



MEEP

MareNostrum Experimental
Exascale Platform

D2.2 Dissemination and Communication Report

Version 1.4

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Change Log

Version	Author	Description of Change
V 1.0	Dayana Fernandes Muzzetto (BSC)	Initial draft
V1.1	John Davis (BSC)	Edits
V1.2	Renata Giménez (BSC)	Second draft
V1.3	Dayana Fernandes Muzzetto (BSC)	Third draft
V1.4	John Davis (BSC)	Final review

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Executive Summary

This report summarizes the dissemination activities carried out by the MEEP project from 1 January 2020 to 30 June 2021. Please note some statistics and activities have been included before this final date.

This report includes a complete list of publications and conferences as well as presentations made at various events and workshops related to the project. Furthermore, additional coverage of the project in press and social media is also presented in this document, as well as other dissemination activities such as collaborations with other projects.

Over the first year and a half of the project, the consortium participated in a total of 11 conferences, workshops or seminars disseminating the project. With the aim of creating awareness and building a community around the project.

The dissemination team has successfully carried out the dissemination plan (D2.1) for this reporting period.

1. Introduction

The objective of this report is to present a detailed list of dissemination activities, which took place during the initial 18-months period, as planned in deliverable D2.1. The activities were carried out to increase awareness of MEEP's technology and build a community around it, while also maximizing academic dissemination.

2. General objectives

The overall goal of MEEP WP2 team is to maximize the impact of the project, increasing awareness and engaging key stakeholders. Please find below a few more detailed objectives of this work package (as in D2.1 v2.1):

- Identify and perform communication and dissemination activities in order to maximize the impact of the project, in collaboration with other EU research projects and initiatives.
- Support in building an ecosystem community, in collaboration with [WP3](#).

In order to achieve these objectives, the following activities will be developed:

- During the first year the focus was to create awareness by:
 - a. Creating a project logo, style guide and website.
 - b. Launching press release (each partner).
 - c. Presenting the project in events.
- During the second year the focus will be on building a community by:
 - a. Launching a press release to share the project's progress.

- b. Creating content for podcasts and blogs (e.g. 'Open Source Digital Library in HPC') in order to start discussion and engage all target audiences.
- c. Becoming a RISC-V International Foundation member.
- d. Becoming a HiPEAC member.
- e. Engaging in HPC communities i.e. MEEP's coordinator is Chair of a Special Interest Group (SIG): High-Performance Computing (topics related to MEEP will be discussed during the SIG meetings).

3. Target Audiences

In order to achieve the dissemination objectives, target audiences and potential stakeholders have been identified and extended over time. Moreover, the summary of MEEP's ecosystem stakeholders was extended by Exploitation and can be found in D3.2 under the Market Analysis Section in the 'Summary Table of the Ecosystem Definition.'

Target audience	Value proposition	Key messages	Register	Channels
<p>EU-funded projects (Centers of Excellence, R&D Projects, Centers of Competence, Digital Innovation Hubs): EPI SGA1, EPI SGA2, the European PILOT, CoEs (POP/POP2), RoMol, DEEP/DEEP-ER/DEEP-EST, eProcessor, and MONTBLANC2020.</p>	<ul style="list-style-type: none"> Influence and enable developments in related EU-funded projects. Next generation exploration of computer architectures as well as software development of existing and future HPC applications and frameworks. 	<ul style="list-style-type: none"> Influence, enable and follow-up the development of EPI technologies. Creating a full stack ecosystem that can be a foundation for many other European systems. Create European silicon chips in the future. 	For specialists	<ul style="list-style-type: none"> Website Press releases Events
<p>National and International stakeholders (Industrial Associations and R&D Networks and Clusters) e.g: Association for Computing Machinery (ACM), IEEE, the RISC-V Foundation, the Free and Open Source Silicon Foundation (FOSSi), OpenHW Group, Chip Alliance and the LLVM project community.</p>	<ul style="list-style-type: none"> Developing a competitive European technology which could be integrated in future exascale computers. Next generation exploration of computer architectures as well as software development of existing and future HPC applications and frameworks. 	<ul style="list-style-type: none"> An exploratory supercomputing infrastructure for the development, integration, testing, and co-design of a wide range of European technologies. 	For specialists	<ul style="list-style-type: none"> Website Press releases Publications Events
<p>HPC Community, other adjacent specialist communities (Electronic Components and Systems, Artificial Intelligence, Machine Learning, etc.)</p>	<ul style="list-style-type: none"> Featuring an exascale-class self-hosting accelerator emulator with capability to serve as a performance evaluation and software development vehicle for future exascale systems based on European technology. Next generation exploration of computer architectures as well 	<ul style="list-style-type: none"> Developing an advanced experimental platform towards exascale systems is one of the first steps to enable performance emulation and software development for these future systems, for both hardware and software. 	For specialists	<ul style="list-style-type: none"> Website Press releases Publications Events

	as software development of existing and future HPC applications and frameworks.	<ul style="list-style-type: none"> Exploring emerging Artificial Intelligence (AI), Machine Learning (ML) and Deep Learning (DL) workloads. 		
Policy makers and governmental institutions	<ul style="list-style-type: none"> Extend beyond silicon to software, creating the full stack ecosystem that can be the foundation for many other European systems beyond HPC. 	<ul style="list-style-type: none"> Create competitive European technology integrated into future exascale supercomputers The first stepping stone to build made-in-Europe silicon chips 	For non-specialists	<ul style="list-style-type: none"> Website Press releases Events
General Public	<ul style="list-style-type: none"> A project that will work towards improving Europe digital future as well as how supercomputers tackle challenges in different areas. 	<ul style="list-style-type: none"> Aim to develop open-source technologies to underpin a competitive and innovative HPC ecosystem in Europe. Create a sketch of the future, thus providing a glimpse of what can be built or how to improve systems for greater HPC capabilities. 	For non-specialist	<ul style="list-style-type: none"> Website Press releases Events

Table 3: MEEP's target audiences

4. Corporate image

In accordance with deliverable D2.1 Dissemination and Communication Plan, the first step was to define a common graphic identity. The brand of the MEEP project (including brand and style, Montserrat and Lato fonts chosen, project templates defined for presentation, poster, etc.) was established and its guidelines have been correctly implemented by all partners in these 18 project months. As an example, this document follows MEEP branding guidelines. The Dissemination and Communication Work Package leader is in charge of supervising that the MEEP brand is correctly applied in all dissemination materials.

5. Dissemination tools

During the first initial 18-months period, the dissemination tools have been regularly used and have established as the visible part of MEEP. The main dissemination activity is the creation of the website, as the main channel for all dissemination activities. Another regular activity is the creation of content to update this channel of communication.

