



ICARUS:

“Aviation-driven Data Value Chain for Diversified Global and Local Operations”

D6.4 Report on Dissemination and Communication for Period 1 and Updated Plan for Period 2

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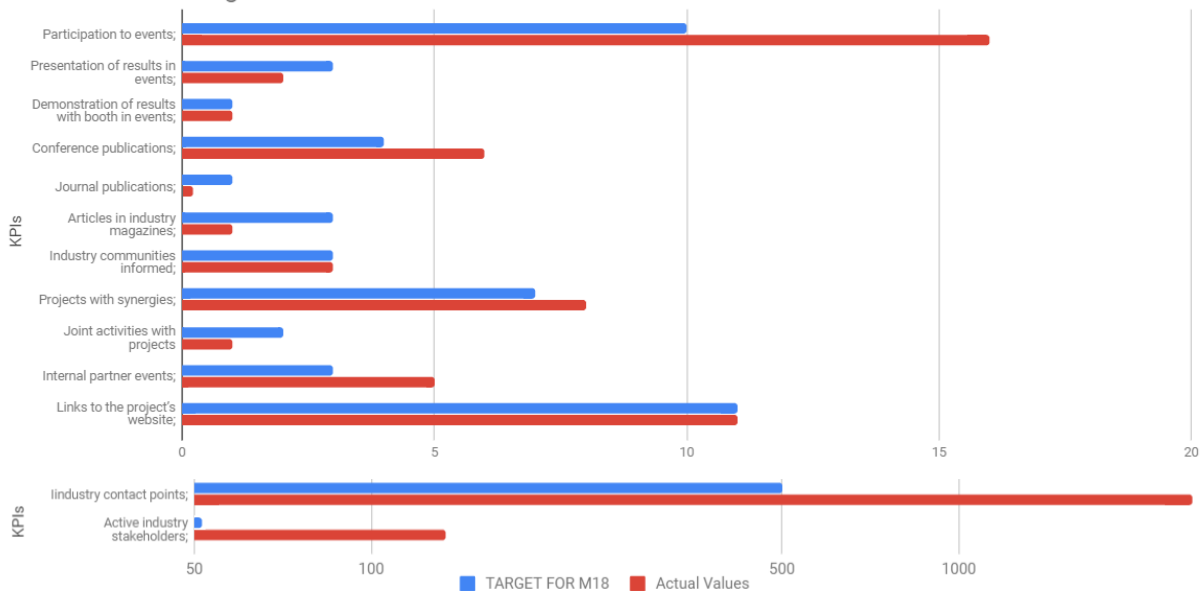
Executive Summary

The ICARUS deliverable D6.4 presents the interim version of the “Dissemination, Communication and Stakeholders Engagement Plan” of the ICARUS project. The document recaps the detailed plan that was developed in month 3 of the project (D6.1), which is updated at places in order to address issues and opportunities recognized during the intervening period.

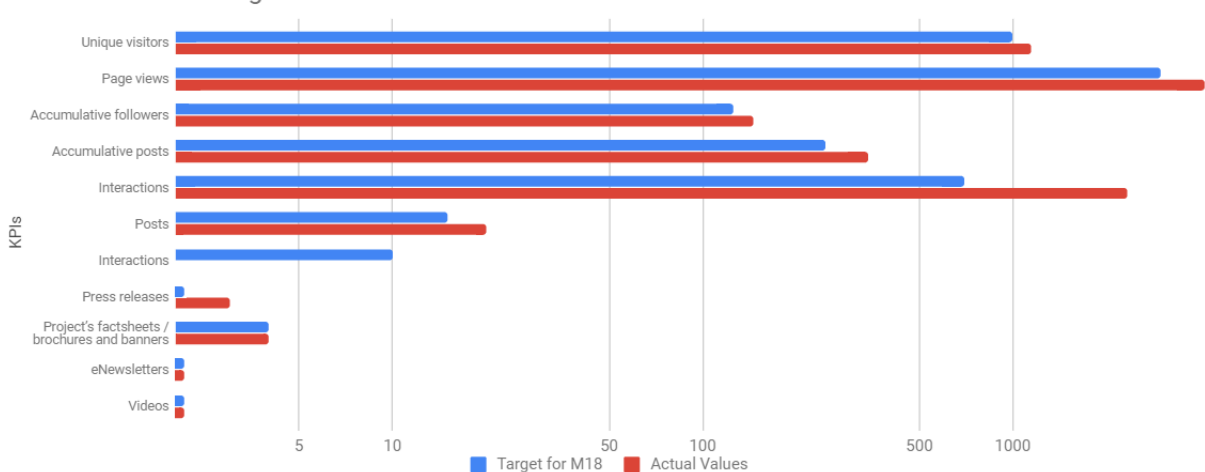
Summaries of the activities and material produced within this period are also included, along with the Key Performance Indicators (KPIs) from the 1st phase (M1-M12) and the ongoing 2nd phase (M13-M24) of the dissemination and communication time plan. Identified risks are reported and corrective actions are proposed.

A summary graph of all the major KPI targets until M18 for both communication and dissemination activities in comparison to the actual results is displayed in the figures below:

Dissemination: Targets for M18 & Actual Values



Communication: Target for M18 & Actual Values



In more detail, at the beginning of this document, the dissemination and communication objectives of the project are ascertained, along with the strategy to implement them. More significance is put to the objectives affecting the second phase of the plan.

Subsequently, all actions implemented during the first 18 months of this project are reported. By aggregating and analysing these lists, the KPIs are calculated and reported in detailed tables. This workflow leads to identification of over-performing and, most importantly, under-performing activities, which are discussed during the latter sections of this report.

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1 Introduction

1.1 Purpose of the Document

The scope of the deliverable is to present the updated strategy and work plan for the dissemination and communication activities of the ICARUS project. Additionally, the performed actions up to this point, as initially described in “D6.1 Plan for Dissemination, Communication and Stakeholder Engagement”, are reported. Potential opportunities and risks are identified, as ICARUS moves forward towards the 2nd and 3rd phases of the project. The current deliverable is based on the previous WP6 deliverables, primarily D6.1 “Plan for Dissemination, Communication and Stakeholder Engagement”, as well as D6.2 “Project Website and Web 2.0 Channels”, echoing and updating, where necessary, the dissemination and communication objectives and plan.

1.2 Document Structure

In section 2, the project’s main dissemination and communication objectives are revisited, following the initial work of D6.1.

In section 3, we report on the activities performed during the first 18 months of the project, along with the dissemination and communication material created.

In section 4, we summarize and analyse the quantified KPIs, as they occur from the individual dissemination reports. Where is needed, we suggest corrective actions in order to reach the expected KPIs.

In section 5, we summarize the content of this report and establish the baseline for the remaining period of the project.

2 Dissemination & Communication Objectives & Strategy

In order to set the baseline for this report, the dissemination and communication plan is reported here. This section is based upon the work performed in WP6 during the initial stage of the respective tasks, since the plan that was developed then was exhaustive and no major drawbacks were identified during the time passed. Nevertheless, when appropriate, slight modifications have been inserted, to clarify and address any minor identified deficiencies. Additionally, the achievement of these objectives is discussed as well.

2.1 Target audience

Taking into account the inter-relation between the diverse activities to maximize the project's impact, it is important to identify the potential targeted audiences of ICARUS along with their specific interest in the project. An initial list of the main target groups for ICARUS, as described in D6.1, follows in the table below.

Table 2-1: ICARUS Target groups

Target Group	Interest in ICARUS
<p>A – Aviation Value Chain Industry Stakeholders: data providers and consumers of data from:</p> <p>1st Tier: Airports, Airlines, OEMs</p> <p>2nd Tier: Airport Services Providers, Aviation-related Service Providers</p> <p>3rd Tier: Businesses and organizations in Health, Tourism, Security industries, Public Organizations</p>	<ul style="list-style-type: none"> • Utilisation of project results in everyday operations • Exchange of aviation data in a trustful way that is respectful to their IPR • Strengthened innovation by blending with in-house artefacts • Training on project's outcomes • Participation in the project's events
<p>B – IT Industry Players for the Aviation Value Chain: IT companies, web entrepreneurs, software engineers of solutions for 1st-2nd-3rd tiers of the ICARUS aviation data value chain</p>	<ul style="list-style-type: none"> • Participation in project events • Exploitation of ICARUS open source results • Inspiration for new ideas and applications
<p>C – Industry Associations & Technology Clusters: European initiatives and clusters (like SESAR 2020, Clean Sky, BDVA, AIOTI, FIWARE, ETP4HPC, I4MS)</p>	<ul style="list-style-type: none"> • Inclusion of project results to collaborative research activities (roadmap, white papers...) • Dissemination of project results to their members • Bilateral participation in events for knowledge exchange
<p>D – EC Big Data Value Public-Private Partnership Stakeholders: Participants, project partners and relevant stakeholders active in the H2020 projects funded under the EC BDV-PPP programme</p>	<ul style="list-style-type: none"> • Identification of common topics • Synergies and collaborations for results promotion • Enhancing innovation through results combination • Co-organisation of events
<p>E - Researchers and Academia: Individuals engaged in research initiatives and/or working in research/academic institutes conducting core or application research on big data and / or the aviation data value chain</p>	<ul style="list-style-type: none"> • Further advancements on the project research through extension / reuse of the project's innovative technologies to other application domains • Inspiration for future research initiatives based on

Target Group	Interest in ICARUS
	the project concept and results <ul style="list-style-type: none"> • Participation in the project events
F - Policy-makers at any level like EC Directorates and Units, Ministries and Governments, Regulatory Agencies, Standardisation Organisations (CEN, ISO, ETSI, etc.) on Big Data technologies	<ul style="list-style-type: none"> • Evaluation of the project Social-Technological Economic-Environmental-Political (STEEP) aspects • Definition of future research and innovation directions for the EC initiative “Digitizing the European Industry” considering the project's acquired knowledge and experience • Inputs for standardisation activities
G – General Public: Passengers and the general public who benefit from the project outcomes.	<ul style="list-style-type: none"> • Acquire new experiences in their interaction with 1st-2nd-3rd tier aviation industry players

2.2 Dissemination activities and strategy

Six dissemination objectives were initially introduced in the project, focusing on the dispersal of scientific and technological knowledge generated within the context of the ICARUS project. They target for creating both a mid-term and long-term impact of the project.

In particular, the dissemination objectives are the following:

- **DISS. OBJ. I:** To maximize outreach of the project in the target audiences via appropriate key messages.
- **DISS. OBJ. II:** To timely disseminate the scientific and technological knowledge generated in the project within and beyond the project’s consortium.
- **DISS. OBJ. III:** To establish liaisons with other projects and initiatives for knowledge and innovation transfer.
- **DISS. OBJ. IV:** To engage the targeted audiences to gather feedback, validate and ensure broad applicability of the project’s results.
- **DISS. OBJ. V:** To attract potential users / clients, foster the acceptance of the project’s outcomes by new and current users and stimulate the appropriate market segments to support the project’s exploitation strategy.
- **DISS. OBJ. VI:** To encourage the development of further outcomes in new initiatives.

In order to reach these objectives, the dissemination activities and plan was built to meet each partner’s specialty and profile. The industrial partners have been required to approach relevant industry communities, as well as their business network, while the academic partners have focused on research institutes and universities across Europe.

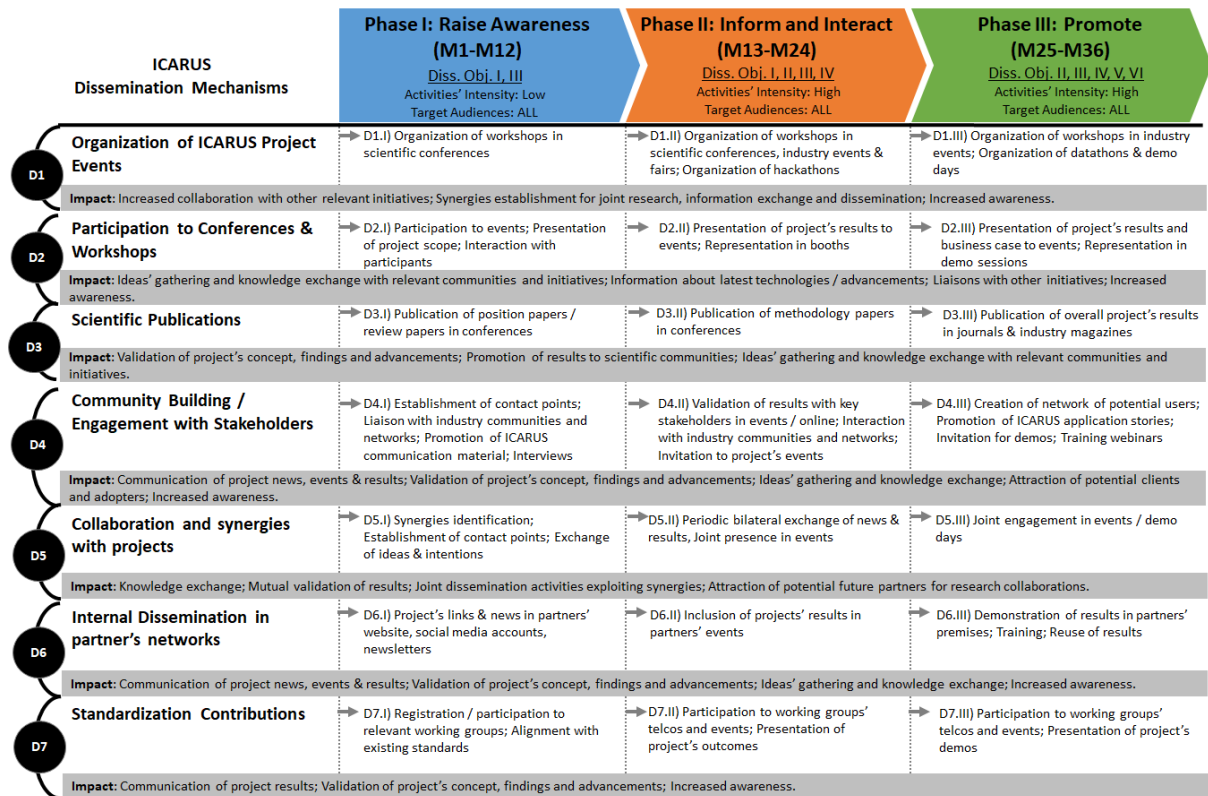


Figure 2-1: Dissemination Plan and Activities

Any task and initiative that aims at spreading the results of the project, promoting the ICARUS concept, increasing the visibility and supporting the exploitation of the achieved results has been considered as a supporting activity to the dissemination strategy.

