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Concerted action for the European HPC CoEs
Project Number: 823964

**D5.1 – Initial Strategy for Communication,
Dissemination, Innovation and Event Management**

WP5 – Promoting EU HPC CoEs



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List of abbreviations

CoEs	
Centres of Excellence.....	8
CSA	
Collaboration Support Action	8
EU	
European Union.....	8
HPC	
High Performance Computing	8
IP	
Intellectual Property	8
KPIs	
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PCC	
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Executive Summary

This deliverable describes the main objectives and action points for FocusCoE regarding dissemination and outreach. It presents the development of its Corporate Design has been developed and is implemented and formulates its communication goals which can be grouped into soft communication goals, which have cognitive and affective implications, and hard communication goals. The document as well outlines target groups, formulates messages to transmit to each of these target groups, determines channels through which these groups can be reached, and assesses a set of Key performance Indicators (KPIs) to measure the success of communication activities.

In addition, this deliverable describes the internal communication tools Slack and mailing lists and how they are used to communicate within FocusCoE and/or the individual CoEs. The website, Social Media, Newsletter, and Printed Documents are described as external communication channels and how they are used to reach the relevant target groups. Additionally, an extensive list of events potentially interesting for CoEs to participate in is added, which will be promoted via the website, Slack and social media.

Finally, the web-based tool to pilot in the last quarter of 2019 is briefly described, and the innovation management approach is shortly outlined.

An update section of this deliverable has been added in October 2020 at the end of this document.

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1 Introduction

In December 2018, the European Union (EU) has launched nine new European Centers of Excellence (CoEs) for computing applications. As a part of the three-pillar European HPC Ecosystem (Developing Exascale technologies, providing access to (High Performance Computing) HPC infrastructure, and achieving excellence in HPC applications), these CoEs aim to support the EuroHPC research agenda by testing large scale applications on (pre-) exascale machines. In order to support these CoEs in their mission to contribute to a globally competitive HPC ecosystem, FocusCoE has been selected as a Collaboration Support Action (CSA). The main objective of this work package is to promote the EU HPC CoEs competences and services and to establish and promote the EU HPC CoE “brand”.

In the first section, this document will explain how the brand will be established and how interested stakeholders will be addressed. Targeted communication and dissemination via online and offline channels and event promotion will be the mechanisms used in order to achieve this objective, which will be described in more detail in the first section of this document.

Work package 5 aims to support the EU HPC CoEs in receiving valuable and tailored information on (external) industrial collaboration possibilities and (internal) synergies between CoEs. This document describes how to achieve this, e.g. through regular newsletters and the opportunity to access a database where relevant stakeholders are listed and categorized according to the themes they are covering, expertise they lack but wish to acquire (which might be covered by one of the CoEs), and intersection areas.

In addition, FocusCoE provides the platform for these internal and external discussions to be held, which will be achieved in form of organized workshops and presence at events where relevant target groups are being found. A list of events where this potential has been discovered will be provided in this document.

Finally, this deliverable provides an outlook on how innovation outputs arising from the FocusCoE itself, such as generated Intellectual Property (IP) and innovations in the form of course material as well as the web-based tool developed in this workpackage, are managed.

2 Communication and Dissemination

2.1 Corporate Design Development

The FocusCoE corporate design consists of a word mark (FOCUS), a figurative mark (an aperture with the word ‘CoE’ in the centre), and a slogan (European Excellence in HPC Applications). The three elements can either be used all together, or without the slogan. The figurative mark can also be used independently, e.g. as a browser-image.



Figure 1: Final FocusCoE-Logo

The intention of the Logo is to convey the importance of the CoEs, making sure that FocusCoE helps to build and promote the European HPC CoEs brand, rather than creating a brand for itself. Metaphorically, the logo expresses that the EU HPC CoEs are in focus of attention. Following the CoE feedback at the workshop on February 21st, the CoEs aim for a HPC CoE branding which is independent from the project FocusCoE, and which could be used as a label for EU HPC CoEs. One possibility could be to use the figurative mark only for these purposes. However, the final branding issue still has to be considered open.

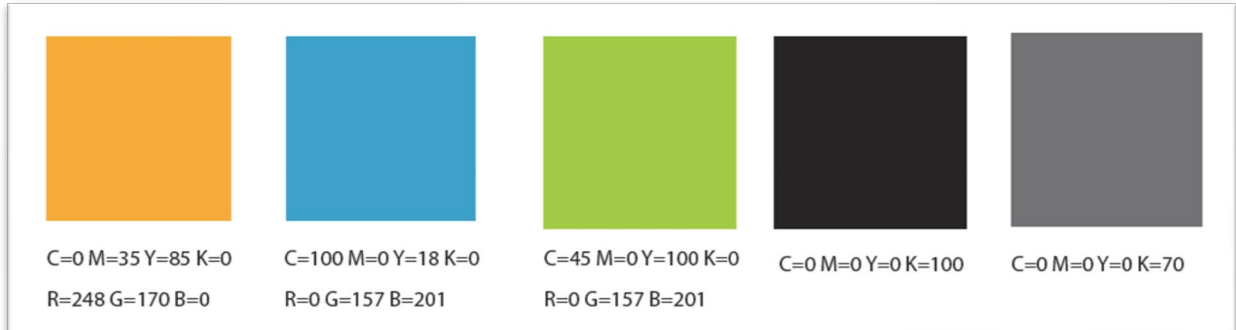


Figure 2: Focus CoE Colour Scheme

The three main colours appearing throughout communication materials are orange, blue, and green. The colour families have been mixed to display the variety of CoEs.

These graphic elements are used on the website, presentation templates, Twitter cards, and more. One example of the FocusCoE Corporate Design used as a design element is shown in Figure 3.



