
# Deliverable D2.1

# Outreach, Communications and Dissemination Plan

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| **Abstract:** | The document defines the marketing, communication & dissemination strategy and the activities that will be carried out during the project to steer the DICE users' engagement. |
| **Keyword List:** | community, outreach, service, storage, data, social |
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# Terms and abbreviations

| | |
|---|---|
| BSC | Barcelona Supercomputing Center |
| CAB | Community Advisory Board |
| CINECA | Cineca |
| C-SCALE | Copernicus - eoSC Analytics Engine |
| CSC | IT Centre for Science |
| DIH | Digital Innovation Hub |
| EC | European Commission |
| EGI-ACE | EGI Advanced computing for EOSC |
| ERF | European Research Level Research Facilities |
| ERIC | European Research Infrastructure Consortium |
| ESFRI | European Strategy Forum on Research Infrastructures |
| EOSC | European Open Science Cloud |
| EU | European Union |
| EUDAT CDI | EUDAT Collaborative Data Infrastructure |
| GA | Grant Agreement to the project |
| INFRAEOSC-07 | Implementing the European Open Science Cloud (H2020-INFRAEOSC-2018-2020) Call |
| IT4I | Vysoka Skola Banska - Technicka Univerzita Ostrava |
| KPI | Key Performance Indicator |
| RELIANCE | REsearch Lifestyle mAnagemeNt for Earth Science Communities and CopErnicus users in EOSC |
| SURF | SURFsara BV |
| TRUST | Trust-IT services |
| VA | Virtual Access |
| WP | Work Package |

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# Executive Summary

Consistent and content-rich communication is strategic to showcasing the results and impact of the objectives and goals within DICE. This plan presents the activities to be put in place by the consortium during the 30 months of the project. This plan has been built on a series of communication and promotional campaigns for the main DICE assets: a set of 14 state-of-the-art data management services together with more than 50 PB of storage capacity.

Various types of communication and promotional campaigns are presented in this plan, together with both individual timelines and a master timeline giving a bird's eye view over all types of outreach and communication activities. Examples of campaigns that have already taken place (or are currently underway) are presented, giving the reader an indication of their characteristics.

This is the first of two versions of the outreach, communication and dissemination deliverable. All of the key instruments of engagement, including the community roadshow webinars, newsletters, Calls for Service Requests, and so forth will be updated in the final version (M30), in order to document all activities undertaken over the course of the project.

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# 1 Introduction

The Data Infrastructure Capacities for EOSC (DICE) consortium brings together a network of computing and data centres, and research infrastructures, for the purpose to enable a European storage and data management infrastructure for EOSC, providing generic services and building blocks to store, find, access and process data in a consistent and persistent way. Specifically, DICE partners will offer 14 state-of-the-art data management services together with more than 50 PB of storage capacity. The service and resource provisioning will be accompanied by enhancing the current service offering in order to fill the gaps still present to the support of the entire research data lifecycle; solutions will be provided for increasing the quality of data and their re-usability, supporting long term preservation, managing sensitive data, and bridging between data and computing resources.

## 1.1 About this deliverable

The purpose of this document is to put in place a pragmatic Outreach, Communications and Dissemination Plan for DICE to be delivered through diverse communication channels over the 30-month duration of the project. The plan will evolve during future consultation with the INFRAOESC-03 and INFRAOESC-07 projects to synchronise outreach and dissemination activities and avoid overlaps.

## 1.2 Document structure

**Section 1** of the plan presents the project objectives, the context and purpose of this deliverable, and the overall structure of the document.

**Section 2** presents the project communication and stakeholder engagement strategy in the form of three main pillars of activity.

**Section 3** analyses the DICE stakeholder community.

**Section 4** introduces the community outreach activities planned for DICE. The initial targeted communities and their use cases are described, as well as the Community Advisory Board.

**Section 5** describes the overall communication and engagement tools and channels to be used, including online presence and content production, collaterals and social media channel utilisation and distribution. The online dashboard monitoring the visibility, engagement, and dissemination potential of online activities is also introduced.

**Section 6** continues with an overview of DICE webinars and participation to events.

**Section 7** describes the Risk Mitigation Plan, primarily concentrating on the COVID-19 crisis.

**Section 8** provides Conclusions and **Section 9** provides references.

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# 2 DICE Outreach, Communications, and Dissemination Strategy

The DICE strategy, documented in the Grant Agreement, involves three "pillars", described in the following sections.

## 2.1 Democratising access to data management and storage resources

***Pillar 1: Democratising access to data management and storage resources in Europe to accelerate scientific discoveries***

The DICE VA open **Calls for Service Requests** are an important instrument to raise awareness about the DICE resources and to attract the demand-side throughout Europe and throughout the diverse sectors of scientific research in Europe. The EOSC Portal is the platform used to disseminate the DICE data management and storage solutions to the broad community.

The first such open call was launched in early March 2021 (see Figure 1) on the DICE website at https://www.dice-eosc.eu/news-events/news/launch-dice-call-service-requests


*Figure 1: First DICE Call for Service Requests*

The Call text was structured as follows:

- Introductory description,
- Brief summary of the DICE Data Storage service offering, including clear indications, that the services are free of charge for the duration of the DICE project,
- "How does it work?" An explanation of the procedure for acquiring the services,
- Clearly indicated links to the Call for Service Requests page for applications.

The Call was also disseminated via EOSC channels (EOSC portal, EOSC Liaison Platform) and DICE consortium websites (CINECA, EUDAT, Trust-IT services, IT4I).

## 2.2 An integral part of the EOSC value proposition

***Pillar 2: Ensuring that the DICE resources are an integral part of the EOSC value proposition and interoperable with the other EOSC-related projects***

Synergies with EU initiatives such as the INFRAEOSC-03 and the other 07 projects, the EOSC-related projects and the ESFRIs are geared towards maximising impact of the DICE project, increasing awareness of the DICE offering and adoption of the resources made available. The

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synergies will be also key to establishing a continuous dialogue among the different projects on topics such as standards, specifications and adopted methodologies that are the fundamental elements to guarantee the interoperability among the different initiatives and maximize the return on investment.

**INFRAEOSC-07**

Figure 2 shows the projects that were funded within **INFRAEOSC-07**.