A final Phase “IV: Post-project Dissemination” is also envisaged to guarantee further promotion and exploitation of project’s results. In fact, the creation of a community of interested stakeholders and potential users is anticipated to ensure sustainability and transfer of data and knowledge beyond the project duration, ensuring in such a way the continuation of research and the increased take-up of results. For this reason, the project's dissemination activities will also include continuous monitoring of the achieved impact in order to increase the size of the community, along the project.

In particular, with regard to (D4) “Community Building / Engagement with Stakeholders”, ICARUS will additionally follow a Growth Hacking¹ strategy during the project lifecycle, and then will apply a simplified version of the Bullseye Framework² to fine tune its marketing channels. Growth Hacking refers to development of inexpensive, viral marketing techniques to grow the aviation-related data value chain community, and is typically summarized in:

- a) referral programs,
- b) proactive rewards,
- c) manual/human customer outreach and PR, and

¹ Growth Hacking Made Simple: A Step-by-Step Guide (<https://neilpatel.com/what-is-growth-hacking>)

² The Bullseye Framework for Getting Traction (<https://medium.com/@yegg/the-bullseye-framework-for-getting-traction-ef49d05bfd7e>)

- d) exploitation of other platforms' communities

During the project implementation, ICARUS will indicatively build the following Growth Hacking tactics:

- a) The project will establish collaboration agreements with other aviation data providers and data repositories to exchange aviation-related data;
- b) The project will exploit the traffic on 3rd party aviation-related portals to bring traffic back to the ICARUS platform while informing the whole network of customers and collaborators of the ICARUS partners;
- c) The project will attend well known industry events, to get exposure in the media industry and get press coverage.

The final step of the dissemination plan was the identification and mapping of the relative stakeholders/target groups to the defined objectives. The initial matrix table, as included in D6.1, is presented in the following table.

Table 2-2: Dissemination objectives per different target groups

	DISS. OBJ. I	DISS. OBJ. II	DISS. OBJ. III	DISS. OBJ. IV	DISS. OBJ. V	DISS. OBJ. VI
A – Aviation Value Chain Industry Stakeholders	◆	◆		◆	◆	◆
B – IT Industry Players for the Aviation Value Chain	◆	◆		◆	◆	◆
C – Industry Associations & Technology Clusters	◆	◆	◆			◆
D – EC Big Data Value Public-Private Partnership Stakeholders	◆	◆	◆	◆		
E - Researchers and Academia	◆	◆		◆	◆	◆
F - Policy-makers	◆	◆		◆		
G – General Public	◆				◆	

2.3 Communication activities and strategy

Based on the same approach used on the dissemination plan, the communication objectives and plan were defined. The communication activities aim at the diffusion of the project beyond the consortium and the direct stakeholders, promoting its innovations and attracting a wide range of stakeholders who are invited to take advantage of the project's advancements.

The initial communication objectives are:

- **COMM.OBJ. I:** To create awareness about the project among the full range of potential adopters / users in the general public.
- **COMM.OBJ. II:** To provide a clear view of the project's concept, goals and results by formulating adapted key messages, and preparing communication material.

- **COMM.OBJ. III:** To create an active community of potential users and collect feedback to be taken into account by the project's activities.
- **COMM.OBJ. IV:** To prepare the ground for the exploitation of project's results.
- **COMM.OBJ. V:** To support targeted dissemination of the project's results.
- **COMM.OBJ. VI:** To foster the adoption of the project's results in society and industry

In this direction, the project will:

- Define concrete and measurable objectives for the communication activities and will link these objectives with the appropriate target groups.
- Implement a solid, modern and inclusive communication strategy, accompanied by a realistic plan to reach these objectives.
- Set up the different channels, tools and mechanisms that will be used to implement the communication plan and reach the targeted audiences.
- Define the guidelines for the implementation of communication and dissemination actions (e.g. project identity, messages to convey, internal reporting rules, etc.).
- Put into action an iterative communication and learning process, which shall measure the level of response per communication mechanism and interpret the corresponding insights.
- Closely monitor the impact of the communication activities in order to be able to apply corrective actions whenever necessary and identify opportunities that can maximize visibility.

To ensure the different communication objectives are addressed effectively and expectations of the target audience groups are met, specific attention has been given to adapt the communication means, the measures and the content both to the needs and knowledge levels of these groups, as well as to the status/progress and needs of the project.

The initial communication plan, as presented in D6.1, is depicted in Figure 2.2.

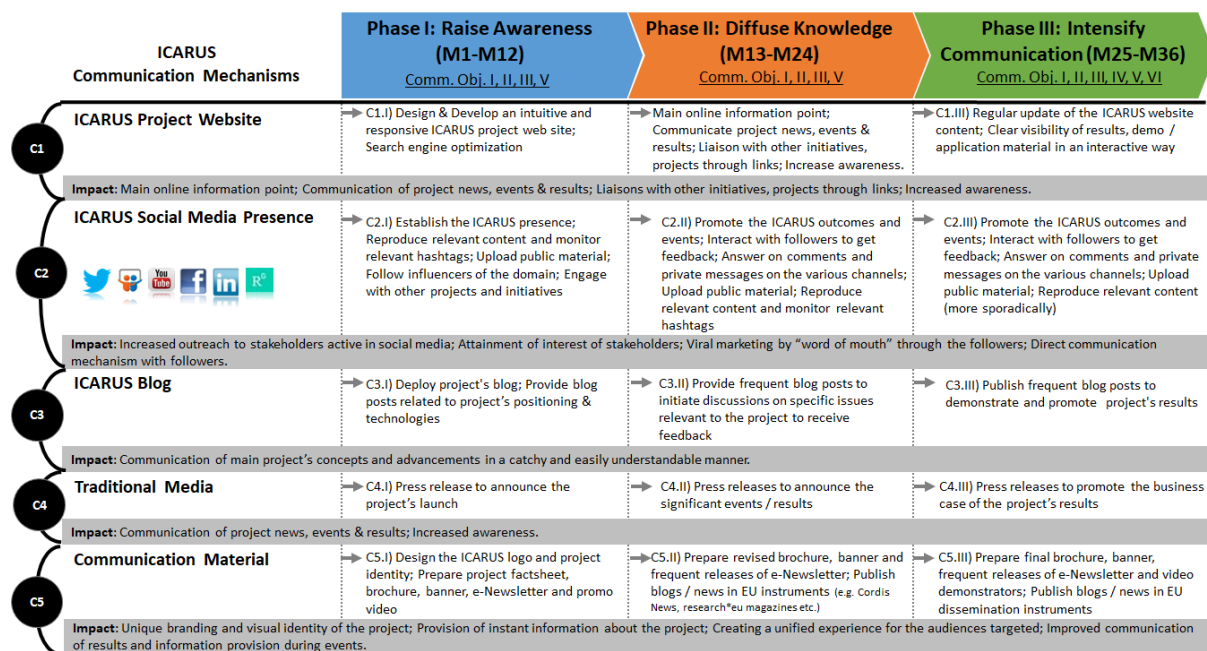


Figure 2-2: Communication Plan and Activities

It should be noted that an additional phase, "Phase IV: Post-project Communication", is also envisaged to guarantee further promotion of project's results beyond the project period, but it has not been

depicted in detail in Figure 2.2 as it will be detailed in the final dissemination and communication report in D6.5.

The final step of the communication plan was the identification and correspondence of relative stakeholders/target groups to the defined objectives. The initial matrix table, as included in D6.1, is presented in the following table.

Table 2-3: Communication objectives per different target groups

	COMM. OBJ. I	COMM. OBJ. II	COMM. OBJ. III	COMM. OBJ. IV	COMM. OBJ. V	COMM. OBJ. VI
A – Aviation Value Chain Industry Stakeholders	◆	◆	◆	◆	◆	
B – IT Industry Players for the Aviation Value Chain	◆	◆	◆	◆	◆	
C – Industry Associations & Technology Clusters	◆	◆	◆	◆	◆	
D – EC Big Data Value Public-Private Partnership Stakeholders	◆	◆	◆	◆	◆	
E - Researchers and Academia	◆	◆	◆	◆	◆	
F - Policy-makers	◆	◆	◆	◆	◆	
G – General Public	◆	◆	◆	◆	◆	◆

3 Dissemination & Communication activities

This section provides a written report on the implemented activities and actions during the first 18 months of the project. The structure is similar to the previous chapter, first reporting on the dissemination and subsequently on the communication activities.

3.1 Dissemination Activities

The table below provides an overview on the dissemination activities performed until M18 of the project. The results are colorized accordingly:

- green: the set goal was achieved,
- orange: the goal was not reached, but no major issue was recognized
- red: the goal was not reached, and corrective actions were needed
- no specific colour: the specific activity was not planned for the specific period

Table 3-1: Summary Dissemination activities KPIs

Dissemination mechanism	KPIs	1st phase target	2nd phase target	3rd phase target	TARGET FOR M18	Actual Values
Organization of ICARUS events	8 workshops		3	5	0	0
	1 Hackathon;			1	0	0
	2 Demo events organized by ICARUS;		1	1	0	0
Participation to Conferences and Workshops	Participation to >20 events;	6	6	8	10	15
	Presentation of results in >15 events;	3	5	7	3	5
	Demonstration of results with booth in >4 events;		2	2	1	1
Scientific publications	>20 Conference publications;	2	6	12	4	4
	>4 Journal publications;		1	3	1	0
	>8 articles in industry magazines;	2	3	3	3	1
Community building / Engagement with stakeholders	>1000 industry contact points;	300	300	400	500	2500
	>100 active industry stakeholders;	30	30	40	50	74
	>10 industry communities informed;	3	3	4	3	4
	>2 webinars;		1	1	0	0
Collaboration and synergies with projects	>15 projects with synergies;	4	5	6	7	8
	>8 joint activities	2	3	3	3	3
Internal dissemination in partners' networks	>8 internal partner events;		3	3	3	6
	>10 links to the project's website;				11	9
	>4 pilot training sessions;		2	2	0	0
Standardization contributions	Liaison with >2 working groups;		1	1	0	0
	Presentation of project results to >2 standardization meetings;		1	1	0	0

3.1.1 Printed material

ICARUS has produced a two-sided printed and electronic brochure that reflects the scope of the project, provides an overview of the technical framework and the technologies it builds upon, as well as a description of the four demonstrators. The design and format of the brochure is presented in Figure 3.1.

Additionally, a platform-specific brochure has been produced, focusing on the ICARUS platform features and the validated necessity of those for the aviation industry, in an infographic format. The infographic data are based on the replies gathered from the circulated questionnaire of the project. The brochure is displayed in Figure 3.2.

Moreover, two roll-up banners have been designed and produced, as well as a poster, all of which to help visualizing the ICARUS scope in events and exhibitions. The banners and the poster are presented in Figure 3.3 below.



Figure 3-1: ICARUS Project Brochure



Figure 3-2: ICARUS Platform Brochure

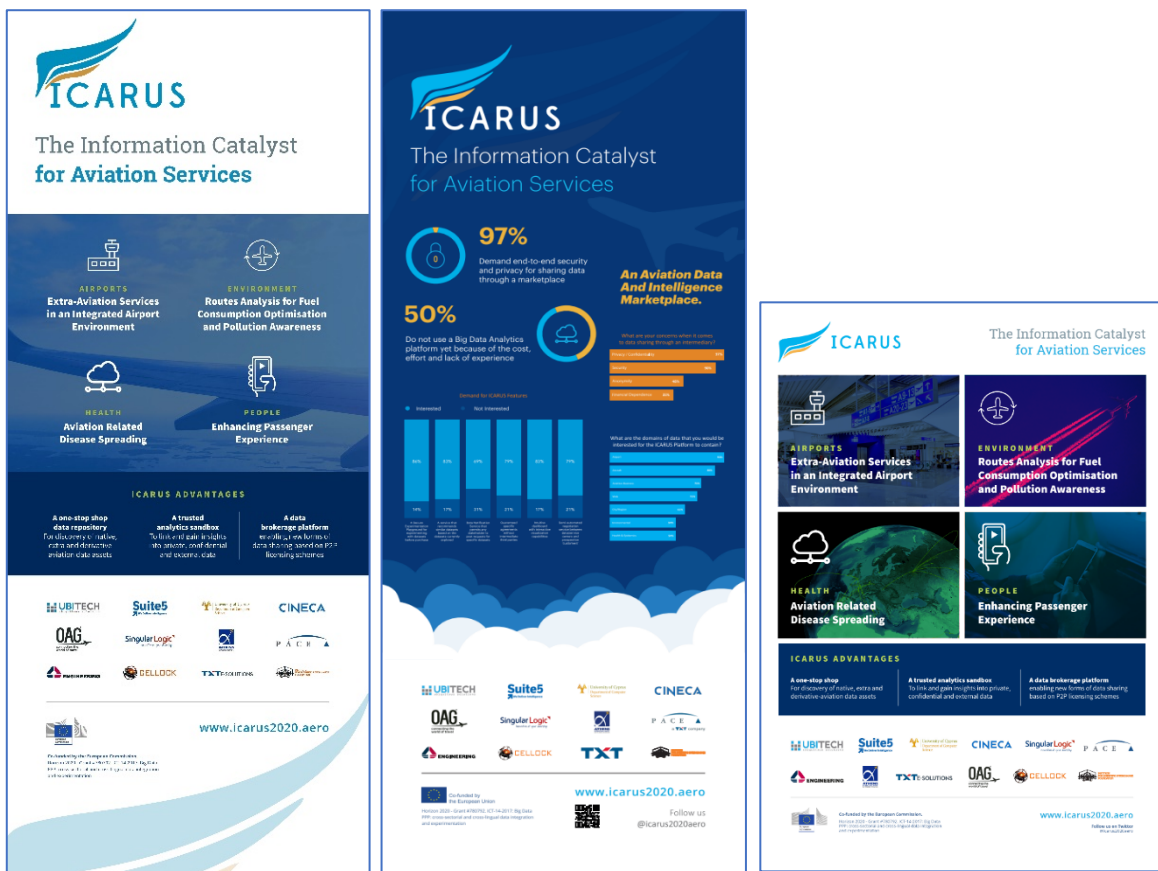
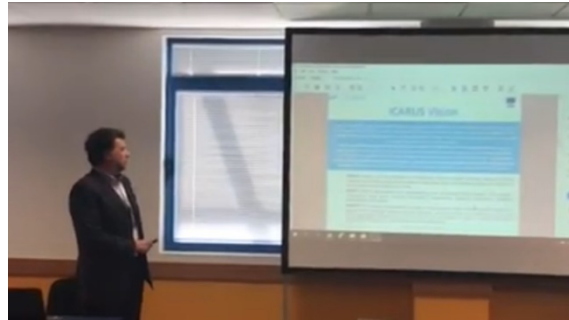


Figure 3-3: ICARUS Roll-up banners and Poster

3.1.2 Visual media

ICARUS has produced 3 videos in the first and second phase of the project, including a live presentation recording of ICARUS and 2 creative short videos.



