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Abstract

The present document summarises strategies and actions for effectively disseminating and exploiting the OSCAR progresses and results to the project's relevant target audiences.

Dissemination, networking and exploitation actions already performed, as well as short-term actions already defined, are described herein.

Being dissemination, networking and exploitation activities carried out by the whole consortium, the document is also intended to act as a guideline for the OSCAR partners, when promoting the project's activities along its lifetime. At the aim, this Networking, Dissemination and Exploitation Plan will be periodically updated, according to the evolution of the project.

The PDER document (D6.1) complements the Data Management Plan (D6.2 DMP) which describes in detail management and protection of research data and knowledge and the relation to the objectives of OSCAR.

Executive Summary

OSCAR Work package 6 – Networking, Dissemination and Exploitation – aims to ensure extensive outreach of the OSCAR results. WP6 consists of 6 complementary tasks, starting with planning of concrete activities and subsequent execution of the planned activities.

T6.1 addresses dissemination of knowledge and exploitation of results as key elements for the success of a project. This is particularly true in the case of the OSCAR project, having the ambitious goal of inducing a paradigm shift towards implementation of Open Science in European Aviation research.

As central result of T6.1 this document – deliverable D6.1 – represents the OSCAR Plan for Dissemination & Exploitation of Project Results PDER. It complements the Data Management Plan (D6.2 DMP) which describes in detail management and protection of research data and knowledge and the relation to the objectives of OSCAR.

The maximization of the information usage relies on the identification of relevant groups of stakeholders and communities who may be interested in the project findings, but also on the identification of other research domains – far beyond aviation, which may also be of interest in the context of OSCAR.

The main objectives to be achieved through the OSCAR dissemination, networking and exploitation activities are:

- to inform the aviation community about the project activities and goals;
- to promote the use of project results for the future research activities and to support strategically related policy decisions;
- to provide open access to the results achieved within the project, as long as data, knowledge and results are not restricted by legitimate confidentiality and / or privacy interests;
- to support the work of the OSCAR WP2 & WP3 by attracting and motivating relevant stakeholders to support the OSCAR Open Science Code of Conduct.

This document presents the OSCAR Communication, Dissemination, Networking and Exploitation Plan for a proper promotion of the project and its results. Goals, overall strategy and activities to perform are analysed. Moreover, the project's relevant target audiences, the key messages to communicate as well as the proper mechanisms and schedules to do so, are defined. Lastly, appropriate means to monitor, evaluate and assess the performed dissemination and exploitation activities are defined.

This plan is designed to be a practical framework for the OSCAR day-to-day communication activities and it will be updated on a semester basis, so as to include actions already carried out and take into account adapted dissemination and communication activities until the end of the project.

The document consists of three main sections.

1. Section 1 introduces the OSCAR project and its high-level goals. A specific section is dedicated to the dissemination Work Package.
2. Section 2 describes the foremost goals of dissemination in the OSCAR project, the dissemination strategy and actions to perform consequently, and the identified target audiences of this Coordination and Support Action. The dissemination pack and the monitoring parameters to evaluate the dissemination effectiveness are also included.
3. Section 3 presents the exploitation goals, strategy and actions, tailored to the relevant identified stakeholders.

1 OSCAR Project Overview

1.1 Project Description

The transport sector remains to be a fast-growing sector of Europe and is associated with a wide range of economic and societal benefits – acting as a catalyst of technology transfer to many fields of mainly industrial application and vice versa taking up technologies from other sectors.

Today, the transport sector is confronted with many diverse challenges as e.g. climate change, dependency from fossil fuels, evolving mobility demands, increasing global competition, emergence of enabling technologies etc.

The transport sector as such is usually categorized by transport modes (car, road transport, rail, maritime, and aeronautics) and by the production respectively operation of transport equipment. Additionally, both production and operation of transport infrastructure as well as aspects of intermodality need to be considered.

Complexity and impact of current and foreseeable challenges on the one and characteristics of the different groups of actors on the other require more efficient mobilisation of resources, increased innovation speed and integration of enabling technologies. In this context, Open Science is considered as an important and promising measure to support the intended performance gain: "Open *science, open innovation and open to the world – the so-called 3 O's – are likely to impact European innovation performance, growth and international competitiveness"*.

European aeronautics and air transport (AAT) research covers the scale of Technology Readiness Levels (TRL) from level 1 to level 6. Experience shows that higher TRL usually goes with more strict protection of Intellectual Property Rights (IPR) which contradicts the concept of Open Science. However, IPR protection is a central pillar of competitiveness. Hence, implementation of Open Science requires a transparent trade-off with IPR requirements.

OSCAR – **O**pen **S**cien**C**e **A**eronautic & Air Transport **R**esearch – addresses the current perception, acceptance, and implementation of Open Science in the field of European AAT research and in those fields where European AAT research issues interact with e.g. other transport modes and technology exchange.

The main goal of the OSCAR project is to initiate and deliver an optimized Open Science concept to European transport with special focus on AAT research with triggering an implementation in aeronautics and air transport where:

- The concept of Open Science is widely known in European aviation sector, taking also proximate research fields like Industry 4.0, digitization, material sciences, etc. into account, and it is implemented at least in pilot cases. The interfaces to other transport modes, to inter-modality and to proximate technology fields are considered.
- The message of an achieved balance between Open Science and IPR protection, which maximises beneficial, transparent, and fair openness while maintaining IPR and related competitiveness has been convincingly spread by means of a Code of Conduct.
- Project consortia concerned are well guided to efficiently apply the Open Science Code of Conduct customized to the characteristics of the individual project and to the individual researchers even in their daily work.
- A paradigm shift towards implementation of Open Science in European aviation research has been initiated.

The main goal of OSCAR is more than simply adapting an established approach to a specific field. It requires on the one an in-depth understanding of Open Science (principles, application, benefits) as well as of the European AAT landscape as is. On the other it requires an application concept, i.e. convincing stakeholders of the added values and guiding them to integration of Open Science in their daily research work beyond single European projects. Thus, the main goal of OSCAR as

mentioned above means to pave the way towards Open Science in European aviation research by detailed analysis of the landscape and by developing, validating, and promoting a suitable OS concept.

1.2 Project Structure

In order to realize the main goal and the related sub-goals, OSCAR will achieve the following Objectives and measurable results: Achieving the main goal of OSCAR requires (1) detailed understanding of knowledge and acceptance of Open Science in AAT research, (2) development of adapted implementation approaches and (3) their validation. While these three objectives provide tools and practical information to implement Open Science in AAT research projects it is also necessary to raise the motivation to implement Open Science within the AAT research community. Objective (4) addresses the latter.

