
# D 4.2 Report on key communications and dissemination results

| | | | |
|---|---|---|---|
| **Work package:** | WP4 | Evaluation and Dissemination | |
| **Author(s):** | Nikoleta Kiapidou | | BSC |
| | Javier Bartolome | | BSC |
| **Authorized by:** | Dirk Pleiter | | JSC |
| **Reviewer #1** | Dirk Pleiter | | JSC |
| **Reviewer #2** | Stéphane Requena | | GENCI |
| **Dissemination Level** | Public | | |

| Date | Author | Comments | Version | Status |
|---|---|---|---|---|
| 23.07.2021 | Nikoleta Kiapidou | First draft | V0.1 | Draft |
| 16.08.2021 | Javier Bartolome, Nikoleta Kiapidou | Second draft sent to internal review | V0.2 | First version |
| 23.08.2021 | Stephane Requena, Dirk Pleiter | Comments and edits by internal reviewers | V0.3 | Internal review |
| 13.09.2021 | Nikoleta Kiapidou | Final version with applied review comments | V1.0 | Final version |

*The PPI4HPC project has received funding from the European Union's Horizon 2020 research and innovation programme under the grant agreement No 754271.*

## Contents

# 1. Executive Summary

This deliverable reports on the key communication and dissemination results of the PPI4HPC project. It briefly outlines the dissemination strategy and analyses the dissemination results in terms of the branding and material, project website, press coverage, news and success stories, events, and community engagement.

# 2. Introduction

The main goal of the Evaluation and Dissemination work package (WP4) is to maximise the visibility of the project and to support the partners involved for dissemination purposes, as well as evaluate the PPI process. This document presents the key communication and dissemination outcomes of the PPI4HPC project by outlining the results of the branding and dissemination material, website, press, news, events activities, and engagement with the community throughout the project's lifecycle.

It should be noted that for a significant amount of time during the whole duration of the tender process, no communication activities were allowed in order to secure the confidentiality required by the relevant law and therefore the success of the procurement procedure. Thus, the dissemination and communication tasks reached a peak at the beginning of the project and, afterwards, once the tender process was complete and towards the final project phase.

# 3. Dissemination strategy

This section briefly presents the objectives and target audience of the PPI4HPC dissemination and communication plan. A detailed analysis of this plan can be found in the D4.3 Exploitation and Dissemination Plans.

## 3.1 Dissemination objectives

The PPI4HPC dissemination objectives were to:

- Manage the information and relationships between the PPI4HPC consortium and the different target audiences interested (vendors, HPC European infrastructures, HPC centres), disseminate the objectives, attract a wide range of providers and disseminate results obtained from the project.
- Collect and disseminate lessons learnt and best practices obtained for the development of a joint procurement (common technical specification and evaluation criteria).
- Analyse the impact of the PPI process and the technologies tested in the whole HPC ecosystem.

This document focuses on the results that came out of the first objective, while the D4.1 Report on Innovative Solutions presents the lessons learnt from and impact of the PPI process.

## 3.2 Target audiences

The various target audiences that the project aimed to attract are the following:

- PPI4HPC partners
- HPC and IT vendors

- HPC European and worldwide infrastructures such as PRACE RI
- HPC centres
- Industrial HPC users
- Related European projects and initiatives, such as EuroHPC Joint Undertaking
- Politicians and governmental institutions
- Scientific communities interested in joint procurement

# 4. Dissemination activities

This section analyses the key results of the project's communication and dissemination activities.

## 4.1 Branding

A common graphic identity was created at the beginning of the project in order to allow for a unified image, better visibility and recognition as well as a comprehensive branding of the project. The branding activities included: the project logos, font, and language. The logo was approved by all PPI4HPC partners and it was applied in all documentation and communication activities related to the project by all partners. All versions of the logo can be downloaded in different formats from Media page of the project website. The font used for the project dissemination tasks was Arial for documentation and Ubuntu for dissemination material. The official language of PPI4HPC material was British English.

Following this branding, corresponding PowerPoint template was created for the project partners to use for internal and external presentations. The template was shared with all partners and can also be found on the corresponding page of the website.

Furthermore, an infographic was produced with a professional graphic designer in an attempt to describe the complex PPI process in a visual way that would help the interested bodies understand the tender procedure, the different stages of the project, and the various players involved. This infographic was posted on the website, included in the second press release, as well as the project leaflet.

