DELIVERABLE REPORT

Project acronym: CS3MESH4EOSC

Deliverable D1.1: Agenda & minutes of kick-off meeting and all other project meetings

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Abstract

This document summarizes the work done in the context of Deliverable D1.1 of Work Package 1 in the CS3MESH4EOSC project. Detailed information is provided regarding all official project meetings organized to date, as well as pointers to all relevant data. This includes the kick-off meeting, which took place on the 30th and 31st of February 2020, in Copenhagen.

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1. Introduction

The CS3MESH4EOSC project aims to create an interoperable federation of data and higher-level services to enable friction-free collaboration between European researchers. Its distributed nature (involving 12 different institutional partners) means that all coordination has to be done remotely, with the assistance of video conferencing tools and content management solutions. It also means that keeping track of all project discussions, decisions and conclusions is of paramount importance, since the lack of face-to-face interaction between project participants could otherwise give rise to misunderstanding and other potential communication issues.

Among others, Work Package (WP) 1 is expected to:

- ensure efficient organisation and day-to-day management of the project;

- ensure proper interaction among collaborating partners.

In order to make sure these objectives can be achieved, WP1 established a framework based on two software tools. Firstly, the Zoom[1] videoconferencing tool was used as a way to establish real-time communication between the partners, based on DTU's infrastructure. Then an online collaborative tool (Indico[2]), hosted in CERN's premises[3], was used both as a means of exchanging meeting minutes, documents and other materials and an archive of all project meetings, readily accessible by anyone in the project at any time. Indico was also used as the main platform for the organization of the project Kick-off Meeting, which took place in Copenhagen on the 30th and 31st of January 2020. Moreover, in order to allow for efficient collaboration in the writing of documents within the activities of WP1 as well as sharing them with others, a shared folder on CERN's CERNBox system was set up and restricted to the relevant partners.

1.1   Description of the Task

The *CS3MESH4EOSC Project Proposal* details task *T1.3* in the following way:

> *This task will coordinate the communication tools and activities between the project partners and provide 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.). The task also involves the organisation (and proper documentation) of internal project meetings related to the technical development and commercialisation of meetings, incl. the Kick Off, GA meetings, STC meetings and External Advisory Board (EAB) meetings. [...]*

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1   https://zoom.us/

2   https://getindico.io

3   https://indico.cern.ch

1.2　Description of the Deliverable

The current deliverable report intends to present a first overview of the planning and management of the CS3MESH4EOSC project, in its first months of life.

At the starting phase of any project, it is essential that the members determine and agree upon the collaborative tools which will allow for communication to happen and which will assist in laying the foundations for the project. These tools will allow for the creation of both formal and informal communication channels which will play an important role in ensuring that knowledge flows within the project. Informal communication channels, in particular, normally take time to be established, which is why Project and Steering Committee meetings are expected to play a particularly important role in the first months of such a collaboration. As the project matures and more autonomous working groups arise, meetings will most likely lose relevance as fora to discuss lower granularity tasks and instead mutate into something akin to project "checkpoints" where higher level "synchronization" will happen. It is expected that project meetings will help provide the partners with a shared understanding of their roles, responsibilities and rights.

In this deliverable report, the meetings organized and held up to the Kick-Off at the end of January are included and listed. All interested parties can refer to this document to obtain information about the content of the meetings, the decisions made, the progress done and any other information relevant to the Kick-Off meeting and the other support meetings of the project.

2. Implementation and Result

From early on, CS3MESH4EOSC's interim governing bodies have agreed to hold regular meetings. The main aims of those meetings were to bring together the partners to discuss topics of the project, take decisions, define the next steps and talk about the current status and progress of the project. There are two types of meetings which were agreed to be held, as per the consortium agreement, on a regular basis by all partners:

- Steering Committee meetings;
- "All-hands" Project meetings.