5.1. MEEP website

In the first 17 months of the project, the overall performance of the website has been satisfactory. The website, built in Drupal (open source CMS), satisfied the technical requirements of performance and security. In addition, the website is prepared to host the intranet that members can use to upload final documents, allowing an effective management by the dissemination team and a seamless access by all consortium members. The website was launched in March 2020.

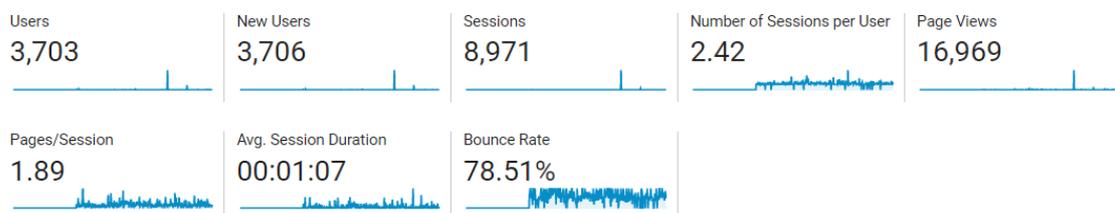


Figure 1: Main indicators of the MEEP website from March 2020 to May 2021. Source: Google Analytics

The main indicators of MEEP show that the website is attaining the main objectives. The total new users are 3,703, who fulfilled 16,969 page views, and 8,971 sessions since the launching of the website in March 2020 (as shown in Fig. 1).

The established KPI in the D5.1 Dissemination and Communication Plan for this metric is 1,000 unique users per year and as stated above, we reached and surpassed this goal.



Figure 2: Sessions on the MEEP website from 1-31 May 2021. Source: Google Analytics

These peaks are related to upcoming events such as [ISC 2021](#) and [ICS 2021](#), as well as [news articles](#) about the project and its technology and [publications](#).

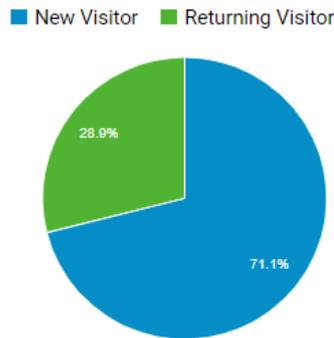


Figure 3: New visitor vs Returning visitor to the MEEP website from March 2020 to May 2021. Source: Google Analytics

MEEP sessions show a high number (71.1%) of new visitors (Fig. 3). However, the trend in the acquisition of visitors comes from organic search (38.2%), referral (31.2%), and direct (26.5%). This performance shows the settlement of the project, with a growing number of links pointing to the MEEP website and increasing hits from search engines (Fig. 4).

The main referrals come from RISC-V, EuroHPC, and all partners' websites.

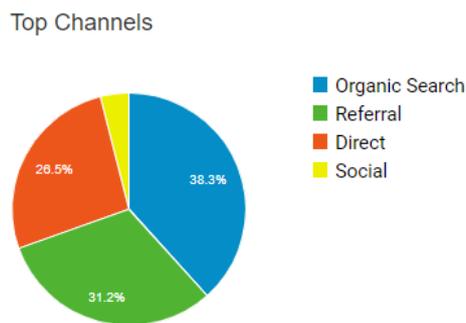


Figure 4: Traffic source channels for the MEEP website from March 2020 to May 2021. Source: Google Analytics.

	Acquisition			Behaviour		
	Users	New Users	Sessions	Bounce Rate	Pages/Session	Avg. Session Duration
	3,703	3,706	8,971	78.51%	1.89	00:01:08
1 Organic Search	1,816			76.48%		
2 Referral	1,477			95.35%		
3 Direct	1,256			57.43%		
4 Social	187			57.30%		

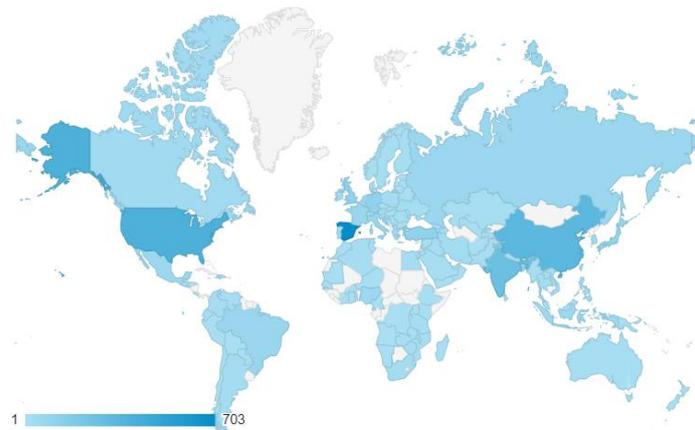
Figure 5: Traffic source channels and bounce rate for the MEEP website from March 2020 to May 2021. Source: Google Analytics

The most engaging pages are the 'Home' page, followed by 'News' and 'Events' as well as the intranet but this page is only for internal use (Fig. 6).

Page	Page Views	Unique Page Views	Avg. Time on Page	Entrances	Bounce Rate	% Exit	Page Value
	16,984 % of Total: 100.00% (16,984)	13,026 % of Total: 100.00% (13,026)	00:01:15 Avg for View: 00:01:15 (0.00%)	8,966 % of Total: 100.00% (8,966)	78.51% Avg for View: 78.51% (0.00%)	52.79% Avg for View: 52.79% (0.00%)	US\$0.00 % of Total: 0.00% (US\$0.00)
2. /	2,880 (16.96%)	2,027 (15.56%)	00:00:43	1,796 (20.02%)	40.72%	42.88%	US\$0.00 (0.00%)
3. /intranet	1,165 (6.86%)	813 (6.24%)	00:01:37	440 (4.91%)	48.18%	53.56%	US\$0.00 (0.00%)
4. /media/news	857 (5.05%)	393 (3.02%)	00:01:25	108 (1.20%)	60.75%	17.04%	US\$0.00 (0.00%)
5. /user/login	637 (3.75%)	354 (2.72%)	00:00:37	72 (0.80%)	40.28%	11.15%	US\$0.00 (0.00%)
6. /events	422 (2.48%)	211 (1.62%)	00:01:22	19 (0.21%)	42.11%	14.69%	US\$0.00 (0.00%)
7. /403.html?page=/mce/private&from=https://mEEP-project.eu/intranet	372 (2.19%)	318 (2.44%)	00:00:20	27 (0.30%)	48.15%	20.97%	US\$0.00 (0.00%)
8. /jobs	331 (1.95%)	278 (2.13%)	00:02:47	150 (1.67%)	62.34%	58.01%	US\$0.00 (0.00%)
9. /platform-layers	290 (1.71%)	211 (1.62%)	00:02:40	78 (0.87%)	74.03%	42.41%	US\$0.00 (0.00%)
10. /results/publications	251 (1.48%)	160 (1.23%)	00:01:38	32 (0.36%)	65.62%	23.11%	US\$0.00 (0.00%)

Figure 6: Views and average time on the MEEP website content from March 2020 to May 2021. Source: Google Analytics

As for visits by country, most of sessions originate in Spain, United States, China, India, Germany, Turkey, United Kingdom, Japan, Croatia, and Brazil as shown in Figure 7.