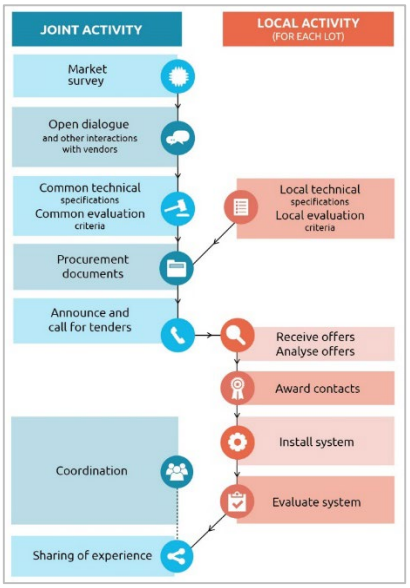


*Figure 1*: The PPI4HPC process infographic

## 4.2 Leaflet and public documents

A one-page project leaflet was produced in October 2019 to explain the PPI procedure in a brief, user-friendly way to the different audiences and promote the benefits of this innovative joint initiative. The flyer was approved by and shared with all partners and it was promoted at internal meetings with EuroHPC and trainings. It can be found on the dedicated page on the website.

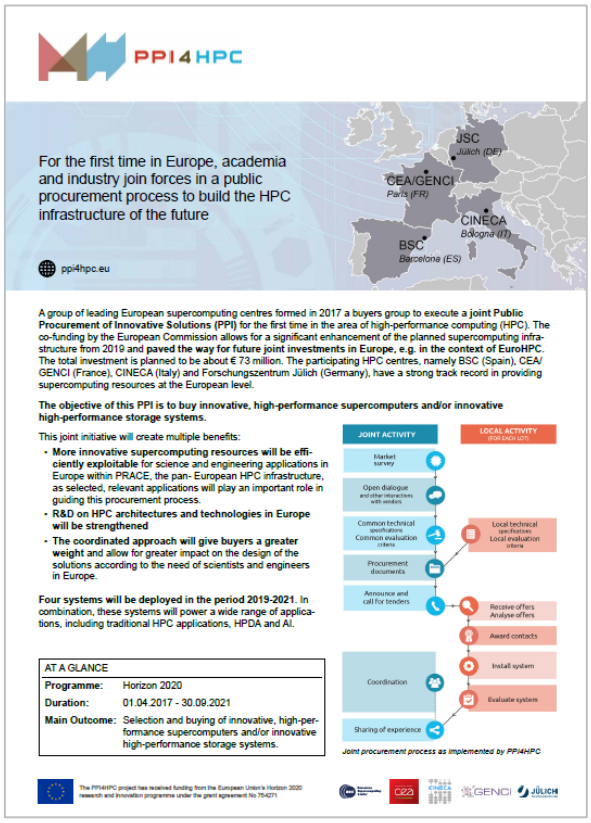


*Figure 2:* PPI4HPC leaflet

Finally, a whitepaper titled "Lessons Learned on Legal Aspects" was produced by the partners in September 2020 to address the experience of the joint procurement process, the lessons learnt from a legal point of view and the recommendations derived from these lessons that may be helpful for future joint European procurements. The Whitepaper was posted on the Public documents page of the website and it was shared through the partners' social media and with relevant stakeholders on an individual basis by the project members.

We observed interest in this whitepaper within the relevant expert community, as it was posted on the Resources page of the Innovation Procurement Platform and the Resource Centre page of the Sustainable Procurement Platform. We were also contacted by the Spanish Observatory of Public Procurement (ObCP) to provide information about this whitepaper and the legal aspects of the PPI.

### 4.3 Website

The domain for the project website is: www.ppi4hpc.eu. The website has been live since the second month of the project and is the main communication platform of PPI4HPC. As pointed out in the introduction of this report, during the PPI and tender procedure, no communication was allowed, thus the project website had to remain with no updates or new information in order to secure the procurement process. However, significant efforts were made to keep an up-to-date Call for Tenders page and particularly to create and enrich the Q&A section which was used heavily before the start of the tender process to address in a transparent way questions from vendors and other actors involved in the process.

