I-FAST

Accelerator Research and Innovation for European Science and Society

Horizon 2020 Research Infrastructures GA n° 101004730

MILESTONE REPORT

Dissemination plan ready

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ABSTRACT

The I-FAST Dissemination Plan, was developed within the overall I-FAST Communication Strategy following the basic objectives drafted in the I-FAST proposal. The procedures and tools to support dissemination of I-FAST scientific results are setup and functional. The Dissemination Plan is an evolving document, which will be continuously updated to match emerging needs during the lifetime of the I-FAST project.

For more information on I-FAST, its partners and contributors please see https://I-FAST-project.eu/
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Executive summary

The I-FAST dissemination plan is developed driven by the I-FAST ambition regarding timely publication of scientific results, following Open Access and FAIR principles, and is implemented integrating EU developed and supported methods and tools that allow and promote Open Science. It builds on the heritage of the previous EU-funded projects ARIES and EuCARD and expands regarding concepts, methods and tools. The primary tools for disseminating the I-FAST scientific results to scientific communities is publications in peer-reviewed journals, presentations of scientific results in conferences, workshops, network events and the respective conference proceedings, targeted bulletins and newsletters addressed to the scientific communities. These publications are the basis of further communication to broader communities and the public at large.

The main gateway to the external world, making available the I-FAST outcomes, is the I-FAST web page, which serves as a point of access to the different platforms where scientific publications or other public documents and material are stored. The procedures for developing and approving the different types of documents have been setup and publication instructions as well as dedicated tutorials are available for the I-FAST collaborators.

The I-FAST dissemination plan is ready and its implementation well under way. The associated methods and tools were tested and are available to I-FAST collaborators to use. Based on its evaluation and depending on any further requests, based on experience and users' suggestions, it will evolve and improve accordingly.

This MS2 milestone reports on the I-FAST dissemination plan of scientific results to scientific communities. The general communication strategy addressing different audiences is detailed in the deliverable report D2.1 while the internal communication plan is detailed in the deliverable report D1.2.

1. Introduction

The overall I-FAST Communication Strategy includes the development of the I-FAST Dissemination Plan as a milestone report which is described in this document. The main objectives and its specific aims are detailed in Section 3.1.

I-FAST aims at enhancing innovation in the particle accelerator community, mapping out and facilitating the development of breakthrough technologies. The project's 48 beneficiaries and 15 Partner Organisations, including academia, research institutes and industry, will explore new accelerator designs and concepts, advanced superconducting technologies for magnets and cavities, techniques to increase brightness of synchrotron light sources, strategies and technology to improve energy efficiency, and new societal applications of accelerators related technologies.

Consequently, I-FAST will produce a large and diverse array of publications of scientific results, as an outcome of the work of its collaborators, who will endeavour to publish any results as swiftly as possible. Indeed, it is the ambition of I-FAST that dissemination of results will be among and beyond the members of the I-FAST consortium and in a timescale beyond the duration of the project. Thus, the primary goal is to make known the scientific results of the project, first, among all I-FAST participants, promoting cross-fertilization, and then to the broader scientific community, promoting a sense of pride for the achievements of the project's teams.

In general, the impact of a project is proportional to, and largely demonstrated by, its scientific results and their timely publication; primarily the number of publications in scientific journals. This is then the basis of any external communication to broader communities.

Dissemination and communication activities ensure that information about the project, its results and their impact, is going to reach the wider range of audiences, including project members, the wider scientific community, industry, political bodies, and the public with emphasis on students. Thus, publications of scientific results find their way as success stories via communication and outreach events, demonstrating the impact on society, and enhancing the interest and fascination of public for particle accelerators, presenting accelerator science as a way to find answers to societal challenges as well.

Clearly, the basis of everything is the timely, open publication of scientific results and this is the main focus of the I-FAST dissemination plan and of this MS2 milestone document.

The general Communication Strategy, and means to address broader audiences, is detailed in the deliverable report D2.1. The Internal Communication Plan, relevant to the I-FAST members, is described in the deliverable report D1.2

Section 3 provides details on the dissemination procedures (objectives, audiences, messages). Section 4 presents the chosen dissemination tools and Annex 8 summarises the considerations taken into account based on best practices of the previous EU-funded projects ARIES and EuCARD. Section 5 details the status of their implementation, including evaluation and future improvements. Section 6 presents conclusions and outlook.

2. Background

Within WP1 “Management, coordination and dissemination”, the Task 1.3 “Internal Communication and Dissemination” foresees the preparation of the “Internal Communication Plan” as deliverable D1.2 and of the “Dissemination Plan” as Milestone MS2. The exact formulation of the I-FAST respective Tasks in the Work Plan (Annex II) that guided the development of these plans is reproduced for convenience in Annex 9.

A summary of consideration that were taken into account during the first exploratory phase of the I-FAST dissemination plan is presented in Annex 8. Particular emphasis was given on the experience of the previous EU-funder projects ARIES and EuCARD, taking note of what worked efficiently and what could be improved given the evolution of concepts and tools. I-FAST builds on the heritage and continues on the spirit of these previous EU projects; it addresses the common members of ARIES and EuCARD consortia and expands with new members. Hence, it benefits from the culture of open collaboration and exchange of ideas that has been created and aims at enhancing it. All these members, that operate (very) large-scale world-renowned accelerator infrastructures or contribute to their construction and upgrades or to the R&D for future infrastructures, are striving to advance in all fronts and contribute with their competencies for the advancement of the whole scientific community. Therefore, they are all aware and sensitive to the importance of dissemination of their scientific results. Thus, I-FAST benefits from the input of the members that worked already together as a team and is open to the ambitions and suggestions of new collaborators on approaching topics of common interest such as dissemination and exploitation of their scientific results.

This I-FAST milestone document MS2 describes the main principles and requirements that led to the development of the I-FAST dissemination plan of its scientific results to the scientific communities focusing on their proper publication procedures. It also describes best practices, the chosen methods and technical solutions, as well as the current status of implementation and evaluation of procedures and tools. The dissemination plan is an evolving document, which will be continuously updated to cover any emerging needs during the lifetime of the I-FAST project.

3. I-FAST dissemination strategy

3.1 Objectives

The I-FAST overall communication goals are:

1. Implement efficient knowledge sharing among the project participants;
2. Engage the wider scientific community with the project developments;
3. Facilitate the knowledge transfer between academia and industry;
4. Engage the public with accelerator science and its applications;
5. Demonstrate the impact of the project to the public and policy makers;
6. Demonstrate the project is on track and its objectives are achieved.

The main objectives of I-FAST, regarding its dissemination plans, is to:

- provide timely information about its scientific results;
- facilitate the communication of publications of its scientific results to EU;
- provide a platform, which can respond to the requirements of Open Access, ensuring that readers are granted access to its scientific output without financial, legal or technical barriers;

- provide a platform, which can respond to the requirements of the FAIR principles and modern publishing procedures and tools (see Annex 6).