Country	Acquisition			Behaviour			Conversions		
	Users	New Users	Sessions	Bounce Rate	Pages/Session	Avg. Session Duration	Goal Conversion Rate	Goal Completions	Goal Value
	3,703 <small>% of Total: 100.00% (3,703)</small>	3,706 <small>% of Total: 100.00% (3,706)</small>	8,971 <small>% of Total: 100.00% (8,971)</small>	78.51% <small>Avg for View: 78.51% (0.00%)</small>	1.89 <small>Avg for View: 1.89 (0.00%)</small>	00:01:08 <small>Avg for View: 00:01:08 (0.00%)</small>	0.00% <small>Avg for View: 0.00% (0.00%)</small>	0 <small>% of Total: 0.00% (0)</small>	US\$0.00 <small>% of Total: 0.00% (US\$0.00)</small>
1. Spain	703 (18.93%)	703 (18.97%)	2,121 (23.64%)	43.80%	4.04	00:04:07	0.00%	0 (0.00%)	US\$0.00 (0.00%)
2. United States	393 (10.58%)	391 (10.55%)	724 (8.07%)	89.36%	1.26	00:00:11	0.00%	0 (0.00%)	US\$0.00 (0.00%)
3. China	333 (8.97%)	333 (8.99%)	792 (8.83%)	97.60%	1.03	<00:00:01	0.00%	0 (0.00%)	US\$0.00 (0.00%)
4. India	265 (7.14%)	262 (7.07%)	500 (5.57%)	83.60%	1.50	00:00:39	0.00%	0 (0.00%)	US\$0.00 (0.00%)
5. Germany	109 (2.93%)	109 (2.94%)	231 (2.57%)	92.21%	1.09	00:00:07	0.00%	0 (0.00%)	US\$0.00 (0.00%)
6. Turkey	109 (2.93%)	109 (2.94%)	182 (2.03%)	80.77%	1.37	00:00:36	0.00%	0 (0.00%)	US\$0.00 (0.00%)
7. United Kingdom	100 (2.69%)	100 (2.70%)	214 (2.39%)	91.59%	1.14	00:00:09	0.00%	0 (0.00%)	US\$0.00 (0.00%)
8. Japan	90 (2.42%)	90 (2.43%)	201 (2.24%)	87.56%	1.32	00:00:30	0.00%	0 (0.00%)	US\$0.00 (0.00%)
9. Croatia	78 (2.10%)	78 (2.10%)	104 (1.16%)	64.42%	2.32	00:00:56	0.00%	0 (0.00%)	US\$0.00 (0.00%)
10. Brazil	71 (1.91%)	71 (1.92%)	169 (1.88%)	83.43%	1.17	00:00:01	0.00%	0 (0.00%)	US\$0.00 (0.00%)

Figure 7: Visits to the MEEP website by countries from March 2020 to May 2021. Source: Google Analytics

5.2. Social media

As stated in the DoA, partners promote the project via their social media channels to create awareness about MEEP technology and build a community around it. Some international and national communities such as [RISC-V](#) and [COIT](#) have been sharing news, articles and blogs about MEEP.

As shown in Fig. 4, social media channels provide nearly 3.9% of the website sessions.

LinkedIn generates 63.76% of social traffic, becoming the top social media network to bring traffic to MEEP website (Fig. 9).

Social Network	Sessions	% Sessions
1. LinkedIn	227	63.76%
2. Twitter	115	32.30%
3. Facebook	13	3.65%
4. Google Groups	1	0.28%

Figure 9: Traffic to the MEEP website referred from social media (May 2020-May 2021). Source: Google Analytics

Find below some social media posts related to MEEP shared by partners, related EU projects, international and national communities, European Commission, Euro HPC JU, research communities, and media:

RISC-V @risc_v

Blog up! John Davis from @BSC_CNS delves into how the European project MEEP will develop an open source digital library for the @risc_v ecosystem in #HPC and a performance modeling tool called Coyote. Read the blog here:

Open Source Digital Library in HPC - RISC-V International
John Davis, MEEP project coordinator, explains how the European project MEEP will develop an open source digital ...
@riscv.org

6:00 PM · Nov 17, 2020 · Salesforce - Social Studio

1 Retweet 1 Quote Tweet 7 Likes

ACIT_Canarias @acitcanarias · Feb 18

Hoy a las 9:30h @COIT_AEIT, #COITC y #eiteulpgc estan en el Ciclo #DiadelaMujerylaNiñaenlaCiencia en la @agenciaiisi junto a Teresa Cervero @BSC_CNS del #MEEPproject divulgando nuestra profesión a futuras jóvenes #científicas y #tecnólogas.

Ingenieras de Telecom día Internacional Mujer y Ni...
Ingenieras de Telecomunicación en el Día Internacional Mujer y Niña en la Ciencia, 11 febrero...
youtube.com

BSC-CNS @BSC_CNS · May 14, 2020

Watch this video about the **#MEEPProject** to find out about a project that is expected to set the foundations of the next generation of supercomputers in Europe & European IP & don't forget to visit meep-project.eu

@eurohpc_ju @TBilgem @fer_unizg @risc_v #h2020 #HPC



443 views 0.01 / 0.35

Barcelona Supercomputing Center
13,279 followers

Europa en la carrera por liderar la computación exaescala

Europa está apostando por posicionarse como un referente tecnológico. En el área del diseño y desarrollo de dispositivos de computación la tarea no es fácil.

Sin embargo, ya se han dado los primeros pasos en esta dirección en computación de altas prestaciones y España tiene mucho que aportar al respecto.

Proyectos como MEEP son una muestra de ello.

Aquí podéis leer el reportaje de la **#RevistaBit** de COIT AEIT Colegio Oficial y Asociación Española de Ingenieros de Telecomunicación <https://bsc.es/ZWG>

#RES #RISCV #MeepProject

See translation



Europa en la carrera por liderar la computación exaescala

54 · 1 comment

Reactions

Celebrate Comment Share Send

Add a comment...

Dominik Gotwald · Jrg+
Senior Project-Manager - LOEP-Projects / UNIZG-FA - Jukath Supercomput...
The nicest place to put a supercomputer #tpc #42

eFlows4HPC Project
111 followers

#eFlows4HPC was included in EuroHPC Joint Undertaking Director Anders Jensen's speech at #EHPCSW this morning, among other funded projects.