The website consists of subpages that explain the PPI process and market consultation and tenders, a media corner that contains information on the project branding and press clippings, and details on the news and events related to the project. It also includes a Public documents page where visitors can be find the public deliverables as well as the whitepaper "Lessons Learned on Legal Aspects". These pages have been updated throughout the project to include the latest details on the project events, material, documents, etc.

A couple of more recent pages were created to reflect the project's development and latest stages, such as the PPI4HPC in a nutshell page and the Success Stories. The PPI4HPC in a nutshell page was produced in order to present the project in more accessible manner that would be easier to be understood by communities that are not that familiar with the PPI procedure and the relevant stakeholders, such as policy makers, the industry, and the general public. The Success Stories page will be analysed in Section 4.4 of this document.

*Figure 3*: The PPI4HPC in a nutshell subpage

The website statistics taken from Google Analytics show that the page has had a total of 1,860 users, over 3,000 sessions, and over 7,700 page views during the project life cycle. The average session duration of the visitors (2:31 mins) shows that the users spent quite some time on the website meaning that they were engaging with its content and were interested to find out more about the project. It should be noted that due to the tender phase and as the dissemination activities and website updates had to be limited, the website did not have many visitors during a considerable time period. The highest number of visitors is noted at the beginning of the project when the press releases were launched and the several initial events took place.

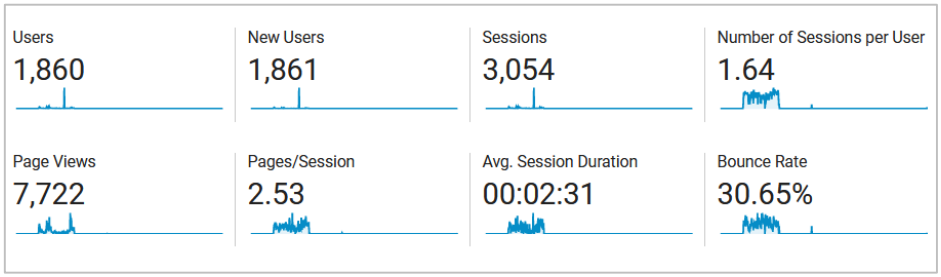


*Figure 4*: PPI4HPC website analytics during project life cycle

In the same vein, we see that the most popular pages of the website, apart from the Homepage, were the Open Dialogue Event in 2017, the general events page, the Call for tender, About, the tender Q&A page, and the news page. Following this trend, the events and news pages were regularly updated to share the relevant information with the audience that seemed to be interested in these particular project activities.

| | Page | Page Views |
|---|---|---|
| 1. | / | 1,107 |
| 2. | /events/open-dialogue-event-2017 | 757 |
| 3. | /events | 550 |
| 4. | /call-for-tender | 465 |
| 5. | /about-ppi4hpc | 401 |
| 6. | /call-for-tender/questions-and-answers | 384 |
| 7. | /news | 354 |
| 8. | /events/one-one-technical-meetings | 339 |
| 9. | /news/leading-european-supercomputing-centres-join-forces-procurement-process-innovative-hpc-systems | 218 |
| 10. | /call-for-tender/process | 211 |

*Figure 5*: Most popular pages of the PPI4HPC website

As mentioned above, the PPI4HPC events and news were shared through the institutional social media of the project partners. The project did not have its own social media due to the nature of the procurement process that had to be kept secured during that period and, therefore, no information was to be shared online. However, at the beginning of the project and after the PPI process was completed, the partners were encouraged to post the news of the PPI4HPC project on their Twitter and LinkedIn accounts, when possible, particularly when it came to the individual press releases, as well as the Whitepaper and success stories.

### 4.4 Press

The press strategy of the project consisted of an initial press release when the project began and individual press releases to promote the newly installed systems on each site. The first press release was launched in July 2017 after having been approved by all partners. It was shared through the institutional channels of each partners and sent out to various technical media. A second press release was launched by the WP4 team in May 2018 to announce the beginning of the joint procurement process and promote the publication of the official contract notice.

The partners were encouraged to translate these generic press releases in their national language and share it with national and local media, as appropriate. These press releases gained significant coverage by the media and was shared extensively by key outlets in the field, such as HPC Wire, Scientific Computing World, Inside HPC, Primeur Magazine, Science Business, as well as HPC and EC stakeholders, such as PRACE, Cordis, ETP4HPC, Digital Single Market, among others.

