

H2020-FETHPC-3-2017 - Exascale HPC ecosystem development



EXDCI-2

European eXtreme Data and Computing Initiative -2

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References and Applicable Documents

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- [2] http://www.prace-ri.eu
- [3] http://www.etp4hpc.eu
- [4] https://exdci.eu/events/european-hpc-summit-week-2018
- [5] https://events.prace-ri.eu/event/850/
- [6] https://www.exascale.org/bdec/
- [7] http://www.prace-ri.eu/pracedays18
- [8] http://www.prace-ri.eu/pracedays19
- [9] http://www.teratec.eu/gb/forum_2018/index.html
- [10] https://www.isc-hpc.com/isc-history.html
- [11] https://sc18.supercomputing.org/
- [12] https://sc18.supercomputing.org/presentation/?id=bof104&sess=sess367
- [13] https://sc18.supercomputing.org/presentation/?id=bof104&sess=sess367
- [14] https://www.bsc.es/badia-rosa-m
- [15] https://events.prace-ri.eu/event/750/
- [16] https://www.exascale.org/bdec/meeting/ng-chicago
- [17] https://www.exascale.org/bdec/meeting/indiana
- [18] https://www.exascale.org/bdec/meeting/kobe
- [19] https://www.exascale.org/bdec/report
- [20] https://www.hipeac.net/jobs/#/
- [21] http://193.224.23.141/index.php/training-portals-of-projects-and-hpc-centers/
- [22] http://193.224.23.141/index.php/training-roadmap/
- [23] http://193.224.23.141/index.php/hpc-career-case-studies/
- [24] https://exdci.eu/events
- [25] https://twitter.com/exdci_eu
- [26] https://exdci.eu/newsroom/press-releases/nearly-350-hpc-experts-come-together-european-hpc-summit-week-ljubljana

- [27] https://exdci.eu/newsroom/news-in-press/european-hpc-summit-week-and-pracedays-2018-slaying-dragons-and-shapeing-futures-one-sme-time
- [28] https://exdci.eu/newsroom/news-in-press/exdci-final-conference-2017-co-located-wit-acm-europe-conference
- [29] https://exdci.eu/about-exdci/public-deliverables
- [30] https://www.etp4hpc.eu/sra.html
- [31] http://www.prace-ri.eu/third-scientific-case/
- [32] https://www.eurolab4hpc.eu/vision/
- [33] https://www.hipeac.net/vision/#/
- [34] https://www.hipeac.net/2019/valencia/#/
- [35] https://www.hipeac.net/events/#/csw/
- [36] https://www.hipeac.net/jobs/#/career-center/
- [37] https://www.hipeac.net/events/#/acaces/
- [38] https://www.hipeac.net/csw/2019/edinburgh/#/

List of Acronyms and Abbreviations

AISBL Association Internationale Sans But Lucratif (International Non-for-Profit

Association)

BDEC Big Data and Extreme-scale Computing

BDV Big Data Value

CoE Centres of Excellence for Computing Applications

cPPP contractual Public-Private Partnership
CSA Coordination and Support Action

D Deliverable

DG Directorate General
DoW Description of Work
EC European Commission

ECMWF European Centre for Medium-range Weather Forecasts

EESI European Exascale Software Initiative

ENES European Network for Earth System modelling

EPOS European Plate Observing System
EsD Extreme Scale Demonstrators

EU European Union

FET Future and Emerging Technologies

FP7 Framework Programme 7
GDP Growth Domestic Product

H2020 Horizon 2020 – The EC Research and Innovation Programme in Europe

HPC High Performance Computing IDC International Data Corporation

IESP International Exascale Software Project

INVG Istituto Nazionale di Geofisica e Vulcanologia (National Institute of Geophysics

and Volcanology)

ISV Independent Software Vendor

IT Information Technology
KPI Key-Performance Indicator

M Month

OS Operating System PM Person Month

Q Quarter

R&D Research and DevelopmentR&I Research and InnovationRFP Request for ProposalROI Return On Investment

SHAPE SME HPC Adoption Programme in Europe

SHS Social and Historical Sciences
SME Small and Medium Enterprise
SRA Strategic Research Agenda

SWOT Strengths, Weaknesses, Opportunities and Trends

TRL Technology Readiness Level

US United States
WG Working Group
WP Work Package

Executive Summary

This deliverable entitled "D6.1 – First Report on Dissemination Activities" outlines the work carried out in Work Package 6 (WP6) during the first year of the EXDCI-2 project. As the entire project is 30 months long, the "first year" reported here will cover months 1 through 14, covering the period between March 2018 and April 2019.

This deliverable is divided into four chapters. Chapter 1 introduces the Work Package and provides a general overview of the work carried out in the reporting period. Chapter 2 provides a summary of the WP6 activities. Chapter 3 describes in more detail the work carried out in each of the tasks and sub-tasks of WP6. Chapter 4 presents conclusions.

Highlights of the reported activities include:

- The European HPC Summit Week 2018 [4]
- Preparation of the EuroHPC Summit Week 2019 [5]
- Production of an updated website for the project [1]
- ISC and SC 2018 booths

For the second year, WP6 will focus intensively on promoting result of EU-projects, as well as on facilitating the collaboration with other HPC stakeholders.