The main objectives behind the rationale of Open Access to scientific peer-reviewed publications are the benefits for:

(a) science, since it allows scientists to build on previous scientific results avoiding duplication of efforts and leading to improved quality and greater efficiency;

(b) economy, since it allows speeding up of innovation and faster progress to markets;

(c) society, since it allows making research available to individual citizens and non-profit organisations with greater transparency.

All these objectives are aligned with the I-FAST objectives and ambitions; therefore, they are the "driving force" behind the development of the I-FAST dissemination plan.

One of the main aims of the I-FAST dissemination plan is to setup efficient procedures and modern dynamic tools, promoting and facilitating collaborative work, following up the life-cycle of documents in an interactive clear way, from its initial development stages to final publication. The aim is to delegate responsibility to the Work Package Coordinators and Task Leaders that are provided with dedicated internal collaborative space for the development of documents (as described in deliverable D2.1 "Internal Communication Plan"), and are instructed, and are responsible, to make available the final approved versions to the broader scientific communities, and the public at large, using the setup I-FAST publication procedures and tools (see Annex 2).

With the aim to facilitate the process of open access publication, the I-FAST dissemination plan also includes setting up and testing of procedures and associated tools as well as the preparation of explicit guidelines for the I-FAST collaborators. To further support the I-FAST members the dissemination plan also foresees the preparation of targeted tutorials. Support and monitoring is going to be provided by the project management team. The aim is to continuously improve the setup procedures and tools based on evaluations and feedback of the Work Package Coordinators and Task Leaders who are asked to also report on the publications status of their work packages during the Steering Committee meetings.

3.2 TARGET AUDIENCES

The main target audiences are the broader scientific community, and most importantly, the experts' groups of the accelerator community and European industry, that are as diverse as the topics that are being explored by I-FAST; having direct contacts to industry should facilitate, fast and efficient follow up and exploitation of scientific results on a broad variety of topics that are investigated by the I-FAST collaborators.

In general, dissemination to industry, political bodies and the public at large is addressed by the Communication Strategy, and presented in the deliverable D2.1. In a holistic approach, I-FAST aims at disseminating its results targeting different communities and utilising different means as detailed in the general communication strategy, acknowledging and responding to the importance of centralised coordination of initiatives in the field of dissemination, communication, and technology transfer.

3.3 MESSAGES

A summary of the different audiences, the related communication needs and information, the appropriate channels and expected outcomes is presented in the table below. The I-FAST communication team is creating content that is fit for multiple channels and audiences. In addition, specific communication activities are being designed to reach specific audiences including the project's participants, the accelerator and wider communities that are the primary targets of the dissemination plan.

Audience	Information needs	Drivers	Channels/Platforms	Outcome
Project participants	Project information; updates on work plan implementation (events, results), outreach materials	Community spirit; career development	Website, mailing lists, project meetings	Engagement with project results; sense of pride
Accelerator & wider scientific community	Main advancements in accelerator science; opportunities to collaborate	Scientific excellence; peer recognition; funding	Newsletter *Accelerating News;* beneficiaries' and projects' channels; community events	Identifying common challenges, knowledge sharing, closer collaborations
Undergraduate students	Main advancements in accelerator science; career opportunities	Peer recognition; career development	Challenge-Based innovation programme (Task 2.3)	Attract talent; support next generation of researchers
European Industry	Academic publications, potential knowledge-transfer opportunities,	Innovation; job creation; collaboration	Academia Meets Industry events organised by I-FAST; beneficiaries' channels	Knowledge and technology transfer, joint R&D
Funding agencies & decision-makers	Summary of results; project impact; policy recommendations	Scientific excellence; economic and societal impact	Website, newsletter *Accelerating News*, marketing material (e.g. brochure)	Support to project community; demonstration of return of investment in accelerator S&T
Public	Societal impact of accelerator technologies	Curiosity, societal impact	Social media, including the beneficiaries' channels; public talks	Support for fundamental research

3.4 Open Access Policy And Intellectual Property Rights

The I-FAST dissemination plan of scientific results follows the Horizon2020 and Horizon Europe directives and is based on the principles of Open Access. As a first step, it includes the exploration of different options and the recommendation of appropriate open access platforms that implement the FAIR principles so that the data are Findable, Accessible, Interoperable, Reusable (see Annex 5 and Annex 6). The basic points are summarised in a "leaflet" made available via the I-FAST web page and appended in Annex 3.

The I-FAST dissemination plan is shaped following the EU relevant guidelines, in order to ensure that readers are granted access to the I-FAST scientific output without financial, legal or technical barriers. I-FAST plans to follow both the "Gold Open Access" and the "Green Open Access" promoting open access publishing and self-archiving respectively (see Section 5). Accordingly, the I-FAST Publications Guidelines (see Annex 2) summarise the main points facilitating the publication process and ensuring that such requirements are implemented. It is clearly stated that each beneficiary must ensure open access to peer-reviewed scientific publications relating to results according to the article 29.2 of the project's Grant Agreement.

It is also clarified that Open Access is not a requirement to publish and researchers are free to decide whether to publish or not. Open access does not affect the decision to exploit research results commercially (e.g. through patenting). Therefore, the decision to publish through open access comes after the more general decision on whether to publish directly or to first seek protection of Intellectual Property Rights.

Intellectual Property Rights

In general, the principles for dissemination, access and use of results generated through I-FAST fully comply with the "Rules for Participation and Dissemination in Horizon 2020". Access to Results and Background and ownership of results follows the principles set out in the EC Grant Agreement. Furthermore, the Consortium Agreement defines the procedures for publication, taking into account the potential for commercial exploitation and/or the need for protection of Intellectual Property Rights (IPR) of the concerned results, with due consideration of the IP practices of all participants. Indeed, I-FAST aims at implementing efficient management of IPR, which is essential for successfully exploiting the research results of the project and for protecting the interests of the institutes and companies that have produced these results. Therefore, an experienced staff member of the Knowledge Transfer Group of CERN, assigned as Coordinator of the WP4 "Managing Innovation", acts as a liaison between the beneficiaries to ensure that ownership of new IP is adequately distributed and protected.

It is expected that some of the main exploitable I-FAST results will have a wider impact beyond the specific project targets and objectives. Since these will constitute the I-FAST "flagship results" they will be disseminated to larger scientific and public audiences.

4. I-FAST dissemination tools

4.1 Overview

In order to achieve the set objectives, and address the information needs of the target audiences the I-FAST dissemination plan consists of setting up and using the following basic channels and platforms for dissemination of its scientific results (among its members and the broader scientific communities primarily):

- Web page and its linked communications channels and documents repositories;
  - Zenodo repository
  - CERNbox repository
- Intranet document space (SharePoint);
- Conferences and workshops
- Network events
- Project meetings (in-person or online);
- Scientific Journal publications
  - Open Research Europe
- Accelerating News online Bulletin;
- Project Newsletters online Bulletin

4.2 Dissemination Tools Details

In addition to publishing in scientific journals, different opportunities for immediate dissemination of results to the scientific communities are foreseen through presentations at conferences, organisation of open workshops or network events but also communication to the scientific communities via newsletters and bulletins. Proper archiving of all these kinds of documents, ensuring their accessibility, is of paramount importance and set the requirements for the development and implementation of the I-FAST dissemination plan and tools (see Section 5).