Figure 3: Example of graphic elements used for social networks, templates, website, and more.

2.2 Strategic Communication

2.2.1 Overall Communication Goals

FocusCoE has several categories for goals to be achieved and supported by effective communication. The two main categories are soft and hard communication, with soft communication objectives being subdivided into cognitive and affective goals.

- Soft Communication goals:
 - Cognitive Communication Goals:
 - Increase visibility of EU HPC CoEs
 - Raise awareness of the importance of HPC applications for society, science, and industry
 - Link FocusCoE and the European HPC CoEs to the EuroHPC [1] research agenda
 - Improve information flow between the CoEs
 - Improve information flow from CoEs to external interest groups
 - Affective Communication goals:
 - Give European HPC CoEs a unified voice
 - Achieve positive reputation of European applied HPC
 - Position European CoEs as social and economic innovation drivers
- Hard Communication goals
 - Help increase attendance to training and CoE events
 - Help increase number of users of the CoE-individual services

These goals cannot easily be measured, or, more precisely, the role of FocusCoE communication measures as a contributor to the achievement of these goals is not clearly distinctive. Therefore, we will treat this through performance indicators (Table 2) in order to achieve strategic goals. WP5 is responsible for clearly defining target groups, channels to reach them, messages to be conveyed (Table 1), and communication activities. The chapters 2.3 and 2.4 will give more precise examples on the implementation of communication measures and tools.

2.2.2 Target Groups

Communication, dissemination, and enhancement of the collective impact of the partner CoEs are core goals of FocusCoE. Thus, almost all activities involve communication with diverse HPC ecosystem stakeholders, the most important of which can be categorised as follows:

- Partners:
 - Collaboration Partners – CoEs
 - EU HPC Strategy Partners – PRACE [2], ETP4HPC [3]
 - H2020 Programme Partners (CSAs) - EXDCI-2 [4], EuroLab-4-HPC 2 [5]
- Decision making bodies: EuroHPC Joint Undertaking
- Users: Industrial and other users of HPC applications

In order to exchange more effectively with its partners, FocusCoE has set up the General Assembly (GA) with representatives of each partner. Within the frame of workpackage 5, this body allows to discuss contributions to events and communication materials such as success stories.

Secondary target groups such as the General Public have to be addressed as well. With this diverse set of target groups, FocusCoE has to address different motivations and interest in their communication strategy. The target groups' main concerns can be of scientific, political, commercial, or social nature. These target groups have to be addressed with different messages, as illustrated in Table 1.

Stakeholder /	Channel	Message
Category: Partners (members of the GA)		
Active CoEs (current call / still active)	<ul style="list-style-type: none"> • Slack • Meetings and Workshops 	<ul style="list-style-type: none"> • FocusCoE helps promote CoE services to users • FocusCoE helps increase individual impact
EU HPC Strategy Partners: PRACE, ETP4HPC & H2020 Programme Partners (CSAs): EXDCI-2, EuroLab4-HPC-2	<ul style="list-style-type: none"> • Joint events • Meetings 	<ul style="list-style-type: none"> • Together, we can give European HPC CoEs a unified voice • Coordinated joint efforts lead to increased impact
Category: Decision making bodies		
EuroHPC initiative	<ul style="list-style-type: none"> • Position Papers • Direct Communication 	<ul style="list-style-type: none"> • FocusCoE supports EuroHPC research agenda • European Excellence in HPC applications made possible with EU-funding • FocusCoE pools information to reduce complexity
Category: Users		
Industrial users	<ul style="list-style-type: none"> • Direct communication • Trade fairs • Website 	<ul style="list-style-type: none"> • With the help of HPC, product development can be faster, cheaper, and thus more efficient
Other users: Academic, Research institutes, public bodies and administrations	<ul style="list-style-type: none"> • Direct communication • PRACE strategic partnership 	<ul style="list-style-type: none"> • HPC is a valuable tool to address important societal challenges: health, environment, sustainability
Category: Education		
Students and	<ul style="list-style-type: none"> • Website 	<ul style="list-style-type: none"> • We share valuable information on

lecturers	• Academic project partners	training opportunities and educational material
Category: Hubs		
Industry / trade organisations	Trade fairs and other industrial sectorial events	Promote CoEs as contact point for HPC (exacale) applications
Other hubs (vendors, code owners, scientific communities / organisations)	Trade fairs and other industrial sectorial events	Promote CoEs as contact point for HPC (exacale) applications
Category: Observers		
General public	<ul style="list-style-type: none"> • Website • Social Media • Public science events 	<ul style="list-style-type: none"> • HPC is a valuable tool to address important societal challenges
Press	<ul style="list-style-type: none"> • Direct Communication • Community Events 	<ul style="list-style-type: none"> • FocusCoE is a valuable hub for information on HPC applications

Table 1: FocusCoE stakeholder groups, channels to reach out to them, and messages to be conveyed

2.2.3 Communication Performance Evaluation via KPIs

In order to transport said messages to their target groups and achieve the strategic communication goals, FocusCoE has set up a number of KPIs. The measurable goals set by FocusCoE are the following:

Tool	Communication activities	KPIs
Publications	Number of Newsletter issues	12
	Number of Newsletter Subscribers	100
	Success Story/Booklet editions	3
Events	Presence at sectorial industrial events	8-10
	Number of training events for CoEs organised by WP4	3-4
	Number of participants to training events	25
Social Media	Number of followers	750
	Average engagement rate	1%
Website	Number of visits	10,000
Media relations	Number of Press Clippings	20

Table 2: FocusCoE communication KPIs

Some other activities are potentially interesting to track, however as they are dependent from decisions made in the GA and therefore do not underlie the sole responsibility of FocusCoE, they not easily be estimated in the same way. These activities include:

- Number of GA meetings
- Number of joint FocusCoE & CoE events (e.g. at ISC)
- application-oriented position papers as input to further development of the EU research agenda

These activities highlight the overall impact of FocusCoE support actions, but shall not be put as KPIs yet, as FocusCoE should not be misunderstood as a controlling body. However, developments in these fields will be more thoroughly discussed in the following deliverable.