There's still time to register to follow the upcoming presentations <https://bit.ly/2PguGAX>

Research & Innovation projects launched

Following the evaluation of our first research and innovation call 20 projects have been selected.

- LIGATE, SCALABLE, and eFlows4HPC were launched in January
- ACROSS, HEROS, NextSim, and Optima started in March
- The others will come on 1 April

These projects will help the EuroHPC JU to develop hardware, software applications and services for future European HPC systems and help Europe to become globally competitive in the field of supercomputing.

Logos for MEEP, LIGATE, SCALABLE, ACROSS, and eFlows4HPC are shown.

EuroHPC Summit Week 2021

11

Dayana Fernandes Muzzetto
Science Communication- EU Project Dissemination Officer
8mo ·

#DYK that two MEEP project stories were published on the #europeancommission "Shaping Europe's digital future" website?

*Spoiler alert: One of them includes a video discussing a trending topic.

Moreover, did you know that MEEP (MareNostrum Experimental Exascale Platform) is the first project to receive funding from the European High-Performance Computing Joint Undertaking (EuroHPC JU)? The project aims to develop open-source technologies to underpin a competitive and innovative HPC ecosystem in #Europe.

Find out about this and more by visiting <https://lnkd.in/eHMSWcZ>

#h2020 #HPC #digitalfuture

John Davis

The Croatian Ministry of Science and Education launched a press release about MEEP
01 September 2020

MEEP's project stories were published on the EC's "Shaping Europe's digital future" website
20 August 2020

MEEP workshop conducted virtually
13 July 2020

MEEP presentation at ICS 2020
29 June 2020

Kim McMahon @kamcmahon

Alright - a little bit of bragging here. But look at the year @risc_v had?! I'd like to say I did this. I can say I worked with the team to create the communication. :) #riscv

RISC-V International Reports Another Strong Year of Growth...
RISC-V sees widespread commercial adoption across industries, from embedded to AI, from IoT to HPC and ... riscv.org

4:25 PM · Dec 14, 2020 · Twitter Web App

1 Retweet 1 Quote Tweet 15 Likes

Faculty of Electrical Engineering and Computing @fer_unizg

#MEEP #H2020 project will enable Croatian researchers and industry the access to the latest EU #supercomputing infrastructure, said prof. Mario Kovač (UNIZG-FER), a member of the project's Steering Committee.

@BSC_CNS @Tubitak
meep-project.eu



9:27 AM · Apr 21, 2020 · Twitter Web App

3 Retweets 4 Likes

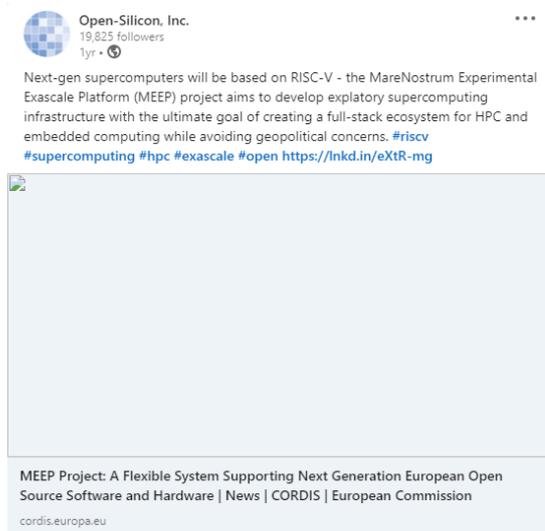


Figure 10: MEEP social media posts

6. Dissemination pack

The dissemination pack was developed before M4 and includes the following materials: the leaflet, the roll-up, the poster, MEEP backgrounds for online events, and an overview project presentation, that is regularly updated.

6.1. Leaflet

The general brochure provides information about MEEP: its objectives and features. The format of the brochure is a double-sided A5 sheet, so that interested project partners can easily download and print for their own dissemination activities.

The online leaflet is currently available on the Media > Branding page of the MEEP website.

This dissemination material had a total of 95 views (May 2021).



Figure 11: MEEP flyer front side

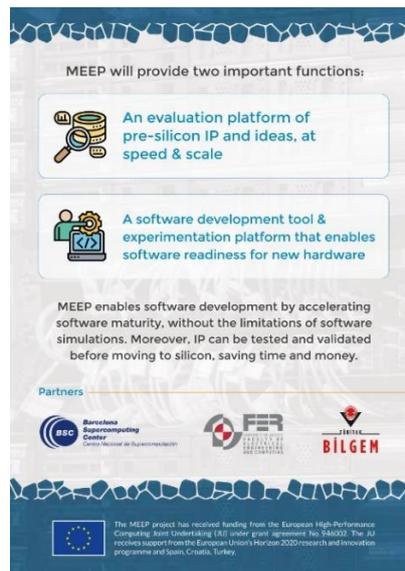


Figure 12: MEEP flyer back side



Figure 13: MEEP flyer branding

6.2. Roll-up

Two roll-ups have been created. Their aim is to present the MEEP project to all audiences.

The first version was printed for the Supercomputing 19 in Denver, Colorado, USA on 18-21 November 2019 in the Barcelona Supercomputing Center (BSC) booth before the project started.

This dissemination material had 103 views on the website (May 2021).

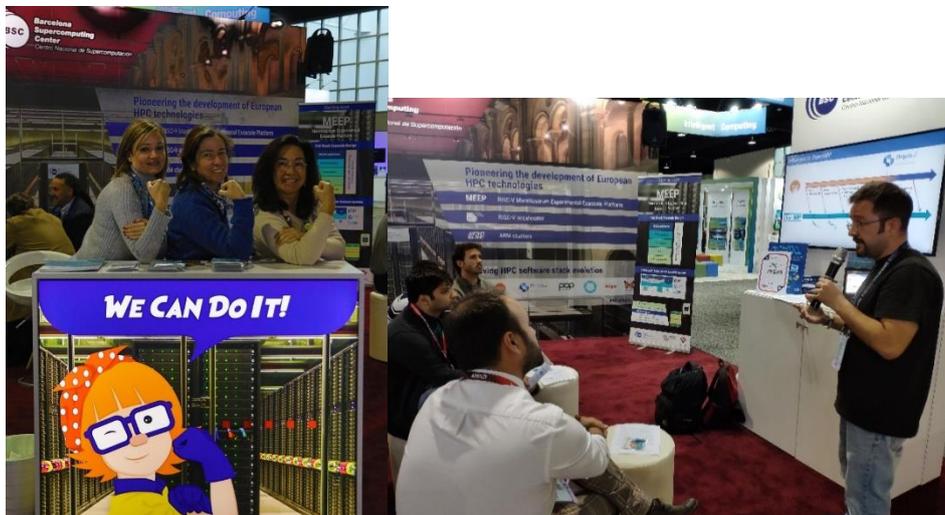


Figure 14: MEEP roll-up

A second version was developed for future events after the project started to showcase MEEP in a nutshell for general audiences (non-specialized), please refer to section 11.