Project website: As part of its overall dissemination and communication plan, I-FAST provides information about its activities and results, foremost and most importantly, among all I-FAST members. Naturally, the primary tool for dissemination and communication is the project's website which acts as central information hub and is the gateway to different information channels and/or platforms including news and announcements, upcoming events, newsletters, publications, among others. Through the I-FAST web site announcements of upcoming events are posted including major conferences where I-FAST participants are encouraged to present their scientific results. More details on the I-FAST Web Site are given in Section 5.2 and Deliverable D2.1 "Communication Strategy".

Newsletters Bulletins: Among the different means that I-FAST plans to use to disseminate its results is an **electronic Project Bulletin,** foreseen within Task 2.2 as part of the overall communication plan. It will be distributed to all partners on a quarterly basis, with exceptions for special announcements, in order to facilitate sharing project-specific information and activities among the I-FAST members. This is going to contribute to creating a spirit of community, sharing the common I-FAST achievements among all members. This is complemented with specific articles in the well-established quarterly electronic newsletter **Accelerating News** which is reaching a community of 1500 subscribers (https://acceleratingnews.web.cern.ch/) and where the I-FAST members are also encouraged to subscribe. They are also encouraged to share the content from their institutes and to become active contributors of the newsletters disseminating their I-FAST activities. This is going to promotes sense of pride and motivation for further future developments. Further details are included in Deliverable D2.1 "Communication Strategy".

5. I-FAST Dissemination Plan Implementation

5.1 Overview

The I-FAST web page (https://I-FAST-project.eu) is set up as a central information hub; it also links to the I-FAST internal communication intranet https://espace.cern.ch/project-I-FAST-Intranet/, accessible from the I-FAST home web page but with restricted access to I-FAST members only. While the I-FAST web page is used for the dissemination of results to the scientific communities and communication to general public, the internal communication space is designated to the Members and Partners of the I-FAST community and tailored to their needs, primarily, for the development of documents and efficient flow of information. Documents are being developed in a dedicated collaboration space, accessible only to the I-FAST collaborators (I-FAST intranet based on SharePoint); their final published version is stored in appropriate open access repositories (Zenodo and CERNbox) and are made available via the I-FAST web page. Details on the I-FAST intranet are given in the I-FAST Internal Communication Plan, deliverable D1.2. This document describes further the I-FAST Zenodo (Section 5.3) and CERNbox (Section 5.4) repositories as well as the I-FAST web site (Section 5.2) regarding its usage for making publicly available the I-FAST results.

In the editorial process and life-cycle of documents the Work Package Coordinators and Task Leaders play a key role. Documents are developed internally, within the different tasks/groups intranet dedicated space, under their supervision, using modern dynamic tools facilitating editing and approval procedures, allowing for documenting versions while avoiding copying documents as much as possible. They make sure that documents, after their final approval, become available externally, which is the key point for dissemination to broader scientific and other communities. They are responsible to submit the (a) final published versions of scientific publications to the I-FAST Zenodo repository and (b) the EU contractual documents, such as deliverables and milestones, to the I-FAST project management team that then submits them to the EU portal. The final versions of these documents are also stored in the I-FAST dedicated CERNbox space as a backup solution, and are made visible via the I-FAST web page (see Section 5.2).

5.2 I-FAST Web Page And Results

The project website **(** https://I-FAST-project.eu **)** was setup within Task 2.2, dedicated to communication tools, using the modern dynamic features of the Drupal software. It links to the I-FAST internal work space dedicated to internal work and accessible only to the I-FAST members, as described in Deliverable D2.1 “Communication Strategy”.

The I-FAST web page https://I-FAST-project.eu is foreseen as the main gateway and communication tool of I-FAST to the external scientific communities and the “external world” in general. It acts as a central information hub including upcoming events, news and announcements as well as specific sections for specific audiences. It hosts information about the project work programme and corresponding results making publicly available publications but also deliverables and milestones without confidential content. Hence, it serves as a point of access for the publication database and therefore as a self-archiving repository in Green Open Access mode.

