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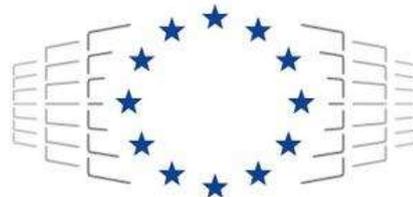
H2020-JTI-EuroHPC-2019-2

HPC INNOVATION FOR EUROPEAN SMES

Innovating and Widening the HPC use and skills base

Project Number: 951745

D5.2
First Dissemination, Communication and Collaboration Report

Work package:	WP5	First Dissemination, Communication and Collaboration Report
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Dissemination Level	Public	

Date	Author	Comments	Version	Status
2022-01-31	Tina Črnigoj Marc, Martina Golob	Initial draft	V0.1	Draft
2022-02-9	Andrej Košiček, Martina Murovec	Arctur Internal Review	V0.1	Draft
2022-02-11	Tina Črnigoj Marc	Document submitted to project internal review	V0.2	Draft
2022-02-23	Tina Črnigoj Marc, Martina Golob	Revisions incorporated, final check	V0.3	Draft
2022-02-25	Tina Črnigoj Marc	Final version for submission	V1.0	Final

List of abbreviations

AI	Artificial Intelligence
CoE	Center of Excellence
CPC	Cost per Click
DIH	Digital Innovation Hub
DoA	Description of Actions
EU	Europe / European
GA	Grant Agreement
GDPR	General Data Protection Regulations
FAQ	Frequently Asked Questions
HPC	High-Performance Computing
HPDA	High-Performance Data Analytics
IPR	Intellectual property rights
ISO/IEC	International Standards Organisation / International Electrotechnical Commission
ISVs	Independent Software Vendors
KPIs	Key Performance Indicators
M	Month (project month)
MS	Milestone
NCC	National Competence Centre
p.a.	per annum
p.m.	per month
PMT	Project Management Team
PPT	PowerPoint Presentation Template
PR	Press Release
ROI	Return on Investment
SMEs	Small and Medium Enterprises
URL	Universal Resource Locator
WP	Work Package

Executive Summary

This document presents an overview of work package WP5 "Success Stories, Dissemination to and interaction with the HPC Ecosystem's activities and results that were achieved during the first 18 project months (M1-M18).

The main objective of FF4EuroHPC is to enable the European industry to be more competitive globally by using advanced HPC services (including Simulation, Data Analytics and/or Artificial Intelligence).

WP5 supported all work packages with dissemination materials and communication activities with the objective of creating awareness of the business benefits of advanced HPC and communicating project achievements.

The Key Performance Indicators (KPIs) are presented as well as deviations, which have been successfully mitigated.

All the data collected and progress achieved within this reporting period is presented and detailed in the following chapters.

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1 Introduction

The dissemination and communication of the project activities and the results intends to raise awareness of the benefits of using advanced technologies as well as to motivate potential HPC users to approach such methods. The communication will revolve around the Experiments, most notably their Success Stories.

The overall objective of FF4EuroHPC is to enable the European industry to be more competitive globally by using advanced HPC services (including Simulation, HPDA and/or AI). FF4EuroHPC will achieve this objective by realising the goals of:

- Raise awareness of access to advanced HPC services for industrial users, particularly SMEs, through competences available in the project and the Experiments.
- Create, publish and distribute Success Stories to show the full potential of these advanced HPC services.
- Promote and scale the business impact through the entire SME ecosystem.
- Produce high quality, tailored dissemination content.

In collaboration with the other work packages, WP5 supports achieving of this objective by creating awareness of the business benefits of advanced HPC services across the whole value chain.

Target groups addressed include industrial and commercial HPC user communities (SMEs), service providers, HPC/HPDA/AI experts and providers of HPC-infrastructure, EuroHPC's NCCs, relevant SMEs associations and networks, DIHs and domain specific associations from diverse industrial sectors and different European countries.

WP5 consists of three main tasks:

- Task 5.1 – Outreach, Communication, and Dissemination
- Task 5.2 – Success Stories
- Task 5.3 – Collaboration with EuroHPC and other entities

Arctur is leading Task 5.1 and Task 5.2 and HLRS is leading Task 5.3. All project partners are involved in WP5 and actively contribute to project achievements.

Within WP5, five deliverables will be submitted. The first deliverable *D5.1 Dissemination, Communication and Collaboration Plan* (hereinafter D5.1) was submitted in November 2020 and contains the dissemination plan including milestones, performance indicators, and the due time frame. The second deliverable D5.2 and the third D5.3 are the intermediate and final Dissemination, Communication and Collaboration Reports that will provide the results achieved in the first and second half of the project lifetime. The last two deliverables D5.4 and D5.5, which are the *Success Story Booklets*, will represent the Success Stories that will be created through the project lifetime.

The KPIs for the first 17 months of the project were achieved and all planned activities were carried out according to the dissemination and communication plan. In this document, KPIs reported include the reporting period M1-M17, as the KPIs for M18 cannot be included due to the submission date for this deliverable, which is 28th February 2022 (M18).