This dissemination material had 136 views on the website (May 2021).

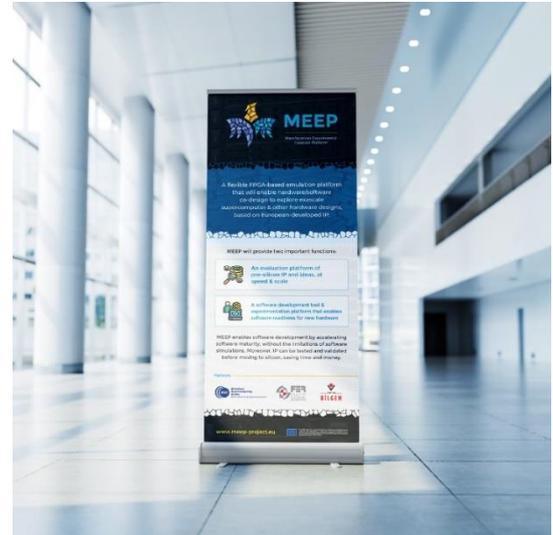


Figure 15: MEEP roll-up

Both roll-ups can be found on the [branding](#) section on the website.

6.3. Poster

The poster of MEEP, agreed by the consortium, can be downloaded and printed out from the Internet repository/SVN, as well as the template to produce further posters in scientific conferences.

One poster has been developed to be featured in the RISC-V booth at [ISC 2021](#).



Figure 16: MEEP poster at ISC 2021

6.4. Presentation

The project presentation has also been distributed among the partners and is available to download in the intranet. A presentation template is also available in the intranet to create new presentations.

The aim of this presentation is for all partners to present the MEEP project in a similar way and align key project messages included in D2.1.

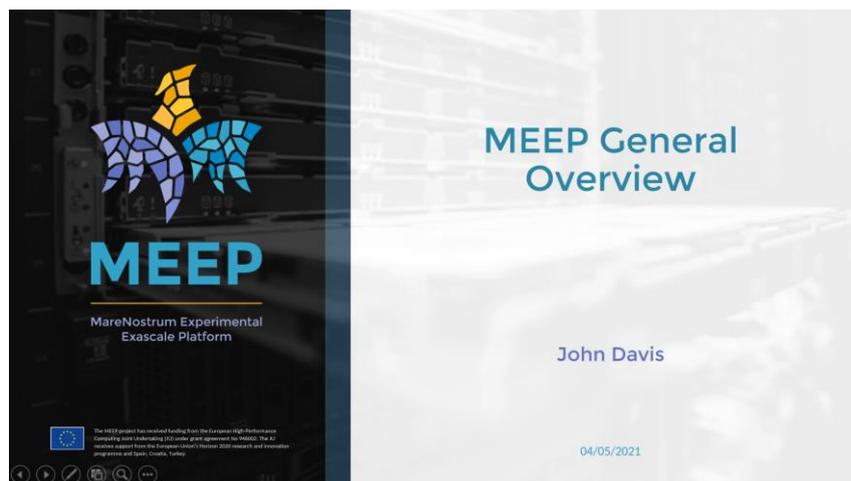


Figure 17: MEEP project presentation

6.5. Zoom backgrounds

In order to adjust and cope with the COVID-19 outbreak, event organizers are holding most or all events in a digital form. Therefore, Zoom backgrounds have been developed to be used consistently by the consortium to attend such events. All of them are background images so they are static in nature except one that is a video, shown in Figure 22.

We have developed several backgrounds to adjust to the different nature of events that will be attended such as conferences, internal meetings, community meetings, interviews, etc. as well as different audiences (please refer to section 11).

These have been uploaded to the intranet to be used by the whole consortium.



Figure 18: MEEP horizontal logo

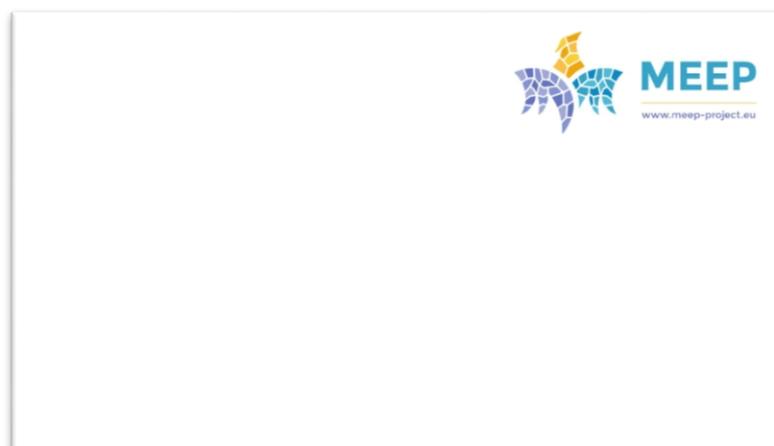


Figure 19: MEEP web logo

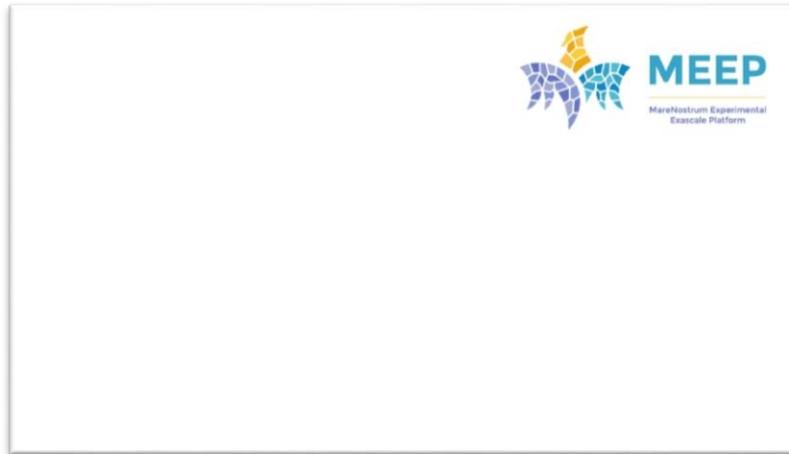


Figure 20: MEEP logo



Figure 21: MEEP cartoon



Figure 22: MEEP video background

7. Press strategy

On 11 March 2020, a first press release titled '[Flexible System Supporting Next Generation European Open Source Software and Hardware](#)' was sent to technical media to emphasize how the project, as a performance evaluation and software development vehicle for future chip designs, will provide European technology that will set a foundation for many systems, both in HPC and beyond. This press release was approved by all partners. The dissemination leader encouraged the MEEP partners ([FER](#) and [Tübitak](#)) to replicate this on their own partners' channels, all parties published a press release.

