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D7.2
Initial Dissemination and Collaboration Plan

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List of abbreviations

APIs ..... *Application Programming Interfaces*
CCC ..... *Center Coordination Committee*
CFD ..... *Computational Fluid Dynamics*
CoE ..... *Centre of Excellence*
DoA ..... *Description of the Action*
EEA ..... *European Economic Area*
EU ..... *European Union*
GUI ..... *Graphical user interface*
HPC ..... *High Performance Computing*
ISV ..... *Independent Software Vendor*
IT ..... *Information technology*
KPIs ..... *Key Performance Indicators*
OA ..... *Open Access*
US ..... *United States*

Executive Summary

This deliverable will present the initial plans for dissemination and collaboration activities. The Key Performance Indicators (KPIs) that determine a successful development, including planned activities to meet these KPIs, will be explained in more detail.

As the work package 7 tasks of Community Building and Standardization have not yet started, these tasks will be described in more detail in the Deliverable D7.3. However, as all tasks of work package 7 are highly interactive, this document will outline Community Building as well.

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1 Introduction

The CoE for Engineering Applications EXCELLERAT aims to boost High Performance Computing (HPC) for engineering to Exascale and thus enable the engineering industry to use highly scalable codes leading to increased competitiveness. In order to help establish EXCELLERAT as a principal hub for industrial and academic players in the field of engineering with potential use of HPC, awareness about the services and expertise of EXCELLERAT has to be created among its stakeholders, which makes it necessary to approach communication and collaboration strategically.

In the first section of this document, the dissemination and communication strategy is addressing the questions of how information is exchanged within the project, what communication goals EXCELLERAT aims to reach, who the target group is and what message the project wants to deliver to each of them. In addition, communication and dissemination performance evaluation is outlined with the help of KPIs. The second section of this Document explains the specific communication measures and tools the project uses in order to meet the strategy outlined in the prior section. The purpose of the EXCELLERAT portal specifically is only outlined very briefly, as this web-based tool will not be developed before the end of 2019.

Additionally, this deliverable provides a comprehensive summary of the activities, which can be performed in cooperation with partners beyond the EXCELLERAT CoE. Efficient collaboration on various levels are identified, e.g., with other European CoEs or projects, with industry companies and with national projects/partners working on HPC related fields.

Finally, this document introduces community building as a tool to more efficiently support the exploitation of the EXCELLERAT services.

2 Dissemination and Communication Strategy

2.1 In-project collaboration and information flow

The success of the EXCELLERAT work package 7 on Awareness, Impact creation and Outreach highly depends on the regular input and updates from other work packages and project partners. Therefore, two sets of measures have been set in order to enable exchange and encourage partners to participate. These consist in meetings and logging. WP7 is involved in the following meetings:

Meeting title	**Members and Goals**
WP7 bi-weekly meeting	One member for each project partner is part of the bi-weekly internal WP7 meeting. The meeting comprises updates from each task leaders on 1) Communication and Dissemination, 2) Standardisation, 3) Collaboration, and 4) Community Management. In addition, work package 6 members are involved in the meeting as well, and one of each project partner. Therefore, this meeting is used to ask for input on the logging document, which is described below.
WP6 bi-weekly meeting	WP6 deals with the exploitation of project results and the creation of a sustainable business plan. An integrated, targeted communication and dissemination strategy enables efficient exploitation, while exploitable results feed into the communication strategy, which is why a

	good exchange between these two work packages are of utmost importance.
Monthly Center Coordination Committee (CCC) meeting	The leaders of each EXCELLERAT work package are part of this meeting. The overall goal is to achieve a regular update on the overall status of the project and to detect blockers on an overriding, process and management related level.

Table 1: Regular meetings with WP7 involvement

Furthermore, this work package has installed an open excel document for everyone involved in WP7 to work in. This document is used as a logging system in order to keep track of everything relevant in work package 7. The document keeps track of the following events:

- Publications
- Events
- Social Content
- Twitter Statistics & LinkedIn Statistics
- Web Analytics
- Editorial Plan
- Media Relations

These individual items will be discussed in greater detail in chapter 3.