2.3 Tools for internal communication

2.3.1 Slack

The workspace [6] has been set up to establish a direct link between all CoEs. Using Slack for cross-CoE communication as opposed to more commonly known methods such as mailing-lists has a number of clear benefits:

- **Transparency:** Everyone can see who is involved in the Workspace and therefore technically able to follow the discussion. Everybody is free to contribute to all discussions and inquiries.
- **Flexibility:** Members and thematic channels can be added, member roles and channel settings can be changed according to current needs.
- **Fast reaction times:** The chat feature allows to directly mention Slack members which leaves a notification E-Mail to the account connected to Slack.
- **Minimize Scatter Loss:** If used appropriately, Slack can be an ideal tool to prevent things to slip through the cracks as relevant partners can be addressed directly.

However great the benefits of the Slack channel are, due to the increasing number of members with different user behaviour, the risk of confusion by overwhelming information flow has been discussed. Thus, counter measures are in place to mitigate the risk of confusion in the Slack.

- **Thematic channels:** A set on channels has been predefined, namely *#general*, *#technical_discussions*, *#comms_and_events*, and *#coe_strategic_collab*
- **Administrator roles:** Four administrators have been named to moderate discussions when necessary.
- **User manual:** A Slack user manual which gives basic information and user suggestions has been sent out and pinned to the workspace's *#general*-channel.

2.3.2 Mailing Lists

The web server *scapos-tools.de* runs an instance of GNU Mailman [7] and hosts the project mailing lists.

There are lists reaching all members, lists for each project body and each work package, lists for financial and admin people, and lists for reaching CoEs. More lists can be created if necessary (e.g. thematic lists for reaching relevant people in CoEs). To avoid spamming, the mailing lists are not publicly announced.

These lists are maintained by the Project Management. List archives and member lists are accessible to list subscribers only.

2.4 Tools for external communication

2.4.1 Website

In the first edition of the FocusCoE website, the main priority was to address the CoEs and give them a good idea of the support services FocusCoE offers them. The website is built upon a WordPress template and has been customized with the FocusCoE corporate design elements.

The preliminary Navigation of the FocusCoE website (Figure 4) is as follows:

- **About FocusCoE:**
 - **CoE support services:** The services on Training, Industry Outreach and Communication support (Figure 5) that FocusCoE offers to CoEs

- **Objectives:** Bullet points of Focus CoE's objectives
- **CoEs:** Overview of all 10 current CoEs
- **Events:** Events calendar that shows all events with CoE attendance, organized by CoEs, or that are relevant for CoE (Figure 6). This is one of the most important elements of the FocusCoE website.
- **Contact:** Links to Guy Lonsdale as project coordinator

In the following weeks, the website will be updated with the following information:

- **European HPC ecosystem:** This will contain information on the role of FocusCoE within the European HPC Ecosystem, such as the EuroHPC initiative, PRACE, ETP4HPC, CoEs and FET HPC projects...
- **Newsletters and subscription:** A regular Newsletter will comprise all information on the EU CoEs on a regular basis, presumably bi-monthly from March. The newsletter will be sent out to a subscribers list, but also documented on the website. It will contain information such as upcoming events, released papers, and short CoE news and success stories
- **Press material:** this will contain outreach materials such as flyers, posters, and press releases from FocusCoE as well as from the other CoEs

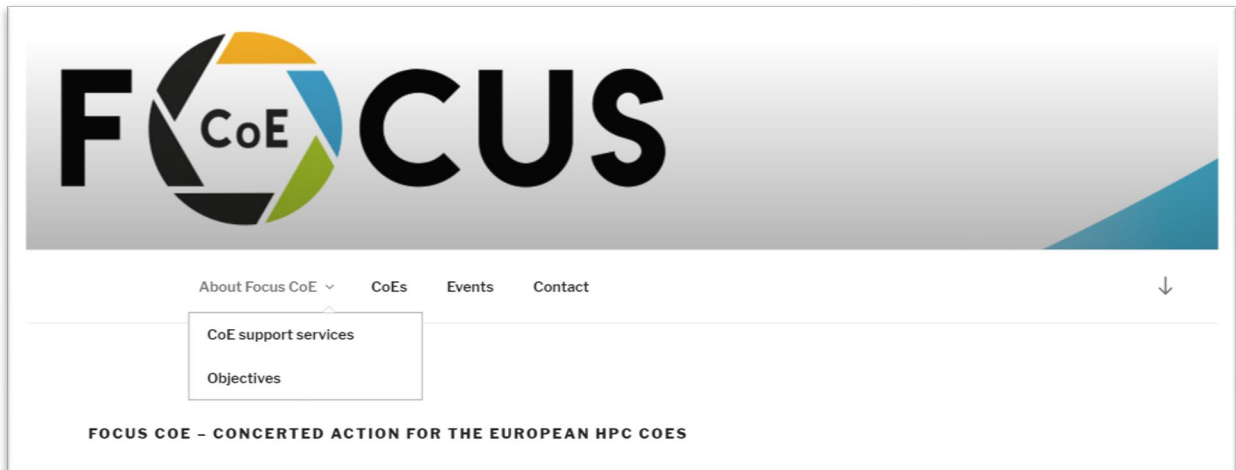



Figure 4: FocusCoE Website navigation


COE SUPPORT SERVICES

FocusCoE creates a platform for the CoEs to coordinate strategic directions and collaboration through support services in relation to training, industrial outreach and promotion of their services to potential users.