- Objective 1 → WP2, WP3: An assessment of the development of Open Science in European AAT projects since the beginning of FP7, i.e. FP7 and Horizon 2020, considering also the AAT related JTIs Clean Sky and SESAR. To some extent projects which relate at least partly with “core AAT” will be considered. The assessment will be based on o a statistical analysis of estimated 1000 collaborative research respectively CSA projects. It shall reveal factors facilitating respectively hampering the acceptance of Open Science approaches; o an intense consultation phase with researchers and administrative / legal staff from IND, REC, HES to gather comprehensive first-hand experience about awareness of Open Science as such, perceived benefits and drawbacks of the idea and potentially concrete examples.
- Objective 2 → WP4: Objective 2 is a practically usable guidance for participants in AAT projects. It will be developed taking up the outcome of objective 1 and considering both legal frameworks and the need for an Open Science Code of Conduct.
- Objective 3 → WP5: As objective 3 the interim results in the course of objective 2 will be tested and iteratively matured. Finalized recommendations targeting legal aspects and the related Open Science Code of Conduct will be validated in pilot cases.
- Objective 4 → WP6: High quality of objectives 1 to 3 will contribute to a significantly increased implementation of Open Science in European AAT research. However, to achieve the ambitious goal of OSCAR, the acceptance of the idea as such, as well as of a comprehensive practical guide – the Code of Conduct – by the AAT research community is crucial. Different complementary measures are foreseen to maximise the intended acceptance of and support for Open Science in AAT research as OSCAR objective 4.

Namely, OSCAR will achieve its goals in three consecutive steps:

Step 1 – Information and opinion gathering

As a first step, the OSCAR consortium will analyse the European AAT research landscape with respect to the awareness and the perception of Open Science. OSCAR will focus on collaborative research projects (FP7: Level 1 and Level 2, Horizon 2020: Research and Innovation Actions, Innovation Actions) and Coordination and Support Actions as most common instruments in AAT research. The landscape is described by the different research and innovation actors on the one and by the technical fields on the other. In AAT, most research consortia consist of: industry (IND incl. SME; from OEMs and the whole supply chain represented by the IMG4 group), research establishments (REC represented by EREA), academia research (HES represented by EASN) and – in some cases – other types of partners as e.g. public bodies (PUB).

Already a view on consortia allows to distinguish between more research driven and more application driven projects, although there will be a level of uncertainty. There is also some tendency to

associate lower TRL with the Framework Programmes and being driven by REC and / or HES. Vice versa higher TRL may be associated with Clean Sky with more emphasize in the role of IND, which might affect the degree of openness. However, these categories should be understood as weak indicators only rather than strict rules.

The taxonomy of ACARE mentions in total 12 technical fields as Flight Physics, Aero-structures, Propulsion etc. which need to be dealt with in order to achieve the FlightPath 2050 goals. During FP7 the European Commission introduced the first elements of Open Science – namely Open Access and later the Open Data Pilot. Open Access became mandatory in Horizon 2020, while Open Data remains a pre-set option, but consortia may opt out. Since the beginning of FP7 respectively Clean Sky estimated 1000 AAT research projects have been started. Considering the publication of calls and the usual project duration there are permanently 100 to 200 collaborative projects running in parallel. One can expect that clustering of projects by technical field and by other indicators provides sub-groups of sufficient size for statistical analysis of the acceptance of Open Access and Open Data. The primary focus will be on the timely evolution of Open Access and Open Data by cluster. This analytical part is addressed in **WP2 – Survey & Analysis on the Current "Open Science" Landscape in AAT-Research**. The second outcome of WP2 – a pre-selection of projects and project coordinators for further investigation – will feed **WP3 - Best Practice for Operationalising Open Science Principles – The Forum**.

WP3 will use the services of WP6 (Networking, Dissemination & Exploitation) in order to spread publishable results to the research community and to attract project consortia for cooperation with OSCAR. Taking the projects pre-selected in WP2 and the feedback from contacted projects into account, the OSCAR consortium will down-select to about 20 target projects, which agree to contribute to OSCAR within the framework of a non-disclosure agreement (NDA). Consortia will be interviewed on their experience with and expectations of Open Science in general, and how to implement Open Science in concrete projects. Practical "hands-on experience" will reveal opportunities and drawbacks. Also, projects dealing with other transport modes, inter-modality and projects affecting indirectly AAT research shall be considered. WP3 will both address researchers executing these projects and administrative staff, i.e. representatives of the legal and the financial departments. Practical experience confirms – especially in medium and large organisations – the different points of view of researchers and administrative staff.

Step 2 –
Development of a preliminary Code of Conduct and considerations of legal constraints

WP4 – the OSCAR Code of Conduct – is the second step dealing with the iterative development of a methodology and a framework for the OSCAR Code of Conduct (OSCAR CoC). The results gained in step 1 show the inside view of participants in AAT research projects in terms of the level of -understanding and accepting Open Science as such, -conflicts of IPR and competitiveness with Open Science, -additional efforts which are expected to result from addressing Open Science duties, -benefits from usage of available Open Science data, etc. The outside view addresses aspects like Open Science infrastructure, i.e. accessibility of OS platforms, data formats, usage in practice etc. Here the different experiences of the consortium partners form IND, REC and HES will feed the discussion.

The result of WP4 is twofold. On the one, there is a legal framework to be developed, which addresses rights and obligations related to Open Science while maintaining the aforementioned aspects of IPR protection and competitiveness. Current Grant Agreement (GA) and Consortium Agreement (CA) models deal – amongst other – with IPR protection issues. Thus, practical implementation of OS should start with the development of "Next Generation CA models" (CA-NG) and demonstration of their applicability. Considering the long-lasting evolution of such models and their alignment with the different Framework Programmes this will turn out as a time-consuming step of OSCAR. It

shall be emphasized, the OSCAR consortium is NOT mandated to change these models, but recommendations will be provided to the respective entities in charge. The remaining calls in Horizon 2020 and the preparation of FP9 together with the time schedule of OSCAR indicate that efforts should be spent rather with a view on FP9. Therefore, OSCAR will analyse the FP9 participation rules (once at least draft versions become available) and OSCAR will also get in touch with the teams working on CA models.

On the other, a practical guide – the OSCAR Code of Conduct – shall help researchers and engineers to integrate the idea of OS in their daily work, i.e. providing advice on how to e.g. -access OS platforms and to benefit from useful information there, - get familiar with the related workflows, -improve project proposals by taking suitable OS material into account, -establish workflows to identify research activities, data and results valuable for OS while respecting IPR constraints and maintaining competitiveness, -practically feed OS platforms, etc. In WP4 OSCAR will develop both recommendations which may be considered in CA-NG (and potentially in future GA models) and a CoC which will help to smoothly implement OS in concrete projects.

Step 3 – Demonstration & validation

Demonstration & validation: **WP5** dealing with **Demonstration and Validation of the OSCAR Open Science Code of Conduct in Pilot Projects** is closely interacting with WP4 in order to feedback first experiences with interim WP4 results gathered in pilot projects. The iterative process will start with H2020 projects running at that time where application of the draft CoC will be simulated. Which impact of both the deliberation on the legal framework and on the CoC will be expected? Which suggestions will seem to be acceptable, which objections – be it regarding contractual aspects or regarding practical application – will come up?

WP5 provides these remarks to WP4 in order to develop more mature versions of the CoC and of a set of recommendations for the CA-NG. Once the partners agree on an acceptable level of maturity, OSCAR aims at a test implementation in at least one suitable project, ideally in one of each RIA, IA, CSA. To achieve this ambitious goal the support of the European Commission will be needed, i.e. to identify such project(s) at an early stage of preparation. Due to the overall timing OSCAR will take care for the project(s) during their first months in order to assess the implementation and – to some extent – the impact achieved.