2.2 Communication and Dissemination Goals

With the help of high quality and to-the-point-content for the targeted interest groups, a strong presence in community events, and scientific publications as well as public special interest magazines, EXCELLERAT follows the overall goal to **raise visibility of the project**. This overriding goal can be split up into five goals that are more specific:

- Raise awareness of the benefits of using of HPC in engineering domains
- Raise awareness of services offered by EXCELLERAT and the achieved success stories via these services
- Help increase attendance to presentations and workshops held by EXCELLERAT at scientific or industrial events
- Help increase attendance to the HPC in Engineering Conferences organized by EXCELLERAT
- Help increase number of users of the individual services of EXCELLERAT

These objectives will be supported through regular blogging, collaboration with other related projects and organisations, visiting industrial and academic events, and activities on social media.

2.3 Target groups

A well-defined audience is key to finding the best dissemination strategies to follow and messages to send. The work conducted EXCELLERAT project affects mainly four target groups within the scientific and commercial arena. In Table 2, these target groups including tailored messages are listed.

Target Group	Message
Code developers (ISV)	Real-life use cases will allow a quick take-up of the algorithms and methods developed in commercial and academic engineering applications, contributing to the European application excellence.

Scientific Users	The advancement of the state of the art in code development for improved scalability and efficiency will progress knowledge and thus benefit the wider HPC research community.
Industrial Users	HPC is a key technology for several engineering industries. The improvements made by EXCELLERAT will allow them to use better simulation models contributing to their market competitiveness.
Technology providers	The increased use of large-scale simulations will stimulate the HPC market. EXCELLERAT aims to contribute to future Exascale developments.

Table 2. The EXCELLERAT project target groups and corresponding messages

2.4 Performance Evaluation

To monitor the progress in EXCELLERAT work package 7, a number of (KPIs) have been identified, for the overall project (Table 3). Within the CCC meetings, this progress will be monitored and reported in the project reports.

Tool	**KPI**	**Target**
Publications	Released Scientific Papers	35
	Press release	4
	Released Whitepapers	5
Events	Project presentations conferences/events	25
	Significant presence at events (hosted, sponsorship and booths)	15
	No. of Workshops/interest group meetings | no. of workshop participants	4 workshops interest group meetings | Ø 10 participants
	No. of conferences | No. of attendees	2 | Total 150
Social Media	No. of Twitter postings, Followers, Interaction rate and Impressions	Daily postings, 200 Followers p.a., Ø interaction rate 1.0%, Ø 500 impressions
	No. of LinkedIn Postings, Followers, Engagement and Impressions	Weekly Postings, 75 Followers p.a., Ø Engagement 1.0%, Ø 300 impressions
Reference in external media channels (Online & Offline)	Press Clippings	20
EXCELLERAT Website	Number of visits	7,000 p.a.
EXCELLERAT Portal	Number of subscribers	50
Newsletters	Number of subscribers	150

Table 3: Dissemination and Communication KPIs

3 Dissemination and Communication Measures and Tools

3.1 Events

EXCELLERAT has identified a large set of different events with industrial or academic background to visit for the purpose of networking, awareness creation, and knowledge exchange. Some of these events have already taken place around the starting weeks of the project or even before (Past events with EXCELLERAT presenceTable 4).

Title	Location	Date	Category
HPC User Forum	Stuttgart, Germany	1 October 2018	Workshop Presentation
	Brussels, Belgium	3 December 2018	Workshop Presentation
EXCELLERAT expert panel	Stuttgart, Germany	16 December 2018	Press conference
EU HPC CoE workshop	Frankfurt, Germany	21 February 2019	Workshop Presentation

Table 4: Past events with EXCELLERAT presence

In Table 5, upcoming events of interest for creating awareness about EXCELLERAT are listed. For some, EXCELLERAT participation is already confirmed (Such as the WSSP in Sendai in March). Others – of which especially the greater scientific conferences (such as ParCFD) – will more likely be visited in other editions in the following years, as for many the call for contributions has already finished. However, most of these events take place on a regular basis and will still be good opportunities to network and enable knowledge exchange.