Training

- Development of a training registry and portal
- Share training best practices
- Developing sample training courses and materials on running domain-specific applications at scale



Industry Outreach

- Promote the competences and services provided by the CoEs to industrial users, with a particular focus on SMEs
- Analysis of user-sectors and market requirements, helping the CoEs thus to better target their offering



Communication Support

- promotion and awareness creation of the European CoE brand
- promotion of CoE participation in, or organization of events such as exhibitions, workshops or conferences
- Development of CoE exchange and information platforms

[CoE exchange platform login](#)

Figure 5: Short description of support services for the CoEs

Events for April 2019

EVENTS IN 2019-04
SEARCH Keyword
FIND EVENTS
VIEW AS Month

« March
May »

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
1	2	3 Extended Software Development Workshop: Topics in Classical molecular dynamics	4 Extended Software Development Workshop: Topics in Classical molecular dynamics	5 Extended Software Development Workshop: Topics in Classical molecular dynamics	6 Extended Software Development Workshop: Topics in Classical molecular dynamics	7 Extended Software Development Workshop: Topics in Classical molecular dynamics
8 Extended Software Development Workshop: Topics in Classical molecular dynamics	9 Extended Software Development Workshop: Topics in Classical molecular dynamics	<div style="border: 1px solid #ccc; padding: 5px; width: fit-content; margin: auto;"> <p>Extended Software Development Workshop: Topics in Classical molecular dynamics</p> <p>April 3 @ 8:00 am - April 12 @ 5:00 pm Workshop Description Classical molecular dynamics (MD) is a broad field, with many domains of expertise. Those specialist domains include topics like transition path sampling (which harvests many examples of a process in order to study it at a statistical level), metadynamics (which runs a trajectory with modified dynamics that enhance sampling, and from which [...])</p> </div>		13	14	
15	16			20	21	
22	23			27	28	
29 CompBioMed All-Hands Meeting 2019	30 CompBioMed All-Hands Meeting 2019	1 CompBioMed All-Hands Meeting 2019	2	3	4	5

Figure 6: Event calendar as current centrepiece of the CoE information hub

Regular meetings of the Project Coordination Committee (PCC) and the GA will be used to discuss whether the website is up to date or needs adjusting.

As one of the results of the first EU HPC CoE Workshop on February 21, CoEs expressed their need for an additional website that should be entirely unrelated to the FocusCoE project and that addresses potential users of their services and the general public. Picking up on the branding issue in chapter 2.1, this website would as well be branded according to the EU HPC CoE brand rather than the FocusCoE brand.

This shift will happen within the first year of the project's runtime and will be addressed in Deliverable D5.3: Intermediate Strategy Revision for Communication and Dissemination and Event Management. Additionally, the information system developed in Task 5.3 will most likely be integrated in the website with a login-area.

2.4.2 Social Media

Social Media is being used for three main purposes:

1. To increase traffic to the sources promoted in the post, such as the FocusCoE or a CoE's website
2. To create a community interested in large-scale HPC applications
3. To inform the community about participation in events, paper releases, and to encourage knowledge exchange with a view to strengthening the impact of developments within the scope of the HPC CoEs

Twitter is currently the most important of all social networks and has been set up in February 2019 under the handle @FocusCoE [8]. Twitter will be most vital for monitoring and picking up on the CoE's activities and on the European HPC ecosystem. As a first step, several Lists have been set up to get a better overview on different target group's content.

A promotional campaign marked the beginning of the FocusCoE twitter activities. This campaign comprises a number of tweets focusing on the close partnership between FocusCoE and the other CoEs and therefore creating a common idea of future collaboration (Figure 7). Additionally, these Tweets picked up the first CoE Workshop on February 21 as an official starting point of collaboration.



Folge ich

European #HPC CoEs run extreme scale applications to tackle scientific, industrial, and societal challenges. In our mission to support them, we are looking forward to our first workshop on Thursday 21st! Who will we meet? 🙌 #InvestEUresearch @EuroHPC_JU

Tweet übersetzen



17:13 - 19. Feb. 2019

4 Retweets 13 „Gefällt mir“-Angaben



ChESEE CoE, BioExcel CoE, ESIWACE Community und 6 weitere



Figure 7: Promotional tweet referencing first EU HPC CoE Workshop

Another frequent source for tweets will be regular reminders on the events listed in the FocusCoE calendar of the website. To ensure the greatest possible number of impressions, all relevant partner's Twitter handles will be tagged.

Especially in the beginning of the project, FocusCoE aims to frequently engage with partner's content by liking, sharing, and commenting, as these activities increase a sense of community and will increase the @FocusCoE number of followers. In addition, active engagement encourages other organizations to engage with our own content in return.

YouTube is a social network that many CoEs use more or less frequently. Assuming that visual content will raise in importance, a YouTube channel will also be set up in due time with the aim to promote the content of the other CoEs and organize their content in playlists.

In addition, FocusCoE wants to encourage CoEs to promote their work to the general public. Visual content is a great way to engage with the general public and transmit information on a lower technical level. This Workpackage will provide support with developing storyboard and a concept for attractive, engaging, and informative video clips.

LinkedIn will be set up later in close collaboration with WP3, as it will most likely support industry outreach rather than exchange and fast information updates.