Supporting processes:

Scientific and administrative management of OSCAR Done in **WP1 – Project Management**. Networking, Dissemination, and Exploitation: Typically, D&E measures of RTD projects (i.e. Level 1 and Level 2 projects in FP7, RIA and IA in H2020 etc.) focus on making use of project results. A support action as OSCAR benefits from D&E measures applied very early to gain and to improve results. As outlined above, “Openness” as a European idea which shall be implemented in European research projects requires an adapted legal framework, a concrete guidance to balance the different interests, and project consortia actively supporting Openness.

Therefore **WP6 – Networking, Dissemination, and Exploitation** shall also attract and motivate individuals, organisations and consortia to promote the process. Related NDE activities will address organisations from all sectors (IND incl. SME, REC, HES, PUB, OTH) and individuals in order to announce meetings, workshops, events, etc. and to attract the targeted audience to attend. The information gained in all NDE activities will help to adapt and to improve the OSCAR outcome. Therefore, all OSCAR NDE activities focus also on supporting the progress of OSCAR. Ethics: The analysis of the factual AAT research landscape requires:

- An analysis of eCORDA data about FP7 and Horizon 2020 AAT research projects in order to efficiently derive an overview of projects in different categories of research content, start and target TRL, involvement of participant types (IND, SME, REC, HES …) etc.
- Interviews with individuals from the aviation community in order to gather their personal opinion about Open Science, its applicability in aviation research, and – if available – the Open Science policy of their employing organisations. Thus, non-sensitive personal data from externals must be gathered and processed in compliance with GDPR 2016/679.

WP7 – Ethics Requirements will provide a deliverable which describes the application of the legal regulations within OSCAR.

2 Networking, Dissemination and Exploitation

Work package 6 is specifically dedicated to the project D&E aspects in the widest sense. EASN-TIS leads WP6 and will coordinate its overall actions, although each OSCAR partner will effectively contribute to the project's dissemination activities. WP6 takes care not only of defining both dissemination strategy and guidelines for the consortium (as reported in this document), but also of concretely implement all the necessary actions for an effective dissemination of results, all along the project duration. Any mean and material needed to communicate the OSCAR messages and to have the aviation community aware of the OSCAR results, will be developed and realized within this work package.

In particular, WP6 aims to ensure the extensive outreach of the OSCAR results. The main objectives of WP6 are to:

- Ensure effective and sustainable dissemination of the knowledge and information produced during the project, among and beyond the members of its consortium, and through the implementation of tailored dissemination activities for each of the project's identified target groups.
- Provide open access to the results achieved, as long as data, knowledge and results are not restricted by legitimate confidentiality and / or privacy interests. Set-up a data management policy and approach for ensuring that the data collected, processed and generated by the OSCAR project, are effectively protected and maintained (→ D6.2 DMP).
- Monitor and assess the OSCAR exploitation, dissemination and networking activities and report upon them, in order to ensure that the WP6 strategy followed, is achieving the expected impact.
- Establish an active network of individual stakeholders, organizations and project consortia. This network is critical for the OSCAR project (and in particular during its "information and opinion gathering" phase) for achieving its ambitious objective of creating a paradigm shift towards implementation of Open Science in European aviation research. Dedicated networking actions will be identified and performed for attracting and motivating the members of this network so as the latter are willing to work on the basis of a commonly agreed OS Code of Conduct. This objective is expected to greatly support the work of WP2 and WP3 and it will be realized in the frame of Task 6.6: "Clustering and liaising with other relevant RDI projects and also other initiatives at European context".

Task 6.4 – Communication and Dissemination Activities, will specifically have the aim to identify the project's overall visual identity and means developed and used to disseminate and exploit results. Particularly, a great attention will be paid to the project website, which represents the main tool for communicating project activities. A specific task of the project is entirely dedicated to developing, upgrading and maintaining the website (Task 6.3: Website design, development and maintenance).

Due to the need of store, manage and protect the huge amount of knowledge and data produced in the project, to be anyhow properly distributed to relevant stakeholders and the whole aviation community, As mentioned before, within WP6 a strategy will be developed describing protection, maintenance and preservation of project data (D6.2 DMP).

Communication, dissemination and exploitation activities will go on all the project lifetime and will be constantly monitored, assessed and improved on a regular base.

2.1 Overview of Dissemination Actions

Dissemination is a key element for the success of OSCAR, in particular considering its ambitious goal of paving the way towards Open Science in European Aviation research by detailed analysis of the landscape and by developing, validating, and promoting a suitable Open Science concept. At this aim, dissemination activities are planned in such a way to maximise the effectiveness through

the achievement of a broad range of stakeholders and a tailored communication based on the stakeholders characteristics, interests and needs.

The OSCAR Dissemination Plan is based on four main pillars, each one detailed in this document:

- Definition of goals and key messages to disseminate: this task consists in fixing both high-level goals and specific output from the project to make available to the aviation stakeholders (Section 2.2).
- Identification of target audiences: the effectiveness of dissemination relies on the proper identification of stakeholders who may be interested in the project findings (general public vs. experts; internal audience vs. external audience), and, afterwards, on the personalization of the communication means and messages to deliver, based on their needs (Section 2.3).
- Strategy definition: a clear and coherent planning and implementation of communication, networking, dissemination, and exploitation activities, is defined. The approach to follow is also based on tailoring the information and the messages to disseminate to the intended audiences. The dissemination strategy will also support the consortium in tracking the impact of the communication (Sections 2.4 and 2.5).
- Assessment of the effectiveness of the activities: in order to check the effectiveness of the strategy and the achievement of expected results, a set of indicators (both qualitative and quantitative) will be identified (Section 2.6).

2.2 Goals of OSCAR Dissemination Activities

As previously explained the first step of the OSCAR Dissemination strategy is to define the high-level goals and specific outputs from the project to effectively make them available to the relevant stakeholder groups. The OSCAR key messages to disseminate will emerge from the work of WP2, WP3, WP4 and WP5, and will regard:

- The identification of existing Open Science practices and expectations, as well as of the entire spectrum of relevant European and International stakeholders.
- An Open Science concept, along with a Code of Conduct that is widely known and implemented in European Aviation research, as well as potentially in other transport modes and technology fields.
- The message of an achieved balance between Open Science and IPR protection, which would maximise beneficial, transparent, and fair openness while maintaining IPR and related competitiveness.

In order to have those results available to the aviation community, thus to assure their exploitation by decision makers and other relevant stakeholders, OSCAR has set-up the following high-level dissemination goals:

1. **Raise awareness**: to achieve a high level of acquaintance of relevant stakeholders about the project goals, activities, progresses and findings, through various means and events. This activity starts in the early stages of the project and lasts for the entire project duration.
2. **Inform and generate understanding**: this objective includes transferring key messages to specific stakeholders, enhancing their knowledge and comprehension on the project itself. This activity will be constant during the entire project lifecycle to ensure that the OSCAR progresses, and achievements will be continuously and efficiently disseminated.
3. **Engage**: specific dissemination actions will foster interaction to encourage the active participation of the stakeholder communities, general public and a wider range of target audiences. It includes initiatives to achieve a continuous and consolidated exchange of relevant information with stakeholder groups, Advisory Board members and other relevant projects.