1. Introduction

Work Package 6 (WP6) Dissemination and outreach of the European eXtreme Data and Computing Initiative – 2 (EXDCI-2) builds on, complements and extends the work carried out during previous EXDCI Project.

The role of WP6 in EXDCI-2 is to disseminate the activities and results of the EXDCI-2 Project, organise the EuroHPC Summit Week, and promote European HPC to industry and academia.

To fulfil this role, WP6 is divided into three tasks:

- Task 6.1 Organisation of the European / EuroHPC Summit Week conference series, and logistical support to the organisation of other EXDCI-related events/workshops/exhibitions
- Task 6.2 Support to international events
- Task 6.3 Dissemination materials

Marjolein Oorsprong (PRACE aisbl) is WP6 leader and Renata Gimenez (BSC) is WP6 coleader.

This deliverable entitled "D6.1 – First Report on Dissemination Activities" outlines the work carried out in Work Package 6 (WP6) during the first year of the EXDCI-2 project. As the entire project is 30 months long, the "first year" reported here will cover months 1 through 14, covering the period between March 2018 and April 2020. Relevant Milestones during this period are:

- MS15 European HPC Summit Week 2018 (conference held)
- MS18 EXDCI booth at ISC 2018, Germany (booth established)
- MS21 EXDCI booth at SC 18, United States (booth established)

Due to the shifted project months, the project started on 1 March 2018 and will end on 31 August 2020: MS21 was moved from M15 to M9 (November 2018).

Additionally, WP6 will address the relevant recommendations coming out of the Final Review of the EXDCI Project. During this period, WP6 team has focused on addressing the activities mentioned in the EXDCI Strategy report, organising the EuroHPC Summit Week in collaboration with the EuroHPC JU and the restructuring and update of the EXDCI website.

2. Summary of WP6 Activities

This section summarises in detail the activities of WP6 during the reporting period for the following WP6 Tasks and their sub-tasks:

2.1 Task 6.1: Organisation of the European HPC Summit Week conference series and logistical support to the organisation of other EXDCI-related events/workshops/exhibitions

The European HPC Summit Week 2018 was held in Ljubljana, Slovenia between 27 May and 1 April [4]. Hosting a variety of workshops covering various application areas, the conference attracted 343 attendees. The EuroHPC Summit Week 2019 (EHPCSW 2019) will be held from 13 to 17 May 2019 in Poznań, Poland [5].

2.2 Task 6.2: Support to international events

During the reporting period, 3 booths were established in collaboration with PRACE and ETP4HPC: at Teratec Forum (France), International Super Computing 2018 (Germany), and Super Computing 2018 (United States). 2 BoF sessions were held during SC 2018.

EXDCI-2 also supported the European participation to the high-level international BDEC workshops [6]. Talks were given on EU strategy, vision and projects during two meetings held in the United States (Chicago and Indiana) and one in Japan (Kobe). EXDCI-2 organises the next BDEC session to be held in Poznań during the EuroHPC Summit Week 2019 [5].

A particular attention was paid to collaborate with the European HPC ecosystem by either offering support for disseminating the results of the EU projects (dissemination of FETHPC results on EXDCI-2 booths) or join forces (common BoF session).

EXDCI-2 was key in bringing together PRACE and HiPEAC so these two projects could coordinate in their joint activities and leverage their dissemination potential. During the HiPEAC Computing Systems Week which was held from 16 to 18 April 2019, in Edinburgh, United Kingdom [38], a member of the PRACE Dissemination Team presented the Outreach to Universities programme to students who attended the Computing Systems Week [35]. Students were informed of PRACE and its activities and most notable, the various PRACE student related opportunities available to them.

2.3 Task 6.3: Dissemination materials

The main focus of this task has been the restructuring and regular updating of the EXDCI website, following the objective to position EXDCI's network as a credible and reliable source of information on the evolution, strategy and roadmap of the European HPC ecosystem. Once this will be in place, the second phase will be to develop factsheets with potential outcomes of the EXDCI-2 project.

3

3. Detailed Reporting of the WP6 Activities (March 2018 and April 2019)

3.1 Task 6.1: Organisation of the European HPC Summit Week conference series and logistical support to the organisation of other EXDCI-related events/workshops/exhibitions

3.1.1 European HPC Summit Week 2018

The European HPC Summit Week 2018 in Ljubljana, Slovenia [4], gathered the main HPC stakeholders in Europe. Similar to previous years, this edition also offered a wide variety of workshops covering a number of application areas where supercomputers are key, as well as HPC technologies and infrastructures. The European HPC Summit Week provided a great opportunity to network with all relevant European HPC stakeholders, from technology suppliers and HPC infrastructures to scientific and industrial HPC users in Europe. PRACEdays18 [7] was the central event of the European HPC Summit Week, and was hosted by PRACE's Slovenian Member ULFME – University of Ljubljana, Faculty of Mechanical Engineering. The conference brought together experts from academia and industry who presented their advancements in HPC-supported science and engineering. The European HPC Summit Week attracted 343 attendees.

3.1.2 EuroHPC Summit Week 2019

The branding and naming of the conference were changed from European HPC Summit Week to EuroHPC Summit Week, following a request from the EC. Even though the conference was re-named (European HPC became EuroHPC), WP6 decided to retain the hashtag EHPCSW for continuity, and to create certain materials such as lanyards without the year so they may be used in several consecutive years. This latter approach also aims to reduce waste.