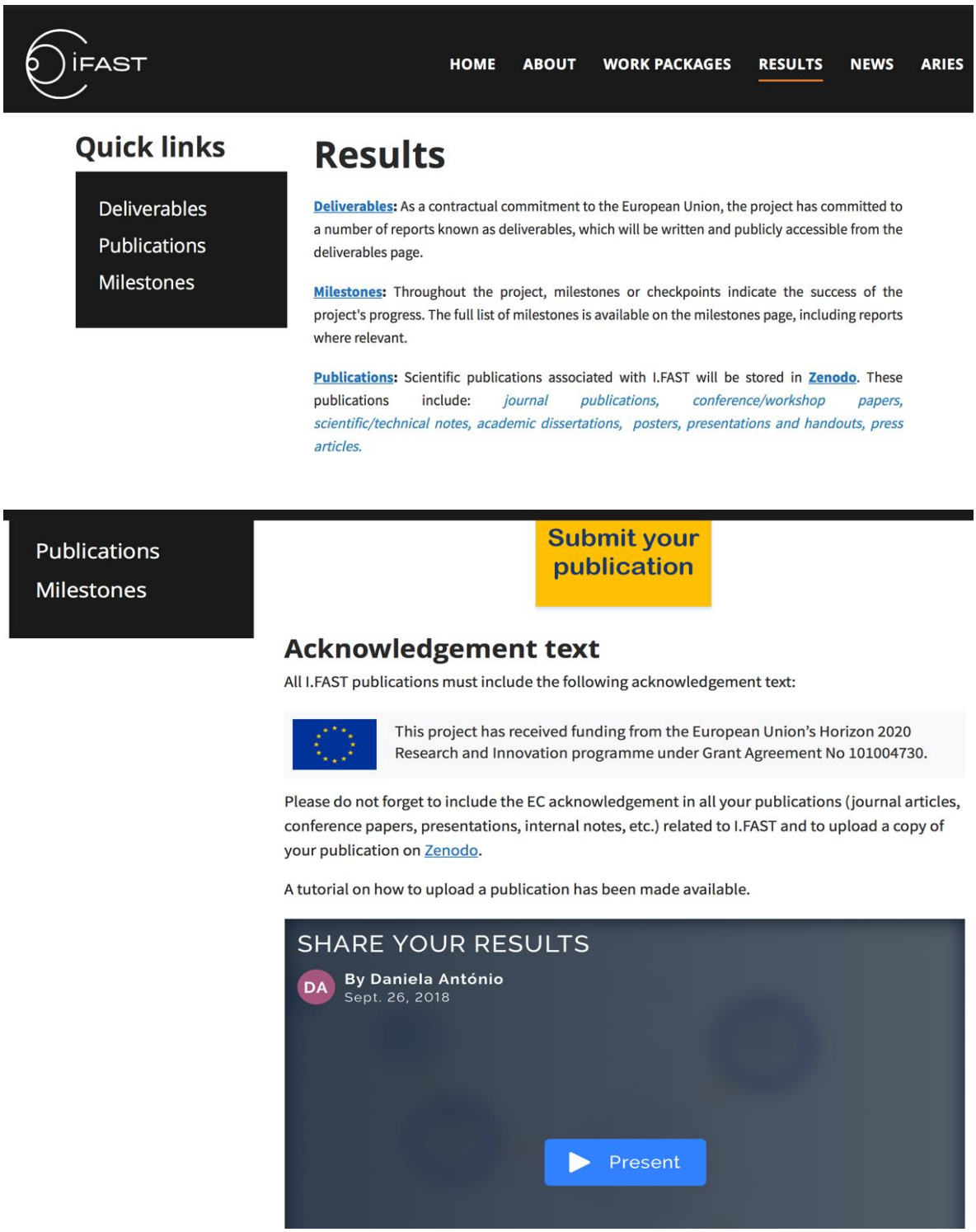


Figure 1. The I-FAST web page through its "tab" RESULTS from its top bar makes publicly available reporting document such as deliverables and milestones with no confidential information and also publications of scientific results including journal articles, conference papers, presentations etc. It also makes available a tutorial on how to upload publications to the I-FAST Zenodo and the Acknowledgement text, mandatory to add in every I-FAST publication.

Through the well-visible tab "Results" (Figure 1a) the dedicated web page https://I-FAST-project.eu/results, provides a unique channel to the I-FAST Publications, Deliverables and Milestones. The tabs of "Deliverables" and "Milestones" link to the dedicated web pages where their corresponding tables summarise their titles, the work package and task by which they will be delivered as well as their due date and status. The plan is to make the final Deliverables and Milestones reports accessible immediately after their approval and submission via the I-FAST Zenodo repository and via links to their I-FAST CERNbox location (which provides also an additional backup storage solution.)

The "field" of Publications is directing to the dedicated web page https://I-FAST-project.eu/publications which serves several purposes. First, it links to the I-FAST Zenodo dedicated space https://zenodo.org/communities/I-FAST/?page=1&size=20 where all publications of the I-FAST "community" are stored and which provides a search bar to facilitate access to a specific publication or specific types of documents (Figure 2). The I-FAST "Publications" web page also provides, in one place, all the necessary information and instructions for publications including, via direct links, the one-page "Publications Guidelines" and the "Acknowledgement" text with the EU Logo giving explicit instructions to I-FAST collaborators to include it in all I-FAST publications. It also provides a video-tutorial on how to upload publications in Zenodo (Figure 1b).

Finally, it provides information on EU Open Access publications guidelines (see Figure 3) via the dedicated links to the H2020 Online Manual and the H2020 directives leaflet on Open Access to scientific publications. For details on the specific I-FAST "Publications Guidelines" see Annex 2.

5.3 I-FAST ZENODO REPOSITORY

After reviewing the experiences on tools and procedures implemented for the previous EU projects ARIES and EuCARD and investigating different available options, Zenodo was chosen as the appropriate repository for all I-FAST publications. Zenodo is an open repository (http://zenodo.org) which provides a common platform for Open Access to Horizon 2020 results across various scientific fields and is integrated into reporting lines for research funded by the European Commission via OpenAIRE (http://openaire.eu). Hence, the "Green" standard in I-FAST takes the form of self-archiving in Zenodo all I-FAST publications including journal publications; conference and workshop papers; scientific and technical notes and reports; academic dissertations; posters; presentations; handouts and flyers; and press articles.

Since reporting documents stored in Zenodo are being picked up by the EU portal, making documents available via Zenodo also establishes a convenient and straightforward reporting link.

The I-FAST dissemination plan consciously subscribes to the FAIR principles and easily adopted them since the Zenodo principles are compatible with FAIR principles as summarised in Annex 5 and Annex 6 and the Zenodo dedicated web page https://about.zenodo.org/principles/. Hence, the I-FAST documents, as any data stored in Zenodo are Findable, Accessible, Interoperable, Reusable. Zenodo responds to the requirements of modern publishing procedures providing several features, as described in Annex 5 and the Zenodo web site. In more technical terms, one of the main requirements is a robust database with an efficient search engine. In fact, the name Zenodo derived from Zenodotus, the first librarian of the Ancient Library of Alexandria and father of the first recorded use of metadata, a landmark in library history. Since proper use of metadata is behind an efficient search engine this was one of the main criteria leading to the choice of Zenodo.

The I-FAST dedicated "community space" in Zenodo (Figure 2) has been created and is accessible, and ready for use, under the link: https://zenodo.org/communities/I-FAST/?page=1&size=20