4. **Ensure impact**: in the long-term, the dissemination objectives will ensure the impact of the project results on the target audiences. The sustainability of the project results is one of the main purposes of the dissemination activity.

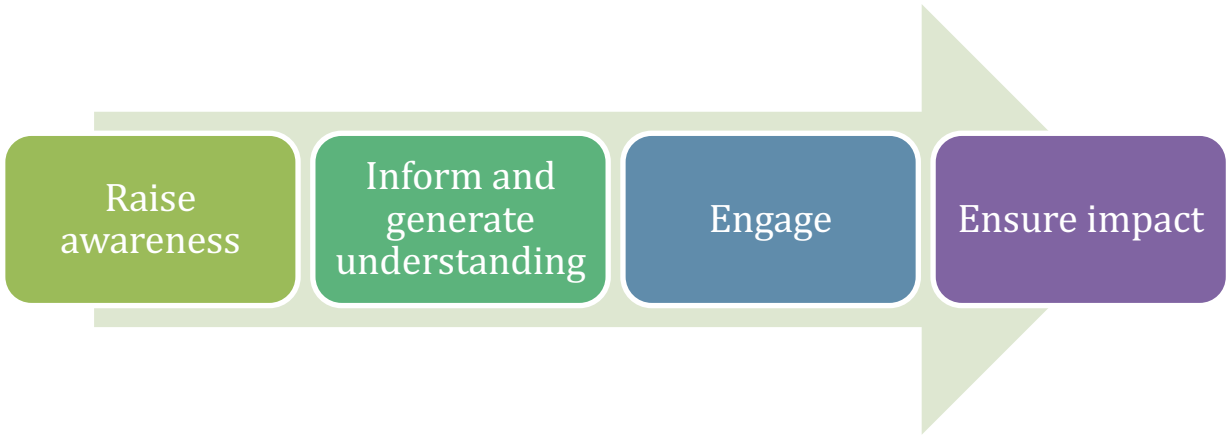


Figure 1: OSCAR dissemination goals

Furthermore, the dissemination approach will follow the perspective of the European Commission to account for EU spending on research funding by:

1. showing how European collaboration has achieved more than would have otherwise been possible, notably in achieving scientific excellence, contributing to competitiveness and solving societal challenges;
2. making better use of the results, by making sure they are taken up by decision-makers to initiate and influence policy-making and by industry and scientific community to ensure follow-up.

Based on what stated, this dissemination plan includes a strategy definition, a statement of goals, the identification and the analysis of target audience and the appropriate communication means to attain the dissemination aims. It is designed to be a practical framework for day-to-day communication activities and it will be adapted in a timely fashion in accordance with the needs and the evolution of the project.

2.3 Target Audiences

In order to achieve the best effectiveness of communication, a message must be delivered through the most appropriate mean to each target audience. A fundamental step is therefore the identification of all relevant target audiences, before deciding on the media to be used to transmit the message.

This section provides the description of the identified OSCAR target audiences and their main interests associated with the project. The different target audiences are defined considering who could be interested in project research, who would be interested in learning about the project findings and who could be directly/indirectly affected by project results. Furthermore, it is taken into account who could and should make use of the outcomes and who is needed to advocate and implement the action plan. Last, not least, it is of importance who is needed to provide feedback to the project to develop meaningful results. Audiences have been categorised under three main clusters, each of them with a different level of interest in the OSCAR topics:

- **Interested General Public**: this kind of audience is made of people or groups generally interested in the topic, who recognize the importance of the OSCAR concept and the benefits that may derive from the project research, even if it is not primarily involved in technical

activities related to the topic. An audience with this level of interest acknowledges the importance of the topics dealt within the project and looks for clear, useful, technical as well as non-technical information. Researchers working in areas not directly involving Open Science, students, general citizens, average European tax payer who shall be informed on how the project findings mainly produced recommendations and corrective measures to decidedly contribute to improving their everyday lives may be included in this category. The OSCAR partners will discuss whether there are aspects which could take advantage of Open Science opportunities involving citizens, e.g. in areas of environmental impact (multimodality, NOx, greenhouse gases, LCA, safety, etc).

- **Specialised Audience**: this audience is made up of people directly interested or affected by the project outcomes in their work. Part of this audience will also act as potential contributor of information. This target audience can be further broken into several stakeholder groups, such as: research communities, industries, universities, research establishments, running research projects and CSAs, etc.
- **Decision Makers**: they are responsible for the aligning of the end users and researchers. This cluster of audience can be considered as the main target audience for the OSCAR project and includes policy makers, company management, representatives of the European Commission, H2020 / Horizon Europe Programme committee (e.g. DG RTD, H2020 Program Committee, ESFRI, Industry or national research programmes funding institutions), representatives of regulators (e.g. EASA, EUROCONTROL, EUROCAE, National Safety Authorities), Aeronautics and Transport research Associations (such as EREA, EASN, ASD), etc.

These three main categories of audiences will be interested in the project with different purposes, levels of knowledge and attitudes. In this sense, the dissemination activity will identify, address and respond to these specific goals by designing the most suitable communication means and contents. Moreover, each of the above-mentioned categories of target groups is expected to make a different use of the OSCAR results, moving from a conceptual use of information, impacting levels of knowledge (interested general public), to an instrumental use of results (specialized audience) up to a strategic use of the OSCAR outcomes, affecting policies and decisions (decision-makers). Furthermore, one organization may make a different use of the same information, and therefore different means and activities, using different languages, content types and levels of detail for each specific target could be needed to communicate with a stakeholder.

2.4 Dissemination Strategy

A clear statement of dissemination goals and the identification of the target audiences represents the base on which to build and define the dissemination strategy. Further to the different clusters of audiences, the communication and networking effort in OSCAR will also be addressed to properly communicate results internally (both to the consortium and to the OSCAR Advisory Board, a panel of external experts that supports the project to maximise the research relevance and accuracy of the project action).

The OSCAR dissemination strategy consists in an accurate matching between the target audience characteristics and needs, the selection of the results to be communicated (tailored on the target needs) and the identification of the proper content, means, formats, and language style to get the desired outcomes from the target audiences. The analysis of the needs and possible use of the OSCAR results of each of the three main clusters of stakeholders is the first step in shaping the dissemination strategy. This helps the consortium in tailoring the information and the mean used to communicate the messages.

After that, the contents to promote are defined, according to the evolution of the projects and the available results. As the contents of the dissemination will evolve during the project, the same will the means supporting the communication. Generally, in an early stage of a project, the focus is on

the project promotion through informative tools such as brochures and website, while more specialized means such as scientific articles, presentations at conferences, and seminars, are used in a later stage, to communicate results that are more technical.

The implementation of dissemination activities, based on the status of the project, tailored to the clusters of stakeholders, and through proper communication means per stakeholder in accordance with the needs and evolution of the project, is the final and operative part of dissemination.

