Media	Post about RAINBOW's 2nd plenary meeting by Datalab's official Facebook account	24/11/2020	Online					x	G	161
R38	Internet / Social Media	Post about the 2nd issue of RAINBOW's newsletter by Datalab's official Twitter account	2/12/2020	Online					x	G	144
R39	Internet / Social Media	Post about the 2nd issue of RAINBOW's newsletter by Datalab's official Linkedin account	2/12/2020	Online					x	G	269
R40	Internet / Social Media	Post about the 2nd issue of RAINBOW's newsletter by Datalab's official Facebook account	2/12/2020	Online					x	G	109
R41	Internet / Social Media	Post about the 2nd issue of RAINBOW's newsletter by Datalab's official webpage	2/12/2020	Online					x	C	364
R42	Lobbying / Networking	Post in H-CLOUD community forum	3/12/2020	Online					x	C, D	61
R43	Internet / Social Media	Share of RAINBOW's posts by the AUTH team members personal social media accounts	5/12/2020	Online					x	G	946

Project No 871403 (RAINBOW)

D7.2 – Open-Source Contributions, Dissemination, Clustering and Workshop Activities Report - Version 1
Date: 30.06.2021
Dissemination Level: PU

Reference	Activities	Short description (name, title, URL, etc.)	Date (start date - end date)	Place	Level (L = local / R = regional / N = national / E = EU / W = worldwide)					Audience (characteristics of the target group)	Reach (size / no of organisations / persons reached approximately)
					L	**R**	**N**	**E**	**W**		
R44	Internet / Social Media	Post about RAINBOW's 3rd plenary meeting by Datalab's official Facebook page	10/2/2021	Online					x	G	137
R45	Internet / Social Media	Post about RAINBOW's 3rd plenary meeting in Facebook personal account	10/2/2021	Online					x	G	71
R46	Internet / Social Media	Post about RAINBOW's 3rd plenary meeting in Facebook personal account	10/2/2021	Online					x	G	104
R47	Internet / Social Media	Post about RAINBOW's 3rd plenary meeting by Datalab's official LinkedIn account	10/2/2021	Online					x	G	578
R48	Internet / Social Media	Post about RAINBOW's 3rd plenary meeting in LinkedIn personal account	10/2/2021	Online					x	G	79
R49	Internet / Social Media	Post about RAINBOW's 3rd plenary meeting in LinkedIn personal account	10/2/2021	Online					x	G	475
R50	Internet / Social Media	Post about RAINBOW's launch of a series of blog posts by Datalab's official Facebook account	25/2/2021	Online					x	G	139
R51	Internet / Social Media	Post about RAINBOW's launch of a series of blog posts by Datalab's official LinkedIn account	25/2/2021	Online					x	G	205
R52	Internet / Social Media	Post about RAINBOW's launch of a series of blog posts by Datalab's official Twitter account	25/2/2021	Online					x	G	103
R53	Internet / Social Media	Post about RAINBOW's 3rd newsletter by Datalab's official Facebook page	28/2/2021	Online					x	G	119
R54	Internet / Social Media	Post about RAINBOW's 3rd newsletter by Datalab's official LinkedIn account	28/2/2021	Online					x	G	285
R55	Internet / Social Media	Post about RAINBOW's 3rd newsletter by Datalab's official Twitter account	28/2/2021	Online					x	G	77
R56	Lobbying / Networking	Post in H-CLOUD community forum	28/2/2021	Online					x	C, D	61
R57	Internet / Social Media	Post about the 3rd issue of RAINBOW's newsletter by Datalab's official webpage	2/3/2021	Online					x	C	351
R58	Internet / Social Media	Post about the 3rd issue of RAINBOW's newsletter in Facebook personal account	3/3/2021	Online					x	G	56
R59	Internet / Social Media	Post about RAINBOW's blog by Datalab's official LinkedIn account	8/3/2021	Online					x	G	170

Project No 871403 (RAINBOW)

D7.2 – Open-Source Contributions, Dissemination, Clustering and
Workshop Activities Report - Version 1
Date: 30.06.2021
Dissemination Level: PU

Reference	Activities	Short description (name, title, URL, etc.)	Date (start date - end date)	Place	Level (L = local / R = regional / N = national / E = EU / W = worldwide)					Audience (characteristics of the target group)	Reach (size / no of organisations / persons reached approximately)
					L	R	N	E	W		
R60	Internet / Social Media	Post about RAINBOW's blog in LinkedIn personal account	10/3/2021	Online					x	G	86
R61	Internet / Social Media	Post about the cooperation among RAINBOW and MORPHEMIC projects in LinkedIn personal account	16/3/2021	Online					x	G	73
R62	Internet / Social Media	Post about RAINBOW's use cases by Datalab's official LinkedIn account	23/3/2021	Online					x	G	201
R63	Internet / Social Media	Post about RAINBOW's use cases by Datalab's official Facebook page	30/3/2021	Online					x	G	123
R64	Internet / Social Media	Post about RAINBOW's use cases by LinkedIn personal account	30/3/2021	Online					x	G	178
R65	Internet / Social Media	Post about RAINBOW's blog by Datalab's official Facebook page	5/4/2021	Online					x	G	102
R66	Internet / Social Media	Post about RAINBOW's blog by Datalab's official LinkedIn page	5/4/2021	Online					x	G	191
R67	Internet / Social Media	Post about RAINBOW's blog by Datalab's official Twitter account	5/4/2021	Online					x	G	104
R68	Internet / Social Media	Post about RAINBOW's blog by LinkedIn personal account	6/4/2021	Online					x	G	396
R69	Internet / Social Media	Post about RAINBOW's blog by Datalab's official LinkedIn page	6/4/2021	Online					x	G	212
R70	Internet / Social Media	Post about the cooperation among RAINBOW and MORPHEMIC projects by DATALAB's official LinkedIn page	19/4/2021	Online					x	G	256
R71	Internet / Social Media	Post about the cooperation among RAINBOW and MORPHEMIC projects by DATALAB's official Facebook page	19/4/2021	Online					x	G	125
R72	Internet / Social Media	Post about the cooperation among RAINBOW and MORPHEMIC projects by DATALAB's official Twitter account	19/4/2021	Online					x	G	119
R73	Internet / Social Media	Post about RAINBOW's blog by LinkedIn personal account	28/4/2021	Online					x	G	59
R74	Internet / Social Media	Post about RAINBOW's blog by DATALAB's official Twitter account	28/4/2021	Online					x	G	44