Steering Committee meetings are held weekly, starting from December 2019, and mainly deal with coordination among work packages and high-level management discussions. **Project all-hands meetings** (initially called *Soft Kick-Off meetings*) are held monthly, starting from October 2019 until January 30-31, 2020 when the official Kick-Off meeting took place, in Copenhagen. The Project meetings listed below were mainly dedicated to the preparation of the official Kick-Off meeting, the tasks and the work around it. The meetings were organised through the adopted tool *Indico* (see chapter *Adopted Tools* for further information). All the details of the meetings such as: dates, place, participants, material and discussions are stored and archived in Indico for future memory, in an area which is only accessible to project participants. The minutes of each meeting are available in a dedicated area. A notification email is always sent to the project partners when the minutes are uploaded and are available online. Partners did not raise objections thus far regarding the current process of meetings organisation and minutes distribution, so there is no foreseen action for a re-evaluation of the tool and method used. The table below, *Summary of organised meetings*, presents the results of all the Project meetings and Steering Committee meetings in chronological order and their links with all the relevant information.

Table 1: Summary of organised meetings

Project's "all-hands" Meetings			
Meeting	**When**	**Where**	**Link**
Soft Kick-Off Meeting #1	16/10/2019	Remotely	https://indico.cern.ch/event/870344/
Soft Kick-Off Meeting #2	27/11/2019	Remotely	https://indico.cern.ch/event/870338/
Soft Kick-Off Meeting #3	16/12/2019	Remotely	https://indico.cern.ch/event/870837/
Soft Kick-Off Meeting #4	20/01/2020	Remotely	https://indico.cern.ch/event/871728/
Steering Committee Meetings			
CS3MESH STC Meeting #1	02/12/2019	Remotely	https://indico.cern.ch/event/868358/

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CS3MESH STC Meeting #2	09/12/2019	Remotely	https://indico.cern.ch/event/869089/
CS3MESH STC Meeting #3	20/12/2019	Remotely	https://indico.cern.ch/event/871736/
CS3MESH STC Meeting #4	13/01/2020	Remotely	https://indico.cern.ch/event/876244/
CS3MESH STC Meeting #5	10/02/2020	Remotely	https://indico.cern.ch/event/886224/

3. Kick-off Meeting

The **Kick-off Meeting** took place on the 30th and 31st of January 2020, in Copenhagen, in the two days following the *CS3 Workshop 2020*[4]. The proximity with this event has allowed for the partners as well as many of the Early Adopters (who also happen to be members of the CS3 Community[5]) to be physically present.

The meeting was a success. The partners had the chance to meet each other in person and to spend quality time together by having fruitful conversations on project matters. The agenda of the two-day meeting included public sessions, partner presentations, WP presentations and *mini-workshops*. The detailed timetable of the Kick-Off meeting can be found on Indico[6]. All the slides of the presentations and any other material used during the meeting are attached to the timetable[7] on the respective session slot. The figure Summary of Kick-Off meeting agenda shows the main sessions held during the meeting, which were mentioned above.