After the procurement process was over, each partner launched their own press release to announce the installation and start of production at their sites, informing potential users about the acquired technologies and their benefits. In particular, GENCI launched their press release in November 2019, CINECA in February 2020, BSC in April 2020, and Juelich in June 2021. All partners shared their press released on their own institutional websites and social media and sent them out to global and national media outlets, while the dissemination team re-posted them on the project website.

A total of 72 mentions in the press were identified during the project's life cycle in technical and stakeholder media channels. All press clippings that came out of the press releases can be found on the Media page of the website.

### 4.5 News and success stories

The news strategy of the news production was to publish: i) news stories about important related updates, events, engagement, and progress throughout the project duration, and ii) success stories out of projects and users that benefitted from the new systems.

A total of 10 news stories were produced from the beginning of the project until the very end. These concerned significant project events, such as re-caps of the Open Dialogue Event and One-to-one industry meetings, the promotion of the whitepaper on the legal lessons learnt, and the engagement activities with different stakeholders, such as the PRACE Fast Track Call for Proposals that included the use of the PPI4HPC systems, the iProcureNet report, and others. A final news piece was published to wrap up the project activities at the end of the project.

A total of 8 success stories were created during the final stage of the project to demonstrate excellence use cases of researchers and projects that used the newly acquired PPI4HPC systems and benefited from the innovative technologies. Two success stories were showcased by each site and a new subpage was created on the project website to gather all these use cases together. In particular, the following success stories were produced by each site:

*CINECA*:

- PPI4HPC system at CINECA contributes to Exscalate4COV's efforts to identify a therapy against Covid-19

- Self consistent multiscale simulations of turbulence and energetic particles in tokamak plasmas

*GENCI/CEA*:

- State-of-the-art simulation methods against the SARS-CoV-2 virus
- Study of factors favouring SARS-CoV-2/inhibitor interaction

*BSC*:

- PPI4HPC storage system at BSC used to explore how dust storms affect societies in major climate project
- PPI4HPC system at BSC employed for massive European Genome-phenome Archive

*JSC*:

- Automated assistance for diagnoses and treatments in rhinology
- Regional climate model simulations at convection-permitting resolution

### 4.6 Events

The PPI4HPC-related events that took place during the project were an important asset of the communication and dissemination activities.

Initially, three significant events were organised in order to introduce the project's concept of joint procurement and engage with the industry and interested companies that would take part in the tender. More specifically, the following events took place during this first phase:

- *Open Dialogue Event in September 2017 in Brussels*:

This event was organised to inform the market of the future joint procurement and to gather input from the industry after the European HPC centres officially opened the market consultation for the purchase of HPC systems in the framework of PPI4HPC. Forty-three participants attended, 17 of whom were from the PPI4HPC project and one was from the EC. The event offered to 16 different companies the opportunity to learn more about the objectives and process of the PPI, as well as about the particular needs of each partner. The topics included the procurement process, the technical requirements and future steps. All participants were encouraged to ask questions and provide feedback about the process. Consequently, feedback was provided by the vendors both during the event and afterwards by email. After the one-to-one meetings and the legal collective telephone conference described below, a full series of questions and answers, validated by all partners, were published on a dedicated page on the project website.

*Figure 6*: Audience at the PPI4HPC Open Dialogue Event in September 2017 in Brussels

- *One-to-One Technical Meetings in October 2017 in Milan and Barcelona*:

The goal of the one-to-one technical meetings was to create a space for in-depth technical discussions and provide an additional opportunity to ask questions and provide feedback. The meetings were open to any interested supplier providing HPC solutions. In these meetings, one supplier met all PPI4HPC partners and the duration was decided based on the number of interested suppliers. For each meeting, a non-disclosure agreement was signed. A total of 15 one-to-one meetings were held with major HPC companies, including various small/medium enterprises (SMEs).

- *Legal Teleconference in October 2017 online*:

The project organised a Legal teleconference so that all legal points set out in the Open Dialogue Event and the one-to-one meetings are thoroughly discussed. In this teleconference, members of both the legal teams of the PPI4HPC partners and the vendors were available to talk in more detail about the legal issues related to the joint public procurement process and possible solutions around them.