The EuroHPC Summit Week 2019 (EHPCSW 2019) was held from 13 to 17 May 2019 in Poznań, Poland [5], and is hosted by PRACE's Polish Member PSNC – Poznań Supercomputing and Networking Center. The EuroHPC Summit Week, endorsed by the EuroHPC Joint Undertaking, is organised by PRACE, EXDCI-2 and ETP4HPC. PRACEdays19 [8] will be part of the EuroHPC Summit Week 2019.

The WP6 team members were included in both the Organisation & Programme Committee (OPC) as well as in the EHPCSW 2019 Logistics Team (LT). Within the OPC, the WP6 leader made sure that the FET-HPC and CoEs were offered the possibility to organise workshops in collaboration with PRACEdays. In addition, in the EHPCSW 2019 LT, the WP6 members made sure that the materials for the event were correctly designed, as well as promoted accordingly in collaboration with the other stakeholders of the conference.



Figure 1: Leonardo Flores from the EC presenting the EuroHPC initiative at the EuroHPC Summit Week 2019

3.2 Task 6.2: Support to international events

During this reporting period, EXDCI-2 participated in Teratec Forum 2018, International Super Computing 2018, Teratec Forum and SuperComputing 2018.

3.2.1 Teratec Forum 2018

EXDCI-2 participated in the Teratec Forum 2018 [9] which was held on 19 and 20 June 2018. EXDCI-2 booth was shared with ETP4HPC.



Figure 2: EXDCI participates in the Teratec Forum, with a shared booth

3.2.2 ISC High Performance 2018 (ISC)

EXDCI-2 shared a booth with PRACE during the largest European fair dedicated to High Performance Computing: ISC [10], held from 24 to 28 June 2018 in Frankfurt, Germany.



Figure 3: EXDCI participates in ISC 2018, with a shared booth with PRACE

3.2.3 The International Conference for High Performance Computing, Networking, Storage, and Analysis 2018 (SC)

The SC conference and exhibition is held each year in the United States and is the biggest trade show worldwide dedicated to High Performance Computing. Promoting European excellence during SC [11] is one of the key actions for international dissemination within EXDCI-2. The 2018 edition was held in Dallas, Texas.

EXDCI-2 shared a booth with PRACE and promoted the EU HPC ecosystem through direct contacts and displays of dissemination materials from FETHPC projects and CoEs, as well as by promoting the EuroHPC Summit Week 2019 [5]. For this edition, EXDCI-2 reinforced the visibility of EU projects through collaborations with Mont-Blanc and Excape. Presentations of both projects were added to a video continuously displayed at the EXDCI-2 booth. This initiative was designed as a pilot with the aim to enlarge EXDCI-2 dissemination collaboration with other EU projects in future editions of SC. The objective for EXDCI-2 is to propose a dissemination platform in which EU projects can participate to promote their results and materials, without the constraints (in terms of budget and logistics) of establishing their own booth. EXDCI-2 also participated in the PRACE initiative "EuroZone @ SC" meant to increase visibility of EU project and organisations on the SC exhibition floor.

Results of the EXDCI-2 project were shared with the international community through the BoF session [12] dedicated to the presentation of the European Exascale Effort, organised by EXDCI-2 partner ETP4HPC.

EXDCI-2 was also present through the co-organisation of a BoF session [13] held under the BDEC2 flagship. Prof. Rosa Badia [14] was the EU speaker, hence also promoting gender equality among the HPC community.

3.2.4 PRACE-CoEs-FETHPC-EXDCI Workshop

On 30 and 31 October 2018, EXDCI-2 participated in and supported the organisation of the PRACE-CoEs-FETHPC-EXDCI Workshop in Brühl, Germany [15]. Representatives of all CoEs and FETHPC projects were requested to attend this workshop, to join forces and better coordinate our activity for the HPC community. This workshop included a session on communication and dissemination activities in order to seek for potential synergies and

opportunities for collaboration. Two follow-up sessions were held at the EuroHPC Summit Week 2019.

3.2.5 BDEC2 conferences

BDECng (BDEC New Generation) was the first meeting held after the "Pathways to convergence" era of the BDEC series. This meeting defined the future of the BDEC series (called BDEC2), dedicated to the follow-up and anticipation of the implementation of Exascale systems worldwide. European efforts were shared through a dedicated talk given by Rosia Badia, as well as a talk given by François Bodin, EXDCI-2 Scientific Director, on the future of HPC architecture. The meeting took place from 26 to 28 March 2018 in Chicago, United States [16]. Five participants out of 21 were present for the European side at this conference.

BDEC2 Indiana was held from 28 to 30 November 2018 in the United States [17]. This workshop was the first of the new BDEC series which focus on "defining and creating consensus around a shared cyberinfrastructure for science in the data saturated world". European projects and organisations gave several talks, including a presentation of the European strategy which presented EOSC to the international community. Nine participants out of 74 were present for the European side at this conference

BDEC2 Kobe was held from 19 to 21 February 2019 in Japan [18]. Several talks were given by the European side, including by EXDCI-2 Scientific Director François Bodin. Nine participants out of 72 were present for the European side at this conference

Finally, T6.2 has taken charge of the organisation of the BDEC2 session that will be held from 14 to 16 May 2019 in Poznań. This session will be held side-by-side with the EuroHPC Summit Week 2019 and will include a shared keynote session. This is in line with the strategy defined at the beginning of the EXDCI-2 project to make the EuroHPC Summit Week more attractive and inclusive.