Figure 1: Summary of Kick-Off meeting agenda
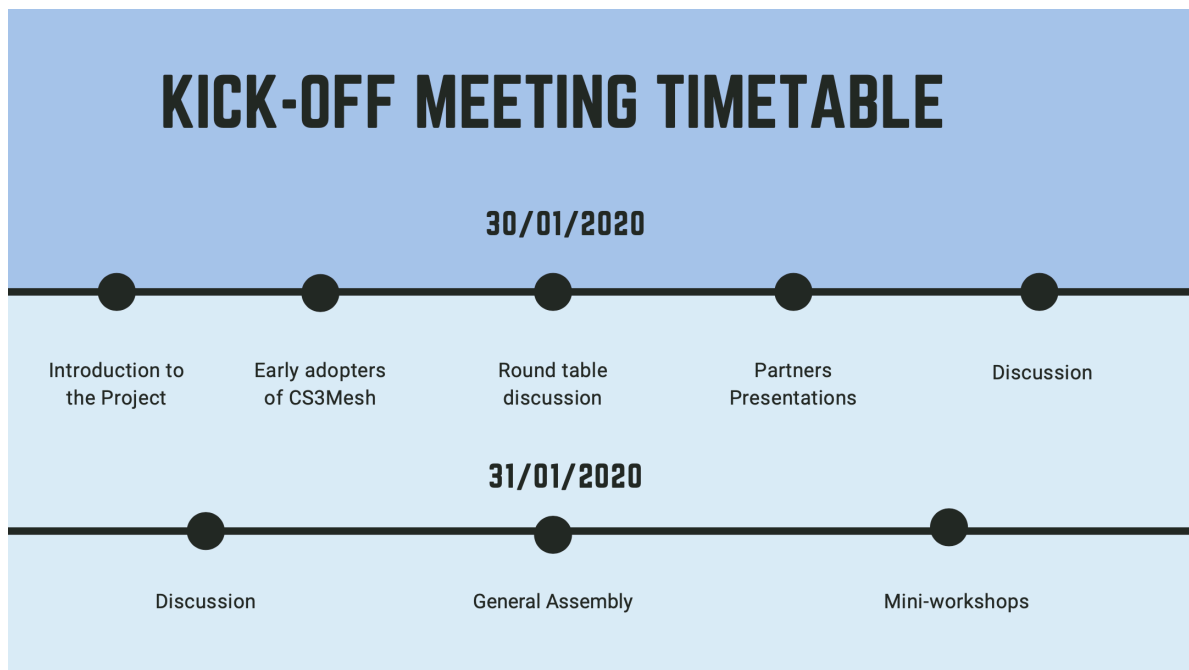
The partners who attended the Kick-Off meeting are presented on the table List of partner representatives below.

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4   https://cs3.deic.dk/

5   https://www.cs3community.org/

6   https://indi.to/cs3mesh-kickoff

7   https://indi.to/B5QQR

Table 2: List of partner representatives

Partner Representatives	
Organisation	**Person**
AARNet	• Guido Aben • Gavin Kennedy • Brad Marshall • Michael Usher
Ailleron (Software Mind)	• Marcin Sieprawski
CERN	• Pedro Ferreira • Hugo Gonzalez Labrador • Jakub Moscicki
CESNET	• Milan Danecek • Jan Hornicek
DeiC	• Martin Bech • Frederik Orellana
ESADE Business School	• Angelo Romasanta • Jonathan Wareham
European Commission - JRC	• Armin Burger • Davide De Marchi
PSNC	• Maciej Brzezniak
SURFsara	• Jean-Marie de Boer • Thirsa de Boer • Wybrand Lohman • Ron Trompert • Tom Wezepoel
SWITCH	• Renato Furter • Fergus Kerins
University of Münster (WWU)	• Holger Angenent

	• Peter Heiss
	• Jens Stegmann

Among the attendees of the first session of the Kick-Off meeting there were also the "early adopters". There were seven representatives present at the meeting (one representative per organization). The detailed list of the representatives' names and their affiliations are presented on the table "Early adopters". In this table, the links to the early adopters' presentations (whenever applicable) are available, as well.

Table 3: Early adopters

Early adopters		
Affiliation	**Person**	**Presentation**
Center for Open Science	Nici Pfeiffer	N/A
CERN	Joao Fernandes	https://indi.to/d5dJt
Elettra - Sincrotrone Trieste SCpA	Ivan Andrian	https://indi.to/F2ZNt
EGI Foundation	Catalin Condurache	https://indi.to/6sfmk
GO FAIR International Support and Coordination Office	Erik Schultes[8]	N/A
Helmholtz-Zentrum Berlin, HIFIS	Andreas Klotz	https://indi.to/Zy6nJ
Netherlands Institute for Radio Astronomy	Zheng Meyer-Zhao	https://indi.to/7xdDB
RENATER	Alexandre Salvat[9]	https://indi.to/XQ8tC

The discussion which followed up the early adopters' presentations is summarized in the table "Early adopters discussion".