2.4.3 Newsletter

The FocusCoE newsletter will be published at least four times a year. This newsletter's objective is to condense all relevant information that happened around the CoEs in a

timeframe of around two to three months and put it in an easily to follow and attractively designed format. The newsletter will regularly cover categories such as:

- **Greeting:** The first greeting will be authored by project coordinator Guy Lonsdale. Ideally, greetings will be provided by switching partners from the broader European HPC ecosystem.
- **Upcoming events:** This comprises trainings, conferences, workshops...
- **Call for:** Papers, Workshop submissions, BoFs, etc. Everything that could support the dissemination activities of each CoE.
- **Publications:** scientific publications will be linked to the respective CoE via Logo-implementation.
- **Short News:** CoEs are encouraged to provide short news for each edition.
- **Software releases:** The chance for regular updates with ten covered CoEs is quite high. However, this might not be relevant for each edition.
- **Bigger Pieces:** user stories, industry uptake, scientific breakthrough, or a major software release will be covered in larger text

For 2019, this workpackage is planning towards the following rough schedule:

1. March 2019
2. May/June 2019
3. August/September 2019
4. November/December 2019

2.4.4 Printed Documents

Work package 5 is concerned with the development of all print material that help strengthen the European HPC CoEs brand. Therefore, the development of general information material such as posters and flyers that can be distributed at conferences, workshops, and other events fall under this category.

However, the centerpiece of FocusCoE printed documents will be a yearly updated booklet that will be published each year around November, in time for the SC Conference. This time seemed most appropriate as it is expected that many project partners involved in the CoEs as well as strategic partners such as PRACE will have booths, hold talks, and visit networking events at SC. These partners will have the opportunity to pick up the booklets and distribute them or store them at their booths for additional information material.

Three editions of the booklet will be released, with the aim to pick up different themes that are based on the CoE's lifecycle:

- Year 1: Services
- Year 2: Use cases / applications
- Year 3: Success Stories & Sustainability

This only suggests a rough framework for the request of content that the CoEs may provide. As the booklets will be developed in close collaboration with the CoEs, and regular information exchange will take place in order to get the newsletters published as well, the focus of each booklet might shift according to the needs of the CoEs.

2.5 Events

The objective of this task is to promote the participation of the CoEs in various potential events. One of the first tasks was to prepare a list of dissemination leaders of the various ongoing CoEs and open a dedicated Slack channel to inform about the potential events that might be interesting to find synergies among the CoEs. The FocusCoE events task leader will

liaise regularly with them in order to update regularly the website and offer them the support needed. In addition, the FocusCoE events task leader will encourage them to promote the participation in existing dissemination-related trainings such as those organized by PRACE, EuroHPC or HiPEAC.

In collaboration with EXDCI, two main activities are planned: first to participate in EuroHPC Summit Week and, second, to encourage CoEs to participate in the already existing EXDCI exhibition booths at ISC and SC conferences. PRACE shares booth with EXDCI project and offers the possibility to CoEs and FET-HPC projects to have a presence by giving a short presentation in its booth to attendees, providing flyers or a rotating presentation to be shown on screen, as well as spending some time and meeting space at the EXDCI booth to promote themselves. This is specially addressed to those CoEs who have a limited dissemination budget and wants to have a presence in those conferences.

One of the main key events for CoEs to participate in, is the conference series called “EuroHPC Summit Week” that is organized yearly with support of PRACE and ETP4HPC through the project EXDCI. In this event, one of the main pillars are the HPC applications users that should be covered with the presence of the CoEs. One of the main benefits for CoEs is to interact with other HPC stakeholders from the European HPC ecosystem in order to establish potential common activities and share best practices, as well as position themselves in the ecosystem. The FocusCoE task leader will try to encourage sending the potential call for workshops to the CoEs to participate in this conference series, both as participants as well as to encourage them to foster collaboration between various existing CoEs or even between other European HPC initiatives and CoEs.

In addition, all CoEs events will also promoted on the FocusCoE newsletter and website [9]. In this way, all CoEs events will be summarized in one single page in order to have a clear overview on this content. This list will also include potential events and trainings interesting to attend to the CoEs. See the list below:

Event/Training	Time	Category	Organizer
ICT 2020	TBC 2020 (location based on the Presidency of the Council of the European Union)	Stakeholders	European Commission
International Supercomputing Conference	June 2019 – 2020 – 2021, Germany	Scientific conference and exhibition	ISC Group – EXDCI project
Supercomputing conference			
DATE 2019	25 – 29 March 2019, Firenze (Italy)	Scientific conference and exhibition	KIT Dresden
2019 Swiss Conference & HPCXXL User Group	01 – 04 April 2019, Lugano (Switzerland)	Industrial and scientific conference	HPC Advisory Council
GPU hackathons	September 30 – October 4,	Scientific training	CSCS

Public

	Switzerland		
International HPC Summer School	July 7 to 12, 2019 Kobe, Japan	Scientific training	NSF's XSEDE and EU's PRACE projects
CompBioMed Conference 2019	5-27 September 2019, London (UK)	Industrial and scientific conference	CompBioMed
PRACE summer of HPC	July/August 2019, European HPC centers	Scientific training	PRACE
PATC	2019, Europe	Scientific training	PRACE
EuroHPC Summit Week 2019	13-17 May 2019, Poznan (Poland)	Industrial and scientific conference	PRACE, ETP4HPC, EXDCI and EuroHPC
EuroPar conference 2019	26 – 30 August 2019, Göttingen (Germany)	Industrial and scientific conference	Gesellschaft für wissenschaftliche Datenverarbeitung mbH Göttingen
EmiT conference 2019	9-11 April 2019, U.K.	Industrial and scientific conference	
Forging Digital Societies	16 – 20 June 2019, Tallin (Estonia)	Industrial and scientific conference	Géant
Supercomputing Frontiers 2018	11 – 14 March 2019, Warsaw (Poland)	Industrial and scientific conference	Interdisciplinary Centre for Mathematical and Computational Modelling University of Warsaw
HiPEAC 2020	20-22 January 2020, Bologna (Italy)	Industrial and scientific conference	HiPEAC
CSW Spring 2019	16-18 April 2019, Edinburgh	Scientific conference	HiPEAC
Teratec 2019	June 11 & 12, 2019, BRUYERES-LE-CHATEL	Industrial and scientific conference	Teratec
EOSC-hub Week 2019	10 – 12 April 2019	Industrial and scientific conference	European Open Science Cloud (EOSC)