Moreover, the original press release was sent to the MEEP Project Officer to disseminate it among its own channels, resulting in two project stories published on the European Commission's website in the '[Shaping Europe's digital future](#)' section and its newsletter, which addresses general audiences (please refer to section 11).

In total, 54 press impacts in technical media have been documented in this 18-month period.

Press impact	Date	Audience
The Next Platform article	14/11/2019	10000
La Vanguardia article	28/12/2019	15000
Inside HPC article	31/12/2019	10000
Europa Press article	1/1/2020	8000
Aldia article	1/1/2020	5000
Islapad article	1/1/2020	500
La Vanguardia article	2/1/2020	15000
Science Business article	9/1/2020	20000
Lemarqué article	13/01/2020	7000
Arquitectologia article	23/01/2020	926
FER article	13/02/2020	500
La Razón Cataluña article	26/02/2020	8000
Nació Digital article	26/02/2020	5000
Gente en Catalunya article	26/02/2020	1000
Expansión article	26/02/2020	5000
Primeur article	11/3/2020	2000
HPC Wire article	11/3/2020	25000
eeNews Europe article	11/3/2020	1000
EC article	12/3/2020	150
BSC article	12/3/2020	76
Cordis article	12/3/2020	500
Coding Societies article	13/03/2020	1000
Inside HPC article	13/03/2020	10000
ECI Electronique article	16/03/2020	7000
RISC-V article	17/03/2020	500
Opensource article	18/03/2020	8000
AWTI article	19/03/2020	100
eSmartcity.es article	23/03/2020	7000

EC project story	24/03/2021	200
Embedded Computing Design article	14/04/2020	25000
Tutel Bilgem Tubitak article	14/04/2020	150
El correo libre issue 26 article	14/04/2020	300
Webtekno article	17/04/2020	3000
Sanal Basin article	17/04/2020	3000
AMAC Alumni FER article	20/04/2020	300
Ministarstvo znanosti i obrazovanja article	20/04/2020	159
Teknoloji haber article	20/04/2020	56
Radyo BALFM article	21/04/2020	100
T.C Kirlareli universitesi article	24/04/2020	3218
Studentski article	25/04/2020	320
SLORD article	27/05/2020	618
Biratto article	27/05/2020	314
ECD blog	10/6/2020	700
EC project story	14/07/2020	100
RISC-V blog	10/11/2020	150
Design & Reuse	8/12/2020	200
HPC Wire article	8/12/2020	25000
RISC-V press release	8/12/2020	500
OmpSs BSC article	18/01/2021	4160
HiPEAC info 62	18/01/2021	80
Semiconductor magazine	22/04/2021	100
BIT magazine	23/04/2021	500
HPC Wire article	07/06/2021	25000
HiPEAC info 63	15/06/2021	3000

Table 1: MEEP's press impacts

As part of its second year focus on building a community, MEEP was featured on [BIT magazine](#) ([Colegio Oficial Ingenieros de Telecomunicación](#)) on pages 54-59 in issue 219-April 2021. This magazine is addressed to specialized audiences (please refer to section 11), more specifically this article addressed national and international stakeholders (Spanish engineers' community).

The article provided an overview about MEEP in Spanish.



Figure 23: BIT magazine

8. Related projects and organizations

Dissemination collaborations have taken place with related projects and organizations to create awareness and build a community around the project. Please, find audiences in section 11.

8.1. HiPEAC

MEEP is part of the [HiPEAC network](#) (Fig. 20), and MEEP was featured in [HiPEAC info 62](#) magazine. This article addressed EU-funded projects, national and international stakeholders, HPC Community and other adjacent specialist communities (embedded computing), policy makers and governmental institutions audiences.

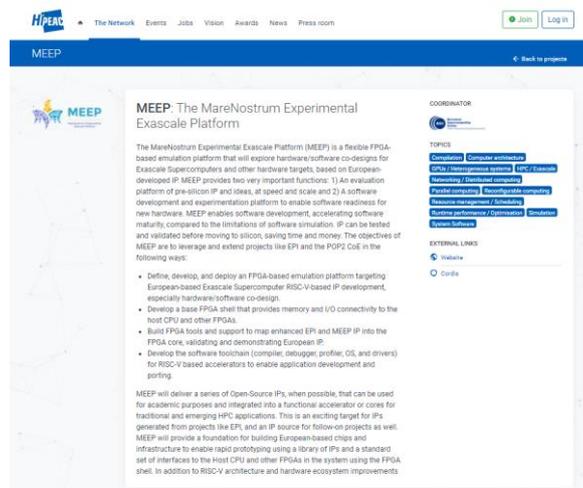


Figure 24: MEEP HiPEAC network membership

BUILDING THE FUTURE USING ALL OPEN SOURCE SOFTWARE AND HARDWARE



The next generation exascale machines need to exploit locality, and support legacy and new programming models and frameworks. What's more, data movement is a source of inefficiency in modern accelerator-based systems, as well as a source of complexity in program model and software implementations. The MareNostrum Experimental Exascale Platform (MEEP) is a hardware and software development vehicle. The novel idea for the accelerator underpinning this project is the ability to execute traditional host software on the accelerator along with the highly parallel code. This provides a single physical memory space which removes data migration and management between the host and the accelerator, as well as reducing programming model complexity. By using a flexible, FPGA-based emulator, a variety of hardware and software accelerator concepts can be emulated and validated. In particular, in MEEP our accelerator provides a flexible framework to integrate a vector accelerator with a high lane count and several types of systolic arrays, all based on the open RISC-V ISA.

The MEEP project sets foundations of the next generation of supercomputers that will work towards improving Europe's future in line with the European Commission's stance on 'Shaping Europe's digital future'. It will provide a foundation for building European-based chips and infrastructure to enable rapid prototyping using a library of IPs and a standard set of interfaces to the host CPU and other FPGAs in the system using a set of standard interfaces defined as the FPGA shell. Open source IPs will be available for academic use, and/or to be integrated into a functional accelerator or cores for traditional and emerging HPC applications.



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As a new digital laboratory for exploring new system concepts, MEEP will provide a platform that can provide a glimpse into the future of hardware and software. It can be used to build specialized systems that can tackle the problems of today and of tomorrow. For example, with COVID-19 or other future pandemics, it could explore new systems to be built for drug or vaccine discovery, and personalized medicine. It will create a sketch of the future, giving us a glimpse of what we can build or how to improve systems for greater HPC capabilities, improving the quality of our lives.