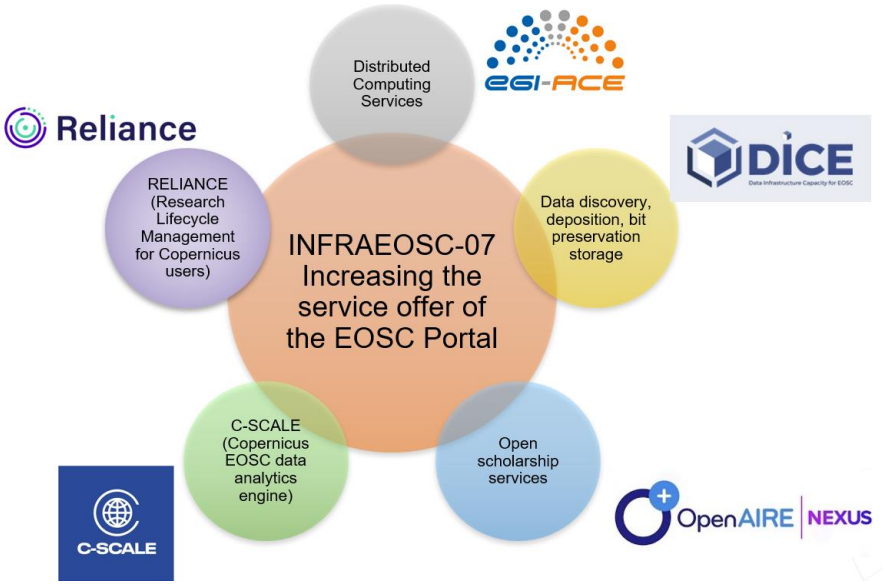


*Figure 2: INFRAEOSC-07 Project Context (Source: EOSC)*

A first joint dissemination activity between all of these projects took place on 05 February 2021 at the EGI-ACE Launch event (https://indico.egi.eu/event/5359/), in which representatives from the projects presented their roles and synergies within the overall INFRAEOSC-07 context of increasing the service offer of the EOSC Portal. Another occasion where these projects came together was the OpenAire Nexus public launch event, which took place on 10 March 2021, featuring representatives from DICE, EGI-ACE, RELIANCE, and C-SCALE. More dissemination events showcasing the INFRAEOSC-07 projects will follow.

In April 2021, the INFRAEOSC-07 projects OpenAIRE-Nexus, C-SCALE, DICE, and EGI-ACE created an "INFRAEOSC-07 Collaboratory" for the coordination of joint activities, on Microsoft Teams, including a shared files workspace and wiki.

The main joint activity of the Collaboratory that concerns this specific deliverable, of course, is communications. The initial communications-related activities of the Collaboratory include the following, as described in the initial working document:

- Networking
- Write a single MoU where all actions are listed
  - Communicate it to the world
- Arrange a date for a "Launch" Workshop, where we present our joint work
- Write a paper (journal) where EOSC stacks are linked to publishing workflows

Other planned activities include more ambitious technical undertakings, such as the elaboration of Open Science publishing workflows as described in the original working document (the source is online in the Collaboratory). "The I07 projects will define/propose a set of EOSC

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Interoperability Frameworks (IF) and relative use-cases towards the definition of a common framework that would support thematic and einfra services at publishing research products on behalf of scientists in a uniform and cross-discipline manner."

Other collaborative activities under this initiative include the addressing of common issues such as Green Computing and Virtual Access Cost.

**INFRAEOSC-03**

Within **INFRAEOSC-03**, the **EOSC Future** project is key to providing guidance on the way ahead. EOSC Future has just started (01 April 2021) as of this writing. It has promised close collaboration with the INFRAEOSC-07 projects. The following collaboration (Table 1) has been described in the EOSC Future Grant Agreement and is indicative of how the collaboration will take place.

*Table 1: "EOSC Future" project cooperation with INFRAEOSC-07*

| | | |
|---|---|---|
| **Stakeholder Engagement and Communications** | • Coordinate engagement channels with users, user groups, and providers<br>• Promote services and resources | • Provide user and targeted communication channels<br>• Provide technical expertise to support adoption by users<br>• Provide materials about services and their technical specifications |

A collaboration agreement is being discussed between EOSC future and the INFRAEOSC-07 projects that will include clear action points for synergic dissemination and outreach.

**EOSC / EUDAT Secretariats**

Within the **EOSC Association**, the **EOSC Secretariat** is helping to set up Working Groups in a number of different areas. Interaction is foreseen with these working groups, with respect to outreach and dissemination. (EOSC Secretariat finishes on 31 October 2021.) EOSC Secretariat manages a **Liaison Platform**, which serves as an important dissemination channel for DICE communications and has already been used on several occasions.

The **EUDAT Collaborative Data Infrastructure** (**CDI)** is a key partner for outreach and communications, given the tight synergy between DICE and EUDAT. One such initiative has already been undertaken: the January 2021 communications of the EUDAT CDI was dedicated to the launch of DICE (Figure 3). Another example of such collaboration was the DICE and EUDAT CDI joint webinar kicking off the Community Roadshow, organised on 29 April 2021 (see Section 6.1).

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*Figure 3: EUDAT CDI announcement of DICE Project Launch*

Several DICE partners are directly involved in the EUDAT CDI as members and different persons in the DICE team are members of EUDAT boards and governance, for example A. Pursula (CSC, WP7 leader), who took over the role of EUDAT CDI Head of Secretariat in March 2021.

**Inter-Project Collaboration Initiatives**

**Collaboration with the EOSC Digital Innovation Hub (DIH)**. In mid-April 2021, DICE Project Management Board agreed on a potential collaboration with the EOSC DIH for the offering of the DICE services. The preliminary set of agreed activities to pursue includes the following:

- The entities will identify the DICE services that can be offered to SMEs and those to be included in the EOSC DIH offering/portfolio
- EOSC DIH and DICE will agree on the detailed support mechanism through the EOSC DIH pilots for the SMEs using DICE services
- EOSC DIH will contribute to promote the DICE services through the current EOSC DIH community
- Both entities will collaborate in terms of mutual dissemination activities

## 2.3 Improving research data management skills

***Pillar 3: Filling important skills gaps in the research data lifecycle management***

Activities on the usage and on the benefits of the DICE data management services and storage resources will be crucial for unleashing the full potential of an EU data-driven economy. While the training on the individual services made available by DICE will be provided in collaboration with the INFRAEOSC-03 resulting project, DICE will organise a skills-oriented program of training to showcase a set of functional use-cases with the support of the WP5 communities that will act as champions for disseminating the DICE best practices and lessons learnt to other thematic domains.

DICE will do an analysis and inventory of existing training resources in the area of Research Data Management and data preservation. This will be used as a basis for building the DICE training programme, which will be developed further in collaboration with the service providers and focused on the communities from the use cases selected by DICE and the INFRAEOSC-03. The training program will be published as a deliverable (D2.2).

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# 3 The DICE Stakeholder Community

The initial set of DICE services revolves heavily around the service offering of EUDAT:

- 17 of the 24 DICE partners are EUDAT CDI members,
- 6 of the 14 services offered via DICE are EUDAT services,
- Many operational tools in DICE are EUDAT operational tools.

As such, DICE natural target stakeholder community is well reflected by the target stakeholder community identified by EUDAT itself. Even when DICE evolves to include further services from outside the EUDAT offering, it is expected that the nature of the overall stakeholder community will not significantly change as the full set of offered services has the common objective to support the whole research data lifecycle workflow.

For this reason, it was considered appropriate to adopt the same considerations in identifying and analysing the DICE target stakeholder community as those put forward by EUDAT when formulating the characterization of their own community.