3.2.6 Collaborations with the EU HPC ecosystem for T6.2

Particular attention was paid to enhancing collaboration for T6.2 activities. Two types of collaboration are being pursued:

- Offering support to the EU HPC ecosystem to disseminate their results. EXDCI-2 built on the work carried on by other activities (such as T2.4 "Collaboration of HPC technology actions") to provide opportunities and support for the EU projects to present their results at EXDCI-2 booths. For example, Mont-Blanc and Excape were presented at the EXDCI-2 booth at SuperComputing in 2018. Building on the project's dynamics, we search to extend such actions. For example: all FETHPC projects have been contacted in the course of the preparations for ISC19; contact has been made with FocusCoE for further development of collaboration.
- Gathering forces to maximise the EU impact. EXDCI-2 collaborated with other projects and stakeholders to maximise our dissemination impact, in particular by coorganising or participating in BoF sessions. This has been the case for the ETP4HPC BoF session at SC18, or the ISC19 BoF organised by EuroLab4HPC.

3.2.7 Planned activities

The foreseen activities for T6.2 in the coming months are the organisation of the BDEC2 session in Poznań (May 2019) held during the EuroHPC Summit Week (see above), and the EXDCI-2 booth at International Super Computing in June in Frankfurt, Germany.

EXDCI-2 at ISC19 will share a booth with PRACE and ETP4HPC, as those two organisations are neighbours on the exhibition floor, and a workable booth design was found. EXDCI-2 will participate in the Eurolab4HPC BoF session, as a result of our collaboration (see below). Also elaborating on the work carried on during SC18, we intend to widen our dissemination support to European projects by giving opportunities to all FETHPC and CoEs projects to display their results and information at the EXDCI-2 booth. Finally, we are setting-up a dedicated Twitter campaign during the event, as past experience shows that our social media impact was particularly good during such events.

Our next event will then be SC19 (November 2019 in Denver, USA). EXDCI-2 already applied for a BoF session at this event.

3.3 Task 6.3 Dissemination materials

Task 6.3 handles the social media and website of the EXDCI-2 project, the creating of dissemination materials, and provides booth designs to Task 6.2.

3.3.1 EXDCI Job and Training Portal

With the greater coordination role of EXDCI-2, and upon the recommendations of the EXDCI reviewers, the project's Job and Training Portal was evaluated, and it was decided that both its Training Portal and Jobs Portal would be deprecated. Given that both these platforms were important for the European HPC community, steps were taken by the EXDCI-2 WP6 team to ensure that important content and services were retained.

In the case of the Jobs Portal, a member of EXDCI-2 WP6 created an account on the HiPEAC Jobs Portal [20] and is thus able to post jobs (or internships) that previously would have been posted on the EXDCI Jobs Portal. The aim is here to reduce the scattering of information, and make it easier for the community to find relevant job vacancies.

In the case of the EXDCI Training Portal, the PRACE Work Package leader was asked to identify any elements that may be valuable and which could be included in the forthcoming redesigned PRACE Training Portal. The following pages were created on the re-designed PRACE Training Portal using content from the old EXDCI Training Portal:

- Training Portals of Projects and HPC Centres: this page [21] describes various projects which provide HPC training, and the various types of training which are available (for different target audiences). Links point to these projects, and to their training portal where training material can be found. External links to the HPC training portals of various European institutions and supercomputing centres are also provided.
- **HPC Training Roadmap**: this page [22] makes available on the PRACE Training portal the HPC Training Roadmap which builds on the prior activities, surveys and reports of the EXDCI members and their partners. It gives an overview of the current

status of HPC training provision, and examines the future training needs of the community and how the gaps can be bridged. The Training Roadmap could also be used by PRACE for its future training planning.

• **HPC Career Case Studies**: this page [23] demonstrates the range of career opportunities that are open to people with HPC skills. These EXDCI case studies show that the paths that lead people to HPC are many and varied, with some people having a passion for computer programming from an early age, while others come via applied scientific domains.

3.3.2 EXDCI Website

The EXDCI website [1] is the main tool to disseminate information about the project and communicating its activities and collaborations as much as possible. It is updated regularly with the latest information, announcements, and outcomes from the work packages, as well as events, news, and activities related to the project.

A significant re-structuring of the whole website is currently underway (changes implemented partially in real-time), to address the reviewers' recommendations from the previous EXDCI project. First, there will be a change in the homepage, which will include a shorter description of the project and will feature a table with useful links based on the main target audiences: for researchers, for students, for industries, for EU-projects. This table will show the 3 or 4 most important links for each category and then point visitors to the corresponding page which will feature the full range of links. This page will be named "EXDCI-2 in a glance" and will be located under the menu "About". The homepage will still show a banner with highlighted content, the latest events and news, as well as the Twitter feed.