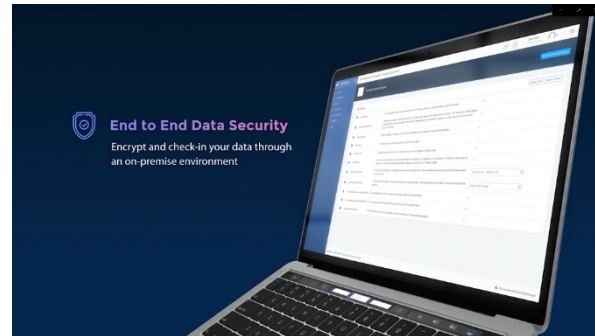
<https://youtu.be/J719noqvjhl>

Figure 3-4: ICARUS Live Presentation Video

The first creative video is an informative teaser reflecting the scope of the project, that was published in the first months of the project. The second video, published near the half of the project’s duration, is an illustration that showcases the ICARUS platform features in a creative and engaging animation. It is also planned to produce a 3rd video by M24, that will present the ICARUS platform in a more explanatory and detailed style, filmed based on the demonstrators’ scenarios execution.



<https://youtu.be/f5MaSoasIG4>



<https://youtu.be/6VugzFjaPU8>

Figure 3-5: ICARUS Creative videos

3.1.3 Conferences and events

The participation to events and conferences surpassed the target set for the 1st period (M0-M12) of the project and is expected to continue likewise for the remaining two phases.



The following tables reflect the performed activities with details.

Table 3-2: Complete list of events

	DATE	EVENT	PLACE	ATTENDED BY
1	2018/02/08	BDVA Steering Committee Meeting in Brussels	Brussels, Belgium	UBITECH
2	2018/03/28	Aviation Open Day on March 28th, 2018 in UCY	Nicosia, Cyprus	UCY, Cellock
3	2018/04/10	APEX Exhibition in Hamburg Messe	Hamburg, Germany	Cellock, PACE
4	2018/05/15	BDVA MeetUp on May 15th, 2018 in Sofia	Sofia, Bulgaria	UBITECH
5	2018/09/05	Aviation Festival London on September 5th-7th, 2018	London, UK	Cellock, OAG
6	2018/09/11	PACEdays on September 11th-12th, 2018	Berlin, Germany	PACE
7	2018/10/02	IATA Global Airport and Passenger Symposium	Athens, Greece	UBITECH, AIA
8	2018/11/12	EBDVF 2018 on November 12th-14th, 2018	Vienna, Austria	Suite5
9	2018/12/04	ICT 2018 - Vienna	Vienna, Austria	Suite5, UBITECH
10	2019/02/27	Aviation Festival ASIA	Singapore	Cellock
11	2019/04/02	APEX Exhibition in Hamburg Messe PTS/PEX/WTCE	Hamburg, Germany	Cellock, PACE
12	2019/04/19	4th Innovation and Entrepreneurship Forum	Nicosia, Cyprus	UCY, Cellock
13	2019/05/14	CCGrid 2019	Larnaca, Cyprus	UCY
14	2019/06/18	IATA SLOTS Cape Town	Cape Town, S.Africa	OAG
15	2019/06/25	IATA Aviation Data Symposium & AI Lab	Athens, Greece	UBITECH, Suite5, PACE, AIA
16	2019/06/26	BDV PPP SUMMIT	Riga, Latvia	UBITECH

Table 3-3: Participation in Conferences and Workshops with a Presentation

	DATE	EVENT	PLACE	ATTENDED BY
1	2018/02/08	BDVA Steering Committee Meeting in Brussels	Brussels, Belgium	UBITECH
2	2018/03/28	Aviation Open Day on March 28th, 2018 in UCY	Nicosia, Cyprus	UCY, Cellock
3	2018/05/15	BDVA MeetUp on May 15th, 2018 in Sofia	Sofia, Bulgaria	UBITECH
4	2018/09/11	PACEdays on September 11th-12th, 2018	Berlin, Germany	PACE
5	2018/11/12	EBDVF 2018 on November 12th-14th, 2018	Vienna, Austria	Suite5
6	2019/06/26	BDVA MeetUp	Riga, Latvia	UBITECH

Table 3-4: Participation to Conferences and Workshops with Partner Booth

	DATE	EVENT	PLACE	ATTENDED BY
1	2018/03/28	Aviation Open Day	Nicosia, Cyprus	UCY, Cellock
2	2018/04/10	APEX Exhibition	Hamburg, Germany	Cellock, PACE
3	2018/09/05	Aviation Festival London	London, UK	Cellock, OAG
4	2019/02/27	Aviation Festival ASIA	Singapore	Cellock
5	2019/04/02	APEX Exhibition in Hamburg Messe PTS/PEX/WTCE	Hamburg, Germany	Cellock, PACE
6	2019/04/19	4th Innovation and Entrepreneurship Forum	Nicosia, Cyprus	UCY, Cellock
7	2019/05/14	CCGrid 2019	Larnaca, Cyprus	UCY

Table 3-5: Participation to Conferences and Workshops with an ICARUS Demo/Booth

	DATE	EVENT	PLACE	ATTENDED BY
1	2018/09/11	PACEdays on September 11th-12th, 2018	Berlin, Germany	PACE
2	2019/06/25	IATA Aviation Data Symposium & AI Lab	Athens, Greece	UBITECH, Suite5, PACE/TXT, AIA

3.1.4 Workshops and Hackathon

During the first dissemination phase of the project (M1-M12), no activities pertaining this mechanism were planned. This is understandable given the fact that this category is tailored towards dissemination of the technical results, which are being developed within the project and as such could not be showcased from the beginning.

The activities are expected to take place in the late second (M13-M24) and early third phase (M25-M36) of the project. Internal discussions for the organization of the first workshop have already started between the partners.

3.1.5 Scientific publications

Publications in scientific journals and conferences with related topics to the research and innovation work of ICARUS, target the scientific communities directly or indirectly in the scope of the project.

The goals set for the first period are met, with 4 papers already submitted for publication, and one more with a submission deadline in the first week of July.

Table 3-6: List of Scientific publications

	TITLE	DESCRIPTION	PARTNER
1	ALIDA: a Novel Micro-service Based Platform for Composition, Deployment and Execution of Big Data Applications	Euromicro Conference on Software Engineering and Advanced Applications. (2019) dsd-seaa2019.csd.auth.gr/seaa/indexbb58.html	ENG
2	"Query-Driven Descriptive Analytics for IoT and Edge Computing"	Conference: IEEE International Conference on Cloud Engineering (IC2E) (2019)	UCY
3	"The ICARUS Ontology: A multi-layer approach of a general aviation ontology"	Conference: IEEE/WIC/ACM International Conference on Web Intelligence 2019 (WI2019)	UCY
4	Digital Transformation in Aeronautics through the ICARUS Aviation Data and Intelligence Marketplace	Accepted for publication in the 9th EASN International Conference on "Innovation in Aviation & Space". Athens, Greece. September 3rd-6th, 2019.	Suite5, TXT, UBITECH
5	Designing a Trusted Data Brokerage Framework in the Aviation Domain. Accepted for publication in the 20th Working Conference on Virtual Enterprises (PRO-VE)	Accepted for publication in the 20th Working Conference on Virtual Enterprises (PRO-VE): Collaborative Networks and Digital Transformation. Turin, Italy. September 23rd-25th, 2019.	Suite5, SILO, UBITECH

3.1.6 Community building & Engagement with stakeholders

Regarding the interaction of the consortium with industry stakeholders, the results meet with the targets set. ICARUS has already surpassed the overall number of contacts informed about the project and has already achieved its goals for active stakeholders for up to M18.

The communities informed for ICARUS meet the target for the first phase of the project, as the partners targeted specific events, and are expected to increase given the fact that members of the consortium are also members of significant industrial associations.

Table 3-7: Summary table of Community building results

INDUSTRY CONTACT POINTS	ACTIVE INDUSTRY STAKEHOLDERS	INDUSTRY COMMUNITIES
2600+	134	4

The overall number of individuals (contacts) informed about ICARUS surpass the number of 2600. These 2600+ individuals have received information about ICARUS, either by electronic means or by informative material handed by the ICARUS consortium during our participation in conferences and exhibitions. Additionally, two (2) project surveys have been circulated by the consortium among the partners' mailing lists. Consequently, a number of 134 active industry stakeholders has been achieved by: **a) the answered questionnaires, b) the live interviews held with aviation stakeholders, as well as c) the engagement of exhibitions attendees with the ICARUS consortium representatives** (in IATA ADS where ICARUS had a booth presence). This is also reflected on the successful results regarding the "Project Website" KPIs that are reported in the following section 3.2.

Table 3-8: Events in which industry communities and / or stakeholders were informed about ICARUS

	COMMUNITY	DESCRIPTION	PARTNER
1	BDVA	BDVA MeetUp on May 15th, 2018 in Sofia	UBITECH, Suite5
2	PACEdays	PACEdays on September 11th-12th, 2018 in Berlin	PACE/TXT
3	EBDVF	EBDVF 2018 on November 12th-14th, 2018 in Vienna	Suite5
4	BDVA	BDVA MeetUp on June 26 th - 28 th , 2019 in Riga	UBITECH
5	IATA	IATA Aviation Data Symposium & AI Lab on June 25 th -27 th , 2019 in Athens, Greece	UBITECH, Suite5, PACE/TXT, AIA

Regarding the webinars, there was set no target for these activities in the first phase, as they are planned for the latter phases of the project.



3.1.7 Synergies with projects

ICARUS has achieved synergies with other projects, satisfying the targets set for the first and second phase. Regarding the joint activities with other projects, ICARUS has achieved three successful actions in the first period through its participation to the BDVA events (BDVA MeetUp in Sofia, EBDVF 2018 in Vienna and BDVA MeetUp in Riga). It is expected that the overall targets will be reached in the latter phases of the project, as the technical results will be more evident and tangible.

Table 3-9: Synergies with projects

	DATE	PROJECT	ACTIVITY DESCRIPTION	JOINT ACTIVITY?	CONTACT	PARTNER
1	Open	ADMITTED (H2020)	Big Data environment and algorithms for flight testing data for the next generation of LEONARDO Helicopter Division's civil tilt rotor	Optional	TXT Data Analytics, Alessandro Bardelli	PACE
2	12/11/2018	COG-LO	COGnitive Logistics Operations through secure, dynamic and ad-hoc collaborative networks.			SILO
3	18/10/2018 & 14/11/2018	BOOST 4.0	Project clustering during the EBDVF 2018 Presentation of the ICARUS and BOOST 4.0 results, exchange of ideas and discussion on future collaboration opportunities among the projects.		INNOVALIA	Suite5
4	12/11/2018	Transforming Transport	Discussions on each project's outcomes (esp. related to data analytics). Exchange of ideas and perspectives, emphasizing on the AIA demonstrator.	EBDVF 2019 Session	INTRASOFT	Suite5
5	12/11/2018	SELIS	Presentation of the ICARUS and SELIS results, exchange of ideas and discussion on future collaboration opportunities among the projects.	EBDVF 2019 Session	ICCS-CSLAB, NTUA	Suite5
6	14/11/2018	AEGIS	Exchange of ideas on data sharing and data integration, and demonstration of the AEGIS results (early AEGIS platform).	EBDVF 2019 Session	Fraunhofer, VIF	Suite5
7	14/11/2018	LeMO	ICARUS contribution to the BDVA workshop "Policy issues, opportunities and barriers in big data-driven transport" organized by LeMO. Discussion on future policy contributions expected	EBDVF 2019 Session	Western Norway Research Institute	Suite5
8	06/12/2018	Market 4.0	Discussions on each project's outcomes (esp. related to data sharing). Exchange of ideas and perspectives, discussion on future collaboration opportunities among the projects.		POLIMI	Suite5

3.1.8 Standardization contributions

Regarding the interaction of the consortium with standardization bodies, no actions were planned for the initial phase. These activities require the dissemination of the technical results, which are being developed within the ICARUS project and therefore will be showcased during the latter phases of the project.

3.1.9 ICARUS Dissemination Highlight

Since the initiation of the ICARUS project, the consortium has a strong confidence that the ICARUS outcome has the credentials to revolutionize the data sharing and analytics status quo in the Aviation Ecosystem. Our main objective is to deliver a platform that will provide added value to the operations and services of the aviation data value chain. Thus, we focused from the beginning of the project, towards the engagement of as many as possible industrial stakeholders, that would provide us with valuable information about their concrete needs and necessities, as well as their minimum requirements to ensure the adoption of a platform like ICARUS inside their routine operations.

During the first months of the project, the consortium compiled a questionnaire that was spread to several contacts of the partners so as to gather as much feedback as possible. Additionally, we setup and realized a set of live, MVP interviews with Aviation Stakeholders, i.e. airline, airport handler, healthcare institution, aircraft manufacturer, weather data provider, catering company. Their feedback was really positive about the services to be provided by ICARUS. They also provided valuable feedback about specific functionalities or minimum requirements that would be of vital importance towards the utilization of a software platform like ICARUS.

IATA Aviation Data Symposium (25-27/06/2019), Athens

The IATA Aviation Data Symposium (ADS)³ is the unique global forum related to new Big Data, AI and Data Science trends and network, formulated and led by IATA, that has welcomed over 1000 aviation industry and data professionals from across the entire value chain and various functional domains of the aviation industry since its launch. The events of the IATA ADS are attended by aviation executives, leaders, commercial and technical professionals from airlines, aircraft manufacturers and MRO providers, air cargo service providers, airports, ground handlers and ANSPs, as well as travel agents, OTAs, TMCs, travel and hospitality providers, financial services and payment providers. The forum focuses and covers a wide variety of data topics on five specialised tracks around: (a) passengers, (b) safety and flights operations, (c) air freight, (d) payment and fintech, and (e) data science and technology.