2 Major Achievements

FF4EuroHPC WP5 endeavours to accomplish the following goals:

- Developing new, appealing visual identity, website and promotional materials to make the FF4EuroHPC project visible;
- Promoting the two Open Calls of the FF4EuroHPC project through different communication channels: Websites, social media, newsletters, press release, emailing and events/conferences;
- Raising awareness about the business benefits of using HPC and advanced technologies through the Fortissimo Success Stories and best practices from European HPC ecosystem.

Hence, the following major achievements were completed by WP5 within the reporting period to accomplish the goals above:

- The new project visual identity was developed to differentiate FF4EuroHPC from previous Fortissimo projects and to attract the attention of users;
- The new FF4EuroHPC website was produced and launched [1]; and the Fortissimo project website was re-designed and published [2];
- The project social media profiles on LinkedIn [3], Twitter [4] and YouTube [5] were created for project communication. Accordingly, the social media scheduling calendar was developed and used for efficient social media management.
- The two Open Calls for Experiments were widely promoted and successful, as 138 high-quality eligible proposals have been submitted;
- FF4EuroHPC partners actively participated in several conferences, events and other meetings, and presented the project activities, the Open Calls and advocated use of HPC technologies in business;
- To promote the Open Calls and raise the awareness among SMEs about HPC use, two online webinars with invited speakers were organised by WP5 and supported by FF4EuroHPC partners;
- Three issues of the FF4EuroHPC newsletter were created and published to spread the information about the project and the Open Calls;
- Two press releases were written and disseminated among channels for project publicity;
- To raise the awareness among SMEs, ISVs and general public, various promotion materials (brochures, Open Call-1 and Open Call-2 landing pages) were designed and disseminated;
- Templates for the presentation of FF4EuroHPC Experiments on the website, flyers and booklets and templates for experiment partners' presentation on the website were prepared and shared with the Open Call-1 experiment partners;
- Materials from Open Call-1 Experiments were collected and presented on the project website and through other communication channels;
- D5.1 Dissemination, Communication and Collaboration Plan was written and submitted;
- Different approaches have been tested to establish strong collaboration with other projects and entities within the European HPC landscape, NCCs and DIHs.
- Regular WP5 Telcos were held (19 in total) with project partners to plan, report, discuss and advance WP5 activities.

All project partners were involved in WP5 and contributed to the achievements during the reporting period.

3 Work Done

This section will provide an overview of the tasks in WP5 and detail the work performed in each task.

WP5 consists of three tasks:
- T5.1 – Outreach, Communication, and Dissemination
- T5.2 – Success Stories
- T5.3 – Collaboration with EuroHPC and other entities

T5.1 and T5.3 have been active since M1, while T5.2 started in M15.
All project related dissemination and communication activities that will be presented within this deliverable were carried out according to the D5.1 Communication, dissemination and collaboration plan [6].

3.1 Task 5.1: Outreach, Communication, and Dissemination

Communication and dissemination activities that were planned and carried out for the reporting period M1-M18 are shown in Table 1.

Table 1: Activities Planned and Carried out Within WP5, M1-M18.

For a project communication and reaching the communication objectives, addressing the appropriate target group is essential. To communicate and disseminate the appropriate materials to respective target groups and reach project's objectives, target groups were well defined in advance. A list of these target groups can be found in the Appendix.

To track the success of project activities performed and to reach the FF4EuroHPC project goals, KPIs were set and presented in D5.1 [6]. For the successful tracking of these KPI the Metrics file was created, which is shared with partners and regularly updated.

Table 2 gives an overview of the KPIs and their status in M17:

Communication Actions	Target Group	KPI & Target Values	KPI Status M17	Time Frame
Website[1]	SMEs, General public, Press, Potential Open Call proposers	#Visitors 7,000 #Page views 1,500 p.a.	**19,311** **52,842**	By M36
Brochure	General public, Innovation centres, Industry associations, SMEs	#Updates 3 #Tailored versions 3	**#Updates: 2** **#Tailored versions: 3**	By M24
Poster (on request)	General public, Innovation centres, Ind. associations, SMEs	#Updates 3 #tailored versions 3	**No requests**	By M24
Social Media - Twitter	General public, Innovation centres, Ind. associations, SMEs	#Followers total 300 #Tweets total 500 #Impressions 200 p.m.	**326** **334** **14,683 p.m. (avg.)**	By M36 (50% by M12, 25% more by M24, total by M36)
Social Media - LinkedIn	General public, Innovation centres, Ind. associations, SMEs	#Followers total 500 #Posts total 100 #Impressions 200 p.m.	**425** **278** **10,458 p.m. (avg.)**	By M36 (50% by M12, 25% more by M24, total by M36)
Newsletters	SMEs, ISVs, Ind. associations, HPC ecosystem	#Issues 5 #Subscribers 150	**#Issues 3** **#Subscribers 148**	Issues every 7 months 70% of subscribers by M12
Articles in sector magazines / papers	SMEs	#Articles 10	**Start from M25 on**	5 by M30, 5 by M35
Press releases	Press	#Press releases 3	**#Press releases 2**	1 per year
Press clippings[2]	General public	#Articles 10	**#Articles 79**	By M36
Visits to trade fairs, user groups, conferences, workshops	SMEs, ISVs	#Events 5	**#Events 53**	Participation to events by M35 70% visits during Y1 and Y2, Success Stories presentation in Y3