## 3.1 Demand-side and supply-side considerations

The market for data management services served by organisations such as EUDAT has consisted of grants from either national or European-level funding agencies to research entities in the European Research Area, the so-called “supply side”. In that sense, DICE itself is a supply-side customer for EUDAT data management services, through its Virtual Access funding mechanisms. That is, an important objective of DICE is to enlarge the community of users through supply-side stimulus, using the EC-supported VA mechanisms to acquire new users.

However, EUDAT foresees a shift to a demand-side market, in which customers will be directly purchasing services on behalf of end users. In this case, EUDAT will be dealing directly with the customers to negotiate services on behalf of their users. This is particularly relevant to DICE at the end of its project life, when the VA funding mechanisms will cease. It will be important for DICE to guide its community of new users toward direct negotiation with EUDAT and the other service providers for continuing service under conditions that are sufficiently attractive to retain the customer.

This should be possible, because the targeted DICE stakeholder community does not consist of entities that are merely seeking “free storage in eternity”. Rather, these are research organisations that are accustomed to budgeting for data storage and archival services providing sufficiently sophisticated support for their needs (e.g., FAIR treatment, persistent identifiers, and so forth). Thus, the VA-funded period of service over the duration of DICE may be seen as an opportunity for transitioning the new users into a new, paid period of service with the chosen service provider.

## 3.2 European Research Stakeholder Segments

EUDAT has segmented its stakeholder community of European research entities into three categories that provide also useful guidance for DICE.

- **Data Managers**. Those responsible within large European research infrastructures for organising data management services. Typical such infrastructures are European Strategy Forum on Research Infrastructures (ESFRI) and European Research Infrastructure Consortia (ERIC). As with EUDAT, the DICE consortium provides the possibility to work directly with data managers to provide customised service packages that satisfy their needs.

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- **Data Producers**. These are the primary producers of research data. DICE has followed the EUDAT lead of providing data services that support the entire research production lifecycle, from the first, dynamic and unstable data, transitioning to more stable archiving, through to final, FAIR treatment.
- **Data Consumers**. This is the mirror image of the Data Producers category, whereby *production* is replaced by *discovery* of research data. Here, too, DICE follows the lead of EUDAT in providing search and discovery data services to data-driven researchers. These groups might be large scientific organisations (e.g., marine research), or small SMEs (e.g., innovative services in machine learning such as sentiment analysis or machine vision).

## 3.3 Stakeholder Communities

Table 2 lists the currently identified stakeholder groups according to entity types (e.g., institute, commercial, individual), together with descriptive examples and comments concerning their relationship to the above-described stakeholder segments.

*Table 2: DICE Stakeholder Communities*

| Stakeholders | Description or example organisations | Research Stakeholder Segments |
|---|---|---|
| **Research Institutes** | | |
| ESFRIs | Projects on the ESFRI Roadmap in all scientific domains: Energy, Environment, Health & Food, Physical Sciences & Engineering, Social & Cultural Innovation | These are clear examples of Data Managers, a major customer category both for EUDAT and consequently DICE. |
| ERICs | Current and any future European Research Infrastructure Consortium organisations. | As above for ESFRIs. |
| Pan-European research infrastructures and communities | LOFAR, ICOS, CompBioMed etc | These are similar to the above categories, but more at the level of domain-specific research. In fact, the examples listed here are the initial DICE domain outreach communities as part of the project activities. Although they may also contain Data Managers, they are often mostly Research Data Producers. |
| Research performing organisations & agencies | EIROforum (EMBL, CERN, ESA, ESO, ESRF, ILL, EUROfusion, European XFEL), Association for European Research Level Research Facilities (ERF), etc. | These are generally Research Data Producers who rely on Data Manager entities to provide their data e-infrastructures. |
| **Universities & Libraries** | | |
| Universities & University Associations | EUA, LERU, YERUN, EURODOC | Universities include both Data Producers (the research departments) and Data Consumers (see below) |

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| Stakeholders | Description or example organisations | Research Stakeholder Segments |
|---|---|---|
| Research libraries & Library organisations | LIBER, UEA | These are good examples of Data Consumers at the institutional (and pan-institutional) level. |
| **Individuals** | | |
| Researchers | The EOSC provides maximum choice to researchers, who can utilize multiple categories of resources. | Individual researchers are the iconic example of a Research Data Producer and Consumer. |
| Citizen scientists | Individuals who can publish, find and re-use each other's data and tools for research, innovation and educational purposes under well-defined and trusted conditions. Support in the development of rewards & incentives | Citizen scientists represent an increasingly important actor. They help to contribute as Research Data Producers (e.g., by monitoring sensor data), and have more and more possibilities to be Data Consumers, utilizing existing open data sources. |
| **Other Benefitting Initiatives** | | |
| Infrastructures and platforms to integrate DICE services with | FENIX, EuroHPC, EGI | Other Data Manager organizations such as those mentioned here can join DICE in integrating their own services. |
| European Data Spaces | European data spaces for industrial, mobility, financial, energy and health data as laid out by the European Data Strategy | This is an initiative to encourage the rise of more and more strictly European Data Managers. |
| Copernicus | | Copernicus is supported by two sister initiatives to DICE (C-Scale and RELIANCE). They can act both as Data producers and Data managers with respect to DICE services. |
| GAIA-X | Consider mutual use cases and best practices to carry out together for IT services | This is an EOSC sister initiative that could create synergies related to the overall goals of DICE. |
| European Innovation Council (EIC) | A future marketplace for IP registration tracking, smart contracts, IPR management | The EIC is an initiative that could help to further the goals of DICE in establishing innovate uses of research data in Europe. |
| **European projects or initiatives and individuals** | | |
| European Citizen Science Initiatives | Socientize Project, Zooinverse | Both Research Data Producers and Data Consumers are found here (see above) |
| Big Data projects and initiatives | Big Data innovation hubs, DAPHNE, EVEREST | All three segments could be represented here. |
| Extreme scale data analytics | MORE (real time energy data), VesselAI (extreme scale analytics and AI) | As above |

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| Stakeholders | Description or example organisations | Research Stakeholder Segments |
|---|---|---|
| Data-intensive initiatives in European nations | Laboratory for the Environment (Corsica), VisioTerra (FR), Frascati Research Centre (Italy), Lechner Knowledge Centre (Hungary) | These are nation-specific initiatives which are potentially relevant to all three segments and could provide outreach opportunities to DICE. |
| Targeted individual researchers | Researchers in data-related subjects within European universities. Subjects might include remote sensing, geoinformatics, robotics, machine learning, spatial management, and related fields. | These are mostly Research Data Producers, individually targeted because of their known significant influence on specific research domains. |

## 3.4 Individual Stakeholder Personas

The EOSC Executive Board Skills and Training Working group released a document in February 2021 [1], in which a unified set of *personas* of individual roles within the EOSC ecosystem is developed and described. The purpose of this unified set is to ensure that the various projects (such as DICE) underway in the EOSC context coalesce on consistent descriptions of the relevant stakeholders in their specific contexts.

The current version of the set of personas is depicted in Figure 4.