The WP6 team is also organising a re-set up of the website navigation structure, as seen in Figure 4 below. In particular, Public Deliverables and Logos will be moved to "Resources", while a "BDEC2" sub-page will be located under "Collaboration" menu. The "Resources" page will also include the sub-pages of the "EU HPC projects' results" and "Roadmaps" (to have sub-pages on PRACE Scientific Case, Scientific Research Agenda, and Pathway to Convergence). The "Activities" page will be enriched with additional sub-pages of "Promoting EU HPC", "EU participation in standards", and "Support to SMEs". The rest of the pages (Newsroom, Events, and Contact) will remain the same with Newsroom and Events to be updated with new information regularly.

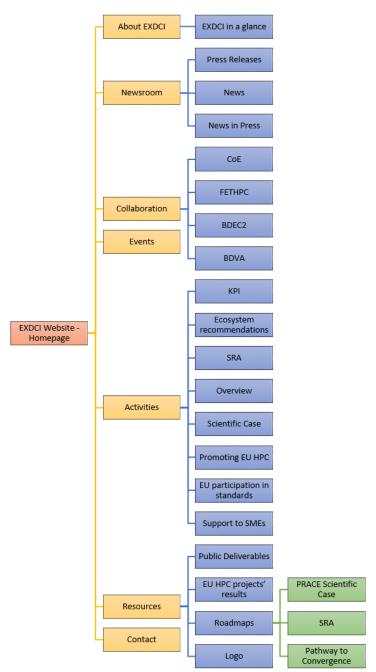


Figure 4: EXDCI webpage - Updated structure

The new structure is currently under validation and changes will be applied in the coming months. The latest version of the "BDVA page" (placed under Collaboration) and the new "Promoting EU HPC" page (located under Activities), which will inform users about and point them to international events that EXDCI-2 participates in, have already been updated.

The WP6 team is also in the process of creating the EU HPC projects' results page to be hosted under "Resources". The aim of this page is to present the rich set of results that were produced by the FETHPC 2015 projects as they are important assets for the European HPC ecosystem. These outputs have been listed and organised into a database, easily searchable on the page and currently working on the final design to be implemented very soon. See Figure 5 below:

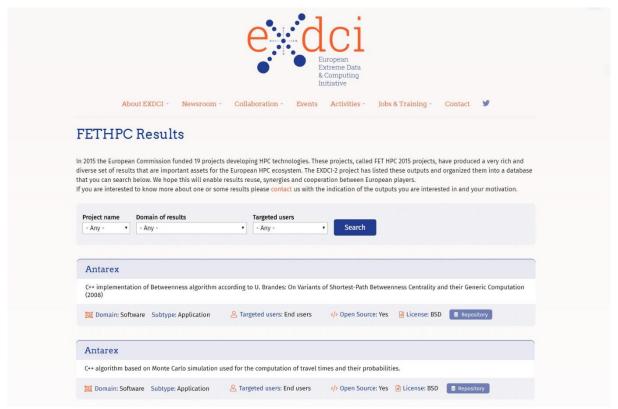


Figure 5: Design of the EU HPC projects' results page

The changes in the structure of the webpage were decided after consultation with the WP6 team in several meetings. The useful feedback resulted in the updated set-up of the page, which will offer to the visitors a clearer overview of the EXDCI-2 activities as well as many more resources and project results. This way, during the second project year the webpage is believed to attract more visits from users that will be interested to explore how the project is developed.

3.3.3 Google analytics

The EXDCI webpage uses the visitor statistics monitoring system from Google Analytics. This information helps to improve the content and structure of the site, as well as obtain more information on the target audience. The following table summarises the data from the period March 2018 - April 2019:

Item	Total visits
Sessions	7 810
Users	2:14 min
Page views	15 664

Pages/Sessions	2.01
Avg. Session Duration	2:08 min
% New Visitor	17.2%
% Returning Visitor	82.8%

Table 1: Summary of the EXDCI website main analytics

The total number of page views from March 2018 until April 2019 is 15 664. The three most visited pages are the events page about the European HPC Summit Week 2018 [4] with 3 202 visits, the homepage [1] (1 941 visits) and the events page [24] with 879 visits, as indicated in the Figure 6 below. The peak in users corresponds with the organisation of the European HPC Summit Week in May 2018 held in Ljubljana, Slovenia.

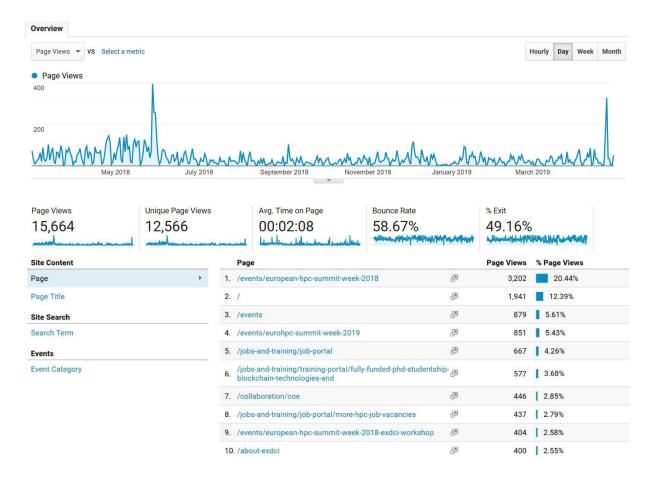


Figure 6: EXDCI website – Page views (March 2018 – April 2019)

As seen in the Figure 7 below, the highest number of visitors are based in the USA (643), followed by European countries, namely France, Slovenia, and the UK. Other European countries, such as Germany and Spain come next.