Task 5.3 – Identification of relevant actors	Ind. associations, HPC ecosystem, NCCs, DIHs	#Relevant actors 15	**#Relevant actors 15**	Until M8
Task 5.3 – Successful contact uptake	Ind. associations, HPC ecosystem, NCCs, DIHs	#Relevant actors 10	**#Relevant actors 2**	Until M18
Task 5.3 – Successful collaborations	Ind. associations, HPC ecosystem, NCCs, DIHs	#Collaborations 5	-	Until M24

1 The FF4EuroHPC website was published on October 22nd 2020, thus statistics are tracked from then on (M2).

2 Press Clipping is the cutting-out of articles from a publications or media to monitor the media exposure of a project. Press Clippings are a measure of how many times a brand name has been mentioned in press such as newspapers, magazines, or in television and online media. According to the project, clippings are all publications on partners' websites, different portals or online journals without involving the members of the media.

Table 2: KPIs overview.

3.1.1 Project Visual identity

A unique, appealing visual identity is essential for a project, since it creates a common brand and uniform communication of the project in different media and communication channels. FF4EuroHPC is a Fortissimo and Fortissimo2 successor, but it still differentiates in some aspects, thus the decision to develop a new visual identity was taken. The colour scheme stays in blue scale, but a new logo was developed which was then used to design project templates (deliverables, letter, PR, social media photos, banner). A project visual identity remains the same for the whole project lifetime. Partners are bound to use the FF4EuroHPC's project templates and graphic elements for internal and external communication throughout the project lifetime.

The latest versions of the project logo, banner, presentation template and website and are shown in Figure 1 to Figure 4.

Figure 1: Project Logo.

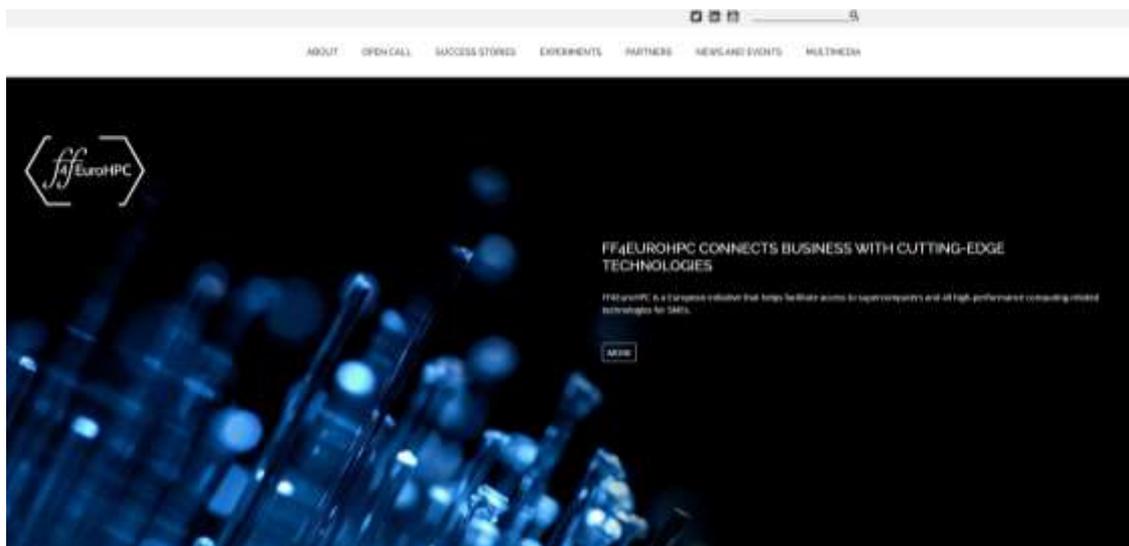**Figure 2: Project Presentation Template.**

Figure 3: Project Website (as of February 1st, 2022).

Figure 4: Project Banner.

3.1.2 Website

A project website is one of the first communication and contact points between the project and its community (target groups). It is an essential tool to establish project brand and credibility, build connections with target groups and communicate project activities and results.

The FF4EuroHPC's website was published at the URL https://www.ff4eurohpc.eu/. It was programmed, designed and published by Arctur in October 2020. The website has been maintained by Arctur and will also persist 5 years after the conclusion of the project. It is a "live" communication channel, showing the progress of FF4EuroHPC and thus its content is adapted regularly and according to the project's activities and results. By M18, the project website contains the following sections:

- About (general information about the project, project partners' presentations, collaboration with other entities and projects, introduction to HPC, presentation about Fortissimo projects history, and attachments of the FF4EuroHPC public deliverables);
- Open Call section, that was adapted according Open Call-1 and Open Call-2's submission requests and deadlines (Open Calls public tender text, FAQ, check-list, submission site);
- Success Stories (presentation of previous Fortissimo project's Success Stories);
- Experiments (presentation of the FF4EuroHPC Open Call-1 Experiments);
- Open Call-1 experiment partners' presentation;
- News (news items about the project activities and results);
- Multimedia (Fortissimo Success Stories booklet, FF4EuroHPC project brochures, FF4EuroHPC newsletters).