Project No 871403 (RAINBOW)

D7.2 – Open-Source Contributions, Dissemination, Clustering and
Workshop Activities Report - Version 1
Date: 30.06.2021
Dissemination Level: PU

Reference	Activities	Short description (name, title, URL, etc.)	Date (start date - end date)	Place	Level (L = local / R = regional / N = national / E = EU / W = worldwide)					Audience (characteristics of the target group)	Reach (size / no of organisations / persons reached approximately)
					L	R	N	E	W		
R75	Internet / Social Media	Post about the launch of RAINBOW's updated website by DATALAB's official LinkedIn page	5/5/2021	Online					x	G	186
R76	Internet / Social Media	Post about the launch of RAINBOW's updated website by personal Twitter account	5/5/2021	Online					x	G	21
R77	Internet / Social Media	Post about the launch of RAINBOW's updated website by DATALAB's official Facebook page	5/5/2021	Online					x	G	93
R78	Internet / Social Media	Post about the launch of RAINBOW's updated website by personal LinkedIn account	6/5/2021	Online					x	G	48
R79	Internet / Social Media	Post about RAINBOW's blog by personal LinkedIn account	13/5/2021	Online					x	G	6
R80	Internet / Social Media	Post about RAINBOW's blog by Datalab's official Twitter account	15/5/2021	Online					x	G	55
R81	Internet / Social Media	Post about RAINBOW's blog by Datalab's official Facebook page	17/5/2021	Online					x	G	94
R82	Internet / Social Media	Share of RAINBOW's 4th plenary meeting by Datalab's official LinkedIn page	19/5/2021	Online					x	G	154
R83	Internet / Social Media	Share of RAINBOW's 4th plenary meeting by Datalab's official Twitter account	19/5/2021	Online					x	G	50
R84	Workshops	Organization of the workshop "REGAIN: Big data as key driver for circular digital transformation" under the BDVA/DAIRO Data Week 2021 event	27/5/2021	Online				x		A, B, C, D, F	75
R85	Internet / Social Media	Post about RAINBOW's 4th newsletter by Datalab's official Facebook page	31/5/2021	Online					x	G	108
R86	Internet / Social Media	Post about RAINBOW's 4th newsletter by Datalab's official Twitter account	31/5/2021	Online					x	G	26
R87	Internet / Social Media	Post about RAINBOW's 4th newsletter by Datalab's official LinkedIn account	31/5/2021	Online					x	G	156
R88	Internet / Social Media	Post about the 4th issue of RAINBOW's newsletter by Datalab's official webpage	31/5/2021	Online					x	G	318
R89	Internet / Social Media	Post about RAINBOW's presentation in the REGAIN workshop by Datalab's official Facebook page	11/6/2021	Online					x	G	102

Reference	Activities	Short description (name, title, URL, etc.)	Date (start date - end date)	Place	Level (L = local / R = regional / N = national / E = EU / W = worldwide)					Audience (characteristics of the target group)	Reach (size / no of organisations / persons reached approximately)
					L	R	N	E	W		
R90	Internet / Social Media	Post about RAINBOW's presentation in the REGAIN workshop by Datalab's official LinkedIn account	11/6/2021	Online					x	G	136
R91	Internet / Social Media	Post about RAINBOW's presentation in the REGAIN workshop by personal LinkedIn account	11/6/2021	Online					x	G	56
R92	Internet / Social Media	Post about RAINBOW's presentation in the REGAIN workshop by Datalab's official Twitter account	11/6/2021	Online					x	G	25
R93	Internet / Social Media	Post about RAINBOW co-organizing the CYSARM workshop by Datalab's official Facebook page	15/6/2021	Online					x	G	69
R94	Internet / Social Media	Post about RAINBOW co-organizing the CYSARM workshop by Datalab's official Twitter account	15/6/2021	Online					x	G	121
R95	Workshops	AUTH attended the H-CLOUD Open Source Cloud Initiatives Community Event	15/6/2021	Online				x		A, C, D	41

III.7 LINKS

Reference	Activities	Short description (name, title, URL, etc.)	Date (start date - end date)	Place	Level (L = local / R = regional / N = national / E = EU / W = worldwide)					Audience (characteristics of the target group)	Reach (size / no of organisations / persons reached approximately)
					L	R	N	E	W		
R1	Internet / Social Media	Share of RAINBOW's post by Facebook personal account	08/09/2020	Online					x	G	
R2	Internet / Social Media	Retweet of RAINBOW's post by personal account	07/06/2020	Online			-		x	G	
R2	Internet / Social Media	Post about RAINBOW project in LINKS Foundation official Facebook account	05/08/2020	Online					x	G	
R4	Internet / Social Media	Retweet of RAINBOW 's post by LINKS Foundation official account	10/06/2020	Online					x	G	
R5	Internet / Social Media	Share of RAINBOW's post by Facebook personal account	08/07/2020	Online					x	G	
R6	Internet / Social Media	Share of RAINBOW's post by Facebook personal account	10/06/2020	Online					x	G	

Reference	Activities	Short description (name, title, URL, etc.)	Date (start date - end date)	Place	Level (L = local / R = regional / N = national / E = EU / W = worldwide)					Audience (characteristics of the target group)	Reach (size / no of organisations / persons reached approximately)
					L	R	N	E	W		
R7	Internet / Social Media	Post about RAINBOW project in LINKS Foundation official Facebook account	10/09/2020	Online					x	G	
R8	Internet / Social Media	Retweet of RAINBOW 's post by LINKS Foundation official account	31/07/2020	Online					x	G	
R9	Internet / Social Media	Retweet of RAINBOW 's post by LINKS Foundation official account	08/09/2020	Online					x	G	
R10	Internet / Social Media	Retweet of RAINBOW's post by personal account	08/09/2020	Online					x	G	
R11	Internet / Social Media	Share of RAINBOW's post by LinkedIn personal account	22/09/2020	Online					x	G	