Title	Location	Date	Category
Workshop on Sustained Simulation Performance (WSSP)	Sendai, Japan	19 – 20 March 2019	Workshop presentation
EuroHPC Summit Week	Poznan, Poland	13 – 17 May 2019	Presence at event
ParCFD 2019	Antalya, Turkey	14 – 17 May 2019	Scientific paper submission
European LS-DYNA Conference	Koblenz, Germany	14 – 16 May 2019	Scientific Paper submission
TERATEC 2019 Forum	Paris, France	11 – 12 June 2019	Presence at booth
PASC 2019	Zurich, Switzerland	12 – 14 June 2019	Presentation at Minisymposium
ISC 2019	Frankfurt, Germany	17 – 20 June 2019	Presence at booth
Daimler EDM CAE Forum	Stuttgart, Germany	17 – 18 July 2019	Networking
EuroMPI 2019	Zurich, Switzerland	10 – 13 September 2019	Scientific paper submission
Hyperion HPC User Forum	Edinburgh, Scotland	10 – 11 October 2019	Workshop presentation
SC 2019	Denver, USA	17 – 22 November 2019	Presence at booth

Table 5: (potential) Future events and conferences with EXCELLERAT presence

In addition to the academic and industrial events EXCELLERAT plans to participate in, a number of events will be organised by EXCELLERAT for different target groups. Four interest group meetings are planned with the aim to specifically concentrate on the four most important target groups individually. To ensure the highest possible benefit and acquisition of knowledge, these meetings shall take place in small groups. In addition, two conferences will be organised in a later stage of the project in order to present the project's achievement to a larger industrial and academic community (Table 6).

Title	Location	Date (estimates)	Category
Engineering Code developers (ISV) meeting	tbd	Q4 2019	Interest group meeting
Scientific Users meeting	tbd	Q2 2020	Interest group meeting
Industrial Users meeting	tbd	Q3 2020	Interest group meeting
HPC in Engineering Conference	tbd	Q4 2020	EXCELLERAT conference
Technology providers meeting	tbd	Q2 2021	Interest group meeting
HPC in Engineering Conference	tbd	Q4 2021	EXCELLERAT conference

Table 6: Events hosted by EXCELLERAT

3.2 Publications and Whitepapers

Scientific publications in journals and conference proceedings help disseminate innovations and exploitable results. Therefore, project results, outcomes, and innovations will be submitted for publication in scientific journals and conferences relevant to the topic of the research activity carried out during the project. This is a selection of journals and proceedings EXCELLERAT aims to target:

- ACM Transactions on Mathematical Software
- Journal of Parallel and Distributed Computing
- Supercomputing Frontiers and Innovations
- ProSTEP iViP Product Data Journal
- Journal of Parallel and Distributed Computing
- The American Institute of Aeronautics and Astronautics Journal
- Computational Methods in Applied Mechanics and Engineering
- Computer & Fluids (C&F)
- Journal of Flow, Turbulence and Combustion
- Journal of Computational Physics

EXCELLERAT has put aside some dissemination budget in order to enable scientific achievements to be published with green or gold open access (OA). However vague the differentiation between different forms of open access are: uploading a pre-print on an institutional or disciplinary archive is usually considered green OA, while publishing in a proper peer reviewed journal is called gold OA. This process enables quality assurance of scientific publications and makes scientific achievements more easily accessible, which is both of big interest for EXCELLERAT.

As users of HPC in the engineering industry is among the most relevant target groups of EXCELLERAT, white papers will be produced in collaboration with use case providers. These publications will not be exclusively aimed at academia, but seek to ensure that knowledge is efficiently transferred to the commercial arena.

3.3 Blogging

The "News" section of the website will act as a blog for the project. The planned frequency of posts is monthly. Especially in the starting months of the project, these articles will describe potential use cases and services of the project and highlight the importance of HPC in engineering. In addition, these articles shall help to make clear, what the different roles of partners within EXCELLERAT are and why they are important.

In later stages of the project, the articles will be used to promote actual services and success stories of the project. It is expected that each partner will have its turn in providing high-quality content for the website. This work package aims for easy to read articles and will try to reduce highly technical language and overly long articles. To ensure both technical accuracy and high quality writing, the expected review cycles will not allow for more than one article per week. An overview on planned themes in this year is displayed in Table 7. There might be deviations in the actual editorial plan.