*Figure 4: Individual EOSC Stakeholder Personas (Source: [1])*

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In the context of DICE, the relevant specific individual stakeholder personas identified in the Report are the following:

- **Researcher**. The main target individual stakeholder of both EOSC in general and DICE in particular.
- **Data Scientist / Data Analyst**. This is an important persona for DICE, because it spans all of the services in the DICE offering. The description reads as follows: "Technical skills … for data access, sharing, reuse and processing. Deep understanding of FAIR principles for both data and software." Each of the categories of DICE services is touched upon here.
- **Data Research Infrastructure Support Professional**. The description reads: "… an ICT expert who manages and operates research infrastructures and the necessary services for the storage, preservation and processing of research data." This corresponds particularly closely with the Data Manager segmentation of DICE. Such personas are the ones with which DICE will interact especially when negotiating customized service delivery.
- **Data Curator**. The description reads " … an expert on the management and oversight of an organisation's entire data to ensure compliance with policy and/or regulatory obligations for long-term preservation and to provide higher-level users with high quality data that is easily accessible in a consistent manner." This type of persona, therefore, is an ideal candidate for the higher-level, value-added services offered by DICE.
- **Data Steward/Data Libraries**. The description of these two personas reads " … a Data Steward is an expert on the preparation and treatment of data including data selection, storage, preservation, annotation provenance and other metadata maintenance, and dissemination. Data librarians are professional library staff who are experts on RDM, using research data as a resource or supporting researchers dealing with data." Thus, a Data Steward is a candidate for the mid-level DICE services involving data preparation and annotation, whereby Data Librarians make extensive use of the higher-level services for searching and general support to Data Consumers.

We will continue to track these individual personas as they are refined by the Working Group, in order to use them profitably within DICE and remain consistent with their use in other projects within the overall EOSC ecosystem.

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# 4 Community Outreach and Use Case Success Stories

## 4.1 Introduction

As an essential component of DICE outreach and communications, a series of **use cases** is being documented to showcase the benefits deriving from the usage of the DICE resources. The experience matured by the *research communities* part of the project is key to better highlighting the key assets of DICE and how they can accelerate scientific research.

The outreach to research communities and documentation of use case success stories is a joint activity between WP5 (*Integration with community platforms*) and WP2 (*Outreach, stakeholder engagement and service uptake*). It is within WP5 that the deep interaction with the research communities takes place, whereby specific DICE services will be integrated and showcased.

## 4.2 Initial target communities

A first set of communities and corresponding platforms has been engaged and will serve as the initial set of target communities (Table 3).

*Table 3: Initial Community Outreach Target Communities*

| Name | Community | Use Case |
|---|---|---|
| **CompBioMed** | Biomedicine | CompBioMed research data platform |
| **LOFAR** | Radio Astronomy | Advanced data discovery and preservation platform |
| **ICOS** | Environment and Climate | Integrated Carbon Observation System benchmarking tool |

## 4.3 Initial outreach and dissemination activities

Although the timeline for development and documentation of the first use case success stories extends over the entire first year of DICE, outreach and dissemination activities will begin much earlier, making use of communications instruments such as podcasts, webinars, and press releases to disseminate both current activities and preliminary findings.

During the first months of the activity, each use case will elaborate its own work plan within the project. Each case will identify the expected outcome of the DICE services integration activity, as well as expectations and impact.

- **Objective:** Incentivize other similar cases to adopt the DICE services and the expected benefits for open science.
- **Format:** Social network communications directed at researchers who can directly benefit from the data service integration activities, whereby links to the DICE services will be offered.

## 4.4 Outreach to new communities

The Community Advisory Board (CAB) is an essential element in the outreach to new DICE user communities. Representatives and champions from different stakeholder communities with which DICE partners are already in contact and known to be interested have been identified and

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contacted as members of the CAB. It will be the mission of the CAB to promote and cultivate the inclusion of these new communities and their platforms into the ecosystem served by DICE.

The participation of the CAB members to the DICE activities will guarantee their access to the outreach products generated which can be reused for the communications directed at the new communities.

- **Objective**: The CAB is a channel to reach new user communities for DICE, and an entry point of requirements and experiences of services that will help to improve the service offer. It will help to extend the number of applications for the data services, as well as the reliability of the services. Most importantly, it will establish new collaborations between researchers and data providers.
- **Format**: Direct communication by CAB members to community-specific conferences.

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# 5 Outreach, Communications, and Dissemination Activities

In contrast to Section 2, which described the *strategy* for DICE outreach, this section describes the realisation of the strategy in concrete *activities*, together with a description and discussion of the channels and techniques employed.

DICE will promote and ensure visibility in both online and offline channels, building the DICE brand through a coordinated marketing, dissemination and engagement strategy (cf. Section 2). The DICE team will work continuously to enhance the existing communication strategy in key elements such as branding visibility, exploitation of media channels, and a widened audience together. This will go hand-in-hand with the development of synergies, both internally and externally (cf. Section 2.2), for the overall success of the project. The section includes also associated KPIs for monitoring the activities and their impact.

## 5.1 Visual identity and branding

DICE follows the guidelines listed below:

- Human centred
- Balance between "digital & analogue"
- Evolution vs. Revolution
- Readable and recognisable in any circumstances
- Wide colour range
- Fashionable
- Highly modular & responsive

A consistent visual identity will be used for all communication and dissemination activities. Templates for external communication and documents have been provided. There will be a final branding alignment across all formats and channels used to reach stakeholders, spanning the training, products and services, and integrated news, social media, brochures, banners, posters, and other collaterals.

As a result of this branding strategy, the project aims at achieving the following outcomes:

- More effective memorisation and visual identification;
- Improved recognition and acknowledgement across a broad range of recipients;
- Strengthened loyalty and trust from the audience;
- Sustain the overall message that DICE wants to convey.

Information about EU funding will always be presented by a prominently displayed EU emblem and the Grant Agreement number: "The DICE project has received funding from the European Union's Horizon 2020 project call H2020-INFRAEOSC-2018-2020 under Grant Agreement no. 101017207". Further it will be disclaimed that the content does not represent the opinion of the European Commission and the European Commission is not responsible for any use that might be made of such content.

The first way to "communicate" the project is the identification of the project logo (Figure 5).

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*Figure 5: DICE logo*

Different DICE logos (Figure 6) have been created for use in different contexts (social media, website, and printed material).

*Figure 6: Different DICE logo variations*

Similarly, a set of logos for the different services offered by DICE has been designed, for even more precise branding according to service type (Figure 7).


*Figure 7: DICE service icons*

A set of promotional materials is being produced for the project, including among others, project flyers & social media cards and images, and posters. An appropriate mix between digital and physical media formats is being chosen according to the demands and consequences of the situation caused by COVID-19. Currently, the emphasis is on digital media.

## 5.2 DICE Website

The DICE website is the central communication and dissemination channel of the project. It will be continuously evolving as the project results are released or published.

The DICE website (https://www.dice-eosc.eu/) is powered by a professional CMS (Drupal) and has a modern look and an intuitive structure. It conveniently responds to the latest IT criteria in order to grant adequate degree of responsiveness, UX design, loading speed, smooth usability, appealing graphics and essential factors to facilitate a successful SEO ranking. Menus and submenus are designed to improve the user experience and facilitate navigation through the whole website, as shown in Figure 8.