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8   Present via video-conference

9   Not present at the Kick-off meeting, but met with representatives of the StC during the CS3 Workshop

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Table 4: Early adopters discussion

Early Adopters Discussion		
Affiliation	**Person**	**Main discussion points**
Center for Open Science	Nici Pfeiffer	Nici Pfeiffer gave a brief explanation of the purpose of the OSF project and highlighted its storage aspects. Researchers using OSF are able to save their project data in a series of systems which range from commercial providers to their own ad-hoc solutions, thanks to OSF's "pluggable" back end. It was suggested CS3MESH as an additional target of such "pluggable" storage, which would open up the possibility for OSF to connect with all providers in the mesh. OSF users may be already present at the project partner sites. Further analysis will be done for potential user groups for a demonstrator of interoperability between OSF and CS3MESH.
CERN	João Fernandes	João Fernandes highlighted the synergies which may exist between the two projects, specifically in what concerns the OCRE test suite for cloud service testing and the definition of APIs used in the context of the ARCHIVER project. ARCHIVER, in particular, will give "strong preference" to open and general-purpose APIs and a CS3-to-ARCHIVER workflow could be one of the use cases. The latter would require the definition and negotiation of policies/codes of conduct for data usage. The second phase of the ARCHIVER project (end of 2020) will be a suitable moment to consider further synergies between ARCHIVER and CS3MESH.
Elettra - Sincrotrone Trieste SCpA	Ivan Andrian	Ivan Andrian brought up a series of points, relating, most of all, to the interoperability between different providers and whether vendors would have an interest in joining this effort. EFSS vendors are competing for the same market and are not partners in the project consortium. However, the project's assumption is that vendors will have interest in remaining competitive by assuring interoperability (C3APIs and OCM). Interoperability will be a requirement for EFSS solution to be part of the future federated service. The three major vendors (ownCloud, Nextcloud and Seafile) have already implementation of the OCM. In addition, ownCloud already implements the CS3 APIs in their new upcoming product version. The possibility that this assumption fails is one of the risks which were identified for WP3 and is estimated to be low.

		There was consensus that the best path to interoperability is to create a genuine interest on the vendor side, through the creation of value in the resulting mesh. Elettra is interested to test the connection to the CS3MESH later this year.
EGI Foundation	Catalin Condurache	Catalin Condurache pointed out that this collaboration actually works both ways, with CS3MESH being also a possible "adopter" of EOSC-hub. There was widespread agreement that the relationship between these two projects can be mutual beneficial. The possibility of an actual CS3MESH service on EOSC-hub appealed to all those present, who agreed that the provision of any such service was not to be set up or maintained as part of the CS3MESH4EOSC project, but rather by one of the partners, especially a commercial one. Another possibility is to connect part of the existing EGI services to the CS3MESH. The CS3MESH project intends to use some EGI services, such as ARGO monitoring, for federated infrastructure operations.
GO FAIR International Support and Coordination Office	Erik Schultes[10]	In his presentation about GO FAIR, Erik Schultes highlighted a possible use case: CS3MESH as being able to handle FAIR Digital Objects. The partners agreed with that possibility. Since there are not any user-facing applications capable of dealing with FAIR DOs yet, he also pointed out that it would be important to get a specification document from CS3MESH as early as possible, so that any client-side tooling in development could be adapted in time.
Helmholtz-Zentrum Berlin, HIFIS	Andreas Klotz	Andreas Kotz highlighted some current issues in the OCM specifications and pointed out possible problems regarding personal data protection which could arise from a too loose implementation of the CS3MESH concept. It was consensual among partners that whatever mechanisms are implemented should take into account user privacy by design. Legal frameworks such as the GDPR bring require explicit consent from the user and that should be considered at all levels of the system.

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10   Present via video-conference

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Netherlands Institute for Radio Astronomy	Zheng Meyer-Zhao	Zheng Meyer-Zhao suggested the LOFAR Key Since Projects (KSP) and the community behind them as primary source for CS3MESH-related use cases. It was agreed that Zheng Meyer-Zhao suggested the LOFAR Key Since Projects (KSP) and the community behind them as primary source for CS3MESH-related use cases. It was agreed that CS3MESH should engage with the LOFAR community from early on, as to gather as much requirements information as possible. Then, a discussion was launched on a series of points, including: • ESAP API vs. CS3APIs • The role of RUCIO in CS3MESH • Role of Science Box There are several commonalities between ESCAPE WP5/WP2 and CS3MESH WP4.1/WP4.4 (user community, technology choices...). It was felt that the window of opportunity for practical collaboration between the project is open now.