Planned Release	Release date	Title/suggested	Project Partner
	21.12.2018	EXCELLERAT to bring Engineering Applications to Engineering Industry	HLRS
	12.02.2019	New analysis methods Facilitate the Evaluation of Complex Engineering Data	Fraunhofer SCAI
March 19		Overview on codes	HLRS
April 19		Engineering use case BSC	BSC
May 19		Engineering use case EPCC	EPCC
June 19		Face2Face Meeting report	HLRS
July 19		On the role of safe data transfer for EXCELLERAT	SSC
August 19		Visualisation as powerful tool on the path towards exascale	HLRS
September 19		On the relevance of HPC for SMEs	SICOS
October 19		Engineering use case CINECA	CINECA
November 19		Description of EXCELLERAT services	tba
December 19		Face2Face Meeting report	HLRS

Table 7: Draft editorial plan

3.4 Video-Blogging/Podcasting

As EXCELLERAT follow a multi-media approach to communication, some of the blog articles and themes will be enhanced by videos or podcasts. These contributions follow a personalized approach, which means that specific persons involved in EXCELLERAT will be put in focus, as to position them as experts in the specific fields they are working on in the project. Potential formats might be:

- Recordings of presentations (with prior permission)
- Interviews
- Explanatory videos
- Image videos

3.5 Print Material

By month 6 of EXCELLERAT the first version of a project brochure will be created in order to distribute at events starting in June such as ISC19 and the Teratec Forum. This flyer's objective is to introduce the project and application areas. Later on, a second version will be created including updated information concerning the first results and/or success stories. The first version of the flyer is printed and distributed to partners for dissemination events on demand and will be made available in electronic format on the website. EXCELLERAT will also closely collaborate with FocusCoE and place regular project news and updates in their yearly booklet and in the newsletter.

3.6 Website

The EXCELLERAT website [1] architecture and analytics have been addressed in great detail in Deliverable D7.1: Website, Corporate Design and Templates. The procedure on blogging has been explained in chapter 3.3. Future reports will address the results of website analysis more thoroughly. For now, the most important statistics are the following:

- **Site visits:** 500 in 30 days
- **Bounce-rate:** 16%
- **Referring Domains:** LinkedIn, Google
- **Top languages:** English, German
- **Search terms:** excellerat, excellerat hlrs

3.7 Social Media

EXCELLERAT is using social media not only for promoting owned content, but more importantly as a tool for engaging with the community. Within EXCELLERAT, social media is used:

- To increase traffic to the website
- To create a community interested in engineering HPC applications at exascale
- To support promote the used codes
- To inform the community about participation in events, new journal releases
- To strengthen the impact of conducted use cases conducted by the EXCELLERAT partners

On **Twitter** [2], EXCELLERAT uses #engineering and #hpc as individual thematic hashtags. In addition, when participating in events that often have branded hashtags, EXCELLERAT will pick these up. Whenever possible, EXCELLERAT will tag relevant partner's handles to posts in order to encourage engagement. A publicly visible list of the projects' stakeholders will serve as additional orientation.

On **LinkedIn** [3], #engineering, #engineeringexcellence and #hpc have been selected as communities to make the site's purpose easily understandable for visitors.

Figure 1: EXCELLERAT Twitter account

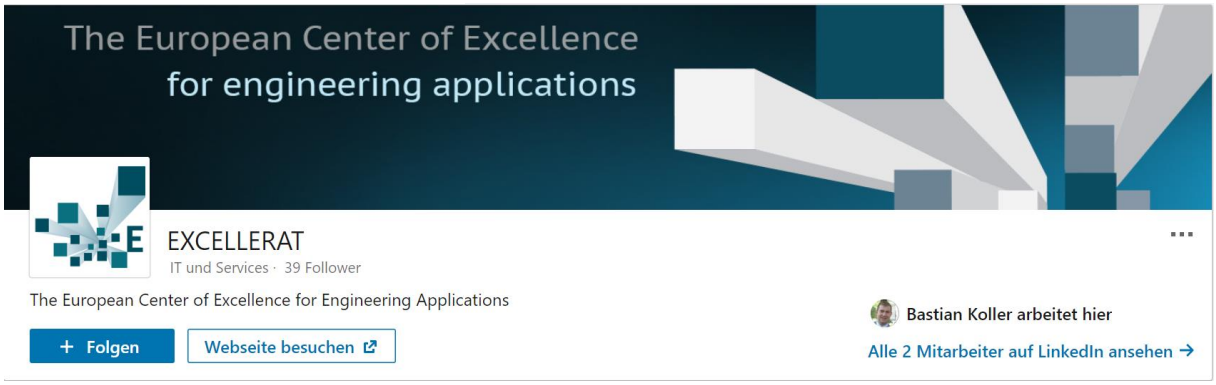

Figure 2: EXCELLERAT LinkedIn account

In the following reports, more detailed information will be given on user statistics and metrics of social media.