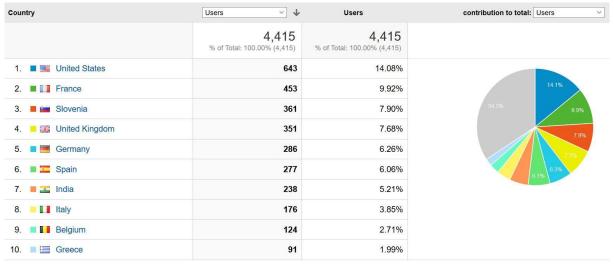


Figure 7: EXDCI website visitor geography (March 2018 – April 2019)

Website users visited the website through different channels: search engines, directly typing the URL or from other pages, as seen in the Figure 8 below.

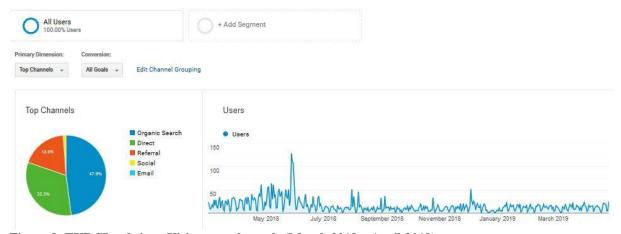


Figure 8: EXDCI website – Visitor top channels (March 2018 – April 2019)

Visitors came mainly from search engines, directly, and also from other webpages (Figure 9 below). The webpages that led most visitors to the EXDCI page are the prace-ri.eu, exascale-projects.eu, and etp4hpc.eu pages.

		Acquisition		Behaviour			
s	ource/Medium ?	Users ? ↓	New Users ?	Sessions ?	Bounce Rate ?	Pages/Session ?	Avg. Session Duration
		4,415 % of Total: 100.00% (4,415)	4,334 % of Total: 100.02% (4,333)	7,810 % of Total: 100.00% (7,810)	58.67% Avg for View: 58.67% (0.00%)	2.01 Avg for View: 2.01 (0.00%)	00:02:13 Avg for View: 00:02:13 (0.00%)
1.	google / organic	2,288 (46.32%)	1,975 (45.57%)	4,070 (52.11%)	58.57%	1.96	00:02:23
2.	(direct) / (none)	1,573 (31.84%)	1,546 (35.67%)	2,068 (26.48%)	58.85%	2.21	00:02:06
3.	prace-ri.eu / referral	114 (2.31%)	78 (1.80%)	358 (4.58%)	47.49%	2.01	00:02:02
4.	events.prace-ri.eu / referral	89 (1.80%)	52 (1.20%)	189 (2.42%)	58.20%	1.76	00:01:31
5.	bing / organic	44 (0.89%)	38 (0.88%)	67 (0.86%)	64.18%	2.01	00:04:00
6.	exascale-projects.eu / referral	44 (0.89%)	32 (0.74%)	49 (0.63%)	48.98%	2.39	00:01:58
7.	etp4hpc.eu / referral	30 (0.61%)	17 (0.39%)	55 (0.70%)	41.82%	2.73	00:02:55
8.	t.co / referral	30 (0.61%)	15 (0.35%)	56 (0.72%)	50.00%	3.07	00:03:14
9.	99-reasons-for-seo.com / referral	26 (0.53%)	26 (0.60%)	26 (0.33%)	100.00%	1.00	00:00:00
10.	eurolab4hpc.eu / referral	26 (0.53%)	1 (0.02%)	52 (0.67%)	42.31%	2.35	00:04:43

Figure 9: Web analytics of the EXDCI website - Visitors' top sources (March 2018 until April 2019) As seen in the Figure 9 above, Twitter was one of the top 10 sources that visitors used to come to the EXDCI webpage. In particular, 31 users visited the page by clicking on a relevant link on Twitter, 15 of whom were new users. The number of sessions after Twitter clicks were 57, while these users spent a fairly long time on the EXDCI page (3.14 minutes average duration).

As mentioned above, in the second year of the project the overall number of visits is expected to increase due to the updated website structure. Although many visits to the events page are expected again during the EuroHPC Summit Week 2019, other pages of the updated website are expected become popular, as users will be interested, for example, in the resources lists that will be added to the homepage and corresponding sub-page(s) or the EU HPC Projects' results page. A better visibility and easier navigation are also expected to increase the time per visit.

3.3.4 EXDCI Twitter account

The Twitter account (@exdci_eu) [25] has been maintained and updated, to ensure continuity of the EXDCI brand. Twitter is used to disseminate EXDCI-2 activities, and to re-tweet all HPC-related activities by the FETHPC Projects, CoEs, and other HPC-related actors such as EuroHPC JU, BDVA or High Performance Data Analysis (HPDA). Other social media channels such as YouTube for the EuroHPC Summit Week or LinkedIn managed by PRACE will be exploited to maximise the visibility of the EXDCI activities. The EXDCI account tweeted a total of 1 979 tweets, and gathered a total of 747 followers.