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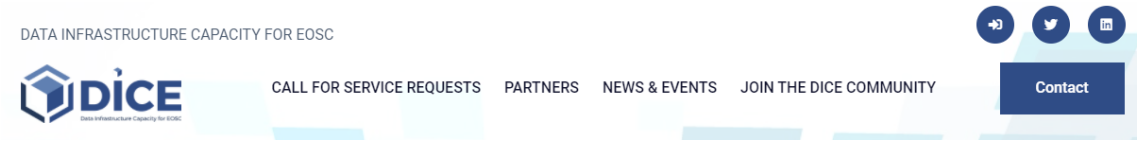


*Figure 8: DICE Website Menu Structure*

The website will also be a catch-all platform to store the most critical outputs and deliverables achieved by the project throughout its lifespan. It represents the official hub to store all the public deliverables produced in the course of the project, to be regularly updated according to the delivery dates.

The initial DICE landing page was created on M1 of the project. In M3, a new section was added in the website for the launch of the Call for Service Requests.

A new iteration of the official website is expected to be completed in the second half of 2021.

**Content-Driven Approach**

Outreach, communications, and dissemination planning will concentrate its efforts on copywriting and producing engaging, stimulating and impactful content. DICE editorial planning will include regular publication of updates covering the progress of VA outreach efforts, DICE webinars and events with their output, as well as other events relevant for the target stakeholders such as news pieces, interviews and spotlights on projects that have acquired DICE services.

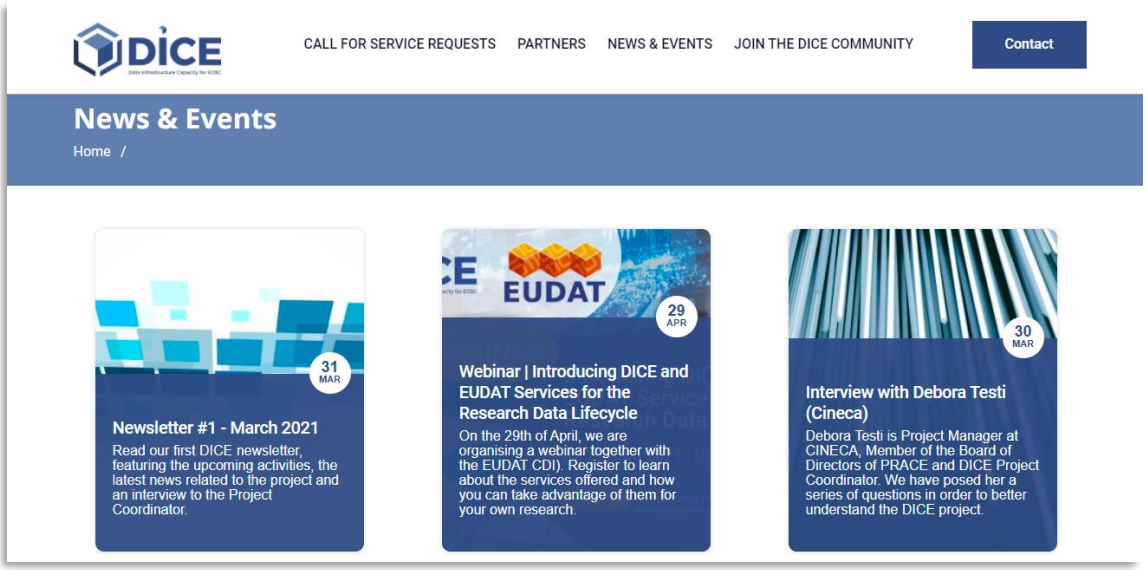


*Figure 9: Examples of DICE News Articles*

The publication of regular news pieces (Figure 9) on the website aims to ensure regular interactions with the DICE community, allowing stakeholders to be continuously up to date with project developments.

At the moment of writing, DICE has published a total of 6 articles, including an interview with Debora Testi (CINECA), the project coordinator, and the launch of the DICE call for service requests.

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## 5.3 Social Media Campaigns

DICE is using two key social networks, Twitter and LinkedIn, first of all, to build its community and promote the open calls for service requests, and ultimately to communicate all the outputs and results. Twitter is mainly used for real-time updates and to promote event-centred activities, but also as a tool to engage new users of the DICE services.

At the time of writing, the DICE Twitter account (@DICEosc) is constructing a solid base of followers targeting profiles that are considered to be good candidates for an interest in the take-up of DICE resources (Figure 10). In its first four months it had already acquired more than 140 followers.


*Figure 10: DICE Twitter account header*

LinkedIn will be mainly used to onboard new stakeholders, send targeted messages and transmit news items such as success story descriptions. At the moment of writing, the DICE LinkedIn account (https://www.linkedin.com/company/diceosc) has over 50 followers (Figure 11).

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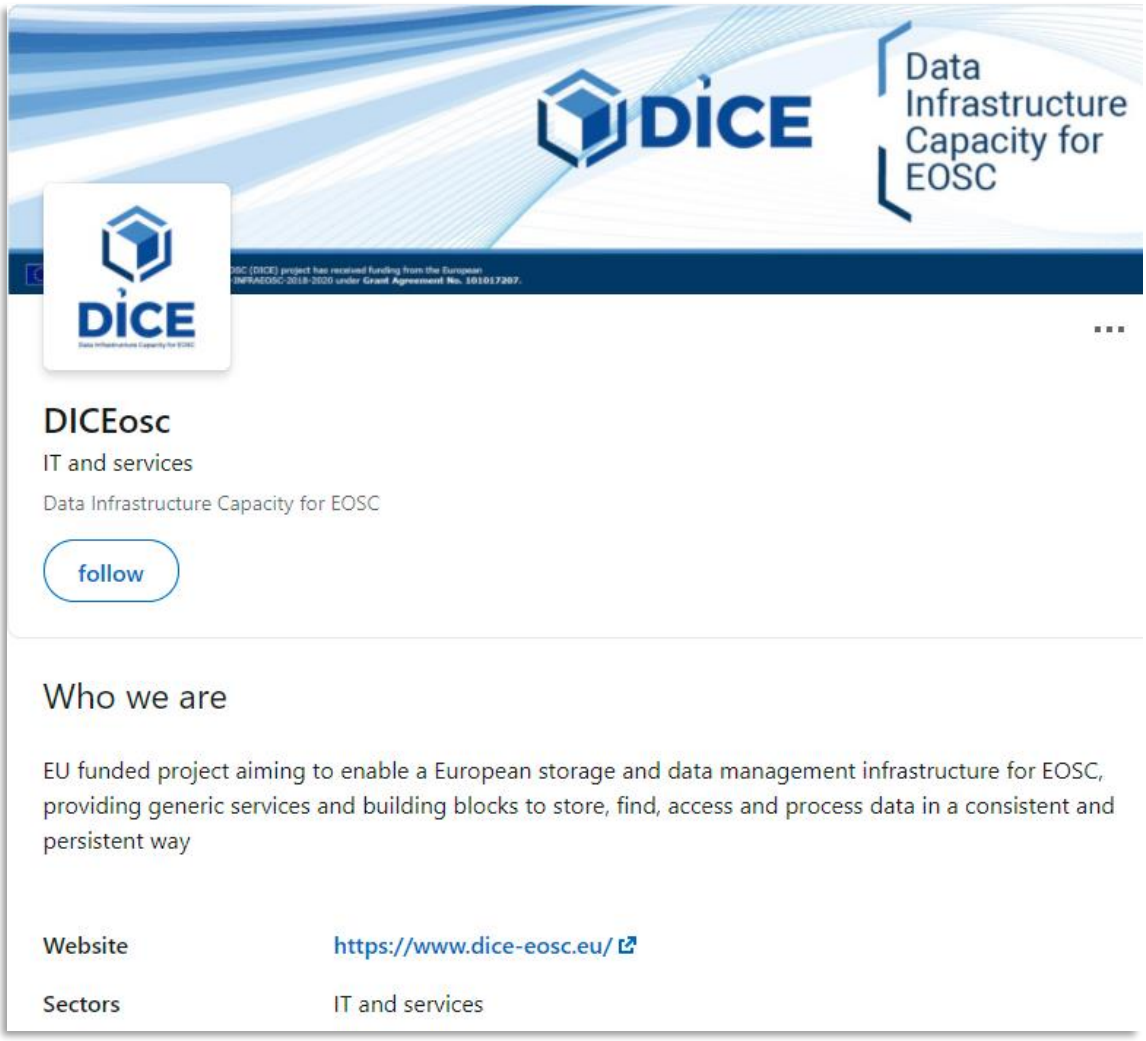