3.8 Media Relations

Through HPC events, social media, and via E-Mail this work package will maintain close contact with the HPC trade press. However, EXCELLERAT will not only provide the HPC trade press with valuable content. A list of possible media outlets have been identified in Table 8, which might be further extended.

Magazine	Area	Language
HPCwire	HPC news	English
Primeurmagazine	Mainly HPC in Europe	English
The New Platform	HPC news	English
InsideHPC	HPC news	English
Scientific Computing World	HPC news	English
Golem	Technology news	German
Heise	Technology news	German
Eureka!	Engineering and design	English
Horizon Magazine	European funded research	English

Engineering	Technology, manufacturing, management	English
CFD online	Computational Fluid Dynamics (CFD) applications	English
Science Node	Applied HPC	English
Research & Development	Applied Science	English
Technology Review	Digital innovation	German
VDI-Nachrichten	Engineering news	German
Bild der Wissenschaft	Popular science news	German
Digital Engineering Magazin	Digital engineering applications	German
Automotive IT	IT in automotive industry	German
Data Center-Insider	Infrastructure/Hardware related news	German
Industrie 4.0 Magazin	Technology and worklife	German

Table 8: Relevant magazines for press outreach

The success of the EXCELLERAT media relations will be measured in pickups by the press as suggested in chapter 2.4Table 3. Hence, the list below presenting press clippings will be updated regularly.

Source	Release Date	Channel	Link
Primeurmagazine	15 Oct 2018	Online/ Video	http://primeurmagazine.com/weekly/AE-PR-11-18-85.html
InSiDE	Nov 2018	Online/ Print	https://www.hlrs.de/fileadmin/user_upload/InSiDE_16-2_ES_web.pdf
HPC Wire	12 Dec 2018	Online	https://www.hpcwire.com/off-the-wire/excellerat-to-bring-hpc-applications-to-engineering-industry/

Table 9: List of pickups in the media

3.9 EXCELLERAT Portal

Work package 5 is in charge of the management of the day-by-day operation of EXCELLERAT, as well as it supports the implementation of the defined services. These include:

1. services for end-users as designed in work package 4, with particular focus on the industrial users;
2. training and education services;
3. internal (CoE) administrative services;
4. on boarding of new application codes.

EXCELLERAT will provide a single entry point to its ecosystem of services, thus building up an online access point – the service portal – which will be incrementally extended by new services. An initial needs assessment and service building plan has been realized, and it is available on D5.1.

In particular, the internal services are the basic tools that allow the CoE to simplify the day-by-day work of its members.

A jungle of tools is available today on the Internet to provide this kind of services, both commercial and open source. To understand which services are necessary and their priority, a list of potential services has been drawn up and was included in a questionnaire for EXCELLERAT partners. The data have been processed assigning an implementation priority to each type of service; the results are shown in Table 1. High priority services (MUSTs) will be implemented in the first release that will be documented by Deliverable D5.2 at M13, while

others will be implemented in the following ones depending on the priority. Periodical revisions of the list will be performed during the project lifetime, to identify new services to be implemented, and old ones to be expanded or improved.

Service name	Priority
01. Mail	WON'T HAVE
02. Calendar	SHOULD
03. Document sharing: collaborative editing	MUST
03. Document sharing: passive	MUST
04. Internal Site	MUST
05. Wiki	MUST
06. Collaborative tools	SHOULD
06. Communication tools: teleconferencing	COULD
07. Discussion tool	SHOULD
08. Large Storage database	SHOULD
09. Code repository	MUST
10. Automatic testing tools	MUST
11. Ticketing system	SHOULD
12. Single sign on	MUST
13. Newsletter management tools	SHOULD
14. Social media management tools	SHOULD
15. Remote visualization tools	SHOULD
16. Tools for questionnaires subministration	COULD
17. Blog	COULD

Table 10: Services of the EXCELLERAT Portal

The following steps will involve the realization of a cost benefit analysis on the tools available on the market for the implementation of the selected services, and a detailed work plan towards the realization of the first release of the CoE portal.