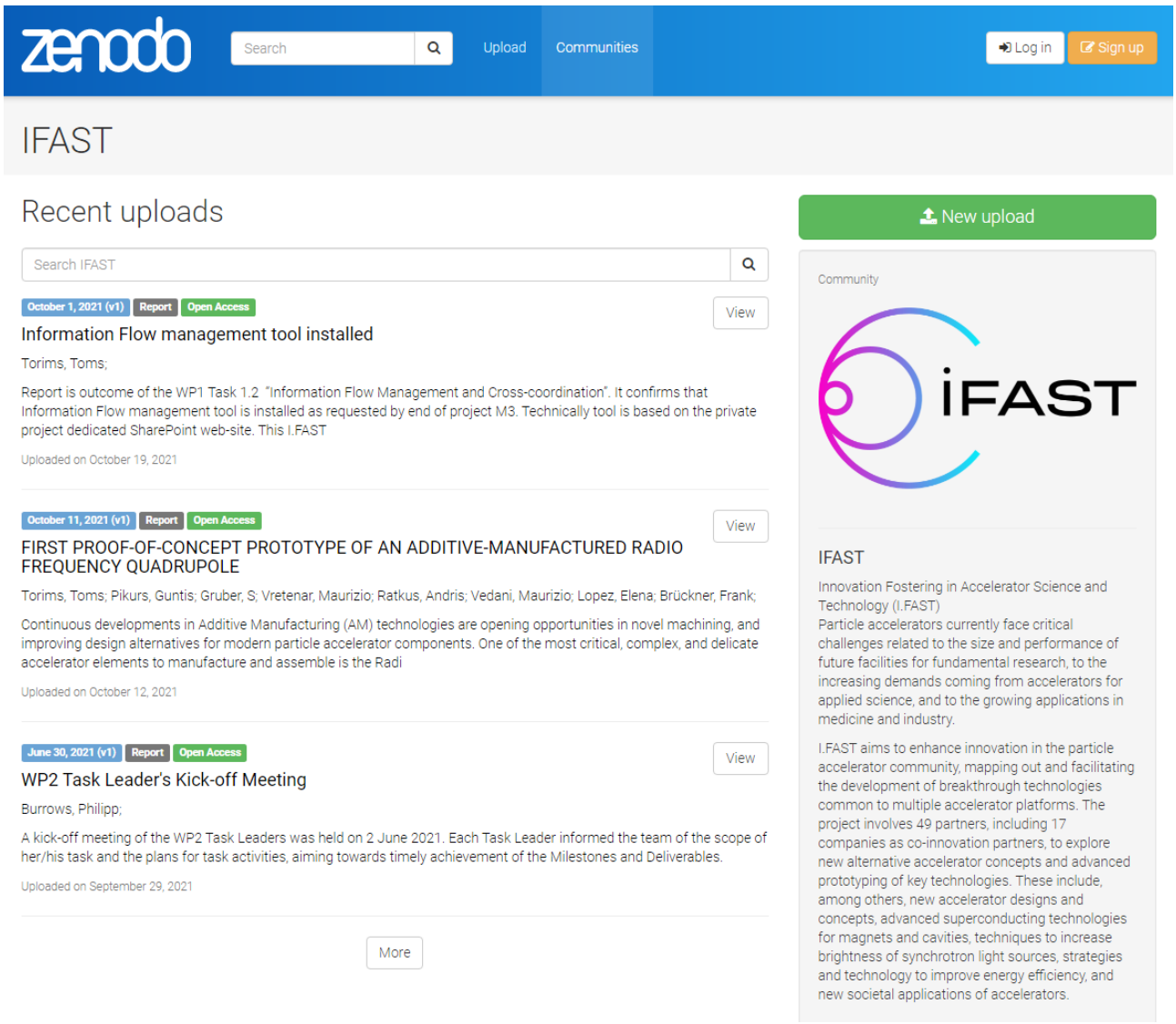


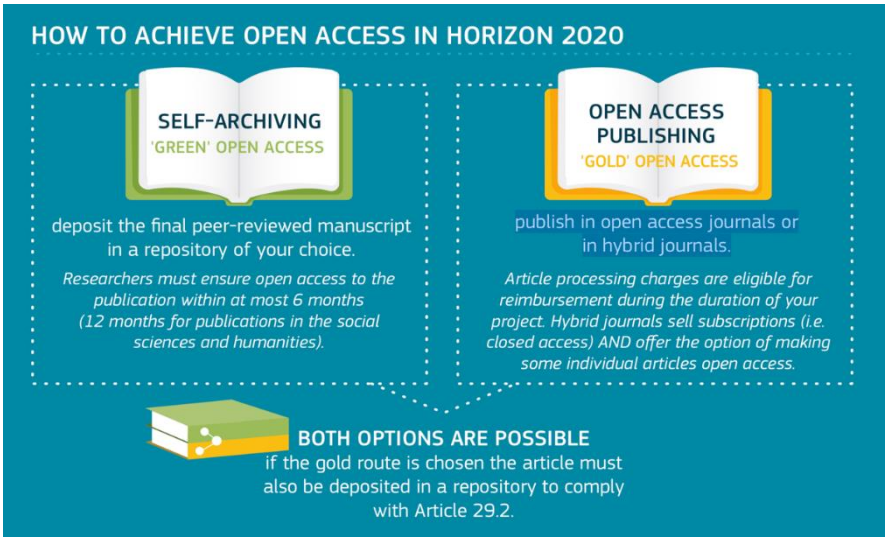
FIGURE 2. The I-FAST Zenodo community space is set up to host the I-FAST publications including nnnnnn

5.4 I-FAST CERNBOX REPOSITORY

An I-FAST dedicated CERNbox (see Annex 4) space has been created with the aim to store the final approved versions of EU contractual documents, such as deliverables, milestones and periodic progress reports, which are delivered to the EU portal by the project management team, providing a document storage backup solution. These documents are also submitted to the I-FAST Zenodo repository and are linked via the I-FAST web page thus becoming available to scientific communities and broader public.

5.5 OPEN RESEARCH EUROPE

The new European Commission Scientific Publishing Service, Open Research Europe https://open-research-europe.ec.europa.eu provides all Horizon 2020 and Horizon Europe beneficiaries and their researchers with an easy, high quality peer-reviewed venue to publish results in open access, at no cost to them, and in full compliance with EU open access policies. The article guidelines for publishing in the platform have been released and submissions have been possible since early December 2020. The platform uses a model of immediate publication of submissions followed by transparent, invited and open peer review with inclusion of all supporting data. The names of the reviewers are open, as well as their reviews, which are also citeable. Its features are summarised in Annex 7.



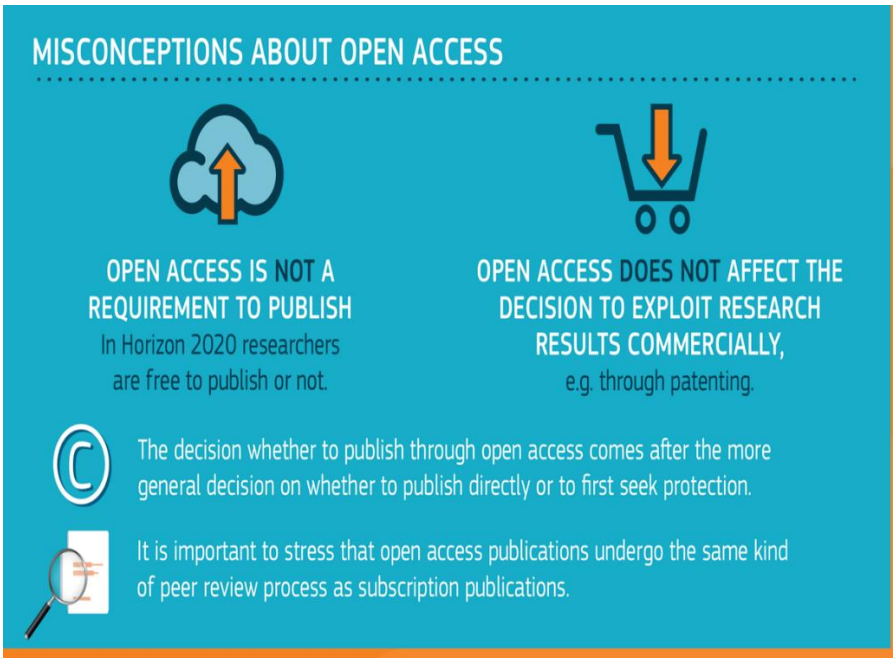


FIGURE 3: (a) Guidelines on open access in Horizon2020 for "Gold" and "Green" standards. (b) Clarifications on open access publishing and commercial exploitation of scientific results after seeking protection of intellectual property rights.