Table 3: Overview on potentially valuable events for the European HPC CoEs

2.6 Development of a web-based tool

The overall goal of this activity is to develop a tool capable of facilitating the match between offer and demand of HPC technologies, services, and expertise, in close connection with the similar initiatives carried out by the individual CoEs, but “going beyond” these, in the sense of achieving an added value by coordinating and/or federating instruments and tools developed by the CoEs, and promoting the dissemination into a larger network.

D5.2, a deliverable strictly connected with the Task and which is due in M9 of the project, will contain the planning and design of the web-based tool, both from the point of view of the functions to be implemented, and of the technical specifications/choices that will be made in order to set it up.

The information system will be actually developed after the conclusion of the planning stage and will be put in operation by ENEA on its ICT infrastructure. The system will be regularly maintained and updated, taking into account the new propositions that will be developed by the various CoEs during the course of the projects, and to take into account experiences and results from the users.

The starting point is of course an analysis of the CoE offers, in terms of:

- technologies and codes;
- typology of services and access conditions;
- addressed industrial sectors;
- relevant contact persons.

This activity is being carried out at the moment in close collaboration with WP3, and a first set of data is currently available and being analyzed. More information will be available as the projects progress, such as lists of participants to events, newsletter subscriptions, industrial and industry association contacts. Other information can be gathered from those projects that have already finished a first phase and have now be renewed, and have therefore already established contacts, made experiences, selected best practices.

A more thorough, “professional” approach to the definition of CoEs offers and businesses can be put in place adopting methodologies of analysis such as the Business Model Canvas or Lean Canvas. These methodologies are viable only if an active participation of CoEs representatives can be organized, i.e. an effective investment in time and effort can be raised. As for now, it remains an option to be evaluated.

A similar approach will be put in place to assess the industrial demand that can be met by FocusCoE. In this case, in order to have data available as soon as possible, it is essential to collect and use information from those projects already in the second phase or underway since a sizable time. These will have available lists of companies, interested stakeholders, success stories, etc. Also here, more sophisticated analysis tools can be put in place, such as the ones mentioned above and/or the distribution of questionnaires to key stakeholders.

The aim of FocusCoE is to represent an added value with respect to the individual CoEs. Analyses of offer and demand carried out in this and other WPs must lead to the development of a unique value proposition for FocusCoE, and not simply to a list of those of the single CoEs.

This concept can be adopted also for the activity of setting up the web-based tool. Each CoE is planning to put in place some sort of ICT tool to support communication and dissemination to industry and other relevant stakeholders, and to promote their business. The tools can be quite diverse, from simple web pages to DBs, to access to software or computing resources.

The web tool/portal developed in Task 5.3 will be capable of granting access to all these information sources (and wherever possible, interoperability among them), and to use the results of the analyses described above to organize common areas, from the point of view of the services offered and of the target “customers”.

At the moment most CoE projects are in an initial phase, and it is therefore too early to specify which ICT technologies and solutions must be used. The activities carried out in the months to come will allow the set-up of the plan that will be illustrated in D5.2.

In between the fourth quarter of 2019 and the first quarter of 2020, a prototype of this web-based tool will be ready and run through a testing phase. After that, feedback from other FocusCoE workpackages and the CoEs will be implemented into the final version.

3 Innovation Management

3.1 Innovation within FocusCoE

While the central objective of the FocusCoE CSA is to support the European HPC CoEs, and not to carry out research in order to generate new technologies or other intellectual property, there are concrete development activities, such as those linked to training tools, which might result in potential innovation. This will generate Intellectual Property (IP) in the form of course material and software tools developed in the training work package (WP 4), as well as the dissemination and outreach infrastructure developed in Task 5.3. We expect several other work package tasks to develop IP, so the first activity of this task will be to periodically survey the activities of FocusCoE to identify potential IP. Thus, exploitation planning is coordinated by a specific task within Work Package 5 building on innovation opportunity identification and development distributed across work packages developing new tools, services or business processes and supported by the cross-cutting deliberations of the Project Coordination Committee. This allows FocusCoE to react to specific innovation opportunities as they arise. The FocusCoE innovation management activities are supplemented by general knowledge and Intellectual Property management principles described in the following sections.

3.2 Interpretation

There are numerous and varied definitions of Innovation Management used across EU and other projects with research, innovation, coordinate, and support objectives. In addition, the stakeholders, partners, and the wider community have different perspectives on Innovation Management, what it entails and how to achieve success.

To align perspectives and to support the approach to be adopted in the project, Innovation Management within the FocusCoE project will use the definition ‘Overall management of all activities related to understanding needs, with the objective of identifying new ideas, and managing them in order to develop new products and services which satisfy these needs’.

These needs encompass the range of research impact, societal impact, and commercial impact that may be achieved as a result of the action.

3.3 Implementation

UCL coordinates Innovation Management in the project as Task 5.4 Lead, supported by BSC. This task runs from M1 to M36 and is fulfilled by 7PMs.

The Innovation Management Strategy is laid out in this document, D5.1: Initial Strategy for Communication, Dissemination, Innovation and Event Management, due in M3.