III.8 IFAT

Reference	Activities	Short description (name, title, URL, etc.)	Date (start date - end date)	Place	Level (L = local / R = regional / N = national / E = EU / W = worldwide)					Audience (characteristics of the target group)	Reach (size / no of organisations / persons reached approximately)
					L	R	N	E	W		
R1	Conferences / Seminars	The 16th International Conference on Availability, Reliability and Security (ARES 2021)	17.08.21- 20.08.21	ARES Conference (Virtual)					x	A, C	

III.9 INTRA

Reference	Activities	Short description (name, title, URL, etc.)	Date (start date - end date)	Place	Level (L = local / R = regional / N = national / E = EU / W = worldwide)					Audience (characteristics of the target group)	Reach (size / no of organisations / persons reached approximately)
					L	R	N	E	W		
R1	Lobbying / Networking	Collaboration with PLEDGER project	15/9/2020 30/11/2022	Online				x		B, C, D	
R2	Lobbying / Networking	Collaboration with the Future Cloud Cluster	18/9/2020	Online				x		B, C, D	35 cloud research projects

III.10 SUITE5

Reference	Activities	Short description (name, title, URL, etc.)	Date (start date - end date)	Place	Level (L = local / R = regional / N = national / E = EU / W = worldwide)					Audience (characteristics of the target group)	Reach (size / no of organisations / persons reached approximately)
					L	R	N	E	W		
R1	Internet / Social Media	tweet from Kick-Off Meeting	05/02/2020	Online					x	G	634
R2	Internet / Social Media	facebook post from Kick-Off Meeting	05/02/2020	Online			-		x	G	966
R3	Internet / Social Media	retweet from SUITE5 account	10/06/2020	Online					x	G	ask data from RAINBOW account holder
R4	Internet / Social Media	retweet of Newsletter #1 from SUITE5 account	05/08/2020	Online					x	G	ask data from RAINBOW account holder
R5	Internet / Social Media	facebook re-post of Newsletter #1 from SUITE5 account	05/08/2020	Online					x	G	101
R6	e-mails	Dissemination of 1st Newsletter via email	1/9/2020	Online				x		B,C	40
R7	Presentations / Demos	Internal Company Presentation of RAINBOW project	1/9/2020	Limassol/Athens	x					A,C	35
R8	Internet / Social Media	facebook re-post from SUITE5 account	8/9/2020	Online					x	G	84
R9	Internet / Social Media	retweet from SUITE5 account	8/9/2020	Online					x	G	ask data from RAINBOW account holder
R10	Internet / Social Media	retweet from SUITE5 account	15/9/2020	Online					x	G	ask data from RAINBOW account holder
R11	Internet / Social Media	LinkedIn share from Stefanos Venios account	30/9/2020	Online					x	G	239
R12	Internet / Social Media	facebook re-post from SUITE5 account	1/10/2020	Online					x	G	82
R13	Internet / Social Media	retweet from SUITE5 account	1/10/2020	Online					x	G	ask data from RAINBOW account holder
R14	Internet / Social Media	facebook re-post of Newsletter #2 from SUITE5 account	3/12/2020	Online					x	G	90
R15	Internet / Social Media	retweet of Newsletter #2 from SUITE5 account	3/12/2020	Online					x	G	ask data from RAINBOW account holder
R16	Internet / Social Media	retweet from SUITE5 account	25/2/2021	Online					x	G	ask data from RAINBOW account holder
R17	Internet / Social Media	facebook re-post from SUITE5 account	26/2/2021	Online					x	G	52
R18	Internet / Social Media	retweet of Newsletter #3 from SUITE5 account	28/2/2021	Online					x	G	ask data from RAINBOW account holder
R19	Internet / Social Media	facebook re-post of Newsletter #3 from SUITE5 account	2/3/2021	Online					x	G	53

Reference	Activities	Short description (name, title, URL, etc.)	Date (start date - end date)	Place	Level (L = local / R = regional / N = national / E = EU / W = worldwide)					Audience (characteristics of the target group)	Reach (size / no of organisations / persons reached approximately)
					L	R	N	E	W		
R20	Internet / Social Media	facebook re-post of "Federated Cloud Reference Architecture" blogpost from SUITE5 account	16/3/2021	Online					x	G	59
R21	Internet / Social Media	retweet from SUITE5 account	8/3/2021	Online					x	G	ask data from RAINBOW account holder
R22	Internet / Social Media	retweet of "Federated Cloud Reference Architecture" blogpost from SUITE5 account	16/3/2021	Online					x	G	ask data from RAINBOW account holder
R23	Internet / Social Media	retweet of "Performance Comparison of Distributed DB Systems for For Analytics" blogpost from SUITE5 account	2/4/2021	Online					x	G	ask data from RAINBOW account holder
R24	Internet / Social Media	retweet of H-CLOUD online catalogue from SUITE5 account	7/4/2021	Online					x	G	ask data from RAINBOW account holder
R25	Internet / Social Media	retweet of "innovative technological axes" blogpost from SUITE5 account	27/4/2021	Online					x	G	ask data from RAINBOW account holder
R26	Internet / Social Media	facebook re-post of urban mobility use case from SUITE5 account	6/4/2021	Online					x	G	80
R27	Workshops	"Data technologies from cloud to edge and circular economy opportunities" in DataWeek2021 REGAIN workshop	27/5/2021	Online					x	A,B,C,D,F	45
R28	Internet / Social Media	like+retweet of Newsletter #4 from SUITE5 account	3/6/2021	Online					x	G	ask data from RAINBOW account holder
R29	Internet / Social Media	facebook like+re-post of Newsletter #4 from SUITE5 account	3/6/2021	Online					x	G	50
R30	Internet / Social Media	original post in facebook by Suite5	12/6/2021	Online					x	G	40
R31	Internet / Social Media	original post in twitter by Suite5	12/6/2021	Online					x	G	220