5.6 Evaluation and Future Improvements

During the first few months of the project, the majority of published documents, making use of the setup procedures and tools, were mostly reporting documents, deliverables and milestones. As the work of the I-FAST groups advances, publications of scientific results are expected to increase; those are going to provide the basis for further dissemination to broader communities. Currently the feedback of the I-FAST collaborators, testing and using the setup dissemination tools, is positive while further evaluations and surveys are planned. Within the overall communication plan (WP2 and WP1) several improvements are planned already aiming at supporting the I-FAST collaborators during the documents development and publication procedures; and ultimately enhancing the sense of pride for all members of I-FAST making their achievements known to broader communities. Details are provided in the Deliverable D1.2 “Internal Communication Plan” and Deliverable D2.1 “Communication Strategy”.

6. Conclusions and Outlook

The I-FAST Dissemination Plan, described in this document, was developed within the overall I-FAST Communication Plan and Strategy following the basic objectives drafted in the I-FAST proposal. A coherent set of procedures and advanced tools are in place. With the support of the Project Management Team and dedicated tutorials the I-FAST members are becoming familiar with the setup procedures and tools and start using them. The I-FAST Dissemination Plan will naturally evolve and, in continuous coordination with the Project Management and Communication team as well as the Work Package and Task Leaders, will provide and maintain a coherent set of procedures and tools to match any needs that may arise at the different stages of the lifetime of the project.

Annex 1: Glossary

Acronym	Definition
PMT	Project Management Team
WP	Work Package
GB	Governing Board
SC	Steering Committee
SAC	Scientific Advisory Committee
IAB	Industry Advisory Board
ICP	Internal Communication Plan
IPR	Intellectual Property Rights

Annex 2: I-FAST publication guidelines

The I-FAST Publications Guidelines summarise conveniently, in the form of a concise one-page leaflet (Figure Annex 2.1), the basic rules and necessary links, implementing the directives of Horizon2020 and Horizon Europe on Open Access. They are also available via the I-FAST web page and I-FAST internal communication space (SharePoint intranet, Figure Annex 2.2) https://espace.cern.ch/project-I-FAST-Intranet/_layouts/15/WopiFrame.aspx?sourcedoc=/project-I-FAST-Intranet/Shared%20Documents/Graphical%20identity%20and%20templates/Publications-guidelines_v2.docx&action=default.

Notably, the I-FAST collaborators are explicitly asked to deposit a machine-readable electronic copy of the published version or final peer-reviewed manuscript accepted for publication in a repository for scientific publications. In particular they are instructed to submit to the I-FAST Zenodo all their scientific publications related to the I-FAST project and are given the direct link to the I-FAST Zenodo dedicated community space for fast access https://zenodo.org/communities/I-FAST/?page=1&size=20. The I-FAST Publications Guidelines also provide the exact text for "Acknowledgement" with the EU grant agreement fund number and EU logo; and they remind the I-FAST collaborators that it is mandatory to use them for all their publications.

The I-FAST collaborators are also made aware that publications can now be submitted to the new European Commission Scientific Publishing Service of Open Research Europe (see Annex 7) that provides a peer-reviewed venue, at no cost, compatible with open access policies and are given the direct link https://open-research-europe.ec.europa.eu

"Gold standard" (see Annex 3), is preferred for peer-reviewed publications. Among the listed examples in the I-FAST Publications Guidelines regarding "Gold Open Access" journals or repositories is "Physical Review Accelerators and Beams" which is a peer-reviewed, purely electronic journal, distributed without charge to readers and funded by sponsors from national and international laboratories and other partners. Publications are also expected to be submitted in particular to "Physical Review Letters" (gold open access if the authors pay), which has the highest-impact factor for accelerator papers. Articles are also published by the American Physical Society under the terms of Creative Commons Attribution 3.0 License. Examples of other journals used for scientific and technical results published in peer-reviewed journals are: IEEE Transactions on Applied Superconductivity, Applied Physics Letters, Superconductor Science and Technology among others.

Among the listed examples of "Green Open Access" (see Annex 3) repositories for self-archiving are ArXiv.org, inSpireHEP.net, JACOW. The accelerator community has a long tradition of publishing scientific results in conference proceedings. Therefore, I-FAST will make extensive use of JACOW, the Joint Accelerator Conferences Website (http://jacow.org). JACOW is an international collaboration that publishes the proceedings of international accelerator conferences, whereby all conferences agree to the policies and requirements for Open Access publication. At present JACOW hosts the proceedings of some 20 of the most popular accelerator conferences including major international conferences such as the "International Particle Accelerator Conference" (IPAC) and International Instrumentation Conference (IBIC).

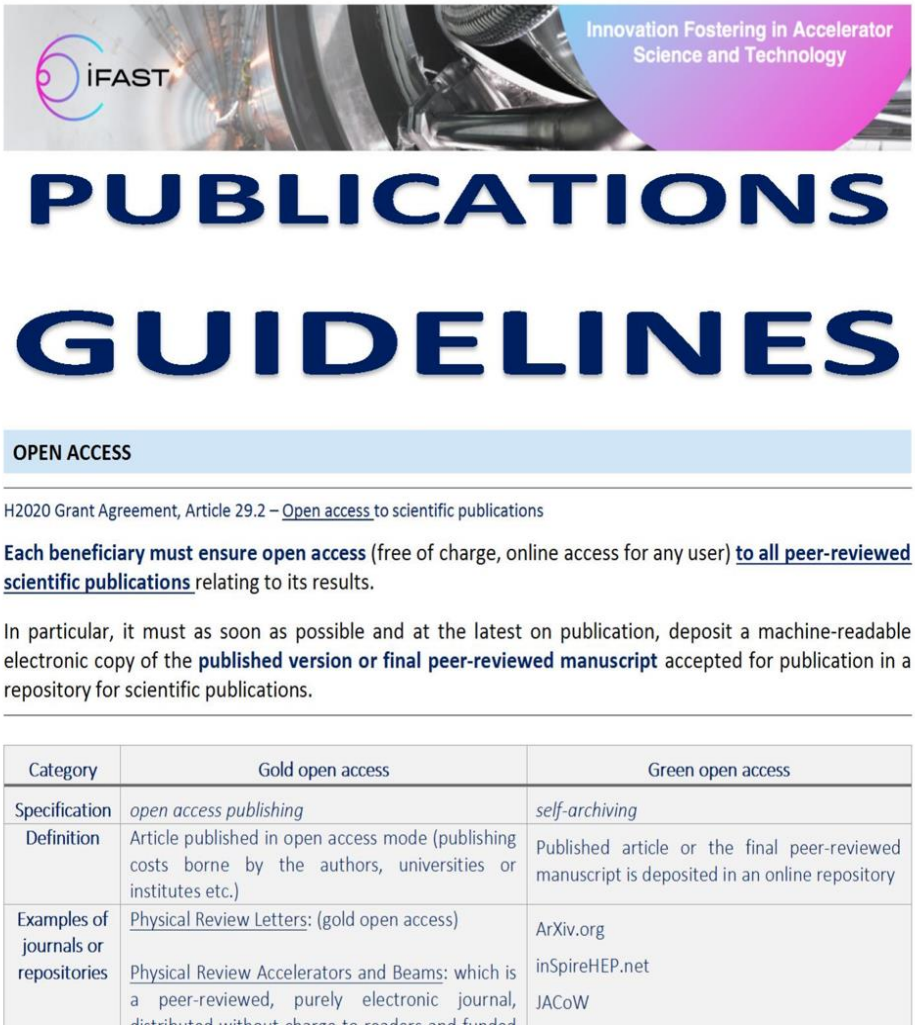


FIGURE 2.1: The I-FAST Publications Guidelines summarise the main points and facilitate the process of open access publications of I-FAST scientific results.