Innovation Management will be reported to the European Commission and to the Public in M18 and M36 via the deliverables D5.4: Intermediate Innovation Management Report, and D5.5: Final Innovation Management Report.

3.4 Innovation Process

Innovation Management activities in the project are designed to promote interdisciplinary entrepreneurial opportunities within the activities, from invention through to exploitation. For each product entering the process, the benefits and potential for impact will be assessed, the capacity to exploit from within the project (and/or need for exploitation beyond the project) will be considered, and the mechanism for exploitation will be formulated, whether for research, societal or commercial impacts. This process will be applied to the anticipated products and services generated from the project activities:

- Software (such as dissemination and outreach infrastructure developed in Task 5.3, and software tools developed in WP4)
- Training course materials (such as those developed in WP4)
- Best practices documents (such as those developed in WP4)
- Any other products that arise during the project lifetime (this may arise from any FocusCoE work package)

The Innovation Management activities will be coordinated across all work packages as a transversal function. The coordination of the identification and management of IP will be led by UCL with the assistance of BSC and with the help of all partners, where the associated team of leaders will look over all parts of the project in order to identify new opportunities and to appropriately exploit them during and also after the project's execution.

UCL and BSC will engage regularly with the consortium to ensure they understand what foreground IP FocusCoE is developing, who owns it, and what the innovation plans are for the IP during and after the project. The background IP are those identified in the Consortium Agreement.

A register will be maintained recording all external technologies identified by the partners that may enhance the exploitation of IP developed.

UCL and BSC will run regular Innovation Management meetings and reviews on a 3-monthly cycle, where the team will meet to discuss and record innovation progress.

3.5 Stages in Innovation

The European IPR Helpdesk promotes a 4-stage process for Innovation Management [10] and broadly this will be adopted, suitably adapted to the specific needs and capabilities of the consortium members. FocusCoE Innovation management will be based on approach:

- Secure the foundations - ensuring the commercial framework is in place and all consortium members are suitably aware, trained and supported in their innovation activities
- Capture project outputs – ensuring the mechanisms are in place to ensure beneficial results enter the innovation process
- Manage and protect project outputs – ensuring the intellectual capital and property in those beneficial results hold their value for subsequent exploitation
- Disseminate, exploit and communicate project outputs – ensuring appropriate effort is expended in order to realise the anticipated research, societal or commercial impact

3.6 Intellectual Property and Intellectual Property Rights

Creation and management of the FocusCoE IP Registry is one of the tasks coordinated by Task 5.4. UCL and BSC will follow up such Intellectual Property via this IP Registry.

The IP Registry contains all information regarding the IP components in the project, with each component defined and detailed within it. The IP Registry is available centrally within the FocusCoE intranet and it will be continuously updated as new components are gathered following the various reviews of results.

The IP registry records the status of the project IP components (background/foreground/know-how), the ownership & access rights, protection arranged (or to be arranged) and the pre-publication reviews and public disclosure monitoring required.

The project General Agreement details the terms of common use, ownership of foreground/background IP and its commercialisation. Consortium members can seek further guidance as necessary from UCL and BSC. The IP Registry can be found in the FocusCoE Intranet (WP5 section).

4 Next Steps

These first months of the project were dedicated to the definition of the strategy and to the set-up of communication- and outreach related elements and tools, which will be used and extended during the project lifetime. The first EU HPC CoE workshop organized by FocusCoE in addition to the kick-off the day before was on 21st February 2019. In the workshop, FocusCoE workpackage leaders presented their activities aimed at supporting the CoEs in the areas of internal exchange, industrial outreach, training, and promotion and asked for feedback. Their feedback regarding promotion has been addressed in this deliverable and will be implemented in the following months.

As outlined in this document, within the next months the FocusCoE social media activities will be intensified in order to build up a community. Also, a press release will be sent out at the end of February, picking up on the FocusCoE workshop. In addition, the first newsletter will be created and the FocusCoE will chair a workshop organized by EXDCI at the EuroHPC Summit Week in Poznan in May 2019, and aims at holding the first GA session there.

The first Milestone in relation to workpackage 5 to be reached is the establishment of the EU HPC CoE brand in month 6 (Table 4: Overview on Milestones to reach in Workpackage 5). Taking into account the feedback received from the CoEs in the workshop in February, the revision of the branding will be achieved in due time. Concerning the second Milestone – the establishment of dissemination tools – part of that milestone have been reached with the set-up of a functional website, social media channels, and the Slack workspace. However, the set-up of the second website unrelated to the FocusCoE project and the web-based information system are still pending and will be achieved by Month 18.

Number	Title	Due	Status
M1	General Assembly (GA) procedures defined and EU HPC CoE brand established	PM 6	Partly Done
M2	GA operational, industrial outreach actions, training and dissemination tools established	PM 18	Partly done
M4	GA sustainability proposal available, industrial success stories available, training actions completed	PM 36	To be done

Table 4: Overview on Milestones to reach in Workpackage 5

This document will be revised in PM 18, evaluating its strategic approach and, if necessary, adapting according to developments and/or shifting needs of the CoEs. An outlook to future deliverables is provided in Table 5: **Overview on deliverables in Workpackage 5**

Number	Title	Due	Status
D5.1	Initial Strategy for Communication, Dissemination and Innovation and Event Management	PM 3	Submitted
D5.2	Report on the proposed information system to support dissemination and outreach	PM 9	To be submitted
D5.3	Intermediate Strategy Revision for Communication and Dissemination and Event Management	PM 14	To be submitted
D5.4	Intermediate Innovation Management Report	PM 18	To be submitted
D5.5	Final Innovation Management Report	PM 36	To be submitted
D5.6	Final Report on Communication, Dissemination and Innovation and Event Management	PM 36	To be submitted