III.11 K3Y

Reference	Activities	Short description (name, title, URL, etc.)	Date (start date - end date)	Place	Level (L = local / R = regional / N = national / E = EU / W = worldwide)					Audience (characteristics of the target group)	Reach (size / no of organisations / persons reached approximately)
					L	R	N	E	W		
R1	Internet / Social Media	Post about the kick-off meeting of RAINBOW by K3Y's official webpage	10/2/2020	Online					x	C	71
R2	Internet / Social Media	Post about the webpage of RAINBOW by K3Y's official webpage	11/5/2020	Online					x	C	59

Reference	Activities	Short description (name, title, URL, etc.)	Date (start date - end date)	Place	Level (L = local / R = regional / N = national / E = EU / W = worldwide)					Audience (characteristics of the target group)	Reach (size / no of organisations / persons reached approximately)
					L	R	N	E	W		
R3	Internet / Social Media	Post about the 1st issue of RAINBOW's newsletter by K3Y's official webpage	3/8/2020	Online					x	C	68
R4	Internet / Social Media	Post about the 2nd issue of RAINBOW's newsletter in the LinkedIn account	7/12/2020	Online					x	G	165
R5	Internet / Social Media	Retweet of RAINBOW's post about the 2nd issue of newsletter in the Twitter account	7/12/2020	Online					x	G	29
R6	Internet / Social Media	Post about the 2nd issue of RAINBOW's newsletter in the Facebook account	7/12/2020	Online					x	G	10
R7	Internet / Social Media	Post about the 2nd issue of RAINBOW's newsletter by K3Y's official webpage	7/12/2020	Online					x	C	71
R8	Internet / Social Media	Post about RAINBOW in the LinkedIn account	14/12/2020	Online			-		x	G	142
R9	Internet / Social Media	Retweet of RAINBOW's post about Drones and Edge Computing in the Twitter account	14/12/2020	Online			-		x	G	14
R10	Internet / Social Media	Post about RAINBOW in the Facebook account	14/12/2020	Online			-		x	G	11
R11	Internet / Social Media	Post about RAINBOW's brochure in the LinkedIn account	17/12/2020	Online			-		x	G	275
R12	Internet / Social Media	Post about RAINBOW's brochure in the Twitter account	17/12/2020	Online			-		x	G	1
R13	Internet / Social Media	Post about RAINBOW's brochure in the Facebook account	17/12/2020	Online					x	G	11
R14	Internet / Social Media	Post about RAINBOW's brochure and flyer by K3Y's official webpage	21/12/2020	Online					x	C	69
R15	Internet / Social Media	Post about RAINBOW's flyer in the LinkedIn account	7/1/2021	Online					x	G	248
R16	Internet / Social Media	Post about RAINBOW's flyer in the Twitter account	7/1/2021	Online					x	G	2
R17	Internet / Social Media	Post about RAINBOW's flyer in the Facebook account	7/1/2021	Online					x	G	11
R18	Internet / Social Media	Post about RAINBOW's 3nd plenary meeting in the LinkedIn account	10/2/2021	Online					x	G	249
R19	Internet / Social Media	Post about RAINBOW's 3nd plenary meeting in the Twitter account	10/2/2021	Online					x	G	2
R20	Internet / Social Media	Post about RAINBOW's 3nd plenary meeting in the Facebook account	10/2/2021	Online					x	G	12
R21	Internet / Social Media	Share of RAINBOW's post on how Edge Computing can benefit businesses in the LinkedIn account	26/2/2021	Online					x	G	85

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Date: 30.06.2021
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Reference	Activities	Short description (name, title, URL, etc.)	Date (start date - end date)	Place	Level (L = local / R = regional / N = national / E = EU / W = worldwide)					Audience (characteristics of the target group)	Reach (size / no of organisations / persons reached approximately)
					L	R	N	E	W		
R22	Internet / Social Media	Retweet of RAINBOW's post on how Edge Computing can benefit businesses in the Twitter account	26/2/2021	Online					x	G	10
R23	Internet / Social Media	Share of RAINBOW's post on how Edge Computing can benefit businesses in the Facebook account	26/2/2021	Online					x	G	10
R24	Internet / Social Media	Share of RAINBOW's post about a blog post that addresses critical issues related to Fog Computing and Edge Computing in the LinkedIn account	1/3/2021	Online					x	G	54
R25	Internet / Social Media	Retweet of RAINBOW's post about a blog post that addresses critical issues related to Fog Computing and Edge Computing in the Twitter account	1/3/2021	Online					x	G	22
R26	Internet / Social Media	Share of RAINBOW's post about a blog post that addresses critical issues related to Fog Computing and Edge Computing in the Facebook account	1/3/2021	Online					x	G	9
R27	Internet / Social Media	Share of RAINBOW's post about the 3rd issue of RAINBOW's newsletter in the LinkedIn account	3/3/2021	Online					x	G	64
R28	Internet / Social Media	Retweet of RAINBOW's post about the 3rd issue of RAINBOW's newsletter in the Twitter account	3/3/2021	Online					x	G	19
R29	Internet / Social Media	Share of RAINBOW's post about the 3rd issue of RAINBOW's newsletter in the Facebook account	3/3/2021	Online					x	G	8
R30	Internet / Social Media	Post about the 3rd issue of RAINBOW's newsletter by K3Y's official webpage	3/3/2021	Online					x	C	59
R31	Internet / Social Media	Share of RAINBOW's post in the LinkedIn account	10/3/2021	Online					x	G	42
R32	Internet / Social Media	Retweet of RAINBOW's post in the Twitter account	10/3/2021	Online					x	G	11
R33	Internet / Social Media	Share of RAINBOW's post in the Facebook account	10/3/2021	Online					x	G	7
R34	Internet / Social Media	Share of RAINBOW's post about the role of Edge Computing in connected and autonomous vehicles, in the LinkedIn account	12/3/2021	Online					x	G	75
R35	Internet / Social Media	Retweet of RAINBOW's post about the role of Edge Computing in connected and autonomous vehicles, in the Twitter account	12/3/2021	Online					x	G	8