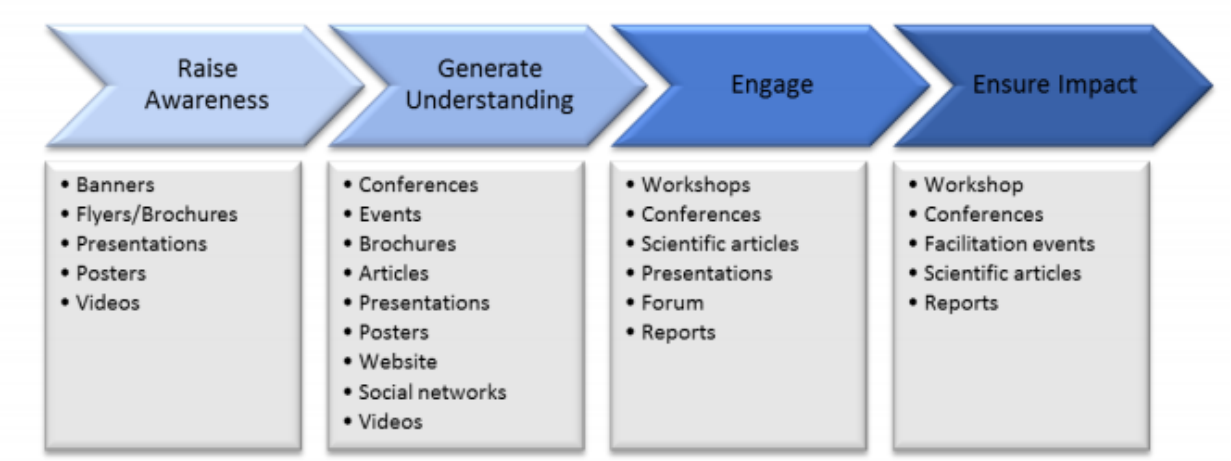
Following what above described, the map of stakeholders has been matched with a set of products considered as the most effective for each group of stakeholders. A specific description of planned means of communication is reported in the Section 2.5. This matching analysis will be updated during the project, depending on the project evolution, dissemination needs and communication effectiveness. The most appropriate communication means for each stakeholder have been therefore identified, as in the following table.

Table 1: Categories of target audiences and methods of dissemination

Cluster	Audience	Means
General public	All	Website, Videos, Online articles, Articles in magazines, Flyers, Brochures, further channel(s) of dissemination to and of involvement of this target group are currently investigated in the national Citizen Science project CitizenSensor running at Fraunhofer. If results from CitizenSensor suggest added value to OSCAR corresponding activities shall be started. Also, Fraunhofer prepared a network dealing with Citizen Science.
Specialised audience	Research community, Ongoing research projects	Website, Academic publications, Flyers, Brochures, Scientific articles, Presentation and posters, Technical Conferences, Seminars, Workshops
Specialised audience	Industrial Associations and Industries	Website, Videos, Flyers, Brochures, Presentation and posters, Seminars, Workshops
Specialised audience	Other CSAs and RDI projects	Website, Presentation and posters, Seminars, Joint workshops and events
Decision makers	ACARE, EU and other funding organisations, policy makers	Website, Deliverables and official reports, Workshops, Seminars, Conferences, On purpose meetings and events
Decision makers	Regulatory agencies	Website, Videos, Presentation, Posters, Workshops, Seminars, Conferences, Scientific articles, Online articles
Decision makers	Aeronautics research associations	Website, Videos, Presentation, Flyers, Brochures, Workshops, Conferences, Online articles, Scientific articles

Figure 3 shows the mapping between dissemination goals and means.

Figure 2: Mapping between dissemination goals and means



2.5 Dissemination Actions

Networking, dissemination and exploitation will be a collective activity managed by the entire consortium and an individual set of actions handled by a specific partner on a local level. During the project, all partners will carry out several dissemination actions such as participation in relevant public events and conferences, distribution of OSCAR dissemination materials, publication of papers based on the work performed in the project, networking with related initiatives and research projects, and organization of project-related networking events.

The dissemination strategy defines the goals of the communication and the actions to put in place to reach those goals. The main cluster activities identified to promote the OSCAR project are:

- Development of the OSCAR communication pack
- Design and management of the project website and other media communication actions
- Participation and Organization of workshops and dissemination events.

2.5.1 Communication Pack

The OSCAR communication pack is composed of a set of products associated with the project visual identity, such as the logo and overall concept image. It is developed to give consistency to the project communication and to support awareness on the project. The logo and concept image will be a practical framework for all the OSCAR communication activities and products, and it will evolve together with the evolution of the project.

The OSCAR communication pack contains:

- **The project Logo and graphical identity** - The design and development of a logo able to give a conceptual representation of the project has been the first task of the OSCAR dissemination programme. The foremost priority when designing the project logo, was to be graphically appealing, manageable and meaningful with respect to the project goals and activities. The logo constitutes the basis for the project graphical identity; it determines the choices of the colours and fonts adopted in the document templates and in the dissemination products. It is the “trait d’union” of the project, which makes each element of the graphical identity immediately ascribed to the project, helping to consistently communicate and disseminate the project. Several alternatives were created by EASN-TIS and were accordingly circulated to the consortium for selection. After exchanging feedback and voting, the OSCAR official logo

was finalized and it has been made available to the consortium in various file formats, as well as in Black & White.

Figure 3: The official OSCAR logo

- **Deliverable and presentation templates** - Templates have a crucial part in reinforcing the consistent visual language of the project. They have been designed so as to be coherent with the project's established visual identity and to be easily adaptable to the specific needs of the Consortium partners. The templates have been made available to all OSCAR partners to be used for presentations, deliverables and other documents for internal and external communication. Two formats of templates have been produced so far: a Word one for text documents such as minutes and deliverables; and a Power Point format for presentations.
- **Official disclaimer statement** - The OSCAR project is requested by the European Commission to indicate at all times that it has received funding from the European Union using a corresponding sentence, and display the European emblem. The written formula must be reported on all the official documents of the project, including promotional materials and publicity. The official OSCAR disclaimer is: "This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824350".
- **OSCAR dissemination products** - Based on the identification of the relevant stakeholders and their needs, several dissemination products have been selected to be used for the project dissemination, including:
  - Printed flyers and brochures will be produced during the entire duration of the project in connection to public events, to present projects goals, methods and findings. The structure of such products can be adapted to the type of conference and objective of the communication; they will be developed to be easily adaptable in terms of content and style. The textual content will be agreed with the partner attending the conference, so to be as tailored as possible to the conference and its public. The OSCAR brochures and flyers will always be up to date and available for download on the website.
  - Presentations and posters will be prepared for the participation to conferences, workshops and facilitation of events. The presentations for external events will be based on the project presentation template, adapted to the dissemination event. These presentations for external events should contain less textual information and will have a preeminent graphical aspect to attract the target audience. Also, they will contain the main project references such as the link to the project website and the contacts. The public presentations and posters will be available on the project website and can be distributed to the people asking for them.