The FF4EuroHPC's website complies with GDPR [7] and ISO/IEC 27001:2013 [8]. The website server is located in Nova Gorica, Slovenia, and it is properly secured.

The KPIs: Defined, tracked and achieved

During the project lifetime the number of webpage visits (page views) and number of visitors is measured with the aim to monitor the website viewership, popularity, and attractiveness. Key priorities related to the website are increasing the number of visitors on the project website and raising the awareness about the use of HPC and the benefits it brings to different sectors among our target groups.

KPIs defined in the D5.1: Nr. of visitors 7,000 by M36, page views 1,500 p.a.

During the reporting period, these KPIs were achieved.

In the following paragraph, some statistics about the visits over time on the FF4EuroHPC website (October 24th 2020[3] – January 31st 2022) are presented. Statistics are showing that the number of visitors was higher than planned. Content presented on the website was in the scope of interest for visitors, as 2.8 actions were done by visitor per visit. The average duration time of a visit was 2.5 minutes and it shows the content is interesting and appealing for visitors (as according to statistics, average time spent on a website is 52 – 62 seconds [9], [10]).

- Total visits: 19,311

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[3] Website was published on 24th October 2020.

- Pageviews: 52,482; Unique pageviews: 35,732
- Actions (page views, downloads, outlinks[4] and internal site searches) per visit: 2.8
- Average visit duration: 2 min 32 sec
- Visits bounced (left the website after one page): 39%
- Downloads: 466
- Visitors by countries: Italy (14.8%), Spain (12.2%), USA 10.9%, France (9.8%), Germany (6.6%)
- Visits from social networks: LinkedIn 739, Facebook: 419, Twitter: 242

The website will be continuously updated with new content and will be adapted according to the project activities (e.g. presentation of the Open Call-2 Experiments).

Deviations from plan

The FF4EuroHPC DoA mentions the Fortissimo Marketplace as an important dissemination channel. However, the board of Fortissimo Marketplace Ltd. (the commercial entity operating the Fortissimo Marketplace) decided before FF4EuroHPC start to close down the operation of the Fortissimo Marketplace. To keep the valuable Fortissimo experiment information publicly available, the FF4EuroHPC Coordinator and Fortissimo Marketplace Ltd. agreed to transfer relevant content, dedicated to former Fortissimo projects for continued publication by FF4EuroHPC.

Since the Fortissimo Marketplace web presence was based on old web technology, and since FF4EuroHPC planned to adopt a new visual identity, the decision was taken to publish the Fortissimo project content at the URL https://www.fortissimo-project.eu/ (re-design with minor content changes), and include a link to the separate FF4EuroHPC web presence at https://www.ff4eurohpc.eu/.

As the result, continued public access to all past Fortissimo success stories is guaranteed, thus establishing a highly valuable source of information (for both communication and dissemination) directly supporting the FF4EuroHPC objectives.

3.1.3 Social Media

Social media are efficient communications channels for reaching and engaging target groups. The social media channels are used within the FF4EuroHPC project for:

- Increasing awareness about FF4EuroHPC project activities;
- Increasing awareness about use of HPC and advanced technologies in business;
- Promoting the benefits HPC brings to Industrial end-users through Success Stories;
- Informing followers about HPC-related events and information about HPC ecosystem;
- Increasing number of visitors on the FF4EuroHPC website.

The social media channels used within the project are: LinkedIn [3], Twitter [4] and YouTube [5]. LinkedIn is one of the largest business social networks, which is build up through partnerships. The LinkedIn page is used to reach the target audiences and build awareness of the FF4EuroHPC project through promotion in relevant groups.

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[4] A hyperlink from a webpage to an external website.

Figure 5: FF4EuroHPC Twitter Profile (as of February 1st, 2022).

Figure 6: FF4EuroHPC LinkedIn Profile (as of February 1st, 2022).

All project beneficiaries contribute round robin to the content for social media; each partner contributes one post for Twitter and one for LinkedIn within its social media week, to be followed by the next partner next week and so on, until the next social media weeks for that partner comes around in six weeks. For this purpose, a social media calendar for scheduling posts was prepared by WP5. During the first 18 months, at least two posts via these two social media profiles have been posted per week.

The topics that FF4EuroHPC partners have been covering within Twitter and LinkedIn include:

- Success Story Mondays: Each Monday one success story is presented. At the moment previous Fortissimo Success Stories are published. As soon as new FF4EuroHPC Success Stories are released, they will be presented through social media;
- Experiments Wednesday: Each Wednesday one FF4EuroHPC experiment (at the moment of writing, only Open Call-1 Experiments as the Open Call-2 Experiments will start in M19) is presented;
- Open Call promotion; information is given about how to participate before a Call opens and during the submission period, and Call results are disseminated afterwards;
- Special / National days: Success Story covering the special / national day topic is being presented on the date corresponding to the special/national days;
- Informing about different HPC related events;
- Sharing the knowledge about: HPC related topics, blogs, articles, videos, use cases from other projects, institutes, SMEs;
- Celebration: congratulation for Holidays (also partner's National days);

- Content sharing (from other HPC related projects, EU organisations e.g. European Commission, EUROHPC JU, ETP4HPC, …, NCCs, industry associations, etc.