Reference	Activities	Short description (name, title, URL, etc.)	Date (start date - end date)	Place	Level (L = local / R = regional / N = national / E = EU / W = worldwide)					Audience (characteristics of the target group)	Reach (size / no of organisations / persons reached approximately)
					L	R	N	E	W		
R36	Internet / Social Media	Share of RAINBOW's post about the role of Edge Computing in connected and autonomous vehicles, in the Facebook account	12/3/2021	Online					x	G	7
R37	Internet / Social Media	Share of RAINBOW's post about a blog post that presents a paper from Future Cloud Cluster (FCC), entitled "Federated Cloud Reference Architecture", in the LinkedIn account	18/3/2021	Online					x	G	32
R38	Internet / Social Media	Retweet of RAINBOW's post about a blog post that presents a paper from Future Cloud Cluster (FCC), entitled "Federated Cloud Reference Architecture", in the Twitter account	18/3/2021	Online					x	G	16
R39	Internet / Social Media	Share of RAINBOW's post about a blog post that presents a paper from Future Cloud Cluster (FCC), entitled "Federated Cloud Reference Architecture", in the Facebook account	18/3/2021	Online					x	G	6
R40	Internet / Social Media	Retweet of RAINBOW's post about an Open Access Journal on "Multi-Clouds and Edge Computing"	26/3/2021	Online					x	G	13
R41	Internet / Social Media	Share of RAINBOW's post about an Open Access Journal on "Multi-Clouds and Edge Computing", in the Facebook account	26/3/2021	Online					x	G	4
R42	Internet / Social Media	Share of RAINBOW's post about the SLOC project in the LinkedIn account	31/3/2021	Online					x	G	72
R43	Internet / Social Media	Retweet of RAINBOW's post about the SLOC project	31/3/2021	Online					x	G	11
R44	Internet / Social Media	Share of RAINBOW's post about the SLOC project, in the Facebook account	31/3/2021	Online					x	G	6
R45	Internet / Social Media	Share of RAINBOW's post about a Technical Report by 5G Automotive Association (5GAA), which includes detailing architecture and deployment models for Edge Computing, in the LinkedIn account	2/4/2021	Online					x	G	60
R46	Internet / Social Media	Retweet of RAINBOW's post about a Technical Report by 5G Automotive Association (5GAA), which includes detailing architecture and deployment models for Edge Computing	2/4/2021	Online					x	G	6

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					L	**R**	**N**	**E**	**W**		
R47	**Internet / Social Media**	Share of RAINBOW's post about a Technical Report by 5G Automotive Association (5GAA), which includes detailing architecture and deployment models for Edge Computing, in the Facebook account	2/4/2021	Online					x	G	7
R48	**Internet / Social Media**	Post about a blog post on RAINBOW's Techniques for the Requirements Elicitation by K3Y's official webpage	2/4/2021	Online					x	C	54
R49	**Internet / Social Media**	Share of RAINBOW's post about an analysis on how 5G and Edge Computing can revive smart cities, in the Facebook account	7/4/2021	Online					x	G	8
R50	**Internet / Social Media**	Share of RAINBOW's post about a blog post with methodologies and techniques for extracting functional and non-functional requirements used for RAINBOW Project in the LinkedIn account	9/4/2021	Online					x	G	48
R51	**Internet / Social Media**	Retweet of RAINBOW's post about a blog post with methodologies and techniques for extracting functional and non-functional requirements used for RAINBOW Project	9/4/2021	Online					x	G	8
R52	**Internet / Social Media**	Share of RAINBOW's post about a blog post with methodologies and techniques for extracting functional and non-functional requirements used for RAINBOW Project, in the Facebook account	9/4/2021	Online					x	G	8
R53	**Internet / Social Media**	Share of RAINBOW's post about a blog post on Performance Comparison of Distributed Database Systems for Fog Analytics, in the LinkedIn account	20/4/2021	Online					x	G	41
R54	**Internet / Social Media**	Retweet of RAINBOW's post about a blog post on Performance Comparison of Distributed Database Systems for Fog Analytics	20/4/2021	Online					x	G	16
R55	**Internet / Social Media**	Share of RAINBOW's post about a blog post on Performance Comparison of Distributed Database Systems for Fog Analytics, in the Facebook account	20/4/2021	Online					x	G	8
R56	**Internet / Social Media**	Share of RAINBOW's post about the public deliverable "Data Management Services – Early Release", in the LinkedIn account	28/4/2021	Online					x	G	34

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					L	R	N	E	W		
R57	Internet / Social Media	Retweet of RAINBOW's post about the public deliverable "Data Management Services – Early Release"	28/4/2021	Online					x	G	9
R58	Internet / Social Media	Share of RAINBOW's post about the public deliverable "Data Management Services – Early Release", in the Facebook account	28/4/2021	Online					x	G	8
R59	Internet / Social Media	Post about a blog post on key concepts driving the innovative technological axes of the RAINBOW project: Fog/Edge Computing and Service Graph Topology Descriptions, by K3Y's official webpage	30/4/2021	Online					x	C	47
R60	Internet / Social Media	Share of H-CLOUD's post about the H-CLOUD Online Catalogue, in the LinkedIn account	7/5/2021	Online					x	G	48
R61	Internet / Social Media	Retweet of RAINBOW's post about the H-CLOUD Online Catalogue"	7/5/2021	Online					x	G	1
R62	Internet / Social Media	Share of RAINBOW's post about the H-CLOUD Online Catalogue", in the Facebook account	7/5/2021	Online					x	G	6
R63	Internet / Social Media	Share of RAINBOW's post about an analysis that explains why complementary 5G and Edge Computing technologies will optimize businesses, in the LinkedIn account	10/5/2021	Online					x	G	78
R64	Internet / Social Media	Retweet of RAINBOW's post about an analysis that explains why complementary 5G and Edge Computing technologies will optimize businesses	10/5/2021	Online					x	G	12
R65	Internet / Social Media	Share of RAINBOW's post about an analysis that explains why complementary 5G and Edge Computing technologies will optimize businesses, in the Facebook account	10/5/2021	Online					x	G	8
R66	Internet / Social Media	Post about a blog post about key concepts driving the innovative technological axes of the RAINBOW project: Scalable trust establishment & attestation and Geo-distributed data processing, by K3Y's official webpage	10/5/2021	Online					x	C	32
R67	Internet / Social Media	Share of RAINBOW's post about the announcement of RAINBOW's collaboration with the Morphemic Proactive Cloud project, in the LinkedIn account	14/5/2021	Online					x	G	64
R68	Internet / Social Media	Retweet of RAINBOW's post about the announcement of RAINBOW's collaboration with	14/5/2021	Online					x	G	1