On average, EXDCI earned one re-tweet and one like per day, and about 15 followers each month, with exceptions occurring during events such as the EuroHPC Summit Week. More frequent and targeted publications will be posted in order to engage both the online audience and conference attendees from one event to another.

In order to connect with both EXDCI followers and new stakeholders, the posts often include one or several hashtags to relate to our different audiences – the most commonly used being #HPC, #industry, #science, #bigdata. In addition, hashtags of events EXDCI is participating in and/or organising are also added, notably #EHPCSW, which not only engage the community during the event, when keeping up with the talks and interacting with one another, but also beforehand during the promotion and registration process.

The three top tweets from the period March 2018 – April 2019 are the following:

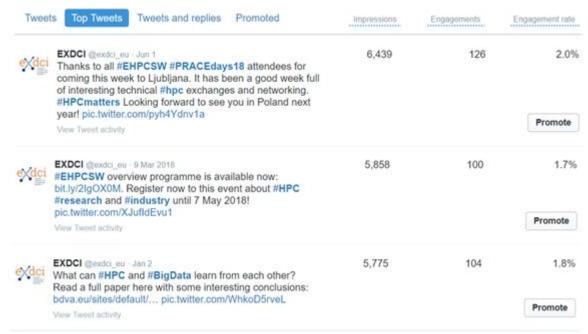


Figure 10: EXDCI Top Tweets (March 2018 – April 2019)

The 747 followers were mainly male, as the HPC community is still male dominated. However, the WP6 team managed to reduce the gap and achieve an almost gender-balanced follower base highlighting the involvement of women in the field of High-Performance Computing and increasing visibility of women both in publications and in events such as the PRACE Ada Lovelace Award for HPC, or the Equality and Diversity in HPC session, which will be held during the EuroHPC Summit Week 2019.

The image shows the percentages of male and female followers of the EXDCI Twitter account:

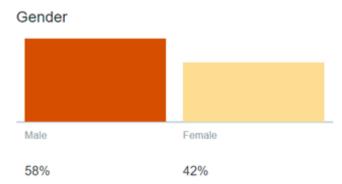


Figure 11: EXDCI Twitter audience by gender

The interests of the EXDCI Twitter followers are the following:

Interests	
Interest name	% of audience
Tech news	99%
Space and astronomy	98%
Science news	98%
Dogs	98%
Technology	97%
Comedy (Hobbies and interests)	94%
Computer reviews	88%
Weather	86%
Music festivals and concerts	75%
Physics	71%

Figure 12: EXDCI Twitter audience interests

EXDCI-2 will carry on the dissemination of the HPC ecosystem activities and its own outputs through this channel to spread the word about all European HPC actions. In the future, the EXDCI account should take advantage of the website restructuring to inform regularly on the various news and / or static content there, as well as pointing the different targeted audiences to specific material related to their field of interest and initiate a more interactive dialogue.

In addition, as past experience has shown positive feedback and a steady growth of the EXDCI Twitter community, the WP6 team will continue to cover events, both participated in or organised by the project, with scheduled and live Twitter campaigns such as dedicated campaigns during the EuroHPC Summit Week 2019 and ISC19, and to pass on information about conferences and workshops from the rest of the HPC community as well.

3.3.5 Dissemination materials

The WP6 team has designed materials for the European HPC Summit Week 2018 and EuroHPC Summit Week 2019, as well as for the EXDCI booths for the ISC and SC exhibitions.



Figure 13: EXDCI booth at SC18

The materials designed for the 2018 edition of the European HPC Summit Week were still prepared based on the EXDCI brand. The 2019 EuroHPC Summit Week edition underwent a change of brand: the name changed to EuroHPC Summit Week, and the EuroHPC JU's branding became dominant. For this reason, all designed materials such as conference bags and material, lanyards, event page, roll-ups, staff t-shirts and flags were re-designed.



Figure 14: Promotional banner for the EuroHPC Summit Week 2019

As the team has focused on designing and preparing the dissemination material for the events, and as the project is still ongoing in terms of producing specific results, other material such as flyers, brochures, and factsheets are planned to be prepared once the project generates results and once the updated website (new structure and updated content) is online. The design of the reports of other work packages will also be planned and consecutively disseminated within the community.

3.3.6 Media

Media-related actions have been taken in order to promote EXDCI events and increase the project's visibility. The press release [26] about the European HPC Summit Week 2018 (Figure 15) was disseminated to various media channels. The press release talked about the event's workshops and activities as well as its success in attracting a wide variety of European HPC

stakeholders and in covering an extensive range of application areas. The press was also invited to cover the event.

Nearly 350 HPC experts come together for European HPC Summit Week in Ljubljana

Thursday, June 21, 2018

The event celebrated the start of EXDCI2, the continuation of the HPC ecosystem-building project. PRACEdays18 was the central event, with numerous additional sessions organized in parallel.

Figure 15: The European HPC Summit Week 2018 press release

Two press clippings were identified and added on the EXDCI News in press page. One was about the European HPC Summit Week and PRACE Days 2018 [27] that was published in HPC Wire and the second one about the EXDCI final conference 2017 [28] posted on Primeur Magazine. Specific infographics will be prepared and promoted via the webpage and Twitter once the re-structure of the EXDCI webpage has been completed.