Regarding the development of services for external users, this is clearly a key point of CoE EXCELLERAT. The skills acquired and integrated by the partners during the activities of the CoE must in fact become a solid basis for external users of the engineering area to benefit from the Exascale systems to improve the quality and quantity of their simulations.

Given the variety of use-cases, codes, hardware architectures discussed in the CoE and the variety of possibilities required in the computational engineering area, the type of services expected is very wide. The Description of the Action (DoA) lists a series of possible marketable services for users outside the CoE. The content of these services will be defined and detailed by WP3 and WP4, while the task of this Work package, and in particular of Task 5.2, is to define the methods for presenting and providing services to users.

High level requirements have been identified, in the functional, IT, and Management areas, and described in D5.1

The operational steps to proceed with the actual development of the portal are now:

1) Definition of architecture, with particular reference to:
    a) main functions (mandatory and / or optional) and integration between the parties
    b) the authentication system.
2) Definition of implementation technologies with particular reference to:
    a) back-end technologies

b) front-end technologies

c) integration of additional tools and integration methods

3) Definition of elements of the portal, underlying logic and database schema (service, use-case, project, user, group, HPC center, HPC cluster, service manager, etc.)

4) Definition of the workflow to follow to transform the design of services by WP4 to the presentation of the service through the web portal.

The portal will be developed and improved during the entire duration of the CoE. However, it will be attempted to set at least the fundamental choices in the most stable way possible in order to maintain these choices since the release of the first portal release scheduled according to the DoA at month 14.

4 Collaboration Plan

4.1 Goals of Collaboration

The goal of the collaboration is to increase the efficiency of the EU resources invested into EXCELLERAT. This will be achieved by avoiding duplicate work, possibly performed in other HPC related EU or national projects. In addition, collaboration will be pursued in cases where additional or improved insight, results and methodologies can be expected by combining the expertise of other partners. Although the strategy is to encourage collaboration with projects supported by other than EU funding schemes, i.e., national research organisations or governments, measures will be taken to ensure that there is no inappropriate activity and that the outcomes of the EXCELLERAT project remain as a benefit within the European Economic Area (EEA).

4.2 Collaboration with EU-Projects and initiatives

EXCELLERAT has officially started in December 2018 and will end in December 2021. At the same time, several other CoEs and HPC-research activities will be actively working on related HPC activities. Table 11 gives an overview of HPC-research activities, which are thematically relevant for EXCELLERAT.

In January 2019, an excerpt of the work programme of EXCELLERAT has been forwarded to the FocusCoE, to provide a detailed description of the main work plan within EXCELLERAT to the other CoEs involved in HPC topics. The mutual exchange of such documents enables a detailed identification of overlapping activities allowing collaboration. Further collaboration activities enabled by FocusCoE have been discussed at the EU HPC CoE workshop on February 21 2019 in Frankfurt, with the result that EXCELLERAT plans to participate in an EU HPC CoEs booth at the Forum Teratec 2019.

Further collaboration opportunities with related activities are as follows:

HPC-research activity	**Partners**	**Possible Collaboration in**
Exa2pro, FETHPC-02-2017 - Transition to Exascale The vision of EXA2PRO is to develop a programming environment that will enable the productive deployment of highly parallel applications	**Coordinator:** Institute of Communications and Computer Systems, Athens, Greece Partners Linköping University, INRIA, FZ Jülich,	**WP 3, WP 5:** Increased applications performance based on EXA2PRO optimization tools (data and memory management)