Apart from these initial events, partners also presented the PPI4HPC project as one of the key initiatives their institutions were involved in with regard to the new EuroHPC ecosystem. CINECA's SuperComputing Applications and Innovation (SCAI) department presented the project at the "Regional big data, empowerment and networks of the value chain from a Mediterranean perspective" that took place in December in Bologna, Italy. GENCI gave a talk at the JCAD 2020 conference in December 2020 to present an overview of the institution's GENCI initiatives and projects that serve the scientific research, innovation, and business competitiveness, including a presentation of the PPI4HPC project.

Due to the COVID-19 pandemic, many institutions found innovative ways to present the new supercomputing installations. This was done via virtual tours of the supercomputing premises that included the new PPI4HPC systems. In particular, CINECA realised a virtual tour of the new system and presented it at digital events and workshops, including the workshop within the EuroCC project "Supercalcolo nell'industria e nei servizi" in autumn 2020. Finally, BSC made an online speech at the 15th Spanish Supercomputing Network (RES) Users conference in September 2021 presenting the new storage infrastructure.

### 4.7 User-oriented communication

Several activities were planned having the user community in mind. A series of trainings were organised by each site to educate current and potential users on the new systems and technologies. Due to the CONVID-19 pandemic, most of these trainings were held in a digital format, instead of physical events as originally thought. More details on these tutorials can be found below:

*CINECA:*

- *Introduction to new accelerated partition of Marconi in November 2020 online*
- *CINECA GPU Hackathon in June 2021 online*

These course intended to support the scientific community to efficiently exploit the architecture of the new accelerated partition of the Marconi system. More precisely, the introductory tutorial aimed at providing a full description of the system configuration, with special emphasis on main crucial aspects for users and application developers. In addition, the Hackathon's objective was to educate teams of three to six developers accelerate their own codes on GPUs using a programming model, or machine learning framework of their choice.

CINECA has also published extensive user guides on its webpages for users of the new systems. Relevant details can be found on the HPC user guide page and Marconi100 user guide page.


*Figure 7*: Banner of the CINECA GPU Hackathon

*GENCI/CEA*:

- *Extreme CDF Workshop and Hackathon 2020 in January 2020 in Grenoble*
- *First A64FX Internal Workshop on Joliot-Curie Supercomputer in June 2021 online*

The objectives of these trainings were to bring together developers and users, to develop innovative digital models and methods and to optimise with the support of experts from CEA, ATOS, AMD and Fujitsu their codes on new system architectures, including the new PPI4HPC technologies. A first complete whitepaper was published in April 2020, based on the first training under the title "AVBP and YALES2 Portability, Tuning and Scalability on AMD EPYC 7002 Rome Processors" focused on the porting and the scalability of 2 leading combustion codes used by academia and industry. Another Whitepaper is planned to be published out of the second training by the end of 2021.

Furthermore, the following CEA webpages include detailed descriptions of the new systems: Main partitions, information on access for users: Access to Joliot Curie, and user documentation (account required). The GENCI "Our Computers" page also provides details on the new PPI4HPC partitions.

*BSC*:

- *Internal workshop to research Principal Investigators at BSC on the usage of the new Storage infrastructure in March 2021 online*
- *Internal workshop to the BSC Earth Science department on the usage of the new Storage infrastructure in April 2021 online*
- *Internal workshop to Centre for Genomic Regulation (CRG) researchers responsible for the European Genome-Phenome Archive (EGA) infrastructure in May 2021 online*

These workshops had the objective of informing and training the BSC researchers, as well as EGA infrastructure users and users of the Spanish supercomputing network, on the features of the new system at the BSC site and on how to use the new technologies to make the most out of their capabilities for their research projects.

BSC has included a detailed user guide on its website to provide information about how to use the new system: Nord3 user's guide.

*JSC*:

- *Introduction to the programming and usage of the supercomputer resources in November 2020 online*
- *Introduction to the programming and usage of the supercomputer resources in May 2021 online*
- *Introduction to the programming and usage of the supercomputer resources in November 2021 online*

The aim of these courses was to give new users of the supercomputing resources an introductory overview of the systems and their usage, and to help them in making efficient use of their allocated resources, including the new PPI4HPC technologies.

Furthermore, Juelich's dedicated webpages provide updates to users about the new PPI4HPC system JURECA, information on the full availability of JURECA-DC Module, and extensive JURECA user documentation.