*Figure 11: DICE LinkedIn account header*

## 5.4 Newsletter

DICE is publishing a quarterly newsletter in order to keep stakeholders informed on topics such as new services, upcoming events and any other relevant update related to the project.

While newsletters are useful in attracting the attention of prospects, their primary importance is in maintaining ongoing connections with contacts and existing users.

The first issue of the DICE newsletter was sent out in early M4. It featured the press release for the launch of the project, the first DICE Call for Service Requests, the webinar organised in collaboration with EUDAT, and an interview with Debora Testi (CINECA), DICE project coordinator (Figure 12).

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*Figure 12: DICE newsletter – Issue #1*

## 5.5 Communication Toolkit

The communication toolkit aims to ensure the timely delivery of high-quality materials and tools supporting outreach stakeholder engagement with messages tailored to various levels of knowledge. The toolkit is KPI-based for communications and stakeholder engagement, as described in the following tables. Those KPIs flagged with an asterisk ("*") originate directly in the Grant Agreement. Those KPIs flagged with a plus sign ("+") originate in our own experience and best practices in similar contexts.

*Table 4: Comms Toolkit – Content Production*

| Content Production | KPIs for the overall project |
|---|---|
| Distribution of DICE press releases targeting special interest groups and potential applicants to the services. | Min. 1 new press release per year* |
| Articles specifically written for CORDIS RESEARCH EU and EOSC-related websites and blogs for timely information about DICE activities. | 2 CORDIS articles per year+<br>2 news published on EOSC-related websites per year+ |

*Table 5: Comms Toolkit – promotional materials*

| Flyers, factsheets, infographics, roll-ups | KPIs for the overall project |
|---|---|
| Brochures, flyers, posters, roll-up banners, slide decks etc. - tailored to different audiences | Minimum 10 per year* |

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*Table 6: Comms Toolkit – videos*

| Videos | KPIs for the overall project |
|---|---|
| Informative and marketing videos produced by professional in-house team. | Minimum 3+ |

*Table 7: Comms Toolkit – newsletters and email marketing*

| Videos | KPIs for the overall project |
|---|---|
| Newsletter creation | 10 by M30* |
| Newsletter outreach | 200 recipients reached by M30+ |
| Email marketing | According to promotional needs+ |

*Table 8: Comms Toolkit – social media strategy*

| Social media activity | KPIs for the overall project |
|---|---|
| Overall social media connections | 400 overall connections (Twitter + LinkedIn) per year+ |
| Webinars | 6 over the course of the project* |
| Twitter | 400 Tweets, 250 Twitter followers by M30+ |

## 5.6 Dissemination Measure KPIs

In contrast to the internally-defined KPIs for the communications toolkit, all dissemination measure KPIs listed in Table 9 may be found directly in the DICE Grant Agreement.

*Table 9: Joint partner dissemination measures and KPIs (Source: DICE Grant Agreement)*

| Joint partners' dissemination measures | KPIs |
|---|---|
| Dissemination campaigns in conjunction with the DICE Open Calls for Service Requests and release of use cases | 1 campaign in M1-10<br>1 campaign in M11-20<br>1 campaign in M21-30 |
| Continuous dialogue with the user communities and feedback collection | 20+ third party events<br>6 webinars<br>4 Hackathons |
| Training activities to increase uptake of the DICE resources | 4 Hackathons<br>User documentation and training material |
| Synergies established at national, EU & international level to position DICE resources in the EOSC landscape and ensure best practices exchange with other EOSC-related initiatives | Leveraging >3-5 projects |

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## 5.7 Monitoring activities and measuring impact

In order to monitor the analytics related to the website, a dashboard (Figure 13) has been created through Google Data Studio, which makes it possible to easily convert raw data into metrics and dimensions, generating engaging reports and data visualizations. The parameters monitored in the dashboard are the following:

- website traffic;
- users;
- sessions;
- average time on page;
- users per country;
- users and average time spent on each page;
- sources of traffic.

The reporting of the statistics is carried out on a monthly basis.


*Figure 13: Website dashboard*

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# 6 DICE Events and Third-Party Events

Over its 30-month duration, DICE will organise a number of events ranging from webinars to hackathons.

Each event is published in the "News and Events" section of the website, accessible from the top-bar menu, with a different tag according to whether it is a webinar, a DICE event (including events DICE took part in) or a "related" event (more generic events related to the topics addressed by DICE but not organised by DICE: this section includes, but is not limited to, the events involving DICE and its related projects within the EOSC and INFRAEOSC ecosystem). Each event published on the website is then shared via the DICE LinkedIn and Twitter pages, as well as in the newsletter.

## 6.1 Webinars

The DICE event suite includes the development and hosting of webinars dedicated to presenting the services and successful use cases of DICE. These are being organised as results become available (in the case of community-related use cases, as described in Section 4), and as partners recognize dissemination opportunities over the lifetime of the project. Six such "community roadshow" webinars are foreseen over the course of the project.