The ICARUS consortium made a sponsorship investment so as to acquire a booth, at the best possible exhibition location (by paying extra fees) in order to maximize awareness and dissemination impact. It should be noted that during the event only sixteen booths were available in the frame of IATA ADS exhibition and ICARUS reserved a key spot at the exhibition, as depicted in Figure 3-6.

³ <https://www.iata.org/events/Pages/aviation-data-symposium.aspx>

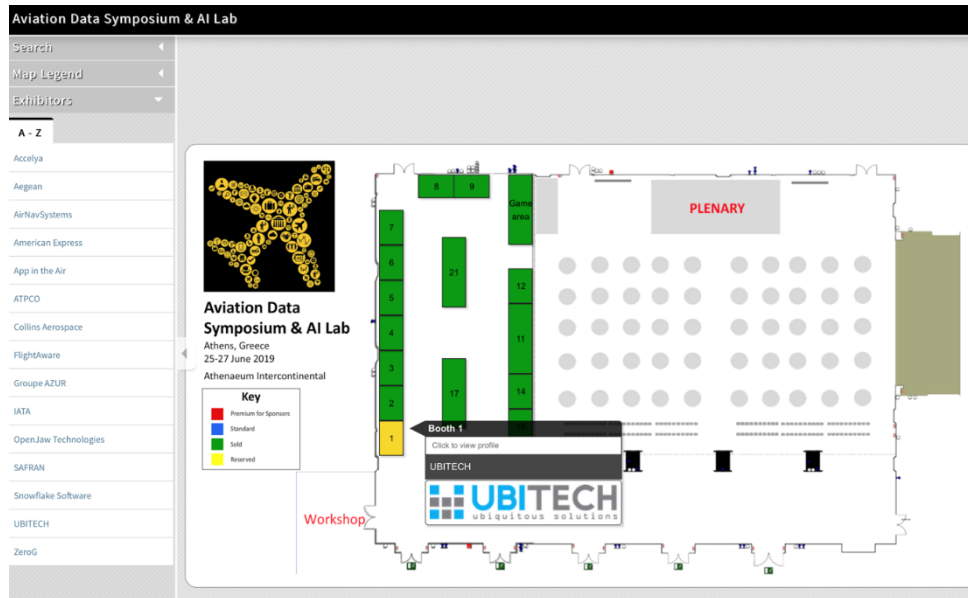


Figure 3-6: IATA Aviation Data Symposium - Exhibition Floor plan

To further maximize awareness and dissemination impact, as well as to attract as many visitors as possible at the booth of the ICARUS project, a series of dissemination materials were prepared and utilised during the exhibition. At first, digital graphics were designed for the booth decoration, as well as the ICARUS infographic providing further information for the project, as illustrated in Figure 3-7 and Figure 3-8.



Figure 3-7: IATA Aviation Data Symposium - Booth Digital graphics

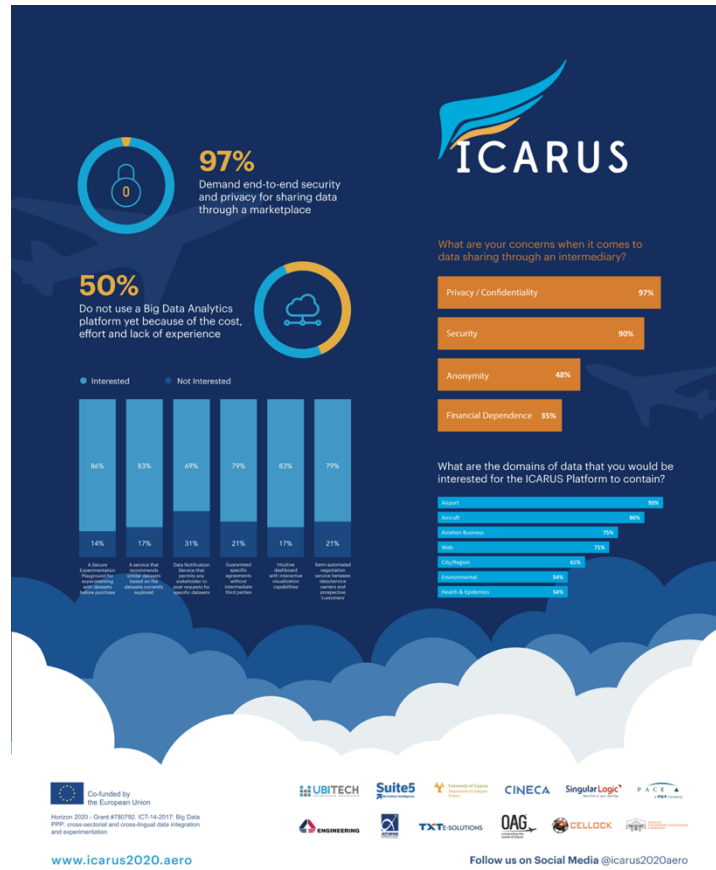


Figure 3-8: IATA Aviation Data Symposium - ICARUS Infographic

Furthermore, the consortium has produced a new project brochure, specialised for the IATA ADS event, that provided more detailed information to the visitors of the event. In detail, the produced eight-page brochure provided a short introduction to the ICARUS project, an overview of the key platform’s features and a focused presentation of the ICARUS data and intelligence marketplace, as well as the key findings from the analysis of the replies from the circulated questionnaires of the project. An extract from the produced brochure is illustrated in Figure 3-9 and Figure 3-10.

 **ICARUS** | Features



Intuitive Data Exploration

Find, understand and explore aviation data



Effortless Data Linking

Curate, map and link your data assets with external data



End-to-End Data Security

Encrypt and check-in your data through an on-premise environment



Secure & Private Analytics Space

Design and execute your analytics and your "applications" in private sandbox environments, spawn on demand



Trusted Data Sharing

Create, Sign and Validate Smart Data Contracts in an immutable manner to acquire data



Advanced Access Control

Regulate access to your data assets through declarative authorization policies

Figure 3-9: IATA Aviation Data Symposium – ICARUS Brochure (1)



Figure 3-10: IATA Aviation Data Symposium – ICARUS Brochure (2)

Furthermore, the following figures depict the ICARUS booth at the IATA ADS event’s exhibition.



Figure 3-11: IATA Aviation Data Symposium – ICARUS Booth (1)



Figure 3-12: IATA Aviation Data Symposium – ICARUS Booth (2)

The event was a great success for the ICARUS project, as during the exhibition days of the event several participants visited the ICARUS booth and they were very interested in the ICARUS platform and a large portion of them were also interested for short demonstrations of the key features of the platform. The consortium members were engaged in fruitful discussions with several key stakeholders of the aviation industry such as airlines, airports, aviation data providers, as well as IATA itself and SITA, and collected valuable feedback that will be further analysed and provided as input in the relevant work packages of the project. Moreover, during these discussions, almost all the visitors showed interest in getting early access to the public beta version of the ICARUS platform. Finally, a key outcome of the discussions that were performed with IATA was related to ICARUS entering the strategic partnership programme, as well as the involvement of the project in various aviation data standards committees.



Figure 3-13: IATA Aviation Data Symposium – ICARUS Booth with visitors

The following table presents a list of the key visitors to the ICARUS booth during the event’s exhibition days.

Table 3-10: List of key visitors to the ICARUS booth in IATA ADS 2019

	STAKEHOLDER NAME	STAKEHOLDER TYPE	INTERACTION HIGHLIGHTS
1	IATA	International Air Transport Association	Highly impressed by the ICARUS approach on data marketplace, data sharing, data management and storage with end-to-end security. They expressed their interest in the project and discussions were performed for participation in the strategic partnership programme and aviation data standards committees. All IATA members that interacted with ICARUS are interested to join the ICARUS platform beta version.
2	SITA	Information Technology Company	Interest in the Ethereum-based data sharing approach of the ICARUS platform as well as on the end-to-end data security and access control mechanisms since SITA has also conducted research on blockchain in the context of FlightChain. Discussions on how SITA would be able to offer through ICARUS its derivative data (i.e. the results of their analysis currently presented in reports). Interested in joining the ICARUS platform beta version.
3	Lufthansa Airlines	Airline	Interested in how ICARUS is safeguarding the ownership of the data assets for the data owners through its trusted data sharing mechanism for all airlines since Lufthansa is building its own data platform (AVIATION DataHub). Discussion on the data security and access control mechanisms as well as on data analytics.
4	Southwest Airlines	Airline	In need of data analysis that would provide valuable insights about their fleet management, in terms of operation optimisation bound with the respective cost reduction. Highly interested in joining the ICARUS platform beta version.
5	Aegean Airlines	Airline	Based on its closed operation with AIA, being the major air carrier in Greece, Aegean provided valuable feedback coming from their personnel in operation and safety that stressed out the fact that their data repositories are highly fragmented, causing lack of data aggregation towards the effective data analysis. They are highly interested to follow the progress of the project and join the ICARUS platform beta version.
6	United Airlines	Airline	Highly impressed by the fact that ICARUS is not acquiring the property of the data assets by providing a set of features towards the secure data transmission and storage, as well as data sharing under specific customisable license schemes. Highly interested in joining the ICARUS platform beta version.
7	Amsterdam Airport Schiphol	Airport	Highly interested in the data marketplace and data analysis features of ICARUS platform. They are going through an initiative for airport digitalization offering

	STAKEHOLDER NAME	STAKEHOLDER TYPE	INTERACTION HIGHLIGHTS
			real-time data access through (open, at the moment) APIs, but they are would be potentially interested in sharing their batch historical data through ICARUS based on data contracts they sign with interested stakeholders. Interested in joining the ICARUS platform beta version and in seeing the AIA demonstrator results in detail.
8	Cargolux	Cargo Airline	Highly interested on exploring and purchasing additional aviation data assets through the ICARUS marketplace. Their goal to combine their data with additional useful data obtained through the marketplace in order to perform advanced analytics and extract highly valuable insights for the optimisation of their fleet management and operations. They would be also interested on existing applications they could acquire through ICARUS.
9	Accelya	Travel and transport technology products and services	Particularly interested in the data and intelligence sharing features of the ICARUS platform. Discussions on how the ICARUS platform could benefit Accelya by allowing them to package their own solutions for airlines analytics and offer them as applications in the ICARUS marketplace.
10	FlightAware	Aviation Data solutions	Highly interested in the data marketplace features of ICARUS. As a data asset provider, they are highly motivated on providing their assets through the ICARUS platform (in the context of their partnerships programs) to potential data consumers in order to increase their sales.
11	AirNav Systems	Flight Tracking and Monitoring Systems	Highly interested in the marketplace and the data sharing under customisable license schemes features of ICARUS platform. Impressed with the secure data transmission and storage functionalities of ICARUS platform. Highly interested in joining the ICARUS platform beta version.
12	AviBright	Information Technology Company	Highly interested in purchasing useful data from the aviation industry, as well as in performed advanced analytics combining their data with ones purchased in order to extend their offerings and products. Highly interested in joining the ICARUS platform beta version.
13	Cirium	Aviation Data solutions	Highly interested in joining the data marketplace of ICARUS since they are an aviation data assets provider, and thus, they are willing to utilise ICARUS so as to increase further their market reach and respectively their sales.
14	Nouvelair Airlines	Airline	The air carrier is interested in joining the digital transformation era with an innovative data sharing and data analytics platform like ICARUS. Highly interested in joining the ICARUS platform beta version.
15	Singapore Airlines	Airline	Digital transformation is an undergoing activity in the air carrier and they are highly interested in the data integration of the various data silos of the company, as well as the execution of data analysis on top of them to obtain useful insights. Highly interested in joining the ICARUS platform beta version.

3.2 Communication Activities

The following table presents an overview of the communication activities performed from M1 until M18. The green colour in the “Actual Value on M18” column indicates that the set goal was achieved, while there is no specific colour in the results when a communication activity was not planned for the specific period.

Table 3-11: Communication Activities Summary until M18

Communication mechanism	Action	KPIs	Target Value for M18	Actual Value on M18	Comments
ICARUS Project Website	Design in M1, Development and deployment on M2, Continuous content updates since M3	Unique visitors	1000	1141	Details in section 3.2.1
		Average duration of visits	~2 min	01:59	
		Page views	3000	4172	
ICARUS Social Media Presence	Presence established in 6 social networks keeping the “ icarus2020.aero ” branding, Continuous posts since M3	Accumulative followers	125	146	Details in section 3.2.2
		Accumulative posts	250	343	
		Interactions	700	2348	
ICARUS Blog	Deployed with the ICARUS website, Initially events reports posts, After M15 ICARUS perspectives also published	Posts	15	20	Details in section 3.2.3
Interactions		-	-		
Traditional Media	Press releases to announce the ICARUS project on M1-M2	Press releases	2	3	Details in section 3.2.4
Communication Material	Production of printed and online material to communicate the ICARUS key messages	Project’s factsheets / brochures and banners	4	4	Details in section 3.1.1, 3.1.2, 3.4.5
		e-Newsletters	2	2	
		Videos	2	2	
		Blog posts in EC mechanisms	-	-	

3.2.1 Project Website

The ICARUS Project Website is available at: <https://www.icarus2020.aero/> as documented in detail in D6.2 “Project Website and Web 2.0 Channels Setup”, and is periodically updated to ensure that its contents are up-to-date in respect to the ICARUS project advancements.