Coyote, made by MEEP in Europe

Early development stages for MEEP require fast, scalable and easy-to-modify simulation tools, with the right granularity and fidelity, enabling rapid design space exploration. For this reason, the team developed Coyote, which is a new open source, execution-driven simulation tool, based on the canonical RISC-V ISA, that has a focus on data movement throughout the memory hierarchy. It provides a solid foundation for a fast and flexible tool for HPC architecture design space exploration. It will enable designers to make informed decisions early in the development of new architectures, based on data movement, a key limiting factor of performance and efficiency.

Coyote is an integration of existing RISC-V tools, leveraging previous community efforts and also producing a tool that users find familiar and easy to adopt. It is based on two pre-existing tools: Spike and Sparta.

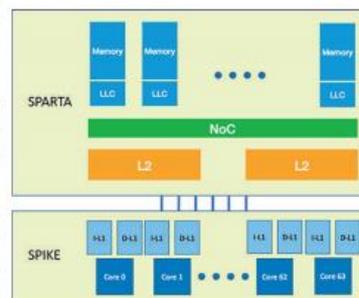


Figure 1: An example 64-core simulation target. Elements simulated by each tool shown in the figure.

Figure 25: MEEP HiPEAC info 62 Innovation Europe MEEP article

8.2. RISC-V

MEEP is a member of RISC-V, was featured in a press release titled '[RISC-V International Reports Another Strong Year of Growth with New Technical Milestones, Educational Programs, RISC-V Adoption More](#)' and blog titled '[Open Source Digital Library in HPC](#)'. Moreover, MEEP is a RISC-V member and John Davis, MEEP's coordinator, is Chair of the [RISC-V Special Interest Group: High-Performance Computing \(HPC\)](#). As such, he also participates in the RISC-V Technical Steering Committee (TSC): Strategy, escalations, group and chair, preliminary charter approvals, ratification, etc.

In addition, MEEP will also have a significant presence at the ISC booth that will take place at the end of June 2021.

These activities have been developed to address national and international stakeholders' audiences.

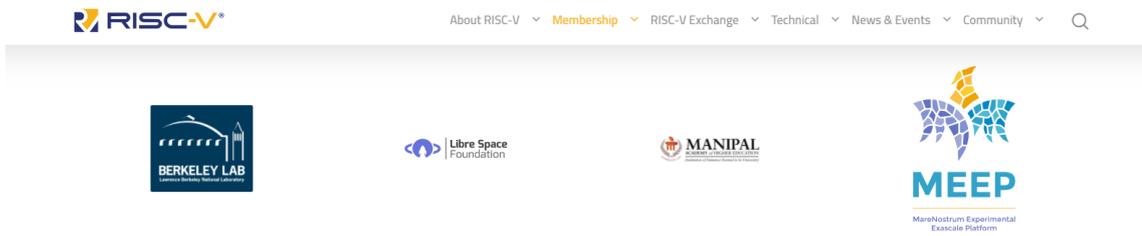


Figure 26: MEEP RISC-V membership

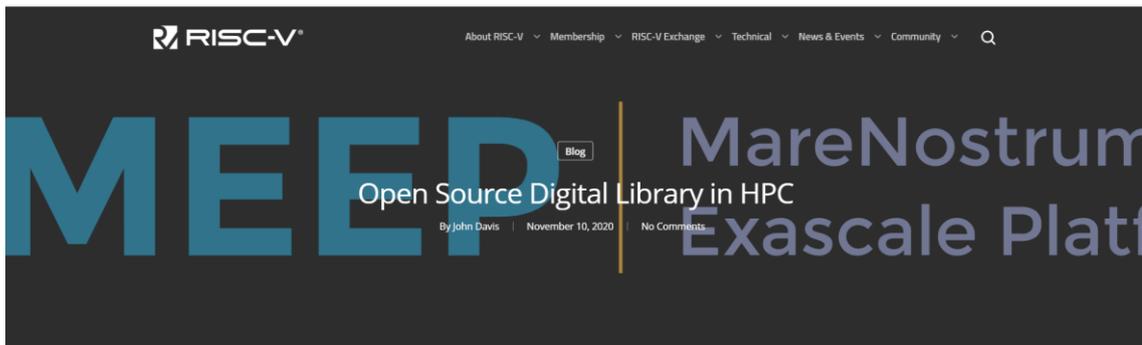


Figure 27: MEEP RISC-V guest blog

8.3. HPC Europa-3

[MEEP](#) was part of the [2nd Transnational Access Meeting \(TAM\) of the HPC Europa-3 program](#) virtual meeting on 22 October 2020. This event addressed EU-funded projects and researchers.

8.4. PRACE Summer of HPC

MEEP is part of PRACE [Summer of HPC](#) in 2021, which is a [PRACE programme](#) that offers summer placements at HPC centres across Europe to late-stage undergraduates and/or master students. During 'Summer of HPC,' MEEP's ACME HPC accelerator architecture will accelerate HPC applications and the Coyote simulator will be researched, analyzed, implemented, and experimented with for new data management policies by students in the 'Analysis of data management policies in HPC architectures' workplan. This event addressed the HPC community and other adjacent specialist communities' audiences.

9. Events

As part of the dissemination plan (D2.1), the following section summarizes the progress made over the first 18 months of the project. As shown in table 2, the total amount of events attended by the MEEP consortium has been 11. The consortium has participated in 9 events and has organized 2 workshops.

Event	Date
SV'19	18/11/2019
ICS 2020	29/06/2020
IVPAI 2020	21/08/2020
Russian Supercomputing Days 2020	22/09/2020
HPC Europa 3	22/10/2020
ApplePies 2020	20/11/2020
HPCC 20'	14/12/2020
DATE 2021	1/2/2021
Investigación e ingeniería: Mujer y niña en la ciencia	18/02/2021
ICS 2021	14/06/2021
ISC 2021	24/06/2021

Table 2: MEEP's events

10. Publications

MEEP has submitted three scientific publications in its first year and half:

1. Title: 'Highly parallel GPU accelerator for HEVC transform and quantization.' Published in: 2020 International Conference on Image, Video Processing and Artificial Intelligence (IVPAI).
Authors: Mate Cobrnic, Alen Duspara, Leon Dragic, Igor Piljic, Mario Kovac.
2. Title: 'MareNostrum Experimental Exascale Platform (MEEP).' Published in: Supercomputing Frontiers and Innovations journal.
Authors: Alexander Fell, Daniel J. Mazure, Teresa C. Garcia, Borja Perez, Xavier Teruel, Pete Wilson, John D. Davis.
3. Title: 'Coyote: An Open-Source Simulation Tool to Enable RISC-V in HPC.' To be published: 2021 Design, Automation & Test in Europe Conference & Exhibition (DATE 2021).
Authors: Borja Perez, Alexander Fell, John Davis.

The MEEP website is already prepared with a '[Publications](#)' section to display its publications (see Fig. 28) as soon as they are published. All publications are following the H2020 Open Access publication rules.