*Figure 14: "Introducing DICE and EUDAT Services for the Research Data Lifecycle" webinar banner image*

The first such community roadshow webinar was held on the 29th of April, 2021, in collaboration with the EUDAT Collaborative Data Infrastructure, and it was entitled *Introducing DICE and EUDAT Services for the Research Data Lifecycle* (Figure 14). It aimed at showcasing the services offered through the project and at reinforcing collaboration among the two initiatives. The speakers were Antti Pursula (CSC), EUDAT CDI Head of Secretariat; Debora Testi (CINECA), DICE Project Coordinator; and Mark van de Sanden (SURF), EUDAT CDI Technical Coordinator. In the spirit of this first webinar as the kick-off event of the community roadshow, Mark van de Sanden presented an overview of numerous use cases being pursued with DICE services by diverse communities.

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The webinar had a total of 114 participants out of 137 registrants, coming from 19 different countries (Figure 16) and working in a range of different sectors (Figure 15), including Policy/Funding Agency; Research/Academia; Government/Public Administration; Non-profit Organisation; Small & Medium Enterprise; Library/Publisher; Data Center/Provider; Large Enterprise.

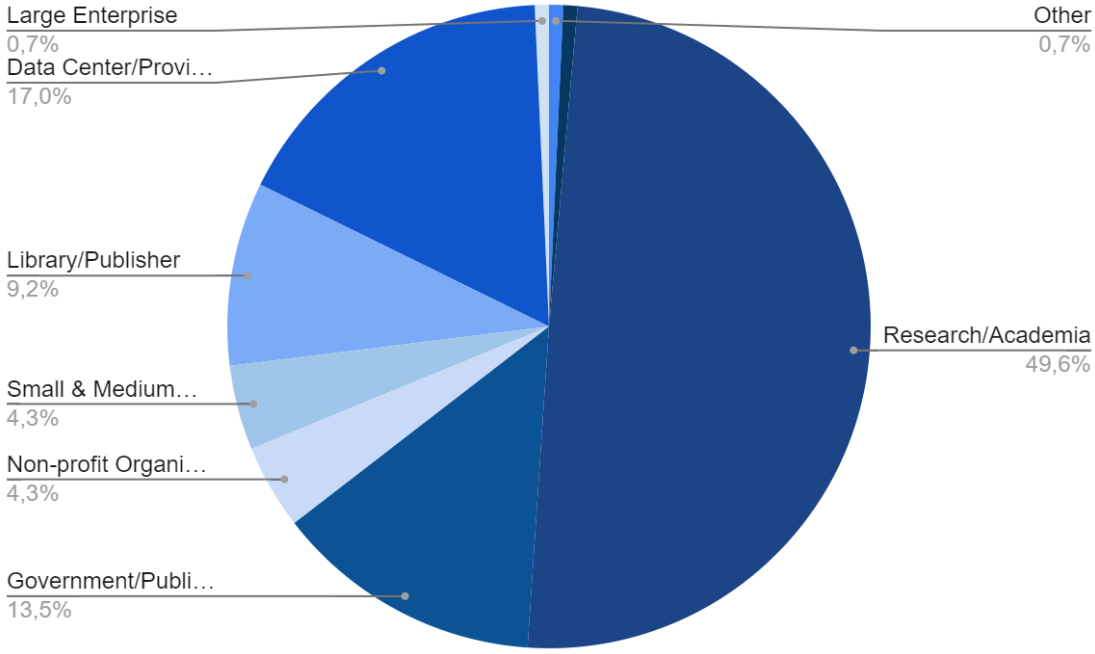


*Figure 15: Breakdown of the industry sector of the webinar attendees*

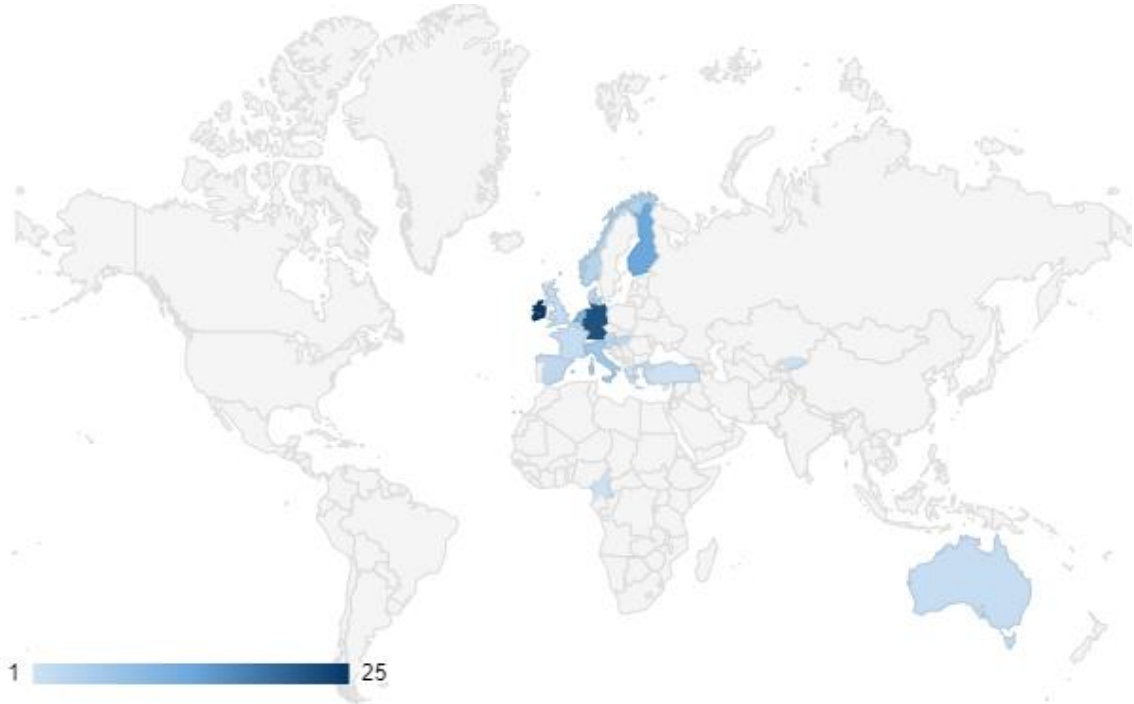


*Figure 16: Geographical breakdown of the webinar attendees*

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## 6.2 Third-Party Events

Third-Party Events are external events (not organised by DICE) relevant for the project due to their pertinence with topics addressed by DICE (e.g., FAIR data), or their possibility to be exploited to gain visibility, simply by taking part or by promoting them through the website and on the social media pages. Presence at related external events will help to further develop the DICE community. Involvement in DICE events will facilitate multi-stakeholder engagement, allowing secondary stakeholders to be reached through the various DICE channels.

An example of this type of external event is the EGI-ACE Launch Event, which took place on 05 February 2021, and was transformed into an online event in order to cope with the Covid-19 emergency. These events are still included in the Related Events section on the website, in that they are not organised directly by DICE, but are related in various ways. For example, in this case, the event was a collaboration among INFRAEOSC-07 "sibling projects". The same communication activities (Figure 17) are carried out for relevant third-party events as for DICE events:

- One event news piece on the website
- Social media posts
- Live tweeting at the event
- Communication package including fliers, pop-up banner (for a physical event), and Institutional Presentation


*Figure 17: Example of social media promotion of third-party events*

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## 6.3 Hackathons and Datathon

DICE partners will set up and run four hackathons with up to 30 participants. Those will be adequately focused on the communities involved in the use cases but also open enough to engage new potential communities. They will focus on the newly developed services and will allow new users to efficiently use them.