3.1 Work Package Presentations

In the afternoon of the first day (30th of January) the Work Package leaders had the chance to present their corresponding Work Packages as well as the main tasks and deliverables. Every presentation was followed by a short discussion based on questions from the audience.

Table 5: Work Packages presentations

Work packages presentations	
WP1	https://indi.to/3wpNy
WP2	https://indi.to/xrxnj
WP3	https://indi.to/hZXYv
WP4	https://indi.to/y8BPh
WP5	N/A

3.1.1   Work Package 1 – Project Management

This Work Package raised an interesting discussion regarding **collaborative tools** – although everyone agreed that the project needs some sort of text-based communication tool as well as a

content-sharing platform, opinions were divided on whether to use a cloud-based third-party solution or a self-hosted application. With regards to text-based communication, the option of setting up a Discourse instance was weighed versus using Gitter. In what concerns content sharing, both using GitHub's own internal wiki or a self-hosted solution based on Open Source software were discussed.

3.1.2   Work Package 2 - Federated Infrastructure

The presentation of Work Package 2 was followed up by an extensive discussion on Tasks 2.1 and 3.2. In particular, the discussion covered the topic of the use cases dedicated to the tasks aforesaid. It was highlighted that Task 2.1 is critical for the successful implementation of the project and other work packages are highly dependent on that task.

3.1.3   Work Package 3 - Technology and Foundation

The presentation of Work Package 3 included;

- the distribution of work among the different members
- the different technologies to be used to build the future interoperability platform and what is the current state of such software
- the near future plans for the upcoming months (Continuous Deployment, OCM sharing and on-boarding new staff for the WP)

In addition, in the presentation it was mentioned that Tasks 3.1 and 3.2 rely heavily on WP2 contributions on federated identity and the impact on sharing of data. Lastly, a workshop took place to explore ideas about federated AAI and the needed extensions to the OCM protocol to make it happen. More information about the workshop can be found below.

3.1.4   Work Package 4 - Users and Applications

During the WP presentations, the WP leader reviewed the objectives of the WP and presented the work plan, including tasks assignments to partners, task timelines, early deliverables and milestones as well as links and dependencies with other work packages of the project. For the technical tasks (4.1- 4.4) the first use-cases and application scenarios to be tackled by WP partners were proposed and discussed. For task 4.5 the organisation of the process of requirements gathering and interactions with WP3 was envisioned. For task 4.6 initial scoping of the work planned in the project proposal was performed and the proposed methodology discussed.

3.1.5   Work Package 5 - Dissemination, Exploitation and Outreach

A lot of discussions happened in the consortium as a whole during the two days of the Kick-Off meeting and many discussions had already taken place internally in WP5 both before and during the CS3 conference. The following were the main themes and its discussions points:

Website

- An external enterprise has been hired to provide layout and graphical design
- A site had put in place based on this
- It was well-received, but points were raised on
- The concept of a landing page with no information
- How much we should differ from the standard layout of most other project sites

- It was decided that the site would be reworked along more traditional lines (informative text, image carousel with news/events)

Internal communication channels

- Whether or not we need project organization tools like *Confluence*/*Jira* or *Trello*
- Whether or not we need real-time communication tools like Signal, Telegram or Discord
- Whether or not we need a project wiki - or similar
- Where to host our code
- Issues with using services from large US providers when we're to some extent building alternatives to precisely those- albeit in a different application space

Given that the project is to a large extent about contributing to already existing CS3 community activities, it was decided to use the CS3 GitHub code repository and create project channels under the CS3 organization on the chat service Gitter.