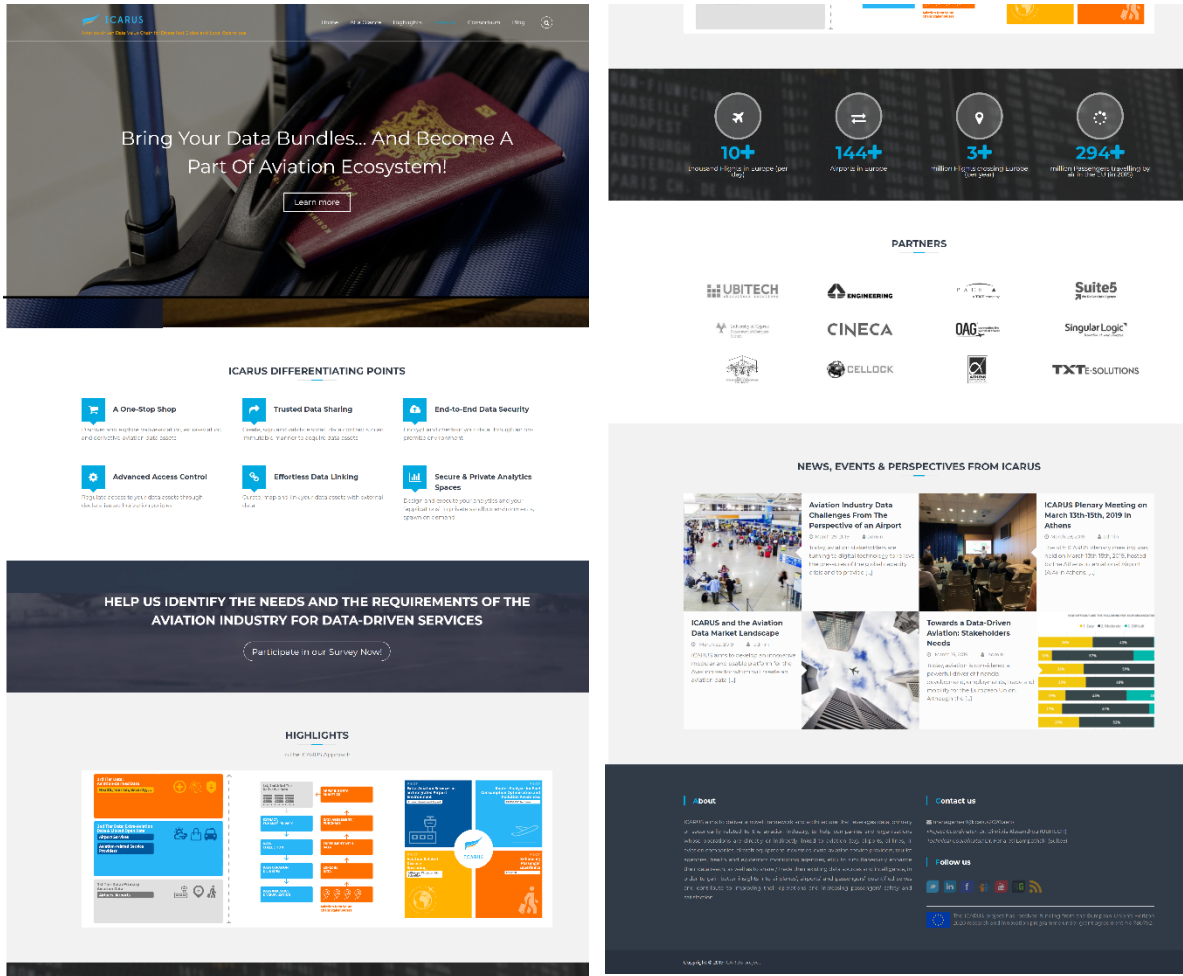


Figure 3-14: ICARUS Website Full Overview (Desktop View)

In total, from M1 until M18, the ICARUS website attracted 1.132 unique visitors, who were engaged in 1.999 sessions for approximately 01:59 average session duration. The website also numbers 4.172 page views from 56 countries. The detailed analysis from Google Analytics per phase is provided in aggregated tables in section 4 and in total in Annex I.2.1.

3.2.2 Social media

The social media strategy outlined in the communication plan of D6.1 – “Plan for Dissemination, Communication and Stakeholder Engagement” has been put into action since M1, as described in D6.2 – “Project Website and Web 2.0 Channels Setup”. By M18, a steadily active online presence has been established in a number of different social networks to serve different purposes for the ICARUS project: Twitter [@icarus2020.aero](https://twitter.com/icarus2020.aero) account, LinkedIn [ICARUS2020.aero](https://www.linkedin.com/company/icarus2020.aero) Company Page, Facebook [ICARUS2020.aero](https://www.facebook.com/icarus2020.aero) Page, SlideShare [ICARUS2020.aero](https://www.slideshare.net/icarus2020.aero) account, YouTube [ICARUS2020aero](https://www.youtube.com/channel/UCicarus2020aero) Channel, ResearchGate [ICARUS2020.aero](https://www.researchgate.net/project/icarus2020.aero) Project, which follows and reflects the progress of the project.

In M18, the ICARUS social media accounts contain 343 accumulative posts, which correspond to one third of the total target value for the whole project. During this first reporting period, the ICARUS Facebook, Twitter and LinkedIn accounts have featured mainly content related to aviation data

sharing and data analytics from relevant sources, as the aim was to raise awareness and engage aviation-specific audiences. The participation of ICARUS in events, i.e. Big Data Value Meet-Up 2018⁴, IATA Aviation Data Symposium (ADS) 2019⁵ etc., has also been announced through the social media. Three public presentations from these events are available through SlideShare. Additionally, three videos have been created during this period and have been uploaded on the ICARUS YouTube channel. Lastly, at this point the project can showcase its first results, as the beta platform is available and was demonstrated in the context of IATA ADS 2019, so a teaser platform video has been created and a number of relevant posts have been shared to attract the attention of the audience.

Table 3-12: Metrics per ICARUS Social Media Account⁶

Social Network	Metric	Actual Value (M1-M18)
Twitter	Tweets	166
	Followers	50
	Impressions	43.714
	Mentions	21
	Retweets of ICARUS Tweets	68
	Likes	70
Facebook	Posts	137
	Followers	63
	Engagement	2.210
	Shares of ICARUS Tweets	125
	Likes	275
LinkedIn	Posts	34
	Followers	22
ResearchGate	Followers	4
SlideShare	Uploads	3
	Subscribers	3
YouTube	Videos	3
	Subscribers	3

The social media activities thus far intended to engage target audiences in the ICARUS concept background, while communicating the ongoing project's development and dissemination activities. The results of social media activities until M18, expressed as metrics, are satisfying, considering that the actual project outcomes were still ongoing and only started being publicized in the last month of this period (when the beta platform release was ready to be launched for the IATA ADS event) and until then mainly third-party content was posted. During all this time, Twitter and Facebook were used as the main networks for the ICARUS communication activities. However, in the second period, as actual, ready-to-publish results are available and the parallel dissemination and communication activities, such as workshops, scientific publications and participation in conferences etc., are

⁴ <https://www.big-data-value.eu/big-data-value-meet-up-sofia/>

⁵ <https://www.iata.org/events/Pages/aviation-data-symposium.aspx>

⁶ Last update 27/6/2019

intensified, primary content will become available to be propagated through all social media channels. Thus, the other social media, like ResearchGate and YouTube, which are currently inactive, will be updated with relevant content (publications, videos, etc.). The audience will also be enlarged and is expected to reach the anticipated target values by the end of the project, as synergies occur and the intensity of networking activities increases.

3.2.3 Blog posts

In ICARUS, the communication mechanism related to the blog posts intends to serve a dual purpose: (a) to report on the dissemination activities performed (e.g. participation to conferences) and externalize the feedback received, and (b) to discuss the ICARUS advancements and results. In the first months of the project, the blog posts were naturally focusing on the ICARUS presence in different events and conferences, yet since March 2019, the results-oriented posts have also started to feature the ICARUS blog. In total, until M18, 20 blog posts were published, out of which 6 posts presented the ICARUS results or discussed the ICARUS positioning, perspectives and challenges. In the next period, the ICARUS-focused blog posts are expected to intensify with contributions by all partners in order to properly diffuse the knowledge created within the project, as such original content from ICARUS is also expected to contribute in raising the visitors in the website and the followers in social media.

The following table presents the list of blog posts that have been published until now.

Table 3-13: ICARUS Blog Posts from M1 until M18

#	Event Post Title / Theme	Type	URL
1	ICARUS Kick-off Meeting on January 16th-17th, 2018 in Athens	Event	https://www.icarus2020.aero/kick-off-meeting/
2	ICARUS in BDVA Steering Committee Meeting on February 8th, 2018 in Brussels	Event	https://www.icarus2020.aero/icarus-in-bdva-steering-committee-meeting-on-february-8th-2018-in-brussels/
3	ICARUS Data Meeting on March 13th, 2018 in Luton	Event	https://www.icarus2020.aero/icarus-data-meeting-on-march-13th-2018-in-luton/
4	ICARUS in the Aviation Open Day on March 28th, 2018 in UCY	Event	https://www.icarus2020.aero/icarus-in-the-aviation-open-day-on-march-28th-2018-in-ucy/
5	ICARUS Plenary Meeting on May 8th-9th, 2018 in Nicosia	Event	https://www.icarus2020.aero/icarus-plenary-meeting-on-may-8th-9th-2018-in-nicosia/
6	ICARUS in the APEX Exhibition in Hamburg Messe on April 10th-12th, 2018	Event	https://www.icarus2020.aero/icarus-in-the-apex-exhibition-in-hamburg-on-april-10th-12th-2018/
7	ICARUS at PACEdays on September 11th-12th, 2018	Event	https://www.icarus2020.aero/icarus-in-the-pacedays-on-september-11th-12th-2018/
8	ICARUS @Aviation Festival London on September 5th-7th, 2018	Event	https://www.icarus2020.aero/icarus-aviation-festival-london-on-september-5th-7th-2018/
9	ICARUS Plenary Meeting on September 26th-28th, 2018 in Berlin	Event	https://www.icarus2020.aero/icarus-plenary-meeting-on-september-26th-28th-2018-in-berlin/
10	ICARUS participants attended the IATA Global Airport and Passenger Symposium, on October 2nd – 4th, 2018	Event	https://www.icarus2020.aero/icarus-in-the-iata-global-airport-and-passenger-symposium-on-october-2nd-4th-2018/
11	ICARUS @EBDVF 2018 on November 12th-14th, 2018	Event	https://www.icarus2020.aero/icarus-ebdvf-2018-in-vienna-on-november-12th-14th-2018/
12	ICARUS Plenary Meeting on December 17th-18th, 2019 in Limassol	Event	https://www.icarus2020.aero/icarus-plenary-meeting-on-december-17th-18th-2018-in-limassol/

#	Event Post Title / Theme	Type	URL
13	The ICARUS journey has begun!	Perspectives	https://www.icarus2020.aero/the-icarus-journey-has-begun/
14	Towards a Data-Driven Aviation: Stakeholders Needs	Perspectives	https://www.icarus2020.aero/towards-a-data-driven-aviation-stakeholders-needs/
15	ICARUS Plenary Meeting on March 13th-15th, 2019 in Athens	Event	https://www.icarus2020.aero/icarus-plenary-meeting-on-march-13th-15th-2019-in-athens/
16	ICARUS and the Aviation Data Market Landscape	Perspectives	https://www.icarus2020.aero/icarus-and-the-aviation-data-market-landscape/
17	Aviation industry data challenges from the perspective of an airport	Perspectives	https://www.icarus2020.aero/aviation-industry-data-challenges-from-the-perspective-of-an-airport/
18	Aviation industry data challenges from the perspective of an IT provider in aviation	Perspectives	https://www.icarus2020.aero/aviation-industry-data-challenges-from-the-perspective-of-an-it-provider-in-aviation/
19	Big data challenges from the perspective of a research institute	Perspectives	https://www.icarus2020.aero/aviation-big-data-value-for-health-related-scientific-research/
20	ICARUS @IATA Aviation Data Symposium on June 25th-27th, 2019 in Athens	Event	https://www.icarus2020.aero/icarus-iata-aviation-data-symposium-on-june-25th-27th-2019-in-athens/

The following figures present indicative posts published in the ICARUS blog.

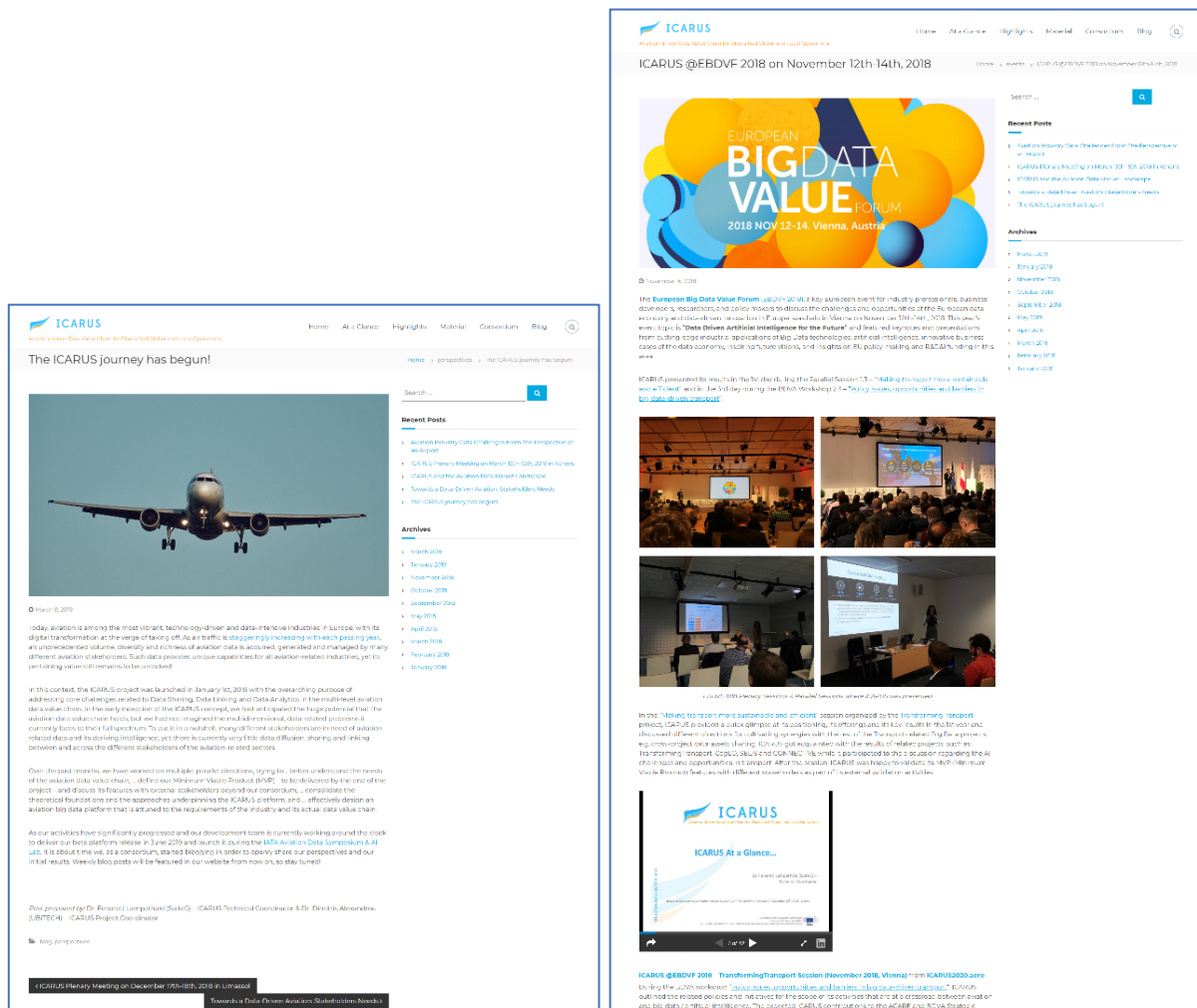


Figure 3-15: Indicative blog posts published in the ICARUS Website

3.2.4 Press releases

In order to raise the broader public awareness for ICARUS, three press releases have been issued so far as depicted in the following figure.