Reference	Activities	Short description (name, title, URL, etc.)	Date (start date - end date)	Place	Level (L = local / R = regional / N = national / E = EU / W = worldwide)					Audience (characteristics of the target group)	Reach (size / no of organisations / persons reached approximately)
					L	R	N	E	W		
		the Morphemic Proactive Cloud project									
R69	Internet / Social Media	Share of RAINBOW's post about the announcement of RAINBOW's collaboration with the Morphemic Proactive Cloud project, in the Facebook account	14/5/2021	Online					x	G	7
R70	Internet / Social Media	Share of RAINBOW's post about a blog post on key concepts driving the innovative technological axes of the RAINBOW project: Fog/Edge Computing and Service Graph Topology Descriptions, in the LinkedIn account	21/5/2021	Online					x	G	62
R71	Internet / Social Media	Retweet of RAINBOW's post about a blog post on key concepts driving the innovative technological axes of the RAINBOW project: Fog/Edge Computing and Service Graph Topology Descriptions	21/5/2021	Online					x	G	12
R72	Internet / Social Media	Share of RAINBOW's post about a blog post on key concepts driving the innovative technological axes of the RAINBOW project: Fog/Edge Computing and Service Graph Topology Descriptions, in the Facebook account	21/5/2021	Online					x	G	7
R73	Internet / Social Media	Share of RAINBOW's post about a press release which issued regarding the 4th Plenary meeting, in the LinkedIn account	28/5/2021	Online					x	G	54
R74	Internet / Social Media	Retweet of RAINBOW's post about a press release which issued regarding the 4th Plenary meeting	28/5/2021	Online					x	G	8
R75	Internet / Social Media	Share of RAINBOW's post about a press release which issued regarding the 4th Plenary meeting, in the Facebook account	28/5/2021	Online					x	G	4
R76	Internet / Social Media	Post about a press release which issued regarding the 4th Plenary meeting, by K3Y's official webpage	31/5/2021	Online					x	C	23

III.12 UNISYSTEMS

Reference	Activities	Short description (name, title, URL, etc.)	Date (start date - end date)	Place	Level (L = local / R = regional / N = national / E = EU / W = worldwide)					Audience (characteristics of the target group)	Reach (size / no of organisations / persons reached approximately)
					L	R	N	E	W		
R1	Lobbying / Networking	Collaboration with DataVaults project	8/4/2021	Online				x		B, C, D	
R2	Lobbying / Networking	Collaboration with GLASS project	10/6/2021	Online				x		B, C, D	
R3	Lobbying / Networking	Collaboration with InGov project	15/6/2021	Online				x		B, C, D	

III.13 CRF

Reference	Activities	Short description (name, title, URL, etc.)	Date (start date - end date)	Place	Level (L = local / R = regional / N = national / E = EU / W = worldwide)					Audience (characteristics of the target group)	Reach (size / no of organisations / persons reached approximately)
					L	R	N	E	W		
R1	Internet / Social Media	Share of RAINBOW's post by LinkedIn personal account	08/09/2020	Online					x	G	318
R2	Internet / Social Media	Share of RAINBOW's post by LinkedIn personal account	05/11/2020	Online			-		x	G	152
R2	Internet / Social Media	Share of RAINBOW's post by LinkedIn personal account	03/03/2021	Online					x	G	99
R4	Internet / Social Media	Share of RAINBOW's post by Facebook personal account	03/03/2021	Online					x	G	
R5	Internet / Social Media	Share of RAINBOW's post by LinkedIn personal account	22/03/2021	Online					x	G	80
R6	Internet / Social Media	Share of RAINBOW's post by LinkedIn personal account	23/03/2021	Online					x	G	15
R7	Internet / Social Media	Share of RAINBOW's post by LinkedIn personal account	23/03/2021	Online					x	G	13
R8	Internet / Social Media	Share of RAINBOW's post by LinkedIn personal account	07/04/2021	Online					x	G	106
R9	Internet / Social Media	Share of RAINBOW's post by LinkedIn personal account	25/05/2021	Online					x	G	

III.14 BIBA

Reference	Activities	Short description (name, title, URL, etc.)	Date (start date - end date)	Place	Level (L = local / R = regional / N = national / E = EU / W = worldwide)					Audience (characteristics of the target group)	Reach (size / no of organisations / persons reached approximately)
					L	R	N	E	W		
R1	Internet / Social Media	BIBA Official Website: http://www.biba.uni-bremen.de/forschung/projekte/laufende-projekte.html	13.10.2020	Online					x	G	200
R2	e-mails	LogDynamics Newletter April 2020: http://www.logdynamics.de/uploads/media/NewsletterApril2020.pdf	14.04.2020	Online			x			B,C,D	350
R2	Scientific Publications	Scientific Publication under RAINBOW at SysInt 2020 Conference: https://www.sciencedirect.com/science/article/pii/S2351978920321454?via%3Dihub	24.12.2020	Bremen, Germany (Online)					x	A,B,C	50
R4	Internet / Social Media	Sharing RAINBOW Newsletter via Personal Profile on LinkedIn	02.03.2021	Online					x	G	50
R5	Internet / Social Media	Sharing RAINBOW Post via Personal Profile on LinkedIn	09.03.2021	Online					x	G	50
R6	Internet / Social Media	Sharing RAINBOW Post via Personal Profile on LinkedIn	18.03.2021	Online					x	G	100
R7	Internet / Social Media	Sharing RAINBOW Post via Personal Profile on LinkedIn	23.03.2021	Online					x	G	13
R8	Internet / Social Media	Sharing RAINBOW Post via Personal Profile on LinkedIn	27.03.2021	Online					x	G	100
R9	Internet / Social Media	Sharing RAINBOW Post via Personal Profile on LinkedIn	29.03.2021	Online					x	G	150
R10	Newspapers / Magazines	BIBA Year Report for 2019/2020: https://www.biba.uni-bremen.de/fileadmin/user_upload/BIBA-Jahresbericht_2019-20.pdf	01.04.2021	Online/ Printed Reported	x	x	x			C, D, E, F	500-750
R11	Internet / Social Media	Sharing RAINBOW Post via Personal Profile on LinkedIn	27.04.2021	Online					x	G	100
R12	Internet / Social Media	Sharing RAINBOW Post via Personal Profile on LinkedIn	14.0.52021	Online					x	G	200