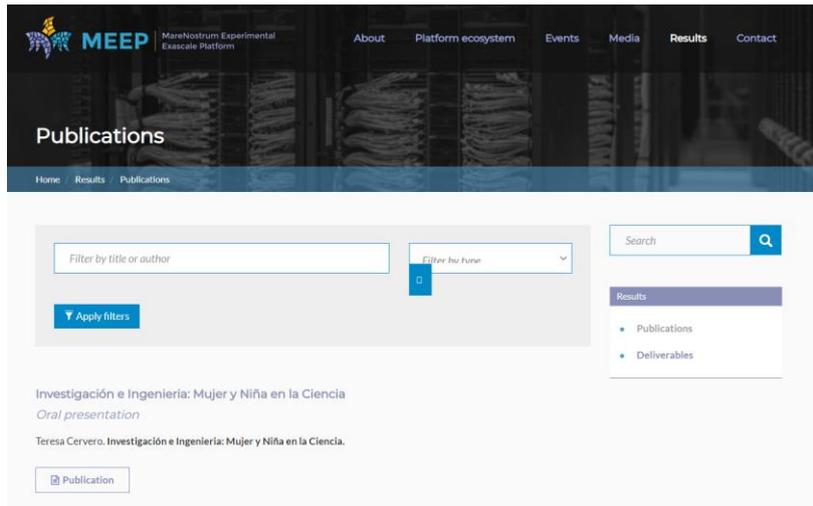


Figure 28: Publications on the MEEP website

11. KPIs

All dissemination activities and tasks are carefully monitored. The metrics defined in D2.1 Dissemination and Communication Plan show the progress of the project, these were increased and updated in D2.1 v2.1.

Key Performance Indicators	Activity	Type	Audience	Achieved (M1-M18)	Total Target (by the end of the project)	Expected impact
Press strategy	Press clipping			54	At least 100 press clippings	To inform the public about the project start, progress and results.
Website	Project Website			8,971	At least 1,500 sessions per year	Communicating project impact to interested parties worldwide (e.g. news such as conference visits, publications & deliverables, partners, link, etc.)
Dissemination material	Project logo, Presentation Poster			1 presentation 1 poster 1 leaflet	At least 1 Presentation and poster	Foster people's awareness of the project and its impact
	Project leaflet				At least 1 leaflet	Raise awareness on project targets, opportunities and partners which can be distributed via e-mail or directly after meetings or conferences
Academics and Industrial Events	Workshop	Conference	Industry	2 workshops 9 events	At least 3 workshops At least 12 events	Introducing project to industrial

						(academic) participants
Scientific Publications				3 papers	At least 4 papers	Show progress and results to the HPC and academic community.
Video				N/A	1 video	Show project's results to general audiences

Table 4: List of KPIs. Source: MEEP D2.1 Communication and Dissemination Plan

The monitoring and contingency plan for the activities measured by KPIs (Table 4) comprises the next actions:

- Press releases: One press release (1 out of 3 for the whole project) was sent in the beginning of the project. Once the project starts generating results, more press releases will be prepared accordingly.
- Media clippings: 54 press impacts (54 out of 100) have been documented. The action plan to increase the KPIs includes more frequency in sending press releases, inviting personalized interviews and news to specialized media.
- Website sessions: The website sessions are attaining the expected outcome and surpassing it (Table 4).
- Project presentation: The project presentation (1 out of 1) has been already distributed to all partners and will be updated along with the project unfolding.
- Project posters: One project poster has been created (1 out of 1).
- Project Flyer: The project flyer (1 out of 1) has been distributed to all partners and uploaded on the MEEP website.
- Events and conferences attended: The project has been presented at 11 events so far, including DATE, ICS, ISC and others.
- Scientific publications: The number of published scientific publications is 1 and the number of accepted scientific (not published yet) publications is 2.
- Project video: The first video of the project (0 out of 1) will disseminate the key messages and results of MEEP to a general audience.

12. Progress and next actions

MEEP shows a satisfactory progress in its first 18 months whose aim was to launch the project, create awareness and built a community around the project.

The main dissemination tasks have involved the definition of the brand (with the development of logos, poster, flyer, roll-up, official presentation, file templates, etc.), the creation of the main communication channel: website, the launch of a first press release followed by a satisfactory media impact, and the participation in key scientific and industry events. New results are expected and will be conveniently disseminated and strategically presented.

In 2021, the project aims to build a community and become a member of communities such as RISC-V and publishing articles in magazine such as BIT in order to bring the project closer to target audiences. Events have been a significant communication tool for MEEP, the consortium will focus efforts on continuing updating audiences on the project at relevant events.

For the rest of the year, the consortium expects to organize and participate in different conferences, exhibitions or workshops such as ISC 2021, ICS 2021, among many others, all of them bringing together scientific and industry public. Moreover, trainings such as [PRACE's Summer of HPC 2021](#) are being developed for younger scientific audiences.

The second press release will be launched before the end of the year to share the project's results. Additionally, public results and updates about the project will also be displayed in the official project website in order to raise as much awareness as possible. This online channel will be highly-important during this year as more information could be showed due to the advancement of the project. Also, where possible MEEP will continue to collaborate with other related European projects such as [HiPEAC](#), [Xilinx](#), [MANGO](#), [EuroEXA](#), [LEGaTO](#), [POP](#), and [CompBioMed](#).

The main objective of the third year (2022) will be disseminating results, so new people are attracted to visit the page as well as bring back past visitors to repeat this experience. In order to achieve this, the consortium will publish updated and engaging content in the 'News' section and launch its first official video showcasing results.

In addition of KPIs (detailed in section 12), the main key message is that MEEP is attaining a stage of maturity during its second year of existence. Consequently, the communications efforts will be focused in increasing the visibility and results of the project.

Acronyms and Abbreviations

BSC – Barcelona Supercomputing Center

CMS – Content Management Systems

CompBioMed– A Centre of Excellence in Computational Biomedicine

DoA – Description of the action

EC– European Commission

EuroEXA–Co-designed Innovation and System for Resilient Exascale Computing in Europe:
From Applications to Silicon

HiPEAC– High Performance and Embedded Architecture and Compilation

KPI – Key Performance Indicator

LEGaTO– Low Energy Toolset for Heterogeneous Computing

MANGO– Exploring Manycore Architectures for Next-GeneratiOn HPC systems

MEEP– The MareNostrum Experimental Exascale Platform

PM – Person month

POP– Performance Optimisation andProductivity

PU – Public

TÜBITAK BILGEM – The Scientific and Technological Research Council of Turkey, Informatics
and Information Security Research Center

UNIZG-FER – Faculty of Electrical Engineering and Computing, University of Zagreb

WP – Work Package