External communication channels

- Which social media services to engage on
- Which use cases to target
- It was decided to post news on *Twitter* and create a CS3 organization on *LinkendIn.*

3.2   General Assembly

On the second day of the Kick-Off meeting, the first General Assembly (GA) of the CS3Mesh4EOSC project took place. Eleven out of the twelve members were present[11]. The main decisions taken were the following:

- **Martin Bech** (DeiC/DTU) was elected as chairman of the GA;
- Election of the Steering Committee (StC):
  - **Pedro Ferreira** (CERN, WP1, Technical Director)
  - **Ron Trompert** (SURFsara, WP2)
  - **Hugo Gonzalez** (CERN, WP3)
  - **Maciej Brzezniak** (PSNC, WP4)
  - **Frederik Orellana** (DeiC/DTU, WP5, Deputy Project Director)
  - **Guido Aben** (AARNET, eResearch Partnerships Coordinator)
  - **Jakub Moscicki** (CERN, Project Coordinator)
- The GA decided (unanimously) that the StC is authorized to form an External Advisory Board (EAB) based on the proposal presented at the GA;
- The next ordinary GA will be held in conjunction with the next CS3 conference. If no CS3 conference is held, the next ordinary GA will be held in January 2021.

3.3   Discussion Sessions

At the end of the first day (Thursday) as well as in the morning of the second day, a series of plenary discussions were held on topics which deserved the immediate attention of the consortium.

First of all, the topic of **AAI and Federation** was brought up, after the appearance, by the end of the previous day, of an ad-hoc working group on the matter. The main concern was whether the project

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11   CERN, DTU, SURFsara, PSNC, CESNET, AARNET, SWITCH, WWU, Ailleron, JRC and ESADE

should focus on a third-party solution on this matter, try to solve it itself or to go for a solution which would leave all options open, with a workflow which would treat all identity providers and federations equally from the technical standpoint. By the end of the discussion, it was consensual that the latter option not only represented a lower risk but allowed as well for better exploitation of the concept at a global level and across different fields.

Then, the previous day's discussion regarding **collaborative tools** was resumed. The consensus was that any of the combinations of solutions which had been discussed were acceptable to everyone and that a decision should be taken in the coming weeks, based on concrete proposals by those interested.

Finally, there was a discussion concerning the **project website**, which provided valuable feedback to the WP5 leadership, directly from the partners. It was agreed that further work regarding the project logo and the website drafts was necessary, as to better align with the project's mission and environment.

Also, as part of this discussion, some of the partners demonstrated their concern regarding the **recruitment of staff**

Figure 2: Kick-off Meeting

for the project. Difficulties in internal recruitment processes and the inability to sometimes find candidates with the right skill set may constitute important obstacles throughout the early phases of the project. It was agreed that collaboration in the identification of possible candidate profiles will be an absolute need.

3.4   "Mini-workshops"

By the end of the second day of the meeting, some time was left to Work Package leaders and participants to start brainstorming and discussing some of the practical aspects of some of the tasks. Two ad-hoc "mini-workshops" emerged from this activity:

The first one continued the discussion which had started during the discussion sessions, about AAI and Federation. It led to a very interesting brainstorming session which will be the basis for an upcoming proposal;

The second one concerned WP4 and resulted This resulted in the identification of the first steps to be taken within particular areas including *Jupyter* notebook integration, open data systems, collaborative applications and on-demand data transfer.

The results of these "mini-workshops" will be followed up at the Work Package level.

4. Adopted Tools

The aspect of communication is of high importance on every project. Therefore, the choice of proper and suitable communication tools is essential. In the current project, since the project partners are scattered all over Europe plus Australia, the need for remote communication was raised. This need was addressed by adopting three main tools which facilitate the communication, organisation and interaction between the partners during the whole lifetime of the project. The tools are; *Indico, CERNBox and Zoom.*

Indico is an open-source tool developed at CERN and which allows users to manage and coordinate meetings, workshops, lectures and conferences in an efficient and simple way. Indico's roots go back to the FP5-IST Project *Integrated Digital Conferencing*[12] and is a product which evolved from one of its deliverables. Indico provides a variety of features and functionalities when it comes to the organization of meetings. For that reason, it was chosen as the main tool for managing the project meetings, which are held on a regular basis during the whole life cycle of the project. In particular, the available features which are used heavily for the arrangement of the project meetings are: list or participants, invitations, agendas and minutes. On top of these, there is the possibility to upload meeting material (e.g. files, documents, links, photos) which all meeting participants can access, download and review at any time. Indico is a user-friendly tool, easy to access and it provides a multi-granular tree-based protection scheme. All meetings in the project will be stored in CERN's own Indico server (*indico.cern.ch*).