in exascale computing systems	Maxeler Technologies Limited, CNRS	Efficient exploitation of heterogeneity by the applications that will allow the evaluation of more complex problems.
EPEEC, FETHPC-02-2017 - Transition to Exascale Computing Main goal is to develop and deploy a production-ready parallel programming environment that turns upcoming overwhelmingly-heterogeneous exascale supercomputers into manageable platforms for domain application developers... enabling 3 overarching objectives: high coding productivity, high performance, and energy awareness.	**Coordinator:** Barcelona Supercomuting Center, Barcelona, Spain **Partners:** Fraunhofer Munich, INESC (Lisbon), INRIA, Appentra Solutions (Spain), CINECA, CERFACS, Interuniversitair Micro-Electronica Cenrum (Belgium), Eta Scale (Sweden), Uppsala University	**WP 2, WP 3, WP 5:** Performance tools will offer integral profiling, performance prediction, and visualisation of traces (OmpSs, parallelware software, BSC Tools, ...) Applications: AVBP, etc.
ExaQUte, FETHPC-02-2017 - Transition to Exascale Computing This project aims at constructing a framework to enable Uncertainty Quantification and Optimization Under Uncertainties in complex engineering problems, using computational simulations on Exascale systems	**Coordinator:** CIMNE, Barcelona, Spain **Partners**: BSC, TU Munich, INRIA, Ecole Polytechnique Lausanne, University Polytechnique Catalunya, str.ucture GmbH (Germany)	**WP3**: Mesh adaption, embedded solvers for multiphysics, uncertainty quantification and optimization
POP2, INFRAEDI-02-2018 - HPC PPP The objective of POP2 is to continue and improve the POP project operating a Centre of Excellence in Computing Applications in the area of Performance Optimisation and Productivity with a special	**Coordinator** Barcelona Supercomuting Center, Barcelona, Spain **Partners:** Univ. Stuttgart, FZ Jülich, Numerical Algorithms Group LTD , RWTH Aachen University, TERATEC,	**WP3:** Performance Analysis and Optimization

focus on very large scale towards exascale.	Univ. Versailles St.-Quentin-en--Yvelines, Techincka Univ. Ostrava	

Table 11: Collaboration opportunities with EU HPC-Research activities

Additional overlap of the technical work will be identified with several other projects funded by the EC. A non-comprehensive list is given in the following:

- EPiGRAM-HS - Exascale Programming Models for Heterogeneous Systems
- Sage2 - Percipient Storage for Exascale Data Centric Computing
- MAESTRO - Middleware for memory and data-awareness in workflows
- EUROLAB4HPC2 - Consolidation of European Research Excellence in Exascale HPC Systems
- ASPIDE - exAScale ProgramIng models for extreme Data Processing
- VECMA - Verified Exascale Computing for Multiscale Applications
- EXDCI-2 - European eXtreme Data and Computing Initiative
- VESTEC - Visual Exploration and Sampling Toolkit for Extreme Computing
- ESCAPE-2 - Energy-efficient Scalable Algorithms for weather and climate Prediction at Exascale

The potential of collaboration will be analysed of each of these projects and the coordinator of those projects will be contacted, which promise to offer a mutual benefit by cooperation.

4.3 Collaboration with industrial partners

A large number of industry companies, documented by the numerous Letters of support in the annex of the project proposal, has considerable interest in the work performed by the EXCELLERAT consortium. These industrial partners are already collaborating through the definition of use cases in WP2 and will be continuously approached to share the results achieved in EXCELLERAT, to discuss further use cases, and to understand the detailed requirements of industry in HPC applications connected to EXCELLERAT. In addition, a number of industrial pilot users will be selected to verify the achievements in the method developments, data analysis and visualization tools and their application on HPC platforms.

5 Outlook Community Building

The goal on this activity is twofold: First, to link EXCELLERAT and its activities to the communities of academics and industrial users and developers, who are potential customers of EXCELLERAT's services, and second to ensure that EXCELLERAT is recognised by developers and users of engineering applications codes as a new player in their ecosystem.

The application codes – which are the heart of EXCELLERAT – have been developed and used for many years now, and communities around these applications already exist, having grown and evolved over time. In the case of AVBP [4] for example, the mailing list «avbpusers», regroups (almost) all academic AVBP-users. Their main annual conference INCA, brings industrial and academic users together. As one of the participants describes it, this meeting is very confidential and not widely announced on the internet. Moreover, closed workshops with industrial users are held approximately twice a year.

Therefore, instead of building "new" communities, the goal of this community building activities is to connect the EXCELLERAT and its activities with the already existing communities. By doing so, EXCELLERAT gains awareness amongst potential clients and among the ecosystem of HPC engineering applications in general.