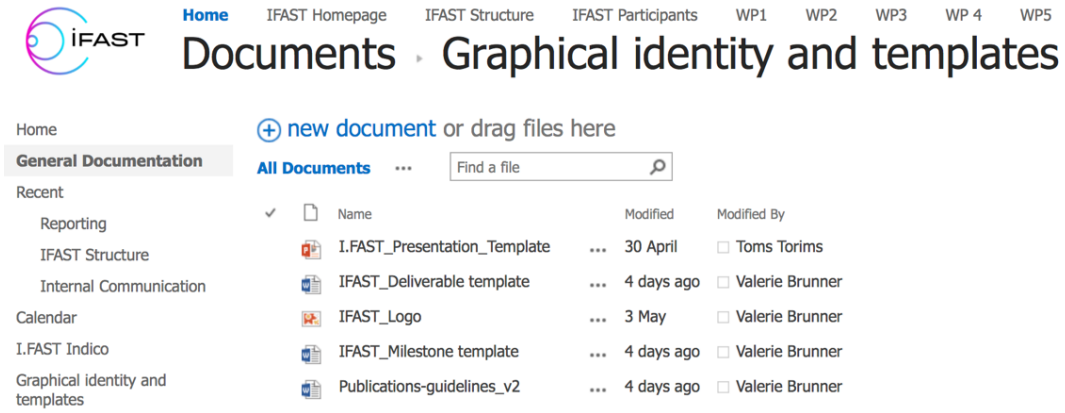


FIGURE 2.2: The I-FAST documents are developed in the I-FAST internal dedicated SharePoint intranet following the I-FAST Publications Guidelines and are made publicly available via the I-FAST web page after their final approval.

Annex 3: Open Access Options

In Horizon2020 and Horizon Europe, Open Access can be achieved via two options: (a) "Gold Open Access", which is based on "open access publishing", i.e. publishing in open access journals or in hybrid journals. In this case, article processing charges are eligible for reimbursement during the duration of the project and the article must also be deposited in an open access repository to comply with article 29.2 of the project's Grant Agreement. (b) "Green Open Access", which is based on "self-archiving", i.e. depositing the final peer-reviewed manuscript in an open access repository. In general, the aim is to ensure open access to the publication within at most six months.

Open access is not a requirement to publish and researchers are free to decide whether to publish or not. Open access does not affect the decision to exploit research results commercially (e.g. through patenting). Therefore, the decision to publish through open access comes after the more general decision on whether to publish directly or to first seek protection (see also Figure 3).

Open access publications undergo the same kind of peer-review process as subscription publications. The rationale behind Open Access is summarised also via the I-FAST web page highlighting the different options and benefits. https://I-FAST-project.eu/sites/I-FAST.web.cern.ch/files/2021-06/Open%20Access%20to%20scientific%20publications.pdf

Annex 4: CERNbox

CERNBox https://cernbox.cern.ch/cernbox/doc/index.html
is a cloud synchronisation service for end users tailored to the professional needs of particle physics researchers; it provides cloud data storage that can be accessed from any Web browser or file explorer and can be shared and synchronised across different devices (smartphones, tablets, laptops, desktops) running different operating systems (Windows, Mac, Linux, iOs and Android). It also integrates with some applications to allow collaborative editing of interactive notebooks for Physics analysis, as well as other products. Details are given in the User Manual at https://cernbox-manual.web.cern.ch .

Annex 5: Zenodo

To support Open Data policy, the OpenAIRE http://openaire.eu project was commissioned by the EC, to provide a catch-all repository for EC-funded research. Zenodo was built within the OpenAIRE project while CERN, an OpenAIRE partner and pioneer in open source, open access and open data, provided these capabilities. Built and developed by researchers to ensure that everybody can join in Open Science, the Zenodo code is itself open source. It is built on the foundation of the battle-tested Invenio digital library https://inveniosoftware.org, which is used by some of the world's largest repositories and many large projects, and which is also open source. Thus, through Zenodo these tools can be shared and contribute to open science.

In summary, Zenodo provides a storage solution which is safe and trusted promoting peer-reviewed openly accessible research. Any file format is accepted, as well as negative results. Every upload is assigned a Digital Object Identifier (DOI) to make them citeable and trackable. Uploads are made available online as soon as they are submitted and the DOI is registered immediately.

Versioning features allow for updates of submissions and tracking them. Metadata and persistent identifiers are stored (12-hourly backup cycle). It is possible to revise, edit and complement keywords after submission for more efficient search. Zenodo further supports harvesting of all content via commonly used protocols such as the OAI-PMH protocol. Integration with GitHub, https://github.com the largest and most advanced development platform in the world, used to build, ship and maintain software, allows easily to preserve the GitHub repository in Zenodo. All uploads display standard compliant usage statistics. Uploading under a variety of different licences and access levels is possible; publications can be "open" or "closed" allowing for sharing e.g. anonymized clinical trial data only with medical professionals via restricted access mode.

More details and the complete list of Zenodo features can be found via dedicated web pages together with the "search guide" and "help"

ABOUT: https://about.zenodo.org
FEATURES: https://help.zenodo.org/features/
INFRASTRUCTURE: https://about.zenodo.org/infrastructure/
HELP FAQ: https://help.zenodo.org
SEARCH GUIDE: https://help.zenodo.org/guides/search/

Annex 6: FAIR principles

The I-FAST dissemination plan consciously subscribes to the FAIR principles and easily adopted them since the Zenodo principles are compatible with FAIR principles as summarised in the Zenodo dedicated web page https://about.zenodo.org/principles/. The I-FAST documents, as any data stored in Zenodo are Findable, Accessible, Interoperable, Reusable.

Findable: because (meta) data are assigned a globally unique and persistent identifier, and a DOI number is issued to every published record on Zenodo. Data are described with rich metadata that are indexed and searchable.

Accessible: because **(**meta) data are retrievable by their identifier using standardized communications protocols (OAI-PMH protocol or through RSET API) and the protocol is open, free, and universally implementable.

Interoperable: because (meta)data use a formal, accessible, shared, and broadly applicable language for knowledge representation; (meta)data use vocabularies that follow FAIR principles; (meta)data include qualified references to other (meta)data.