A key event will be the organisation of a datathon in collaboration with the communities behind the use cases, the EOSC thematic clusters and the INFRAEOSC-07-a1 call funded project to stimulate further usage of VA resources. Naturally, the partnership with data/HPC summer schools (EUDAT CDI, PRACE, and others) is anticipated.

More details about the training programme will be published in the deliverable D2.2 in M10 of the project. The deliverable includes the inventory of the existing training material related to data storage and management solutions, identifies the gaps and defines the activities and the strategy that will be put in place to fill in those training gaps and maximize the uptake of the DICE services. The plan will be developed liaising with the INFRAOESC-03 and INFRAOESC-07 projects.

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# 7 Risk Assessment & Mitigation Plan

In addition to the official Task 1.4 (*Risk Management*), a supplementary extension is provided in this section related specifically to WP2 risks. The impact of COVID-19 is particularly relevant for WP2. Different scenarios may be hypothesized:

- Scenario 1: the crisis ends in the Summer of 2021;
- Scenario 2: the crisis ends in the Winter of 2021-2022.

(Here, "crisis ends" means that cross-border movements become possible again without undue restrictions on the general composition of the relevant population – such as "vaccinated", "non-vaccinated", country-specific travel bans, and so forth.)

A third hypothesis is also possible: COVID-19 will probably have long-term impact, and calls for new approaches to stakeholder engagement. The main conclusions are summarised below.

- DICE context 1 – Stakeholder engagement: Impossibility of face-to-face meetings with potential new users and communities.
  - Partners have been affected, e.g., forced to rely on smart working and their own computing/network resources, making coordination of activities generally more difficult.
- DICE context 2- Dissemination of results: Blind period for conferences and opportunities for dissemination through presentations, networking and publishing.
  - DICE will certainly lose several such opportunities, though some may be recoverable later in 2021 or in 2022-2023.
  - Cancelled events targeted by DICE: situation being monitored at this time.
  - Postponed events: Situation currently being monitored.
- Evolution of COVID-19: There is much speculation about the evolution of COVID-19 and the so-called "return to reality". The latest evidence points to the low likelihood of physical events taking place in 2021 despite the more optimistic views of the scientific community, while industry fora and most standards organisations have cancelled physical events until further notice.

New forms of engagement are clearly needed, whether they be webinars, virtual events or other formats, considering also the long-term need to protect the safety of all the community.

While many activities in WP2 will continue unaffected, albeit not under ideal conditions, those that rely on face-to-face engagement and/or inputs from the user communities, constrained by COVID-19 crisis management and blanket travel bans, will suffer a greater impact.

However, no project can stand still. To ensure impact for the critical DICE events for collecting feedback from stakeholders:

- Coordination with the other INFRAEOSC projects will receive particular emphasis.
- To overcome barriers to direct stakeholder engagement, virtual instruments such as webinars will be utilised to the maximum extent.
- The situation will be monitored constantly, and as soon as the pandemic appears to recede in impact, a return to mixed-mode events will be contemplated.

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# 8 Conclusions

This document is agreed upon between all the DICE partners and it constitutes a pragmatic plan to deliver a series of activities to which all partners – with the different levels of effort foreseen by the DICE work plan – commit to contribute.

WP2 is responsible for monitoring the execution of the activities and to ensure partners' active contribution according to their different roles and effort in the project WPs and tasks.

Concerning targets, KPIs and the planned activities, this plan is, in effect, a "living document".

This plan will be followed by a final version at M30 of the project (D2.3 – *Final report on Communications and Dissemination*), reporting on the results of the activities and initiatives described herein.

For a comprehensive overview in context of the communications activities over the course of the project, see Figure 18 (*next page*).

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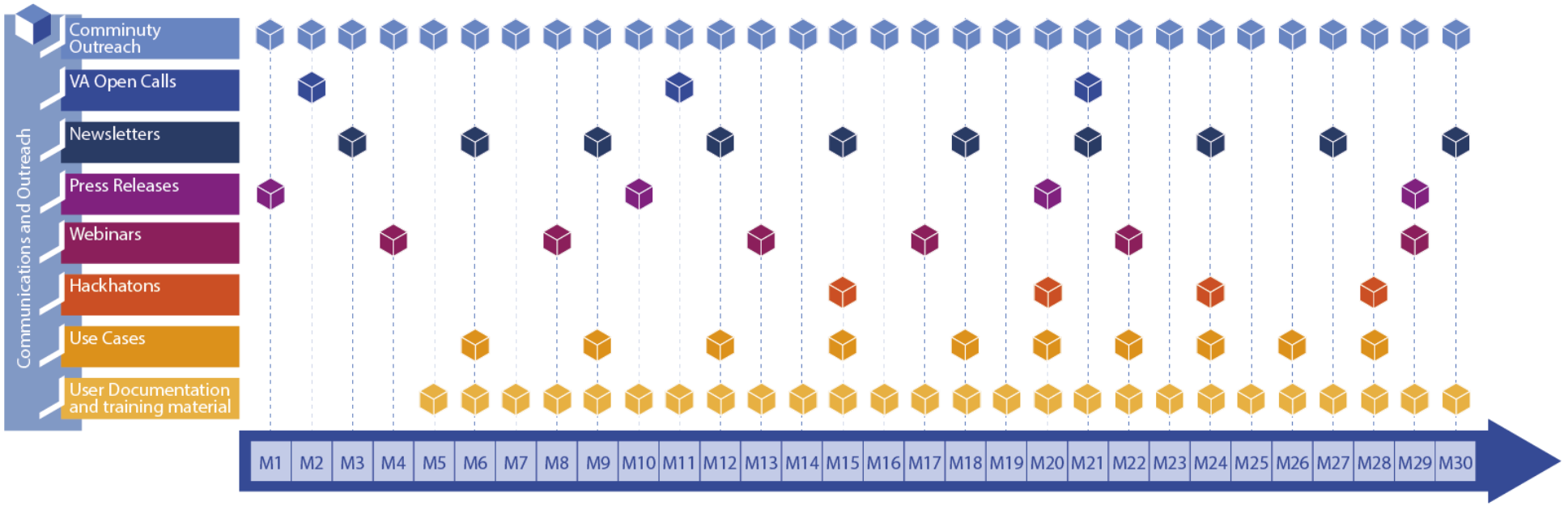


*Figure 18: DICE overall communications timeline (Source: Grant Agreement)*

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# 9 References

[1] EOSC Executive Board Skills and Training Working Group, “Digital skills for FAIR and open science: Report from the EOSC Executive Board Skills and Training Working Group,” 1 February 2021. [Online]. Available: https://op.europa.eu/en/publication-detail/-/publication/af7f7807-6ce1-11eb-aeb5-01aa75ed71a1/language-en/format-PDF/source-190694287. [Accessed 20 April 2021].

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