Special templates (Figure 7) were created to present the Fortissimo Success Stories and FF4EuroHPC Experiments to make them visually attractive and to catch the followers' attention.
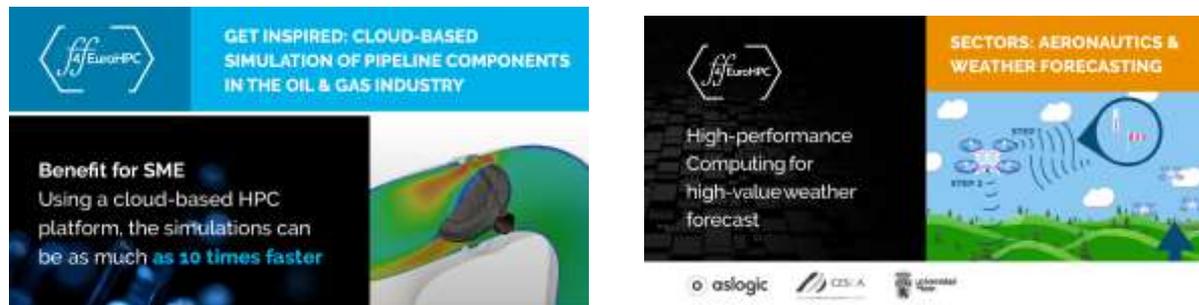
Figure 7: Success Story Template (left) and Experiment Template (right).

To raise awareness of the FF4EuroHPC Open Calls, two paid LinkedIn promotion campaigns were done:

- 1st from November 23rd, 2020 to December 23rd, 2020
- 2nd from July 9th, 2021 to September 17th, 2021

25 ads (e.g. posts) were promoted. WP5 created different campaigns and defined specific target groups for reaching potential candidates who would apply to the Open Calls. According to each ad, we chose:

- Specific countries that were eligible for Horizon 2020 funding contribution, but with the emphasis on the European countries;
- Industrial sectors with emphasis on manufacturing;
- Job functions with the emphasis on engineering and entrepreneurship;
- Job seniorities;
- Company size (focus on SMEs, less than 249 employed).

The results achieved through the paid promotion were:

- 100,252 impressions[5] achieved (organic post gains 100-600 impressions per post);
- 267 clicks on the link leading to the FF4EuroHPC website;
- 2,87 EUR average Cost per Click (CPC);
- Top 5 sectors reached: IT services and consulting (23,5%), Software development (9%), Construction (3%), Business consulting and marketing (5,5%), Motor vehicle manufacturing (2.5%);
- Company size: 11-50 employees (28%), 51-200 employees (26%), 2-10 employees (19%);
- Top 10 countries: Ukraine (9.9%), Slovenia (9.8%), Spain (8.2%), Serbia (7.7%), France (7.2%), Netherlands (6.5%), Belarus (4%), Portugal (4%), Albania (3.2%), Cyprus (3.1%).

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[5] Impressions represent the total number of times posts were seen.

We cannot track if whether the paid promotion helped to increase the number of submitted proposals to the two Open Calls. But we can conclude that the LinkedIn paid promotions were successful, as we gained (and raised the awareness about the FF4EuroHPC project and Open Calls) more than 100,000 impressions (this is on average 4,010 impressions per post. Organic posts, i.e. non-paid posts gain on average 300-400 impressions per post), received additional traffic to the project website and have a low average CPC (as the average costs per click for ads on LinkedIn in 2021 was EUR 4.90 [11]).