III.15 MSP

Reference	Activities	Short description (name, title, URL, etc.)	Date (start date - end date)	Place	Level (L = local / R = regional / N = national / E = EU / W = worldwide)					Audience (characteristics of the target group)	Reach (size / no of organisations / persons reached approximately)
					L	R	N	E	W		
R1	Internet / Social Media	http://uav.com.pl/pl/projekty-ue/a-fog-platform-for-secured-iot-services---rainbow (Polish) And http://uav.com.pl/en/_54/_73 (English) MSP web pages with active links	10.07.2020	online					x	G	
R2	e-mails	preparation of the footage for a company mail with the information on Rainbow Project -will be used to share informatiojn about the project on the occasion of current correspondence	10.12.2020	online					x	A/C/D/G	
R3	Internet / Social Media	update of the information about the project at the MSP Slack platform	15.12.2020	online	x		-			A/G	
R4	Conferences / Seminars	The 4th annual international CURPAS conference "Highly automated / Autonomous on three levels": https://curpas.de/en/international-annual-conference.html Company stand, presentation including info on RAINBOW project	10-11.06.2021	Wildau, n. Berlin And Online					x	A/C/D/F/G	ca. 80 on site plus unknown online

Annex IV – Publications Planner

Partner	Publication type (Journal paper/ Conference paper/ Corporate magazine)	Topic(s)	Related WP/Tasks	Target (title of journal / conference / magazine)	Submission timeframe (estimated)	Publication timeframe (estimated)	Status
AUTH	Conference paper	Benchmarking of In-Memory databases	WP4		4th semester	4th semester	Planned
AUTH	Conference paper	Data placement algorithms (coordination between database and analytics tasks)	WP4		4th semester	4th semester	Planned
AUTH	Conference paper	Benchmarking of Edge Analytic frameworks	WP3		5th semester	5th semester	Planned
AUTH	Journal paper	Adaptive data and task placement algorithms	WP3, WP4		5th semester	6th semester	Planned
TUW	Conference paper	Fog-aware Container Scheduler	WP3	IEEE CLOUD	3rd semester	4th semester	Submitted
TUW	Conference paper	Service Graph Abstraction	WP3		4th semester	5th semester	Planned
TUW	Conference paper	Federated Orchestration	WP3		5th semester	6th semester	Planned
POLITO	Journal paper	ML for event detection in vehicular networks	WP5	IEEE Trans. on Veh. Technology	3rd semester	4th semester	Published
POLITO	Journal paper	Edge-powered Assisted Driving For Connected Cars	WP5	IEEE Trans. on Mobile Computing	4th semester	6th semester	Published

Annex V – Synergies Matrix

EU-funded projects			
Acronym / Topic / Type	**Start / End Dates**	**Short description**	**Website / Cordis**
MORPHEMIC ICT-15-2019-2020 - Cloud Computing RIA	1/1/2020 - 12/31/2022	Cloud computing offers many possibilities to store, secure and work on our data. But present applications and components can be organised and reshaped ahead of the anticipated deployments from new technologies for better effects. The EU-funded MORPHEMIC project will adapt and optimise cloud computing in two dimensions: with the idea of polymorph architecture, and a proactive adaptation. It will optimise applications working in various technical forms to increase their utility in specific environments. The project will also ensure the heterogeneous deployment through a MORPHEMIC deployment platform. Its environment will offer a combination of cloud levels, data centres, edge clouds and 5G base stations to provide a complete solution for easy inclusion of new technologies and services.	http://morphemic.cloud/ https://cordis.europa.eu/project/id/871643
ACCORDION ICT-15-2019-2020 - Cloud Computing RIA	1/1/2020 - 12/31/2022	Edge computing is transforming how cloud giants like Google and Microsoft are handling, processing and delivering data from millions of devices around the world. It is reducing the distance between user and server and minimising latency. Compared to cloud computing, edge computing is more 'democratic' thanks to its distributed and localised nature. As a consequence, it is estimated that edge computing will play a leading role in coming advanced technology. The EU-funded ACCORDION project considers that by associating edge computing with advanced technologies such as 5G, the EU will be able to capitalise on its local resource and infrastructure and bring benefit to its SMEs. The project settles a practical approach in connecting edge resources and infrastructures to support next-generation applications.	https://www.accordion-project.eu/ https://cordis.europa.eu/project/id/871793
FogProtect ICT-15-2019-2020 - Cloud Computing RIA	1/1/2020 - 12/31/2022	Cloud computing is experiencing a fundamental transition from huge data centres to decentralised computing models that restricts latency, increases processing speed and reduces energy consumption. Thanks to the new technology, data produced in end tools such as smartphones and IoT devices are stored, developed, elaborated and transmitted through fog nodes to cloud services. However, the protection of sensitive data in such a decentralised environment is not guaranteed. The EU-funded FogProtect project will provide advanced design, technologies and methods to secure end-to-end data protection along the computing continuum. The project integrates four technological innovations to create applicable solutions for data protection in smart cities, smart industries and smart media.	https://fogprotect.eu https://cordis.europa.eu/project/id/871525
SmartCLIDE ICT-15-2019-2020 - Cloud Computing RIA	1/1/2020 - 12/31/2022	Analysing data is much easier and faster today thanks to cloud computing and on-demand availability of computer system resources, like data storage and computing power. It allows many users to reach data centres over the internet and to distribute certain functions over multiple locations. But today's cloud computing must also open its capabilities and include solutions for products of Big Data and the Internet of things. The EU-funded SmartCLIDE project will create a new, smart development environment made to work in the cloud and capable of self-discovery of IaaS and SaaS. It will be based on the coding-by-demonstration attitude, bringing full-stack data-centred services with high levels of abstraction at all stages	https://smartclide.eu/ https://cordis.europa.eu/project/id/871177
Pledger ICT-15-2019-2020 - Cloud Computing RIA	1/1/2020 - 11/30/2022	Next-generation edge computing infrastructures should confront the new challenges faced today with the power offered by cloud infrastructures. The EU-funded Pledger project aims to provide a new architectural model as well as a set of software tools that will prepare the future development of the next generation of edge computing. The project will allow edge computing providers to secure the stability and effective performance of the edge	http://www.pledger-project.eu/ https://cordis.europa.eu/project/id/871536