Finally, a series of success stories authored by and dedicated to users was produced to describe how different projects benefited from exploiting the new technologies at the different HPC centres. More details about this series can be found in section 4.2 "News and success stories" of this document.

### 4.8 Community engagement

A significant part of the communication and dissemination tasks for all partners was for the project to be involved in initiatives offered by stakeholders within the fields of European public procurement and HPC. These opportunities offered recognition of the project's innovative approach towards joint public procurement processes in Europe as well as visibility of the

benefits presented by the new technologies to potential users. Relevant news stories were published for the project website and can be found in the corresponding links below.

This engagement included:

- The inclusion of the newly installed PPI4HPC systems in the PRACE Fast Track Call for Proposals published in May 2020 in order to help accelerate scientific research and discovery in the battle against the COVID-19 pandemic. PRACE welcomed project proposals from researchers from the academia, research institutions, and commercial organisations based in Europe that were in need of computing resources to contribute to the mitigation of the impact of the Covid-19 pandemic. Among the systems whose resources were used for this PRACE Call, were two systems procured through the PPI4HPC project: Joliot Curie AMD partition for GENCI/CEA and Marconi-100 for CINECA.

- The shortlist of PPI4HPC for the Procura+ Awards in July 2020. The PPI4HPC project has been shortlisted for the Procura+ Awards under the category of Outstanding Innovation Procurement in ICT, which is recognising the outstanding application of Procurement of Innovation and Pre-commercial procurement of ICT. PPI4HPC was selected among other projects due to its innovative joint procurement process aiming to acquire innovative high-performance supercomputers and storage systems for science and engineering applications. Although not a final winner, the Procura+ Awards jury appreciated the project's efforts to achieve a significant upgrade of the European HPC infrastructure towards future exascale systems.


*Figure 8*: Announcement of PPI4HPC being shortlisted for the Procura+ Awards

- The inclusion of PPI4HPC in the iProcureNet report that was published in February 2021. iProcureNet is an EU-funded project aiming to create an ecosystem of procurers, prescribers, legal advisors and other key stakeholders of procurement. Its report, titled "Joint cross-border public procurement in Europe: Analysis of the iProcureNet survey and case studies", summarises the results of a survey that iProcureNet conducted in 2020 among European public procurers in order to learn more about existing cross-border joint public procurement initiatives throughout Europe and identify lessons to be learnt and pitfalls to be avoided. One of these initiatives included in the report was the PPI4HPC project.

- Featuring in the updated EC Innovation Procurement brochure with the ICEI/Fenix project in January 2021. Both projects featured among innovation procurement projects in the latest brochure published by EC providing an overview of EU funded innovation procurements in the ICT domain. The document includes information on

how these projects are bringing ICT based solutions to the market to address challenges of public interest in a variety of sectors, such as health, transport, climate change, energy, and public administration. It also includes details on the impact that completed procurement procedures have had on procurers and companies. It is worth mentioning that the EC within the setting of EuroHPC has been particularly interested in learning from the PPI4HPC experience of a pan-European joint procurement of HPC technologies.

# 5. Conclusion

The communication and dissemination activities of the PPI4HPC project in general and the WP4 team in particular aimed at managing the information and relationships between the PPI4HPC consortium and the different target audiences (vendors, HPC European infrastructures, HPC centres), disseminate the project objectives, attract a wide range of providers and disseminate the results obtained after the public procurement was complete. Initial dissemination activities were focused on presenting the project to the audiences, explain the complex PPI process to the different stakeholders and organising key events to kick off the procedure.

A significant period of the process throughout the tender stage, no communication or dissemination activities were allowed and, therefore, the website remained with no big updates. However, once this phase was over, various dissemination tasks were initiated to promote the new systems installed in the different sites, and the importance of both the innovative joint procurement process and the benefits of the new technologies for the user community. These tasks were carried out successfully through the numerous dissemination material, press clippings, news pieces, success stories, and engagement initiatives with different stakeholders, as described in detail in this report. The project managed to the interest of the EC within the framework of EuroHPC, gain recognition in the HPC and public procurement ecosystem, and have an impact on how public procurement processes will be implemented in Europe in the future. A comprehensive analysis of this impact and lessons learnt can be found in the PPI4HPC D4.1 Report on Innovative Solutions.