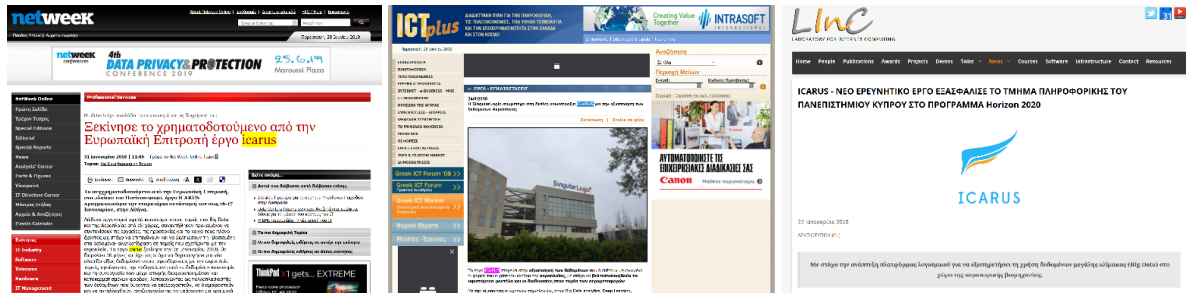


Figure 3-16: ICARUS press releases

3.2.5 Newsletter

Until M18, two newsletters (depicted in the following figure) have been prepared and circulated to the ICARUS intended audiences.



Figure 3-17: ICARUS 1st and 2nd Newsletter

4 ICARUS Key Performance Indicators

In order to accurately monitor and quantify the actions of the initial Dissemination and Communication plan, a monitoring template was created, along with detailed tables of the related Key Performance Indicators. In the following paragraphs, these tables, broken down in phases, are presented and discussed.

The following tables include the defined KPIs with respect to communication, dissemination and stakeholder engagement activities, the set target values for each phase and the achieved (actual) values during that period.

4.1 First phase (M1-M12)

Table 4-1 and Table 4-2 include the defined dissemination and communication KPIs, the initial target values and the actual values for the 1st phase (M1-M12). The results are colorized accordingly:

- a) green: the set goal was achieved,
- b) orange: the goal was not reached but no major issue was recognized
- c) red: the goal was not reached, and corrective actions were needed

Table 4-1: Dissemination KPIs for the 1st phase

Dissemination mechanism	KPIs	1st phase target	Actual Value
Organization of ICARUS events	8 workshops	0	0
	1 Hackathon;	0	0
	2 Demo events organized by ICARUS;	0	0
Participation to Conferences and Workshops	Participation to >20 events;	6	9
	Presentation of results in >15 events;	3	4
	Demonstration of results with booth in >4 events;	0	0
Scientific publications	>20 Conference publications;	2	0
	>4 Journal publications;	0	0
	>8 articles in industry magazines;	2	0
Community building / Engagement with stakeholders	>1000 industry contact points;	300	~500
	>100 active industry stakeholders;	30	34
	>10 industry communities informed;	3	3
	>2 webinars;	0	0
Collaboration and synergies with projects	>15 projects with synergies;	4	8
	>8 joint activities	2	2
Internal dissemination in partners' networks	>8 internal partner events;	2	4
	>10 links to the project's website;	5	9
	>4 pilot training sessions;	0	0
Standardization contributions	Liaison with >2 working groups;	0	0
	Presentation of project results to >2 standardization meetings;	0	0

Table 4-2: Communication KPIs for the 1st phase

Communication mechanism	KPIs	1st phase target	Actual Value
ICARUS Project Website	Unique visitors	500	610
	Average duration of visits	~2 min	2:00
	Page views	2.000	2.421
ICARUS Social Media Presence	Accumulative followers	50	68
	Accumulative posts	100	125
	Interactions	200	621
ICARUS Blog	Posts	5	11 + 0
	Interactions	-	-
Traditional Media	Press releases	1	3
Communication Material	Project's factsheets / brochures and banners	2	2
	e-Newsletters	2	2
	Videos	1	2
	Blog posts in EC mechanisms	-	-

With regard to the communication KPIs, it needs to be noted that for the “social media interactions” metric, there are many interpretations on the way it could be approached. In the context of ICARUS, social media interactions are measured as the sum of Facebook “engagements” (which include “likes” and the rest of reactions, shares, comments and clicks on a post), Twitter “likes” and “re-tweets”. Note also that the “Klout value” metric which was included in the communication KPIs in the DoA, cannot be estimated, due to the Klout service having been suspended as a standalone service since May 25th, 2018⁷.

4.2 Second phase (M13-M24)

In the same manner as in section 4.1, Table 4-3 and Table 4-4 include the defined dissemination and communication KPIs, the initial target values and the actual values for the 2st phase (M13-M24). The results are not colorized as the 2nd phrase is still ongoing.

Table 4-3: Dissemination KPIs for the 2nd phase

Dissemination mechanism	KPIs	2nd phase target	Actual Value Up to M18
Organization of ICARUS events	8 workshops	3	0
	1 Hackathon;	0	0
	2 Demo events organized by ICARUS;	1	0
Participation to Conferences and Workshops	Participation to >20 events;	6	7
	Presentation of results in >15 events;	5	1
	Demonstration of results with booth in >4 events;	2	1
Scientific publications	>20 Conference publications;	6	4
	>4 Journal publications;	1	0
	>8 articles in industry magazines;	3	1

⁷ <https://www.lithium.com/products/klout>

Dissemination mechanism	KPIs	2nd phase target	Actual Value Up to M18
Community building / Engagement with stakeholders	>1000 industry contact points;	300	~2100
	>100 active industry stakeholders;	30	99
	>10 industry communities informed;	3	1
	>2 webinars;	1	0
Collaboration and synergies with projects	>15 projects with synergies;	5	2
	>8 joint activities	3	1
Internal dissemination in partners' networks	>8 internal partner events;	3	2
	>10 links to the project's website;	10	9
	>4 pilot training sessions;	2	0
Standardization contributions	Liaison with >2 working groups;	1	0
	Presentation of project results to >2 standardization meetings;	1	0

Table 4-4: Communication KPIs for the 2nd phase

Communication mechanism	KPIs	2nd phase target	Actual Value
ICARUS Project Website	Unique visitors	2.000	1.141
	Average duration of visits	~2 min	2:08
	Page views	4.000	4.160
ICARUS Social Media Presence	Accumulative followers	250	146
	Accumulative posts	400	343
	Interactions	500	2.348
ICARUS Blog	Posts	15	3 + 6
	Interactions	20	0
Traditional Media	Press releases	3	0
Communication Material	Project's factsheets / brochures and banners	2	2
	eNewsletters	1	2
	Videos	1	1
	Blog posts in EC mechanisms	2	0

4.3 Third Phase (M25-M36)

Based on the results achieved up to M18, certain risks have been identified regarding the overall KPI targets that were set in the initial plan in D6.1. More specifically, extra effort and caution needs to be applied on the organization of ICARUS events as well as on the industry article publications. Although the risk of failing to reach the planned targets is reduced, due to the fact that the ICARUS consortium includes partners with strong background and experience to support and tackle the specific weaknesses spotted, it is necessary to adjust the action plan and update certain targets for the 3rd phase of the project.

Recognizing the nature of the project and its huge industrial potential and impact, based on the feedback and interactions received from stakeholders, the ICARUS consortium has decided to adjust its dissemination activities in order to reflect this approach. Therefore, we will focus our efforts on stakeholder engagement activities to increase the total number of contacts aware of ICARUS from 1000 to 3000 and the active contacts from 100 to 200. Consequently, the overall expected scientific

targets for the conference publications are reduced to 8 from initially 20, the journal publications to 2 from initially 4 and the workshops organization to 3 from the planned 8.

The initial targets as well as the changes (highlighted with bold) are summarized in the following tables.

Table 4-5: Dissemination KPIs for the 3rd phase

Dissemination mechanism	KPIs	3rd phase target	Updated target	Initial total target value	Updated total target value
Organization of ICARUS events	8 workshops	5	2	8	3
	1 Hackathon;	1		1	
	2 Demo events organized by ICARUS;	1		2	
Participation to Conferences and Workshops	Participation to >20 events;	8		20	
	Presentation of results in >15 events;	7		15	
	Demonstration of results with booth in >4 events;	2		4	
Scientific publications	>20 Conference publications;	12		20	8
	>4 Journal publications;	3		4	2
	>8 articles in industry magazines;	3	1	8	2
Community building / Engagement with stakeholders	>1000 industry contact points;	400	2000	1000	3000
	>100 active industry stakeholders;	40	100	100	200
	>10 industry communities informed;	4		10	
	>2 webinars;	1		2	
Collaboration and synergies with projects	>15 projects with synergies;	6		15	
	>8 joint activities	3		8	
Internal dissemination in partners' networks	>8 internal partner events;	3		8	
	>10 links to the project's website;			10	
	>4 pilot training sessions;	2		4	
Standardization contributions	Liaison with >2 working groups;	1		2	
	Presentation of project results to >2 standardization meetings;	1		2	

Table 4-6: Communication KPIs for the 3rd phase

Communication mechanism	KPIs	3rd phase target	Updated target	Total target value
ICARUS Project Website	Unique visitors	2.500	-	>5.000
	Average duration of visits	~2 min	-	~2 min
	Page views	>5.000	-	>10.000
ICARUS Social Media Presence	Accumulative followers	750	-	>750
	Accumulative posts	1.000	-	>1.000
	Interactions	3.000	-	>4000
ICARUS Blog	Posts	30	-	>50
	Interactions	80	-	>100
Traditional Media	Press releases	5	-	8
Communication Material	Project's factsheets / brochures and banners	4		8
	eNewsletters	3	-	6
	Videos	3	-	5
	Blog posts in EC mechanisms	4	-	6

5 Conclusions and Next Steps

In this deliverable, the dissemination and communication objectives and plan of the ICARUS project were reiterated. This plan will ensure that the project results, regarding the ICARUS platform as well as the overall outcomes, will be properly disseminated towards the relevant target groups.

Furthermore, a detailed account of the performed activities within the first 18 months of the project was performed and the values of the defined KPIs were summarized and discussed.

Finally, weaknesses to certain indicators have been identified, and although the risk of failing to reach the overall targets is limited, the KPI targets for the 3rd phase of the project have been updated in certain activities.

Dissemination, communication and stakeholder engagement activities will gradually evolve with the project, increasing the usable channels and number of people reached (stakeholders, end users, researchers, industrialists, public etc.). The dissemination and communication activities are monitored constantly and the KPIs are regularly updated to reflect and reach to the initial planned targets. Efforts will continue during the ICARUS project life cycle as well as after its completion, by exploiting the ICARUS platform and the demonstrators' outcomes.

Annex I: Dissemination and Communication Reporting in Detail

I.1 Dissemination Activities reports

I.1.1 UBITECH

A. Communication with stakeholders (via email, social media, phone, contact form of the website, etc.)

Name and type of the contact	Date of communication	Reason of communication	Activity description (short description of the outcome of the communication, what we gained from it)
AEGEAN Airlines Representative	13/09/2018	Interview with the stakeholder so as to gather information concerning ICARUS MVP and supported functionalities	AEGEAN Airlines IT manager provided valuable information and feedback about the security and encryption aspects that should be covered by ICARUS platform and were taken under serious consideration during the requirements and technical specification phase.

B. Participation in third party events (conferences, workshops, seminars, meetings, etc.)

Name of the event	Date of the event	Location of the event (city, country)	Description of the event (type, aim, size of the audience, type of the audience)	Outcome of the activity
BDV PPP 3rd Steering Committee meeting	08/02/2018	Brussels	Important focus was given to the presentations of the projects starting in 2018 and present in the meeting (CLASS, BigMedilytics, BOOST 4.0, E2DATA, FABDANGO, EDI, ICARUS, TheyBuyForYou, Cross-CPP, DataBench and I-BiDaaS), where we had the opportunity to pitch about our main guidelines, objectives, and strategies.	ICARUS Project Presentation and Networking with other BDV projects
BIG DATA VALUE MEET-UP SOFIA	16/05/2018	Sofia	The event, which was preceded by two days of workshops and parallel sessions for PPP projects and BDVA members, has been involved relevant keynotes from Bulgaria and the EC.	ICARUS Project Presentation and progress updates
IATA GAPS	02-04/10/2018	Athens	GAPS discussed the important trends, challenges, and opportunities in passenger services, from new airports and aircraft to data and biometrics.	ICARUS had the opportunity to follow the trends and have discussions about the data needs of the various aviation stakeholders
IATA ADS 2019	25-27/06/2019	Athens	ICARUS was one of the main exhibitors of IATA ADS 2019 with a dedicated booth	ICARUS partners presented in detail the platform's features and offerings to the aviation audience. The visits to the booth raised the awareness to the communities as well as built the grounds for commercial exploitation of the platform since the interest of the stakeholders to its offered services has been really vivid.
BDV PPP SUMMIT	26-28/06/2019	Riga	The BDV PPP Summit is the primary event for driving European innovation in Big Data and Artificial Intelligence. Key European industry, academia and policy-making players gathered in Riga to foster cross-sector collaboration	ICARUS Project Presentation and progress updates, as well as networking activities.

			and shape strategies for European leadership in data-driven Artificial Intelligence.	
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C. Press Coverage (press release, article, interview, website link, reference on webpage, reference in news items, etc.)