- Banners will be available to all partners and can be placed on their websites pointing to the OSCAR website.
- Videos represent an easy way to raise awareness about the project and communicate the main concepts related to the project. Videos will be about the project concepts, methods, findings and potential applications. They will be directed to the general public as well as to the other stakeholders, and they allow the consortium to obtain feedback about the project outcomes. They will be embedded in a specific section of the project website and will be promoted through the project social networks and dissemination events.
- Publications for journals and conferences will be prepared and submitted as soon as the project delivers its first results. Partners are regularly invited to submit publications to a number of conferences and journals, to generate understanding on the project activities and engage the stakeholders. The articles' references and, whenever possible, a copy of the publication will be available on the project website.
- Fact Sheets and Press Releases may be used to raise awareness on the project and its progress. Fact Sheets contain concise and tailored information on the project key facts (main findings, lessons learnt, deliverables produced) and running activities in the Consortium and other specific audiences. They can help to introduce new contacts to the results achieved and announcements of project progresses and upcoming events. The delivered time has to be decided inside the consortium. Press Releases are related to the dissemination events and consists in brief reports to be quickly distributed after the event to provide people with notes on the event and illustrate the main outcomes. Press Releases can be distributed via email to the event participants and are always available on the project website.
- E-news/newsletters can be sent to a number of contacts to advertise public initiatives and outcomes. Every public event, dissemination activity or publication of documents can be announced through the e-news and on the website.
- Social media applications will support an easy communication of the project news and open up discussion around the project topics to the general public. The social media selected to be used in the project are LinkedIn and Twitter.

2.5.2 Project website

The OSCAR public website, being a foremost communication tool for creating and maintaining public interest, public awareness and societal acceptance about the project, its results and major impacts, has an essential role in the project dissemination strategy. It is the principal mean of communication of the project objectives, activities and results, and it offers a wide range of functionalities, including document download, information on the dissemination events and links to other relevant websites. It is also important through the OSCAR public website, to create the appropriate communicative environment for each relevant targeted group, so that different audiences will become clearly informed of the project's activities, achievements and impact on the EU research & technological excellence and on the European citizens.

The OSCAR public website will facilitate communication and interaction within the project and will also improve dissemination to specialists, potential users, politicians and public funding authorities, as well as the general public. It will be updated on a regular basis with public information about the OSCAR progress, status of the activities, news and any other relevant communication.

Particular attention has been given to the usability and simplicity of the website in order to facilitate the users in the information search and the contents' comprehension. The information provided by the website has been categorized in a logical and significant way, and the pages have been organized in a simple layout with clear sections and texts.

EASN-TIS has been responsible for the graphical layout, the information architecture and technical implementation of the website. The partners of the consortium will be regularly asked to contribute to the website by providing information, documents, news, or any other material that they consider useful to disseminate the progresses of the project. The website adopts the official “visual identity” and basic colours of the OSCAR logo (i.e. blue, yellow and white); these will be also followed in all public and internal communication documents, for raising public awareness upon the project.

The website contents are organized in seven categories:

- Home, with general information about the project
- About, which illustrates the technical aspects of the project, as the main objectives, the approach of the project and the expected outcomes
- Work plan, presenting the structure of the project and the timeline of the activities
- Consortium, containing information about consortium members;
- Related Projects, linking to other related EU projects and initiatives;
- Products, a section reserved to the downloadable products of the project classified by categories (e.g. brochure, scientific paper, deliverable, etc)
- News & Events, constantly updated with all the relevant information about the project and relevant dissemination events, both internal and external;

A contact form will be also available to recruit people interested in the project who will be included in the mailing list used to distribute the e-news mentioned above.

2.5.3 Dissemination of Results

Under the condition that prior notice of any planned dissemination of own results by one or several consortium partners, including but not restricted to publications and presentations, is given to the other consortium partners before the dissemination occurs, during and for one year after the end of OSCAR, a dedicated monitoring process has been set up. This approach was carefully defined considering that each consortium partner shall not include in any dissemination activity another partner's results or background (data, know-how or information, IPR) without obtaining the owning partner's prior written approval.

Specifically, a beneficiary that intends to disseminate its results must give advance notice (in writing, via e-mail) to the other project beneficiaries of at least 45 days, together with sufficient information on the results it will disseminate. Any other beneficiary may object (in writing, via e-mail) within 30 calendar days of receiving notification. In such cases, the dissemination may not take place unless appropriate steps are taken to safeguard these legitimate interests. Any objection to the planned publication shall be made in accordance with the GA in writing, including an explicit request for necessary modifications, to the coordinator and the partner or partners proposing the dissemination within 30 calendar days after receipt of the notice. If no objection is made within the time limit stated above, the publication is permitted.

Dissemination and exploitation (*the latter as described in section 3.1*) will be both a collective activity managed by the entire consortium and an individual set of actions handled by a specific partner on local level. EASN-TIS is responsible for monitoring all planned dissemination and exploitation activities, so as to ensure that the CA and GA requirements are respected and that the involved parties IPR are adequately protected from unauthorised use or any other kind of misuse. It is worth noting that at all times care will be taken to ensure that knowledge protection rules and requirements stated within the CA and GA are fully respected.

2.5.4 Open access to publications

Publishing is an integral part of the research process and the first aspect the DMP considers is related to the Open Access (OA) to the publications generated within the OSCAR project. To this end, any public documents related to its results, will be available online to any user at no charge.

EASN-TIS, in its role as Dissemination Manager, will ensure that all project related publications can be read online, downloaded and printed. However, as any additional rights such as the right to copy, distribute, search, link, crawl, and mine increase the utility of the accessible publication, efforts will be made to provide for as many of them as possible. In particular, the Dissemination Manager will apply Self-archiving / 'green' Open Access to the project related publication, which will be deposited in a repository of their choice. Precisely, within the project's public website a dedicated area will be created which will be used as a repository for scientific publications. In addition, in order to ensure that the project-related publications will remain publicly available even after the project duration, EASN-TIS will host the OSCAR public website on its own servers.

Finally, the project related publications will also be stored in one of the repositories proposed by EC, such as the Open Access Infrastructure for Research in Europe (OpenAIRE), the Registry of Open Access Repositories (ROAR) and the Directory of Open Access Repositories (OpenDOAR), so as to ensure that these publications will become easily accessible via the popular search engines and that they will be listed in the top of the respective search results. Also, Fraunhofer-ePrints will be used, keeping the sovereignty of data within Fraunhofer while delivering meta-data to OpenAIRE.

Furthermore, the dissemination of knowledge generated with EU funding is inextricably linked to free OA to any peer-reviewed scientific publication made within the context of the project. This aspect is mandatory under Article 29.2 of the Model GA and to meet this requirement, beneficiaries must, at the very least, ensure that any scientific peer-reviewed publications can be read online, downloaded and printed.

- Self-archiving / "green" OA: The author, or a representative archive (deposit) the published article or the final peer-reviewed manuscript in an online repository of their choice, before, at the same time as, or after publication. In this case, they must ensure open access to the publication within a maximum embargo period up to 12 months.
- Open access publishing / "gold" OA: Authors, make a one-off payment to the publisher so that the scientific publication is immediately published in open access mode.

Publications arising from the OSCAR project will be made known preferably through the option of "gold" OA or "green" OA under "Open Access Publishing Agreement" on a case-by-case basis.