Furthermore, a YouTube channel (Figure 8) was established to share video content that will be produced throughout the project lifetime. So far, the Fortissimo Success Stories videos and two FF4EuroHPC webinar videos were published. By the end of the project, six new FF4EuroHPC Success Stories videos will be created and published.
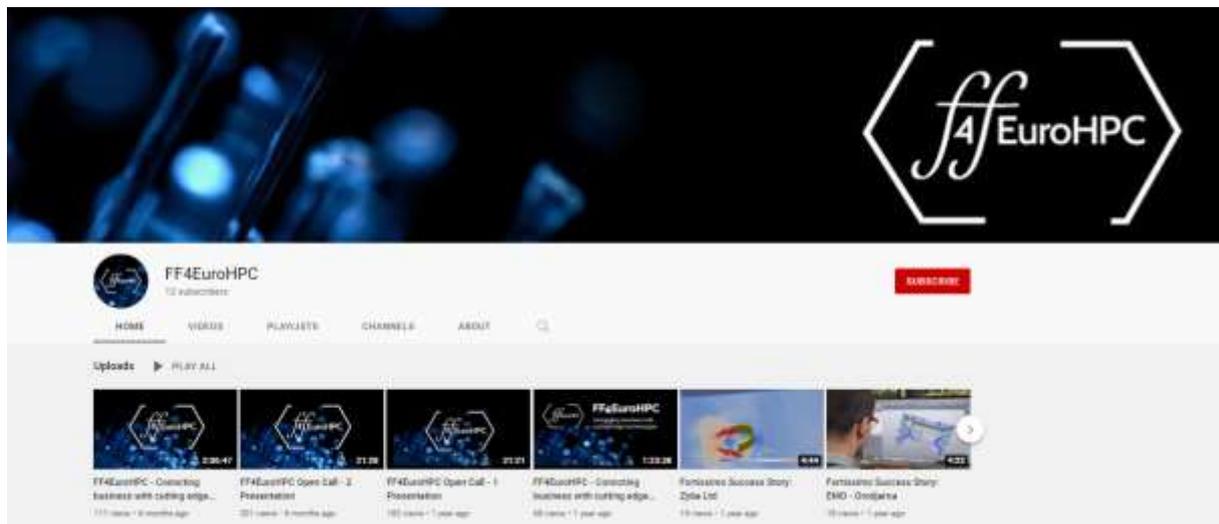
Figure 8: FF4EuroHPC YouTube Channel (as of February 1st, 2022).

The KPIs: Defined, tracked and achieved

A KPIs table was created to monitor the social media activities and to measure the goals related to increasing awareness and boost brand engagement. Table 3 shows the KPIs defined and achieved in the reporting period. As the focus was put on building social media engagement and because quality content was prepared, most KPIs were already achieved in the first project year. We will continue with social media activities in the same scope also in the second half of the project lifetime.

Social Media	KPIs Defined	KPIs Achieved by M17	KPIs Deadlines
Twitter	#Followers total 300 #Tweets total 500 #Impressions 200 p.m.	**326** **334** **14,683 p.m. (average)**	By M36 (50% by M12, 25% more by M24, total by M36)
LinkedIn	#Followers total 500 #Posts total 100	**425** **278**	By M36

	#Impressions 200 p.m.	**10,458 p.m. (average)**	(50% by M12, 25% more by M24, total by M36)

Table 3: Twitter and LinkedIn KPIs – Target and Achieved.

3.1.4 Newsletter

The FF4EuroHPC newsletter is an additional tool to help promoting the project activities and results. The FF4EuroHPC newsletter was set up in the MailChimp tool [12]. The first issue was published in March 2021, second in July 2021 and third in December 2021. The subscription to the newsletter was widely promoted by all partners. Five newsletter issues are planned to be sent out during the project lifetime – one every seven months. As we wanted to keep our community engaged and well informed about the Open Calls and Experiments, we decided to re-schedule the newsletter release timing so its best fits to the project activities. In the reporting period, three issues were already sent to the list of subscribers.

The layout is aligned with the FF4EuroHPC visual identity (Figure 9 and Figure 10) and it consists of at least three different sections (Foreword, Open Calls, Experiments/Success Stories presentation, HPC and FF4EuroHPC events calendar).

The newsletter issues were also embedded on the project website in the multimedia section [13]. The subscription to the newsletter and newsletter issues have been regularly promoted through Twitter and LinkedIn.

The KPIs: Defined, tracked and achieved

Five newsletter issues were planned to be issued every seven months. In the D5.1, the KPIs set was to reach 150 subscribers in total by the project end, 70% of subscribers reached by M12.

By M17, three newsletter issues were published and we reached 148 subscribers, the KPIs were thus reached.

Figure 9: FF4EuroHPC Newsletter Issue Nr. 1, Pages 1 and 2

Figure 10: FF4EuroHPC Newsletter Issue Nr. 1, Pages 3 and 4

3.1.5 Promotional Materials (Brochure, Poster, PPT)

To make the project visible, supporting materials like brochures, poster and presentations have been created. The brochures are available on the project website under the Multimedia section [14]. They were created as a first contact point for interested stakeholders (such as SMEs, ISVs and general public – see Figure 11) to reach the respective interest groups from diverse industries and geographic regions. In the reporting period brochures were updated with the project's progress (version two). The last update of the third version is planned by M24.

A project poster can be prepared on request. As there were no on-site events during this reporting period due to Covid-19 restrictions, posters have not been requested so far.

Figure 11: Brochure for General Public, Second Version.

For the purpose of presenting the FF4EuroHPC project and its activities, two PowerPoint Presentations were prepared for Open Call-1 and Open Call-2, including specific information dedicated to the respective Open Call. Additionally, a PPT for project presentation was created and updated with the project progress.

The KPIs: Defined, tracked and achieved

According to the D5.1, three tailored versions of brochures with three updates will be prepared by M24. KPIs have been achieved as the first two versions of the brochures were successfully prepared and published (for SMEs, general public and ISVs); first one by M4 and updated to the second version in M14. The last, third version will be prepared by M24.

3.1.6 Press Releases, News Items and Press Clippings

Press releases are the main channel for addressing the general public and media and share the information about the project progress, presenting Success Stories and promoting Open Calls.