Within EXCELLERAT, a first level is the community of project partners, building the heart of all EXCELLERAT activities (represented by the orange circle in Figure 3: Communities in EXCELLERAT). At a second level – represented by the green circle in Figure 3 – we find different interest groups with connections to EXCELLERAT and its activities. This includes, but is not limited to:

- ISVs offering software and service in the domain of civil engineering
- software developers (in academia and in industry), who contribute to the development of the EXCELLERAT application codes (or similar applications)
- Users (from academia and industry), who are interested in making sure that the future applications development's take their requirements into account
- Trade unions, who may act as interface between the application developers and the end users, as for example NAFEMS **Error! Reference source not found.**.

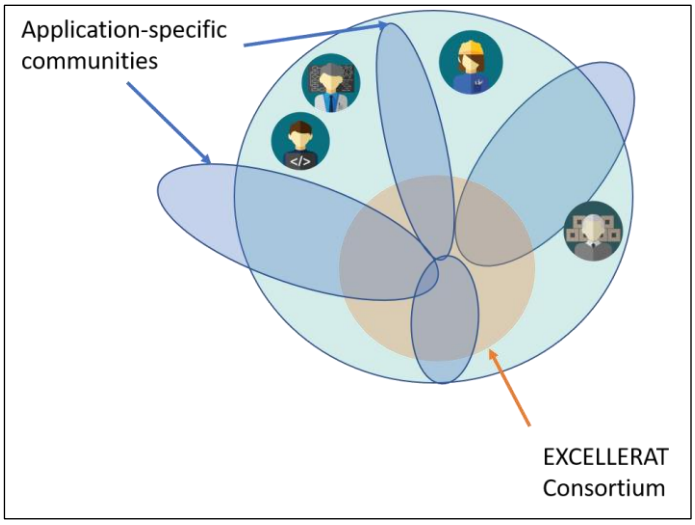

Figure 3: Communities in EXCELLERAT

Within the upcoming weeks, we will identify within EXCELLERAT all actors (developers, users, ISVs, …) who share interest in a specific application (represented as blue petals in **Error! Reference source not found.**) and connect those application-specific subgroups to the already existing communities. In addition, in order to blend best into the communities, the EXCELLERAT communication plans will be developed individually for each of the application-specific sub-groups.

6 Next Steps

This document will be updated during the course of the project to reflect updates and changes, which will naturally occur within the course of the project. In the months to come, work package 7 will put great focus into the implementation of the communication plan drafted in this document, deepen relations with collaboration partners, and will finalize an approach towards community building which will be outlined in more detail in the next deliverable (Table 12).

Number	Title	Due	Status
D7.1	Website, Corporate Design and Template	PM 2	Submitted
D7.2	Initial Dissemination and Collaboration Plan	PM 3	Submitted

D7.3	Dissemination, Communication, Collaboration, Community Building and Standardization Report	PM 12	To be submitted
D7.4	Updated Dissemination, Communication, Collaboration, Community Building and Standardization Report	PM 24	To be submitted
D7.5	Final Updated Dissemination, Communication, Collaboration, Community Building and Standardization Report	PM 36	To be submitted

Table 12: Overview on Deliverables in work package 7

The first milestone to be reached in EXCELLERAT with the help of work package 7 was the project kick off. This work package has supported this milestone with supporting the organisation of the kick-off event and mainly organizing the virtual expert press panel on the second day of the project's kick off, followed by sending out a press release announcing strategy and plan of the EXCELLERAT project. The second milestone: MS6 will not be due until the project closes.

Number	Title	Due	Status
MS1	Project Kick Off	PM 1	Done
MS6	Final Reports of all project outcomes and project close	PM 36	To be done

Table 13: Overview on Milestones to reach in work package 7

7 References

[1] EXCELLERAT project, https://www.excellerat.eu
[2] EXCELLERAT Twitter, https://twitter.com/EXCELLERAT_CoE
[3] EXCELLERAT LinkedIn, https://linkedin.com/company/excellerat
[4] AVBP CFD code, http://www.cerfacs.fr/avbp7x/
[5] NAFEMS, https://www.nafems.org/about/