2.5.5 Dissemination events

The presence of the project, its main objectives and major outcomes will be shown in numerous suitable events for dissemination.

Realizing the importance of face-to-face communication, OSCAR will arrange one major public event to communicate the project approach and results, advancing visibility. This event will be a good opportunity to invite a specialized audience, related project heads and decision makers to share the main OSCAR results, and at the same time to solicit feedback which will be used as input for further OSCAR activities during its lifetime.

Furthermore, this CSA aims to participate in major public events including the presentation of scientific achievements in conferences and workshops, as a dominant part of the adopted dissemination strategy, so as to enhance the scientific impact enabled, the acceleration of knowledge and refine the project work. Therefore, all consortium partners will be responsible for publishing project results in third party events.

Additionally, the OSCAR Consortium plans to organise one final conference for presenting the project's final results and achievements. It will be considered to conduct the final conference co-located with a larger dissemination event, such as the Aerodays, EASN International Conference, TRA etc.

Table 2: Categories of target audiences and methods of dissemination

Dissemination Products/ Activities	Description	Target Audience	Dissemination Objectives
Website	The project public website will provide information on the project itself, its main objective, activities, results, events and news. Regularly updated with the public information, it allows "presenting" the project and engaging the community.	Interested general public Stakeholders communities Decision Makers	Raise awareness Inform and create understanding Engage
Brochures	Printed brochures will be produced during the project in connection to public events (e.g. conference) to summarize the project's methods, objectives and results. They will be always up to date with the most recent project results. They will be also available for download on the website.	Interested general public Stakeholders communities Decision Makers	Raise Awareness Inform and create understanding
Banners	OSCAR banners will be available to all partners and can be placed on their websites pointing to the OSCAR public website.	Interested general public Stakeholders communities Decision Makers	Raise Awareness Inform and create understanding
Newsletters	E-news will allow keeping the target-groups informed about the project progress and results. They will be sent out to particular and relevant entities or associations and SMEs that will help to raise awareness to the project and/or highlight the latest outcomes, events or news.	General Public Stakeholders communities Decision Makers	Raise Awareness Inform and create understanding
Posters	Posters will be developed for the participation to public events. They should contain brief information on the project achievements and methods. They will be available also in electronic format on the OSCAR public website.	Stakeholders communities Decision Makers	Inform and create understanding

Dissemination Products/ Activities	Description	Target Audience	Dissemination Objectives
Social media channels	For disseminating the project outcomes, also social media applications will be employed.	General Public Stakeholders communities Decision Makers	Raise Awareness Inform and create understanding
Infographics storyboard / visual maps	Infographics, storyboards, visual maps will be produced during the project to easily visualise and communicate the most relevant outcomes generated during the project.	General Public Stakeholders communities Decision Makers	Inform and create understanding
Scientific publications	Papers for scientific journals/conferences will be produced as soon as the project delivers its first results. Partners will be regularly invited to submit publications to a number of conferences and journals.	Stakeholders communities Decision Makers	Inform and create understanding
Public deliverables	Public deliverables will be available on the project website.	Stakeholders communities Decision Makers	Inform and create understanding
Workshops	Several workshops will be organised as interactive events held to achieve specific objectives and to support the implementation of project results through the engagement of stakeholders.	Stakeholders communities	Inform and create understanding Engage
Conferences	National and international conferences will be an important opportunity to share achievements with experts in the field. The events will be selected on the relevance, on the attractiveness for the stakeholders, and on the different transportation modes coverage. One conference will be organised by the consortium at the end of the project.	Stakeholders communities Decision Makers	Inform and create understanding Engage Ensure Impact
Fact-sheets	Fact-sheets or short reports will be created where the information will be tailored to specific stakeholders to facilitate the communication of the key messages.	Stakeholders Decision Makers	Inform and create understanding Engage

Dissemination Products/ Activities	Description	Target Audience	Dissemination Objectives
Final dissemination event	The final dissemination event will target the participation of EC officials, policy makers and main players. The conference will be organised to allow the bidirectional communication between the project team and external stakeholders.	Stakeholders communities Decision Makers	Engage Ensure Impact

2.6 Monitoring and assessment

Monitoring and keeping track of the dissemination progresses and effectiveness is mandatory, in order to determine if the dissemination strategy is achieving the expected results. Qualitative and quantitative indicators have to be defined since the beginning, and even modified during the project, if necessary.

Qualitative key indicators of dissemination effectiveness refer to the achievement of both project and dissemination strategy goals. Quantitative parameters mean both to concretely measure the actions' effectiveness and to evaluate the effectiveness of a selected communication tool.

A first qualitative parameter is **the level of awareness** of the project and its work to the target audiences. The raising awareness reaction may be considered achieved if a wide audience is interested by the dissemination and receives information on the project. Website accesses, search engine performance, number of people attending OSCAR events and presentations, are some of relevant quantitative success parameters.

A second qualitative parameter is the **achievement of a proper understanding of project activities**, in the sense that project key messages are correctly received by the target audiences, thus to generate comprehension on the project itself. The achievement of this communication goal can be measured by follow-up discussions on the communicated contents, requests for further information, downloads of project materials (documents, reports or dissemination material).

Another success parameter is the **level of use of the project results and findings**. This level can be assessed, for example, through the number of further interaction between stakeholders and OSCAR partners, the number of references to the OSCAR results in the stakeholders' official documents and the referred use of OSCAR outcomes in other research activities.

Last but not least, another qualitative assessment parameter to be considered is the **level of influence of the OSCAR outcomes** in relevant documents regarding future policies or practices, Research and Development Programmes, strategic agenda and roadmaps. Although the achievement of this goal could be measured in a very long period, a first assessment can be done through the level of participation of OSCAR in standard consultation processes.

Other general measures identified to monitor the OSCAR impact and communication tools are:

- **Media coverage, press publications and references to the project**. This is the simplest form of measurement, through a record of the number of online articles and scientific articles published on national and international journals. Moreover, the number of references in other scientific publications, but also on stakeholder websites, shall be considered.
- **Number count of publicity material**. As for the press publication, this measure consists in a count of the number of news, brochures, posters and other dissemination means produced and distributed during the project.

- **Record of contacts**. Through the involvement of all OSCAR partners, the number of contacts at the project's events will be tracked, along with the number of people asking for feedback or more information, the website accesses and people subscribed to the mailing list, as well as the contacts through social networks.
- **Number of attended events**. The number of external dissemination events attended by the partners for the promotion or presentation of the project will be recorded. Main topics and characteristics of the attended events, the dissemination products presented (e.g. paper, poster, presentation, brochure and so on) and feedback from the audience will be considered.
- **Participation in project events**. Number of people attending the OSCAR events and characteristics of the audience will be recorded, together with the feedback and comments received during and after the event.
- **Website statistics & Search Engine performance**. Standard analytics tools will be used to monitor the OSCAR website number of visitors, the bounce rate and the position on the search engine. Other data collected on the project website may be: duration of visits, most visited pages, traffic sources, time spent on the website, referral traffic and geographical distribution of the visits.