The KPIs: Defined, tracked and achieved

In D5.1, the planned KPIs foresaw preparing three press releases by M36 (one PR per project year). The KPI was reached and even surpassed. As we wanted to address the public about specific project activities and achievements (Open Call promotion and results), three press releases were prepared and published in this reporting period [15], [16], [17]. With the help of partners, PRs were sent to media, collaborating organisations (ETP4HPC, EUROHPC JU), other EU projects, NCCs and DIHs.

To report on the project activities, 24 news items were prepared and published on the project website under the News section [18].

We planned to collect 10 clippings in the project lifetime to track publicity (how many times is the brand name mentioned in press such as newspapers, magazines, television or online media). Partners were highly engaged in project promotion and dissemination, thus during this period, 79 clippings were collected (see Table 2), thus KPIs were achieved successfully.

3.1.7 Publications in Magazines

In the reporting period, the FF4EuroHPC project was presented in the online publications *Handbook of European HPC projects* (2020 and 2021 editions), published by ETP4HPC [19], [20]. The interview with the project coordinator, Dr Bastian Koller and Open Calls lead, Dr Guy Lonsdale was published in the online publication *ETP4HPC Annual Report 2020* [21]. The KPIs for this type of activity was not set, so this presents an additional effort of WP5 achievements.

According to D5.1, 10 articles about FF4EuroHPC Success Stories will be prepared by partners and published in partners' national sectors magazines with the aim to promote Success Stories and raise the awareness on HPC use within different sectors in the next period.

3.1.8 Conferences, Trade Fairs and Other Events

One of the important dissemination activities is attending events which are relevant for promoting the project and its results. The purpose of attending events is also to get in contact with the representatives of the target groups. When the FF4EuroHPC project was kicked-off, the Covid-19 pandemic started. The pandemic has brought several Covid-19 restrictions, and one of them was a limitation for physical meetings – events were cancelled, postponed or brought to online formats. Online events proved to be less effective and yielded poorer results as face-to-face meetings, but, on the other hand, partners did more presentations as planned at the beginning of the project. WP5 also had adapted to the Covid-19 restrictions, thus all presentations at events and workshops were online.

The KPIs: Defined, tracked and achieved

In D5.1, KPIs set were: Five participations at major events were planned by M35, 70% visits during Year 1 and Year 2, Success Stories presentation in Year 3 (refer to Table 2).

Project partners presented the Open Calls and project activities widely during the reporting period, as they have actively participated in 53 events (conferences, seminars, workshops, other events). Partners presented project activities and Open Calls at some prominent events such as ISC20 [22] and ISC21 [23], SC20 [24], EuroHPC Summit Week [25], Hyperion HPC User Forum [26], NAFEMS 20 France Conference [27], Supercomputing Frontiers Conference [28]. Additionally, several webinars were organised by partners to communicate and promote the Open Calls throughout European countries. Two webinars titled *FF4EuroHPC - connecting business with cutting-edge technologies* were organised by WP5' leader in collaboration with scapos and HLRS on December 7th 2020 and on July 27th 2021 to promote the Open Calls and present the use of HPC for business application. Hence, the set KPIs were achieved. A list of all events organised or attended by the FF4EuroHPC partners is available in the Appendix.

The FF4EuroHPC events calendar is available on the project website and is regularly updated [29]. The purpose of this calendar is to collect HPC-related and relevant events and share this information with our community, to promote HPC and novel technologies and motivate SMEs to widen their knowledge about the use of those technologies for innovation.

3.2 Task 5.2: Success Stories

Success Stories are the main outputs of the FF4EuroHPC project and are expected to be delivered by each experiment. A clear presentation of the business benefits for the experiment partners in these stories will be the main focus. The time frame foreseen in the DoA for the generation and production of the first tranche of Success Stories is M25–M26 (September-October 2022). Success Stories will be created in collaboration with the WP3 leader and experiment partners. T5.2 has started in M15 (December 2021).

3.2.1 Success Story Templates

Each Success Story will be written following pre-defined templates and scenarios, published on the project website, presented on flyer and in the booklet. Templates were prepared by WP5 and approved by the PMT and WP3 leader (see Appendix). Success Stories focus on the lessons learned and business benefits achieved through the use of advanced technologies and services by end users and other members of the value chain; they will thereby quantify ROI, time to pay back investment and value of new markets created.

3.2.2 Experiment Presentation

The work on 16 Open Call-1 Experiments started on June 1st, 2021, and will be ongoing for a maximum of 15 months. At the kick-off meeting for experiment partners, the role of Experiments in the project was presented and WP5 leader provided all the information for communication and dissemination activities. With the help of the WP3 leader, the Experiments descriptions, photo materials and partners logos were collected and published on the project website [30]. Six-months after the Experiments started, the WP5 leader collected updates on experiment progress, and published the information and graphic materials on the project website in the Experiments section (Figure 12). Experiments were presented also during events, project newsletter and project social media.