<i>Type of press item (press release, interview, etc.)</i>	<i>Title of the press item</i>	<i>Media where it was published</i>	<i>URL (if available)</i>
News Item	UBITECH undertakes the coordination of the ICARUS Innovation Action on aviation-based data value chain implementation for diversified global and local operations	UBITECH Corporate Website	https://www.ubitech.eu/ubitech-undertakes-the-coordination-of-the-icarus-innovation-action-on-aviation-based-data-value-chain-implementation-for-diversified-global-and-local-operations/

I.1.2 SUITE5
A. Communication with stakeholders (via email, social media, phone, contact form of the website, etc.)

Name and type of the contact	Date of communication	Reason of communication	Activity description (short description of the outcome of the communication, what we gained from it)
AEGEAN Airlines Representative	13/09/2018		
BOEING Representative	13/11/2018		
Goldair Handling Representative	29/11/2018	ICARUS MVP External Validation	Results reported in the ICARUS Deliverable D1.3, in detail.
UBIMET Representative	05/02/2019		
Ospedale Pediatrico Bambino Gesù Representative	11/02/2019		

B. Participation in third party events (conferences, workshops, seminars, meetings, etc.)

Name of the event	Date of the event	Location of the event (city, country)	Description of the event (type, aim, size of the audience, type of the audience)	Outcome of the activity
IATA Aviation Data Symposium	25-27/6/2019	Athens	Conference, Aviation-data specific, 650 aviation stakeholders	ICARUS Presence with a booth. Demonstration of the ICARUS platform and fruitful discussions with a number of airlines, airports, IATA, SITA and other aviation data providers, who all acknowledged the added value of ICARUS and its all-around approach to trusted data sharing and analytics, and asked for access to the ICARUS beta platform. Additional discussions with IATA for the strategic partnerships programme and the aviation data standards. More details for the event are available at: http://www.iata.org/events/Pages/aviation-data-symposium.aspx
European Big Data Value Forum (EBDVF 2018)	12-14/11/2018	Vienna	BDVA Conference, Over 400 participants, Big data experts (from industry and academia)	ICARUS Presentations in the Parallel Session 1.3 – “Making transport more sustainable and efficient” and during the BDVA Workshop 2.3 – “Policy issues, opportunities and barriers in big data-driven transport”. More details are available at: https://www.icarus2020.aero/icarus-ebdvf-2018-in-vienna-on-november-12th-14th-2018/
ICT 2018: Imagine Digital - Connect Europe	4-6/12/2018	Vienna	Conference, 4800 participants, ICT experts (from industry and academia)	Discussion on ICARUS outcomes with participants, Exchange of ideas with participants, Liaisons with ICT big data projects. More details for the event are available at: https://ec.europa.eu/digital-single-market/en/events/ict-2018-imagine-digital-connect-europe
IATA Webinar 'NEXTT Emerging Themes: Advanced Processing'	1/11/2018	Online	Webinar, Info on audience not available	Presence on the webinar to identify the trends related to data analytics under the NEXTT journeys' priorities.

C. Press Coverage (press release, article, interview, website link, reference on webpage, reference in news items, etc.)

Type of press item (press release, interview, etc.)	Title of the press item	Media where it was published	URL (if available)
Reference on website	ICARUS Project	Suite5 Website	https://www.suite5.eu/icarus
Paper Lampathaki, F., Sesana, M., Alexandrou, D. (2019)	Digital Transformation in Aeronautics through the ICARUS Aviation Data and Intelligence Marketplace.	Accepted for publication in the 9th EASN International Conference on "Innovation in Aviation & Space". Athens, Greece. September 3rd-6th, 2019.	
Paper Biliri, E., Pertselakis, M., Phinikettos, M., Zacharias, M., Lampathaki, F., Alexandrou, D. (2019)	Designing a Trusted Data Brokerage Framework in the Aviation Domain	Accepted for publication in the 20th Working Conference on Virtual Enterprises (PRO-VE): Collaborative Networks and Digital Transformation. Turin, Italy. September 23rd-25th, 2019.	

D. Collaboration with other projects

Name of the project you collaborated with	Contact person or organization	Date	Description of the collaboration activity
BOOST 4.0	INNOVALIA	18/10/2018 & 14/11/2018	Presentation of the ICARUS and BOOST 4.0 results, exchange of ideas and discussion on future collaboration opportunities among the projects.
TransformingTransport	INTRASOFT	12/11/2018	Discussions on each project's outcomes (esp. related to data analytics). Exchange of ideas and perspectives, emphasizing on the AIA demonstrator.
SELIS	ICCS-CSLAB, NTUA	12/11/2018	Presentation of the ICARUS and SELIS results, exchange of ideas and discussion on future collaboration opportunities among the projects.
AEGIS	Fraunhofer, VIF	14/11/2018	Exchange of ideas on data sharing and data integration, and demonstration of the AEGIS results (early AEGIS platform).
LeMO	Western Norway Research Institute	14/11/2018	ICARUS contribution to the BDVA workshop "Policy issues, opportunities and barriers in big data-driven transport" organized by LeMO. Discussion on future policy contributions expected
Market 4.0	POLIMI	06/12/2018	Discussions on each project's outcomes (esp. related to data sharing). Exchange of ideas and perspectives, discussion on future collaboration opportunities among the projects.

I.1.3 SingularLogic

A. Direct contact with stakeholders (face-to-face meetings)

Name and type of the contact	Date of the meeting	Venue/Location of the meeting	Activity description (short description of the outcome of the meeting, what we gained from it)
Internal presentation	5/2/2019	SingularLogic premises	Cross-departmental presentation of ICARUS to SingularLogic Group, aiming to share the knowledge derived from the project and the potential to use the project technologies to the company's commercial solutions, respecting the relevant IPR. Furthermore, the potential to apply the ICARUS solution to different business domains of the SingularLogic's customers was investigated.

B. Participation in third party events (conferences, workshops, seminars, meetings, etc.)

Name of the event	Date of the event	Location of the event (city, country)	Description of the event (type, aim, size of the audience, type of the audience)	Outcome of the activity
European Big Data Value Forum 2018	12/11/2018	Vienna, Austria	<p>The European Big Data Value Forum (EBDVF) is the main event of the European Big Data and Data-Driven AI Research and Innovation community.</p> <p>The EBDVF 2018, with the theme of "Data-Driven AI for the future" attracted more than 600 industry professionals, business developers, researchers, and policymakers from 40 different countries, to discuss the challenges and opportunities.</p>	Clustering with the project COG-LO (http://www.cog-lo.eu/)

C. Press Coverage (press release, article, interview, website link, reference on webpage, reference in news items, etc.)

Type of press item (press release, interview, etc.)	Title of the press item	Media where it was published	URL (if available)
Reference in the corporate website	ICARUS	SingularLogic website	https://portal.singularlogic.eu/node/17643
Paper	Collaboration Platform for Trusted Data Brokerage in the Aviation Domain	PRO-VE 2019	Co-authorship with Suite5 and UBITECH

D. Collaboration with other projects

Name of the project you collaborated with	Contact person or organization	Date	Description of the collaboration activity
COG-LO - COGNitive Logistics Operations through secure, dynamic and ad-hoc collaborative networks	SingularLogic	12/11/2018	Project clustering during the EBDVF 2018

I.1.4 PACE
A. Direct contact with stakeholders (face-to-face meetings)

Name and type of the contact	Date of the meeting	Venue/Location of the meeting	Activity description (short description of the outcome of the meeting, what we gained from it)
Philipp Schmaderer (UBIMET)	13/02/2019	PACE GmbH	Discussion between UBIMET and PACE about statistical weather data. Despite PACE can show the demonstrator with statistical weather data, it may be a benefit for the ICARUS platform, if another data provider will be involved. Situation is blocked, because the UBIMET data has a price and PACE has no data acquisition budget in ICARUS.

B. Communication with stakeholders (via email, social media, phone, contact form of the website, etc.)

Name and type of the contact	Date of communication	Reason of communication	Activity description (short description of the outcome of the communication, what we gained from it)
Mail to 2500 PACE customers	16/04/2019	Announcement of ICARUS survey	PACE sent an ICARUS-focused mail to 2500 customers with an invitation to the ICARUS survey. 25 participated on the survey until 7.5.2019

C. Organization of events (co-creation events, engagement workshops, etc.)

Name of the event	Date of the event	Location of the event (city, country)	Description of the event (type, aim, size of the audience, type of the audience)	Outcome of the activity
PACEDays 2018	11. & 12/09/2018	Berlin/Germany	PACE Customer Fair with more than 100 guests, mainly from aviation.	Stand on the fair, poster on the stand, brochures distributed, contact to visitors

D. Participation in third party events (conferences, workshops, seminars, meetings, etc.)

Name of the event	Date of the event	Location of the event (city, country)	Description of the event (type, aim, size of the audience, type of the audience)	Outcome of the activity
IATA Aviation Data Symposium	25-27/06/2019	Athens, Greece	ICARUS has booked a booth on the symposium	Distribution of brochures, infographics, poster and presentation (video) of platform functionality and PACE demonstrator based on Pacelab Mission Suite

E. Press Coverage (press release, article, interview, website link, reference on webpage, reference in news items, etc.)

Type of press item (press release, interview, etc.)	Title of the press item	Media where it was published	URL (if available)
Announcement of project participation	ICARUS (Horizon 2020)	<u>Internet</u>	https://www.txtgroup.com/about-us/passion-for-innovation/

F. Collaboration with other projects

Name of the project you collaborated with	Contact person or organization	Date	Description of the collaboration activity
ADMITTED (H2020)	TXT Data Analytics, Alessandro Bardelli		Big Data environment and algorithms for flight testing data for the next generation of LEONARDO Helicopter Division's civil tilt rotor

I.1.5 ENG
A. Press Coverage (press release, article, interview, website link, reference on webpage, reference in news items, etc.)

Type of press item (press release, interview, etc.)	Title of the press item	Media where it was published	URL (if available)
Project information added to ENG official website	ICARUS project	Eng.it	
Blog post on IN.SIDE, a multi-domain company blog daily read by about 10,000 employees from the Engineering group	"Aviation-driven Data Value Chain: il progetto ICARUS"		https://inside.eng.it/web/eng/articolo/-blogs/113788
Article submitted and accepted as short paper	ALIDA: a Novel Micro-service Based Platform for Composition, Deployment and Execution of Big Data Applications	Euromicro Conference on <u>Software Engineering and Advanced Applications</u>	http://dsd-seaa2019.csd.auth.gr/seaa/indexbb58.html
blog post provided by ENG for the official ICARUS website	'ICARUS and the Aviation data market landscape'		https://www.icarus2020.aero
Blog post regarding international students visit	Gli studenti della Tiburg University in visita a Engineering Palermo	Eng.it	https://www.eng.it/whats-on/events/gli-studenti-della-tiburg-university-in-visita-a-engineering-palermo

C. Organization of events (co-creation events, engagement workshops, etc.)

Name of the event	Date of the event	Location of the event (city, country)	Description of the event (type, aim, size of the audience, type of the audience)	Outcome of the activity
International students visit	05/06/2019	Palermo – ENG R&D Lab	ENG-R&D Lab of Palermo hosted about 40 master students from the TIAS School for Business & Society of Tilburg (Netherlands).	Since their interests focus on business innovation, the ICARUS project and its main innovation objectives were presented. Such event was posted on official ENG channels (web site, twitter, LinkedIn).

I.1.6 UCY

A. Communication with stakeholders (via email, social media, phone, contact form of the website, etc.)

Name and type of the contact	Date of communication	Reason of communication	Activity description (short description of the outcome of the communication, what we gained from it)
ICARUS surveys	02/06/2018 01/11/2018		36 responses for 1 st ; 38 responses for 2 nd First survey: - To identify the needs of the aviation industry for data-driven services - To elicit high-level user requirements from key industrial players Second Survey: - To understand the value of each component and functionality of the ICARUS platform In general both surveys try to "Identify market (aviation industry) needs"

B. Organization of events (co-creation events, engagement workshops, etc.)

Name of the event	Date of the event	Location of the event (city, country)	Description of the event (type, aim, size of the audience, type of the audience)	Outcome of the activity
"ICARUS-Aviation Open Day – Leadership in Aviation"	28/03/2018	University of Cyprus, Nicosia	"ICARUS In a nutshell" presented by George Pallis at the event, 30 participants; Professionals and academics from the Aviation Industry.	Dissemination of the project and activities
ICARUS research activities presented to @Biotronics3D	04/10/2018	Laboratory of Internet Computing - UCY	Presentation of ICARUS research activities during the visit of Haris Hatzakis CEO @Biotronics3D to LINC, (Laboratory of Internet Computing), 04/10/18 (https://twitter.com/LinC_UCY/status/1047812468288999424)	Dissemination of the project and activities
ICARUS research activities	21/09/2019	Laboratory of Internet Computing - UCY	Presentation of ICARUS during the visit of Adj. Professor Mike Nelson, Georgetown University (former Tech Strategy at Cloudflare) and Martin J Levy (Network Strategist at Cloudflare) to LINC (Laboratory of Internet Computing), (https://twitter.com/LinC_UCY/status/1043106805348552705)	Dissemination of the project and activities

C. Participation in third party events (conferences, workshops, seminars, meetings, etc.)

Name of the event	Date of the event	Location of the event (city, country)	Description of the event (type, aim, size of the audience, type of the audience)	Outcome of the activity
IEF 2019	19/04/2019	University of Cyprus	4th Industrial Revolution: Technology and Society". +120 participants Researchers, professionals, industry and business leaders and successful entrepreneurs	Participants had the opportunity to learn about the project and its developments

D. Press Coverage (press release, article, interview, website link, reference on webpage, reference in news items, etc.)

Type of press item (press release, interview, etc.)	Title of the press item	Media where it was published	URL (if available)
Press release	ICARUS - Νεο Ερευνητικό Έργο Εξασφάλισε Το Τμήμα Πληροφορικής Του Πανεπιστημίου Κύπρου Στο Προγραμμα Horizon 2020	UCY global website	http://linc.ucy.ac.cy/index.php/8-linc/news/224-icarus-press-release-gr-1
Blog	"ICARUS: Towards a Data-Driven Aviation" "Aviation Stakeholders Needs and Requirements Analysis"	ICARUS website	https://docs.google.com/forms/d/e/1FAIpQLScYRco4lAFXDOkxYg-nb_edt5rDzUd3Urf6dB2JeF07DKqsog/viewform
Project information	ICARUS Project Information	LINC website	http://linc.ucy.ac.cy/index.php/projects/2-linc/current-projects/221-h2020-icarus-project
Blog	"Data Analytics in Aviation Industry"	(scheduled for publication on ICARUS website)	https://docs.google.com/document/d/13kOsxDkbHXyTY2acCzmYjf6iQvqSHm1nI07Y9QcJg1c/edit
Paper	"Query-Driven Descriptive Analytics for IoT and Edge Computing"	2019 Conference: IEEE International Conference on Cloud Engineering (IC2E)	
Paper	"The ICARUS Ontology: A multi-layer approach of a general aviation ontology"	Deadline: 10/07/2019 - Conference: IEEE/WIC/ACM International Conference on Web Intelligence 2019 (WI2019)	