3 Exploitation

3.1 Overview

Exploitation is generally defined as the use of a project's results at various levels, during and after the projects implementation. Specifically, it is important that project outcomes may influence, or provide sound basis for decision making within the strategic planning of relevant stakeholders, to steer the future calls, to support the decision to fast-track some projects or re-assign project funding.

Exploitation addresses different stakeholders. The partners of a project, each partner individually and the project consortium as a whole, intend to turn their involvement in the project and the project outcomes into profit, to support the development of their current activities, and to possibly lead to the launch of new activities. Research partners may be more oriented to knowledge and technology, while the industries may be more focussed on project outcomes affecting industrialization and commercialization aspects.

At the same time, external stakeholders, namely decision makers, are interested in project results to address future strategies and policies. This is even more true when a project is a Coordination and Support Action (such as the OSCAR project), which is by definition aimed at contributing to the implementation of the Framework Programmes and the preparation of future EU research and technological development policy or the development of synergies with other policies.

The Exploitation Plan shall therefore provide guidelines and actions in order to multiply the impact of the project findings and to ensure the use of results beyond the project itself.

3.2 Goals of OSCAR Exploitation Activities

So far, open science plays a subordinate role in AAT research; it's neither a part of the AAT work programmes (with some exceptions as outlined below) nor is its future implementation systematically researched yet. In the FP7 transport work programme part "aeronautics and air transport" with a total budget of 4.16 billion €, the concept of Open Science was not mentioned at all.

The Advisory Council for Aviation Research and Innovation in Europe (ACARE) as a committee of all European AAT stakeholders develops (amongst others) recommendations to the European Commission on the design of AAT research programmes. Open Science isn't mentioned in its Vision2020 and also not in its follow up vision "Flightpath 2050".

In 2007 the European Commission initiated the launch of a pilot on Open Access in selected fields of the Specific Programmes "Cooperation" and "Capacities". In this context, Transport including AAT was not mentioned. Now in H2020 – thus also in AAT research – Open Access as a step towards Open Science is obligatory. There are several Open Access Journals in AAT research available for example the journal aerospace. OSCAR will perform a deeper examination of their usage, impact, importance.

Based on these considerations, the OSCAR project aims to explore and map the Open Science Landscape in AAT taking every aspect on Open Science into Account. OSCAR strives to identify the main challenges of implementing Open Science in AAT research and to design the Code of Conduct so that the opportunities can be exploited adequately.

Thus, **OSCAR aims to attract** motivated and open minded representatives from the AAT research community and beyond, including administrative and legal staff (as also part of the OSCAR team) to discuss the development of the OSCAR Open Science Code of Conduct and to demonstrate convincingly applicability and benefits. OSCAR will reveal the added value of Open Science in AAT research. It is expected that the benefits will become visible after the completion of OSCAR.

Finally, OSCAR aims to establish "A paradigm shift towards implementation of Open Science in European aviation research has been initiated" to sustain the approach.

3.3 Exploitation Strategy

The exploitation strategy reflects and is built-up as a result of sound analysis of the market trends, needs and potential users. The effective exploitation of the OSCAR results relies on the involvement of target audiences in the project activities at an early stage, thus increasing their awareness of the project, its results and expected impact, and maximising the opportunities of exploitation of knowledge and findings generated. To achieve this, the main stakeholders, either in their role as active partners of the project or members of the Advisory Group, will be consulted on specific needs of the scientific community and society to be considered for a reasonable exploitation from the beginning of the project. Furthermore, a very open and responsive attitude will be adopted, in order to satisfy specific needs and wishes of relevant stakeholders.

Exploitation will follow three operative phases: a starting phase, a trial phase and an expansion phase, as below detailed.

- **Starting Phase.** The Starting Phase covers the initial phase of the project when the future potential stakeholders are identified. During this phase, it will be paid attention to:
  - Identify the potential target groups
  - organize the draft basic information material on the expected project results
  - prepare templates for contact letters, e-mails
  - establish first contacts to the future stakeholders
  - prepare initial marketing surveys and interviews to identify potential demands, specific needs as well as existing level of awareness of relevant topics
- **Trial Phase.** The Trial Phase starts when preliminary results of the project are available. This phase continues also after the end of project since the process of trial, evaluation and optimisation of the results is fundamental for the future success. To reach as many stakeholders as possible, broad dissemination measures are necessary. At the aim, it will be necessary to:
  - prepare specific, tailored information and material on project results and disseminate them
  - contact stakeholders, associations, lobby groups and multiplier organisations during conferences/workshops/exhibitions/other events
  - evaluate and optimise the results by cooperating with stakeholders, also belonging to different than aviation sectors
  - perform national and international information campaigns
  - develop a specific brand for the project results
- **Expansion Phase.** The Expansion Phase concerns the phase after the closure of the project. The scope is to consolidate, expand and extend the introduction of the results in sectors different that the aviation one. Being those sectors possibly outside the aeronautic field but also outside the current scope of the project, this phase could run far beyond the end of the OSCAR project. Possible actions to implement are:
  - to develop follow-up project proposals
  - to define dissemination actions outside the aviation sector
  - to define long-term marketing and dissemination measures
  - to extend the geographical availability of the OSCAR outcomes

3.4 Stakeholder identification

Looking at the goals of exploitation, the main stakeholders to whom address activities are the aviation decision makers, either policy makers, or company management, representatives of the European Commission, H2020 Programme committee, representatives of regulators, etc. A preliminary list of decision makers and European Agencies interested in OSCAR is already reported in Section 2.3 of the current document. During the project, associations and decision makers not directly related

to the aviation world (e.g. automotive, transports, space) will be identified, to further disseminate the OSCAR results.

3.5 Exploitation actions

- The first actions will be performed according to what described in Section 3.3 (Starting and trial phase). A list of point of contacts from each stakeholder, collecting information from all partners and their direct links, in order to establish formal contacts.
- The formation of an Advisory Group (which actually includes partners form universities, research centres, industry, aeronautics operational companies) since the start of the project assures a continuous communication to and support from relevant stakeholders. Furthermore, relevant stakeholders, even if not part of the Advisory Group, will be identified.
- Being more partners also active members of aeronautics associations, a continuous dissemination of results to the stakeholders will be also guaranteed though those members. Furthermore, it is planned to attend selected stakeholders events and to participate to specific meetings to inform on the status of the project, upon invitation.
- Some exploitation actions have been already performed, as below described
  - **Invitation to OSCAR meetings**. INEA was invited and attended the OSCAR Kick-Off Meeting, held on January 9th and 10th, 2019 in Brussels.
  - **Events' participation**. OSCAR has been invited, and accepted the invitation, to participate to a dedicated session on EU policies and running Coordination and Support Actions, in the frame of the 9th EASN International Conference on "Innovation in Aviation and Space". In this aim, the OSCAR coordinator will deliver a presentation of the project, its concept, main objectives and expected impact.

4 Quality

4.1 Comparison of planned activities and performed work

The work performed and the efforts spent are in line with the plan.

4.2 Quality of the results

The results meet fully the quality requirements of the Description of the Action.

4.3 Comparison of objectives and achievements made

D6.1 PDER provides an analysis of potential D&E activities within the framework of OSCAR and a detailed application scenario. Thus, achievements made comply with objectives given.