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EU-funded projects			
Acronym / Topic / Type	**Start / End Dates**	**Short description**	**Website / Cordis**
		infrastructures. It will also allow edge computing users to understand the nature of their applications, research understandable quality of service metrics and optimise the competitiveness of their infrastructures. The project intends to introduce the set of tools in the application fields of manufacturing, mixed reality and smart cities.	
H-CLOUD ICT-15-2019-2020 - Cloud Computing CSA	1/1/2020 - 12/31/2022	New cloud technologies, services and solutions are constantly emerging, furthering the creation of a digital single market in Europe. However, this market is currently fragmented and defined by the absence of a cloud culture. The EU-funded H-CLOUD project aims to address this problem by setting up a sustainable forum of stakeholders to establish a common vision for the future of cloud computing in Europe. The forum will be a live community of organisations and individuals whose goal will be to address challenges and opportunities arising at the research, technological, policy, standardisation and organisational levels. The project will help unlock the potential of cloud computing and support the creation of a digital single market.	https://www.h-cloud.eu https://cordis.europa.eu/project/id/871536
HUB4CLOUD ICT-40-2020 - Cloud Computing: towards a smart cloud computing continuum CSA	1/1/2021 - 30/6/2022	HUB4CLOUD will assist growing the impact and relevance of Cloud Computing research, innovation and policy-driven efforts, while accelerating its adoption and deployments in Europe. By running dedicated coordination and support activities, including roadmapping, dissemination, organisation of events, mapping of open source/(pre-)standardisation initiatives, and business acceleration activities, HUB4CLOUD will ensure the creation of an open, inclusive, and sustainable ecosystem.	https://www.h-cloud.eu/ict_40-projects/hub4cloud/ https://cordis.europa.eu/project/id/101016673
DataVaults ICT-13-2018-2019 - Supporting the emergence of data markets and the data economy RIA	1/1/2020 - 31/12/2022	Although both large enterprises and SMEs acknowledge the potential of Big Data in disrupting the market and business models, this is not reflected in the growth of the data economy. The lack of trusted, secure, ethical-driven personal data platforms and privacy-aware analytics, hinders the growth of the data economy and creates concerns. The main considerations are related to the secure sharing of personal and proprietary/industrial data, and the definition of a fair renumeration mechanism that will be able to capture, produce, release and cash out the value of data, always for the benefit of all the involved stakeholders. DataVaults aims to address this kind of concerns that pertain privacy, ethics and intellectual property rights, by allowing individuals to take ownership and control of their data and share them at will, through flexible data sharing and fair compensation schemes with other entities (companies or not).	https://www.datavaults.eu/ https://cordis.europa.eu/project/id/871755
GLASS DT-GOVERNANCE-05-2018-2019-2020 - New forms of delivering public goods and inclusive public services	1/1/2021 – 31/12/2023	The vision of GLASS is to place EU citizens in control of their personal information and streamline access to eGovernment services across Member States and beyond. The project is citizen-centric by design, uses state-of-the-art technology and envisages to produce a model of interaction among public administration, citizens and businesses with a strong social, societal, economic, technological and scientific impact aligned with the EU eGovernment Action Plan 2016-2020 and the EU Digital Single Market Strategy. With GLASS, public administrations will enhance their open government capabilities and significantly improve the sense of trust and confidence of citizens and businesses that will have the freedom to make personal or businesses choices without the administrative burden of the past.	https://www.glass-h2020.eu

EU-funded projects				
Acronym / Topic / Type	**Start / End Dates**	**Short description**		**Website / Cordis**
inGov DT-GOVERNANCE-05-2018-2019-2020 - New forms of delivering public goods and inclusive public services	1/1/2021 – 31/12/2023	inGOV vision is to provide innovative ICT-supported governance models, where public authorities and relevant stakeholders can collaborate in co-creating inclusive and accessible integrated public services. On one hand, authorities increasingly strive to provide better services to end-users (citizens and businesses), but reality shows a low take-up. On the other hand, end-users don't associate themselves with the offered public e-services, considering them of low value in many respects. inGOV will use multidisciplinary scientific methods, including design science, to suggest how government authorities can exploit co-creation methodology and technologies (i.e. mobile apps, virtual assistance) to improve user experience and take-up rates by offering personalised secure and trustful services, of increased value for the end-user.		https://ingov-project.eu
Other initiatives & projects				
Name / Type	Website	Contact person	Short description - Scope	Partners involved / role
Future Cloud Cluster Clustering Initiative	https://eucloudclusters.wordpress.com/future-cloud/	Ana Juan Ferrer <ana.juanf@atos.net>	The aim of Future Cloud Cluster is to provide a forum for discussion and collaboration for research and innovation initiatives that address next generation Cloud Computing challenges and issues, including diverse forms of distributed computing (Cloud, Multi-Cloud, Edge, Fog, Ad-hoc and Mobile computing). The goal of the cluster is to create a critical mass of projects so as to share experiences, collaborate on approaches, discuss challenges for adoption and future research and elaborate a broad EU perspective for cloud technology roadmapping.	AUTH (cross-dissemination) UCY (technical contributions)