Table 5: Overview on deliverables in Work package 5

Update after month 18

After the mid-term review in month 18 of the project, it became clear that this initial strategy had to be redefined. The WP5 team has decided to update this strategy, summarised by this update section. As all strategies described in this document have actually been implemented in the first 18 months of the project, the WP 5 team decided to reflect the updated strategies in the deliverables D5.2, D5.3 and D5.4. A short summary for each WP5 task is included below:

- **Task 5.1 Communication and Dissemination:** The initial plan described in D5.1 for Task 5.1 was followed in the first 18 months of the project. With further progress of the project, it became clear that some of the initially planned actions were - for different reasons - not to a full extent suitable to effectively perform the work and the objectives for the task. Due to the decision made in D5.2 to turn the initially planned CRM into a web-based tool, and due to the shift to online activities because of the COVID-19 pandemic, it became clear that a major extension of the initially planned online activities was necessary. The former FocusCoE website was therefore merged with the web-based tool under the URL www.hpccoe.eu, a new style guide was created, and the focus of the new website was shifted from a rather static presentation of content to a dynamic, attractive and comprehensive news and service website to promote the HPC CoEs. Added value for the CoEs is created by content items such as the dynamic news frontpage, the events calendar, the training registry. Regarding the social media activities, a stronger focus was put on LinkedIn, which includes not only maintaining the FocusCoE profile on LinkedIn, but also the offer to the CoEs to support them in their activities on LinkedIn. Complementary to this, FocusCoE also offers general support in media relations to the CoEs upon request, for example to help with pitching topics or interview partners to media.

Another change of the tasks activities concerns the creation of promotional materials like roll-ups or booklets that were initially planned for distribution at physical events. Due to the pandemic, these are currently no longer necessary. Instead, Task 5.1 puts a stronger focus on creating added value for the CoEs with the online activities described above.

A detailed description of the activities of Task 5.1 will be given in Deliverable 5.3.

- **Task 5.2 Support for CoE Event Management:** The initial plan described in D5.1 for the work in Task 5.2 (see section 2.5 above) was rendered obsolete by the COVID-19 pandemic affecting the attendance and organization of scientific and industrial events significantly. The update of D5.3 will provide also updates for this task. One of the strategies to continue reaching the KPI established in this plan will be to attend as many online events as possible. In addition, the event task leader will seek possibilities for CoEs to organize joint virtual workshops within existing conferences (such as HiPEAC conference, for example) with the aim to see if they can find synergies among the CoEs. With the new change of website, the events calendar has been transferred to the new HPCCoE services page and can be found now here: <https://www.hpccoe.eu/index.php/events-calendar/> . It will be regularly updated in collaboration with WP3 in order to perform a calendar that summarizes all CoE related events as well as all industrial related events where CoEs attend.

- **Task 5.3 Operational Support for Dissemination and Outreach Infrastructure:** As stated in Paragraph 2.6, the actual planning of the activities of Task 5.3 was performed in the first 9 months of the project, and was the objective of Deliverable D5.2. The analysis carried out in this timeframe showed that, in order to set up an operational and fully operational application that effectively supports industries in accessing and using the technologies developed by the CoEs, the best solution would be to abandon the original idea of a CRM-type application and to set up a website where the stakeholders can access information on services, tools, data and expertise. This change was essentially due to the fact

that a CRM could only be based on an existing, adequate group of “customer relationships” from CoEs to industrial companies. Analyses carried out showed that in most cases no such group existed and, moreover, that individual CoEs having these “customer relationships” with industries would consider this information too confidential for the approach originally envisioned. Thus, a different solution focussing on the offerings of the CoE accessible through the web site was targeted, and it was decided to set up a web area on CoEs’ Technological Offerings.

Further developments were later introduced. In particular, it was decided to collapse and reorganize all material from the websites <https://www.focus-coe.eu/>, <https://www.hpccoe.eu/> and the CoEs’ Technological Offerings into a single entity. This work has been recently completed, and plans have been drawn for a continuous update of the web-based solution and its contents. A more detailed description of all this can be found in D5.2, and in its update developed following the requests arisen in the mid-term project review.

- **Task 5.4 Innovation Management:** This deliverable describes the plans for Task 5.4 as conceived at the start of the project, which was originally designed to manage the innovations created by the FocusCoE project. It has shown, however, that the scope for innovation management within the project was very limited and not productive. We have therefore proposed an alternative activity for this task, to be carried out in the second half of the project. Leveraging the high-level view of FocusCoE towards the CoEs, the task will conduct a study on innovation management across the CoEs, producing thus analysis, conclusions, and recommendations to the current and the upcoming CoEs, based on our findings. Such a study is of great interest to the CoEs, and so the results will be impactful. We will then determine if there are useful cross-cutting innovation management activities that the task can carry out to the benefit of the CoEs. In-depth plans for this study are described in FocusCoE deliverable D5.4.

5 References

- [1] EuroHPC initiative, <https://eurohpc-ju.europa.eu/>
- [2] PRACE project, <http://www.prace-ri.eu/>
- [3] ETP4HPC technology platform, <https://www.etp4hpc.eu/>
- [4] EXDCI-2 project, <https://exdci.eu/>
- [5] EuroLab-4-HPC 2 project, <https://www.eurolab4hpc.eu/>
- [6] FocusCoE Slack Workspace, <https://focuscoe.slack.com/>
- [7] GNU Mailman, <https://www.gnu.org/software/mailman/>
- [8] FocusCoE Twitter account, <https://twitter.com/FocusCoE>
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- [10] European IPR Helpdesk, IP Management in Horizon 2020, http://ec.europa.eu/research/mariecurieactions/sites/mariecurie2/files/04_ip_management_itn_2018.pdf,