I.1.7 CELLOCK

A. Communication with stakeholders (via email, social media, phone, contact form of the website, etc.)

Name and type of the contact	Date of communication	Reason of communication	Activity description (short description of the outcome of the communication, what we gained from it)
PLANE CATERING LTD Representative	February 2019	ICARUS External Validation	
AERIA Interactive Representative	April 2019	ICARUS External Validation	

B. Participation in third party events (conferences, workshops, seminars, meetings, etc.)

Name of the event	Date of the event	Location of the event (city, country)	Description of the event (type, aim, size of the audience, type of the audience)	Outcome of the activity
Aviation Open Day	2018/03/28	Nicosia, Cyprus	Academic, Industry	Dissemination of the project and activities. Stand on the fair, poster on the stand, brochures distributed, contact to visitors
APEX Exhibition	2018/04/10	Hamburg, Germany	Industry	Dissemination of the project and activities. Stand on the fair, poster on the stand, brochures distributed, contact to visitors
Aviation Festival London	2018/09/05	London, UK	Industry, Academic	Dissemination of the project and activities. Stand on the fair, poster on the stand, brochures distributed, contact to visitors
Aviation Festival ASIA	2019/02/27	Singapore	Industry, Academic	Dissemination of the project and activities. Stand on the fair, poster on the stand, brochures distributed, contact to visitors
APEX Exhibition	2019/04/02	Hamburg, Germany	Industry	Dissemination of the project and activities
4th Innovation and Entrepreneurship Forum	2019/04/19	Nicosia, Cyprus	Academic, Industry	Dissemination of the project and activities. Stand on the fair, poster on the stand, brochures distributed, contact to visitors

C. Press Coverage (press release, article, interview, website link, reference on webpage, reference in news items, etc.)

Type of press item (press release, interview, etc.)	Title of the press item	Media where it was published	URL (if available)
Project information added to CELLOCK website	ICARUS project	Online	www.cellock.com

I.1.8 AIA

A. Press Coverage (press release, article, interview, website link, reference on webpage, reference in news items, etc.)

Type of press item (press release, interview, etc.)	Title of the press item	Media where it was published	URL (if available)
Project information added to official website	EU CO-FUNDED R&D	online	https://www.aia.gr/company-and-business/business/co-funded-research-activities/

I.1.9 ISI

A. Press Coverage (press release, article, interview, website link, reference on webpage, reference in news items, etc.)

Type of press item (press release, interview, etc.)	Title of the press item	Media where it was published	URL (if available)
Project information added to official website	ICARUS - Aviation-driven Data Value Chain for Diversified Global and Local Operations	online	https://www.isi.it/en/projects/icarus-aviation-driven-data-value-chain-for-diversified-global-and-local-operations

I.1.10 OAG

C. Organization of events (co-creation events, engagement workshops, etc.)

Name of the event	Date of the event	Location of the event (city, country)	Description of the event (type, aim, size of the audience, type of the audience)	Outcome of the activity
OAG Sales and Marketing strategy meeting	8 th – 9 th June	London, England	Internal OAG meeting with board members, product directors, Sales and Marketing teams	ICARUS was one of the sessions focuses to communicate the offering to other teams around the globe to further push the communication. Also to discuss further activity ideas to further promote this digitally and at events.

D. Participation in third party events (conferences, workshops, seminars, meetings, etc.)

Name of the event	Date of the event	Location of the event (city, country)	Description of the event (type, aim, size of the audience, type of the audience)	Outcome of the activity
World Aviation Festival	5 th – 7 th September 2018	London, England	Aviation focused event specializing in technology related businesses.	We exhibited on a 3x2m stand for the 3 full days within the business innovation centre. A busy show, with a number of discussions about the project's future plans around the 4 key deliverables.
IATA Slots	18 th – 20 th June 2019	Cape Town, South Africa	Aviation focused event for Airlines and Airports to discuss potential new routes	We exhibited on a 2x2m stand within the exhibition area. 200+ delegates, demonstrating OAG and our involvement with ICARUS.

I.2 Communication Activities Reporting Details

I.2.1 ICARUS Website Google Analytics

The ICARUS Website was released on February 13th, 2018. The statistics provided below are consequently covering the period February 13th, 2018 to June 28th, 2019 and have been extracted from Google Analytics.

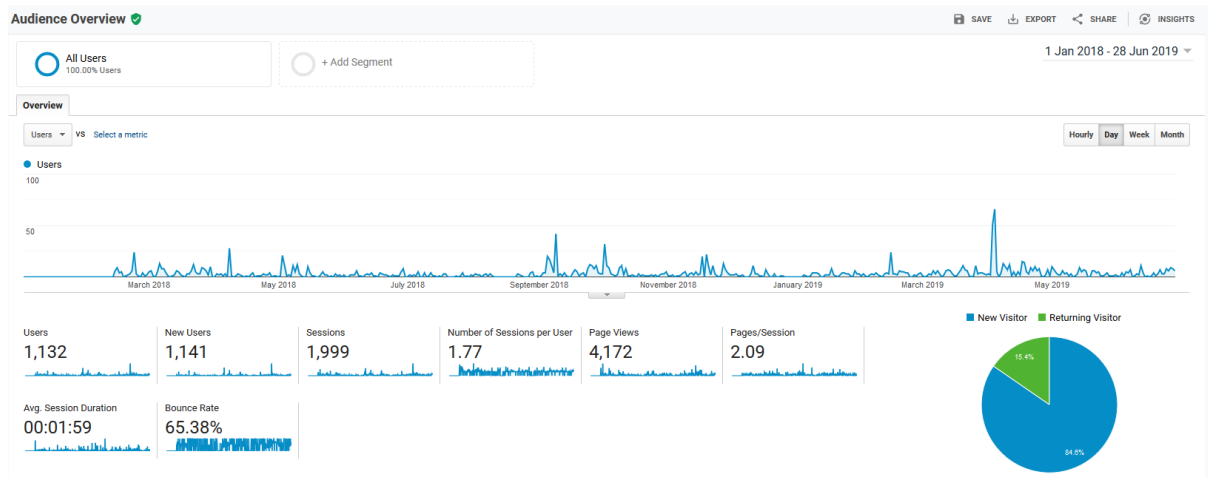


Figure I-0-1: ICARUS Website Google Analytics – Audience Overview

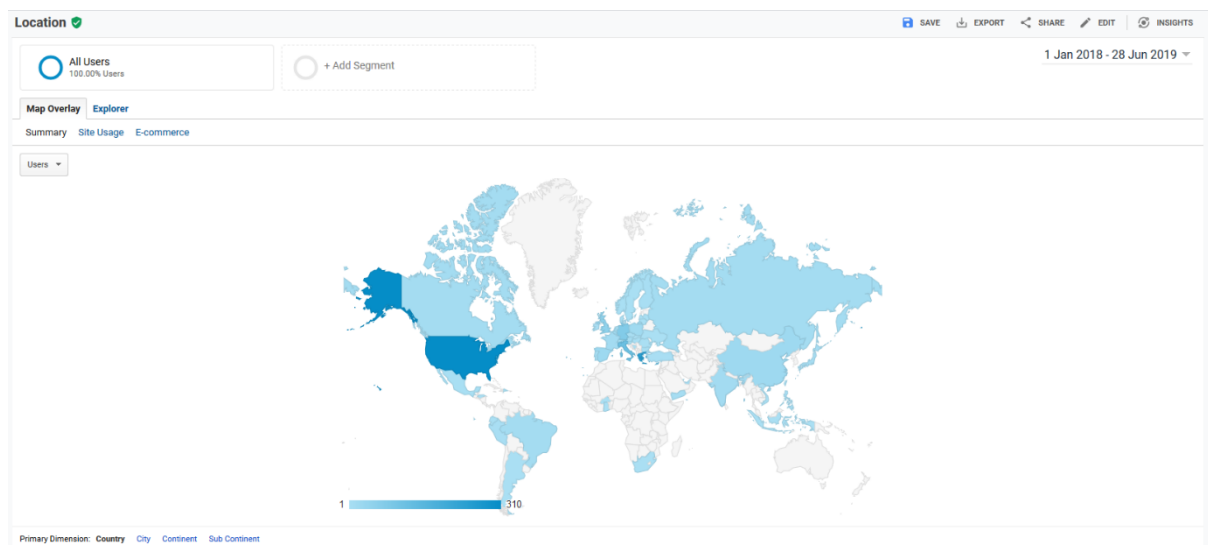


Figure I-0-2: ICARUS Website Google Analytics – Location Overview

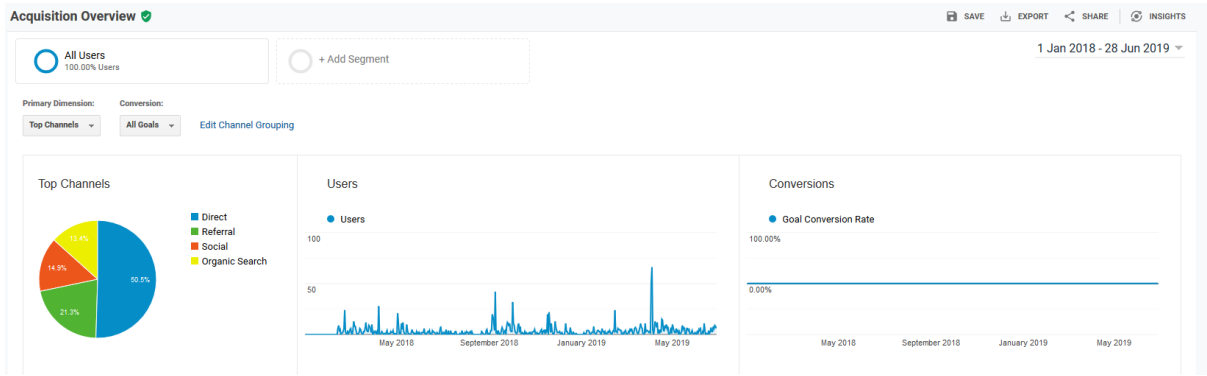


Figure I-0-3: ICARUS Website Google Analytics – Acquisition Overview

I.2.2 ICARUS Social Networks Analytics

The top posts in Twitter, in terms of followers’ engagement, were those that reported actual ICARUS news and project results. For example, a post about a demonstrator meeting among ICARUS partners (14 March 2018) has been viewed 5.347 times and gathered 60 engagements⁸ and a post which is welcoming visitors to the ICARUS booth in IATA ADS (25 June 2019) gathered 27 engagements. In comparison to that, an average post with a third-party article on aviation and data analytics usually gathers less than 10 engagements. The top Facebook post, with 1.212 outreach and 476 engagements, was again the IATAADS welcoming post (25 June 2019).









































25/06/2019 15:17		Can you restrict access to your data assets in order not to even appear to			433		24 14	
25/06/2019 14:05		How does ICARUS enable the creation, signature and enforcement			218		11 6	
25/06/2019 12:53		#IATA white paper on data challenges just presented in			294		10 14	
25/06/2019 12:15		Do you want to share your aviation data, but are concerned about			440		58 13	
25/06/2019 10:18		Our ICARUS team is ready to welcome you in the #IATAADS booth.			1.2K		391 85	
25/06/2019 09:43		What should you expect to see in our booth in #IATAADS? Check our			534		15 11	
25/06/2019 08:01		Find out how ICARUS enables Trusted Data Sharing... Visit our			244		14 8	
24/06/2019 18:47		Just before the #IATAADS in Athens starts, have a look at our teaser			42		8 18	

Figure I-0-4: Facebook Insights Screenshot

⁸ By engagement meaning the number of user interactions with Tweet, even as a click on a hashtag.

A better picture regarding the audience of the ICARUS social media, can be drawn with the help of Twitter Analytics. The ICARUS Twitter account is mainly followed by male audience (70%). The vast majority of the project’s audience comes from Greece (21%) and in the second (14%) and third (12%) place lie UK and USA respectively. Lastly, as regards the fields of interest of the ICARUS Twitter followers, science and tech news come first with 97%, and the rest of the categories including space and technology.

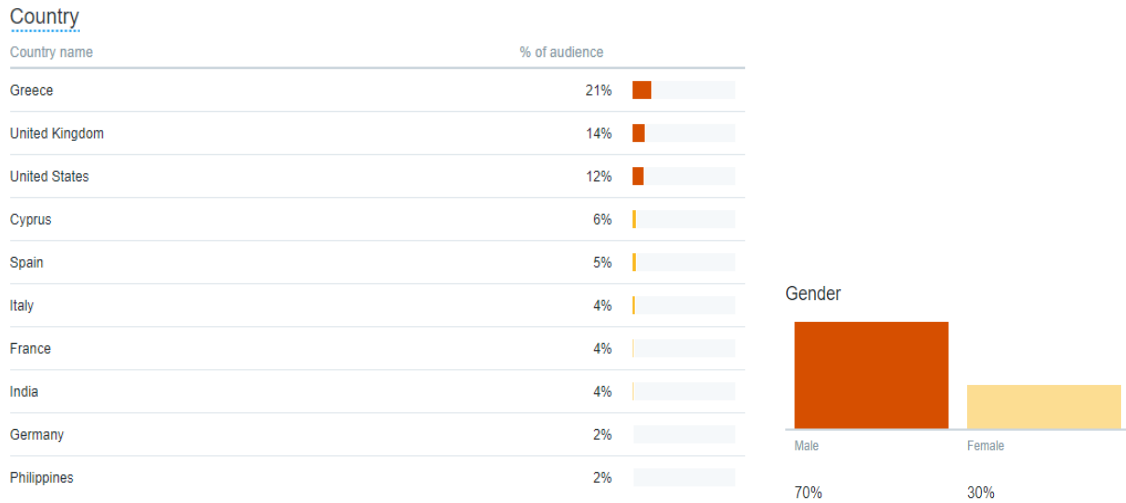


Figure I-0-5: Country of ICARUS Twitter Audience - Figure I-0-6: Gender Percentage of ICARUS Twitter Audience