3.4 EXDCI Strategy

After the final EXDCI review, the WP6 team submitted the Strategy Report (that was complementary to the Final Dissemination Report [29]) at the beginning of the project. In this document, the team addressed issues such as positioning of the CSA due to significant changes in the European HPC ecosystem since the first edition of EXDCI project was approved. WP6 has implemented all the actions indicated in this document, mostly on the website.

In addition, this document also summarised some potential synergies with emerging initiatives that the EXDCI-2 project team planned to fulfil in order to avoid duplication of effort, and to find opportunities for synergy. There has been a special emphasis on following communities such as the ones covered under other CSAs related to HPC: FocusCoE and Eurolab4HPC. In addition, collaborations with close ecosystems such as HiPEAC and BDVA have been also taken into consideration. Please see the table below that indicates its progress organized by project:

Initiative	Opportunities	Status
Eurolab4HPC2	• EXDCI contributes to the Eurolab4HPC vision document (to be published end of 2019/early 2020)	A few teleconferences have taken place and the first steps of collaboration have been taken:
	 EXDCI-2 will encourage that Eurolab4HPC participates in the EuroHPC Summit Week Participation in each other dissemination activities (e.g. sharing 	 Promoting Eurolab4HPC open calls to EXDCI contacts. Participation of Eurolab4HPC in the EXDCI workshop of the EuroHPC Summit Week 2019
		Eurolab4HPC will share its material on the ISC 2019 booth of

Initiative	Opportunities	Status
	 material at booths, sharing slots at BoFs during SC/ISC conferences) Co-organising a joint workshop to present European road mapping initiatives such as the Scientific Research Agenda [30], the PRACE Scientific Case [31], the Eurolab4HPC vision [32], and the HiPEAC vision [33]. Promoting Eurolab4HPC open calls to EXDCI contacts 	 EXDCI shared with PRACE and ETP4HPC and will also coorganise a BoF session Any relevant activities related to Eurolab4HPC have been promoted via EXDCI communication channels, and vice versa
HPC-GIG	 Help EuroHPC members to get introduced to the HPC main stakeholders Participate and co-lead the EuroHPC Summit Week 	EuroHPC JU will actively participate in the plenary session and parallel tracks of the EuroHPC Summit Week 2019.
FocusCoE	 FocusCoE support for EXDCI-2: FocusCoE WP2 has a specific task to support concerted CoE input to the ecosystem, so will coordinate the input on info requests such as the Multi-annual research plan (SRA), or on requests for CoE-wide statistics Outputs on industrial needs and CoE interactions can be provided as input to EXDCI-2 ecosystem analyses The FocusCoE dissemination activities should also ensure higher CoE participation in EXDCI-2 organised events 	 Regular contact with FocusCoE dissemination leader CoE latest description on the EXDCI website including link to FocusCoE page Social media collaborations Cooperation for the organisation of the "1st European Communities Workshop on Exascale Computing - Focus on High Performance Data Analytic"

Initiative	Opportunities	Status
	The HPC CoE General Assembly will invite EXDCI-2 representation as observer, thus facilitating enhance interaction with the CoEs	
	 EXDCI-2 support for FocusCoE: EXDCI-2 will be organising events which FocusCoE will promote and exploit as dissemination opportunities for the CoEs EXDCI-2 WP2 (Task 2.3) - ETP4HPC will assist the realisation of a FocusCoE (WP2) workshop with ETP4HPC and BDVA to discuss industrial training and education needs EXDCI-2 will provide advice from the broader HPC ecosystem view as observer to the HPC CoE General Assembly (to be established and operated 	
HiPEAC	 EXDCI can participate with a workshop at the HiPEAC conference [34] and present the HPC potential to the embedded computing and computer architecture community Disseminate the participation of the FETHPC and CoEs students in training activities such as the student heterogeneous challenge at the Computing Systems Week [35], stem day [36] at the HiPEAC conference or ACACES summer 	 EXDCI jobs portal: WP6 team is already redirecting all job opportunities to be included on the HiPEAC jobs portal [20] HiPEAC expert will present the student opportunities at the EuroHPC Summit Week 2019 and and EXDCI-2 project team member has been invited to the Spring Computing System Week 2019 [38]

Status

Table 2: Synergy progress by project

The above mentioned actions will be further developed in the second year of EXDCI-2 project.

4. Conclusion

This first year of EXDCI-2 project, WP6 has focused on organising the European HPC Summit Week 2018 and preparing the EuroHPC Summit Week 2019. In addition, the team has contributed to the restructuring of the website and the participation in international exhibitions such as ISC and SC. Establishing collaborations with other HPC stakeholders, in particular Eurolab4HPC and FocusCoE, is an activity that is in progress. For the second year, WP6 will focus intensively on promoting result of EU-projects, as well as on facilitating the collaboration with other HPC stakeholders. It is an ongoing challenge to position the project correctly in the HPC ecosystem, both in Europe and internationally, and to find synergies without doubling efforts in the ever expanding HPC landscape. Much effort of WP6 goes into finding these synergies and the RoI of this might merit the partners and stakeholders without it being directly and clearly attributable to the efforts of WP6 and the entire project.