Reusable: because (meta)data are richly described with a plurality of accurate and relevant attributes**;** (meta)data are released with a clear and accessible data usage license**;** License is one of the mandatory terms in Zenodo's metadata, and is referring to an Open Definition license.**;** Data downloaded by the users is subject to the license specified in the metadata by the uploader; (meta)data are associated with detailed provenance**;** All data and metadata uploaded is traceable to a registered Zenodo user.**;** Metadata can optionally describe the original authors of the published work; (meta)data meet domain-relevant community standards**;** Zenodo is not a domain-specific repository, yet through compliance with DataCite's Metadata Schema, metadata meets one of the broadest cross-domain standards available.

Annex 7: Open Research Europe

The features of the recently available platform Open Research europe are summarised in the document https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/other/comm/open-research-europe_horizon-h2020_en.pdf

Horizon 2020 beneficiaries are eligible to publish research articles stemming from the Horizon 2020 research on the new platform "Open Research Europe". Open Research Europe provides all Horizon 2020 and Horizon Europe beneficiaries and their researchers with an easy, high quality peer-reviewed venue to publish their results in open access, at no cost to them, and in full compliance with EU open access policies. The article processing charges will be paid through a procurement contract for publishing and technology services with F1000 Research managed by EU. The service will be available also after the end of the grants.

The platform will accept publications in all fields of science. Research should be original and stem from a Horizon 2020 grant (or Horizon Europe) in which at least one of the authors is involved. The article guidelines for publishing in the platform have been released and submissions are possible as of early December 2020. The platform boasts a strong international Scientific Advisory Board that advises the Commission on strategic scientific issues.

Annex 8: I-FAST dissemination plan considerations

In summary, the following consideration were taken into account during the first exploratory phase of the I-FAST dissemination plan, where different options and tools were investigated. Particular emphasis was given on the experience of previous EU projects ARIES and EuCARD, taking note of what worked efficiently and what could be improved given the evolution of concepts and tools.

- Through ARIES and EuCARD major European laboratories, research institutes, universities and industries worked together as a collaboration and this collaboration spirit expands with I-FAST to its new collaborators with emphasis on new and many more industrial partners. This adds a new aspect and new considerations regarding publications and dissemination of the I-FAST scientific results. These aspects are being considered in I-FAST and are reflected in the I-FAST dissemination, communication and exploitation plans.

- I-FAST adopts and continues improving ARIES and EuCARD best practices and experiences including dissemination, communication and exploitation plans, integrating and improving also methods and tools that ARIES and EuCARD implemented and used.

- Experience from ARIES and EuCARD projects has demonstrated the importance of timely and efficiently spreading scientific outcomes/results and the final impact on society of the dialogue initiated/triggered based on them, where different actors participated including scientific experts, industry representatives, political bodies.

- Experience from ARIES and EuCARD projects has shown that proper, open, dissemination of scientific results has been crucial in attracting interest and creating new collaborations, communities, fora, within Europe and beyond, that continued beyond the duration of the projects.

- Publications in scientific journals and dissertations by young female researchers, contributing to accelerator technologies and innovation within ARIES and EuCARD projects, have proven to the scientific community the potential of female scientists, provided role models, and encouraged the continuous involvement of their young female colleagues. I-FAST plans to continue ensuring proper visibility of relevant publications of female researchers thus contributing to the promotion of women in these fields and gender diversity in the working environments, including industry, where the disparity is greater.

- High quality publications from ARIES and EuCARD projects contributed to demonstrating the European particle accelerator communities world-class level. The importance of not just doing the job properly but also properly making it public knowledge is obvious; first within the experts' communities and then to political bodies, industries and the broader public. I-FAST with its dissemination plan will continue this "tradition" and further improve and expand.

- Timely publication of scientific results and innovation technologies and their adoption in the curriculum of universities prepare the next generation of scientists properly educated in these rapidly evolving fields; thus, contributing to the development of the human resource potential in accelerator science and technology in Europe (and beyond). Early and open publication of scientific results allows/contributes to their early adaptation and exploitation for applications tailored to address societal challenges, such as providing advanced medicine or reducing environmental impacts of modern society. Therefore, the I-FAST dissemination plan is aiming at timely, open publication of its scientific results.

- Experience from ARIES and EuCARD projects has shown the impact of regular electronic newsletters. The "Accelerating News" (https://acceleratingnews.web.cern.ch/), grew from the EuCARD quarterly newsletter to include additional accelerator projects and grew through EuCARD-2 and ARIES projects including over 1500 subscribers/members. It is also distributed to the FCC members, an additional ~1500 recipients. I-FAST will build upon and continue this efficient means of dissemination to the scientific communities. I-FAST will work towards expanding "Accelerating News" to other accelerator-related projects and audiences, building up on the work developed by the ARIES project.

Annex 9: Internal Communication Tasks Formulation

Task 1.2: Information Flow Management and Cross-coordination (RTU, CERN, GSI)
This Task will ensure the overall cross-coordination and information flow between the I-FAST WPs, in particular on subjects that are at the intersection between different WPs. A dedicated web-based platform will be created and regularly updated during the whole project, as an interactive tool to easily access more deep-level project information. The tool will have the form of an interactive input-output I-FAST flow chart, in order to schematically and information-wise outline the links between various project WP tasks, sub-tasks, their deliverables, milestones, information, time-span, deadlines, as well as to clearly establish and monitor cross-WP and cross-Task outputs/inputs.
Common transverse Workshops and activities will be organised (one or two per year), involving different WP's, on specific subjects. Possibly, these multidisciplinary events will be attached to the Annual Meetings.
RTU will be in charge of creating and keeping up-to-date the interaction chart, in agreement with the CERN Coordination team and with the support of the GSI collaborator in charge of dissemination.

Task 1.2: Information Flow Management and Cross-coordination M1-M48

- Develop and maintain general and targeted information flow between I-FAST Work Packages.
- Ensure effective and transparent cross-coordination of the work between WPs.
- Organise transverse multidisciplinary Workshops and events involving two or more I-FAST WPs.

Task 1.3: Internal Communication and Dissemination (GSI, CERN, RTU)
This Task will focus on the coordination and consistent implementation of communication tools and activities between the project partners. This will be organised with an internal communication plan (GSI). A common archive repository, real-time communication tools and online workspace for documents (i.e. organisation of agendas, minutes and action lists, knowledge management etc.) will be provided. The task also involves the organisation (and proper documentation) of the internal project meetings related to the technical work, including the Kick-off meeting, the end-of-project conference, the Steering Committee meetings, Scientific Advisory Board meetings and the annual Governing Board meetings. Agendas and meeting minutes will be drawn up for all meetings. The internal communication plan will also incorporate the requirements coming out of the Risk Assessment Plan. The installation of a three-member Scientific Advisory Board nominated by the Government Board is also part of this Task.

Task 1.3: Internal Communication and Dissemination M1-M48

- Organise Project Events and disseminate project information and results.
- Develop and maintain the internal communication plan.

D1.2 Internal communication Plan (Task 1.3)
D2.1 Communication strategy (Task 2.2)
MS1 Information Flow management tool installed (Task 1.2)
MS2 Dissemination plan ready (Task 1.3)