CERNBox is a cloud data storage solution available to all CERN users. Data can be easily shared, synchronized and accessed by any web browser and file explorer. *CERNBox* is a very secure means of storage and it is recommended for storing sensitive data since the servers where the data is stored are physically located and secured within the CERN premises. CERN, as coordinator of the project, is responsible for compiling, storing, archiving and ensuring the quality of all project documents and information. Therefore, the best tool to be used for the purposes mentioned above is the *CERNBox*, a tool familiar to the project coordinator team.

Zoom is a commercial tool used between the project partners for accomplishing online meetings through video conferences and enhancing better communication. *Zoom* provides a high-definition video and audio links which minimizes the risks of miscommunication and misunderstanding. Project partners can work together despite being miles away. *Zoom* is very easy to use and can be accessed quickly and simply by everyone. An account is not needed in order to attend an online meeting, which makes things much easier. DTU's Zoom license will be used for the project's video conferences.

The need for direct, fast and frequent communication led the consortium to consider a chat and/or wiki platform as an additional tool for collaboration within the project. As mentioned above, this was discussed at several points during the Kick-off meeting, the decision being that partners would come up with suggestions and/or proof of concept solutions before a final decision is made.

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[12] Grant agreement IST-2001-34306

5. Conclusion

This first deliverable report of the *CS3MESH4EOSC* project gives an overview of all the actions taken with regards to the preparation of the project, up to its official Kick-Off meeting in late January 2020. It summarizes the discussions and decisions made so far, as well as the outline of the next steps.

From the aforementioned minutes and presentations produced in December 2019 and January 2020, the following conclusions were drawn:

- The successful organization of the Kick-Off event has demonstrated that the Project is an autonomous entity which is capable of running itself in an efficient and focused manner;

- There is widespread agreement concerning the tools and methods which will be used in the daily management of the project, all partners having demonstrated their will to adapt to the consortium's choices;

- The CS3MESH4EOSC consortium has now been effectively set up, with all partners having demonstrated their engagement and proactive stance with regards to the successful completion of the Project.

The expectations of the Project Management with regards to the Kick-Off meeting were successfully met and the feedback from all partners was positive. The Work Package leaders in particular met the involved project partners in person, interact with one another and start coordinating their work. The "early adopters" had the opportunity to provide their input on the strengths and challenges of the project. More importantly, many discussions were held, which allowed everyone to see their questions answered and to have a better picture of what should be the project's main goals and directions. As part of this process, the roles, responsibilities and tasks of the project members were evaluated and elucidated.

With regards to the outcome of the Kick-Off meeting in particular, the following findings may be highlighted:

- The strategy of involving "early adopters" early-on has so-far proven effective, with very clear use cases and future synergies having been identified, such as those of ESCAPE and OSF, and others.

- In additional to technology, the policy aspect of the *CS3MESH4EOSC* project will be essential, especially given the legal frameworks in Europe and the evolution of user concerns with regards to data storage and sharing by third-party applications. For the Project this constitutes not only a challenge but also an opportunity to delivers a ground-breaking solution fully compatible with all mandatory regulations.

- From the technical standpoint, Federated AAI has, as expected, shown to be challenging, not only due to policy aspects but also because it is a larger challenge to the European research infrastructure as a whole. *CS3MESH4EOSC* intends not only to leverage the existing solutions from a wider community, but also provide the flexible platform to accommodate future developments in the field as well as allowing for early prototyping.

6. Table of Figures

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7. Index of Tables

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