HPC-BASED NAVIGATION SYSTEM FOR MARINE LITTER HUNTING

PRESENTATION OF THE PROBLEM AND OBJECTIVE OF THE EXPERIMENT

Protecting seas and oceans against the litter is becoming a global concern and there is a growing need worldwide for more efficient, clean and autonomous technologies to identify and collect marine detritus, especially plastics, in a systematic and repetitive way. GTS is an agile and innovative start-up that operates in the field of environmental protection and blue growth economy. The use of HPC makes it possible to tackle a computational problem that GTS met during its service for recovery plastic litter in sea: optimizing the plastic litter recovery strategy forecasting the position of hundreds of detritus floating in the sea with suitable accuracy in space and time.

SHORT DESCRIPTION OF THE EXPERIMENT

The proposed HPC experiment is fundamental to drive into the next phase the collaboration of the unmanned systems as it requires >250.000 hours of deep learning which is impossible under conventional computational systems but possible thanks to CINECA. The limited forecasting capability of the future position of detritus thus is limiting the efficiency of recovery of the whole system. The HPC experiment aims to overcome this limitation and targets to improve the current Deep Learning approach to 1. Identify and classify marine litters in terms of dimensions and materials (PET, PPT, Biological); 2. Predict the possible trajectories of classified waste over a longer time; 3. Search the "best" trajectory to collect as much waste as possible under constraints.

UPDATE:

Partners have completed the data acquisition part with aerial drone shots both for the images of the waste to be classified (bottles, caps, bags, glasses, etc ...) and with respect to the real trajectories of typical waste such as bottles (full, empty and a half). At the same time, acquisitions of marine litter movement with sensorised buoys were also carried out and the first oceanographic simulations were started to generate other dragging data useful for training.
Partners are in the test phase for the neural networks identified for the recognition of marine litter and the prediction of trajectories. They expect to be able to find those that generate the best accuracies by the end of the year . The synergy with the entire consortium is proceeding at its best and the production of the progress reports is proceeding as planned.

Organisations involved:

End User: Green Tech Solution SRL
Domain Experts: Università degli Studi di Napoli Parthenope and BI-REX - Big Data Innovation & Research Excellence
HPC Provider: CINECA

Figure 12: Example Experiment Presentation on the Project Website.

3.3 Task 5.3: Collaboration with the EuroHPC JU and Other Entities

This task developed a strategy to achieve the maximal synergies with other projects and entities in the European HPC landscape with a specific objective to establish good collaboration with the EuroCC NCCs, to exchange information about informative events and to facilitate engagements with relevant SMEs and industrial communities.

This task exploited a number of existing materials like the European HPC Handbook [31], networks of the participating partners and non-confidential results from other projects, in order to identify actors in the industrial European HPC Ecosystem. Selection criteria were close interconnection to SMEs, broad reach in the target groups and the coverage of as many industry sectors as possible. The outcome of this process was a list of candidate entities for cooperation, which included 33 industry bodies in 10 sectors and 69 chambers of commerce in 6 countries (see Table 4). Multiple approaches were made per mail and phone calls with suggestions to exchange communication material or develop workshop formats together, to start win-win collaborations.

The feedback to these contact attempts was not satisfactory, so the working group decided a change in strategy both concerning the targeted stakeholders (Consortia of actors from industry and academia covering relevant technical topics, like NAFEMS or DAIRO/BDVA), and the forms of possible collaborations. Once the first experiment success stories are finalised, they will play a central role in the activities of this task as they enable organisations to promote HPC uptake with up-to-date, innovative usage examples. Additionally, a collaboration with EuroCC is foreseen to represent the European industrial HPC landscape as a whole: FF4EuroHPC will supply relevant success stories to the NCCs to convince their stakeholders to use HPC, and to support direct exploitation of experiment results. On the other sides, if the collaborations with the stakeholders result in requests for assistance in the areas of HPC, HPDA and AI, they will be redirected to the respective NCC.

Connections to the EUROHPC JU [32] and the governing board are being established. EuroHPC JU management team representatives will be invited to events. The outcomes of the experiments will be shared with the JU. Furthermore, Task 5.2 will evaluate HPC-related requirements of the experiments and communicate them to the RIAG. Given that the FF4EuroHPC experiments cover many areas of industrial HPC use, such information should be helpful input for future calls and HPC technology projects.

Furthermore, this task supported Task 5.1 to connect with other projects, for example the presentation to the HPC National Competence Centres (NCCs) via the EuroCC project [33], to Digital Innovation Hubs (DIHs) and Centres of Excellences in HPC (CoEs [34]), as well as other European initiatives.

70-80 emails were sent out to potential contributors (listed in Table 4). Only few responses were received, though. Reasons for this lack of responses are being analysed, with a key factor assumed to be the lack of tangible results that early in FF4EuroHPC's term – genuine experiment success stories for example will come later. The collaboration task will be restarted and modified in light of our experiences and it will take a more individual approach to ensure that KPIs are being met. The timeline to reach the KPIs for this task was modified accordingly: Successful contact uptake until M24, Successful collaborations until M28. For the KPIs planned, please refer to Table 2.

Exceptions and Deviations

During the course of the reporting period the following problems and deviations occurred and have been mitigated:

- As presented in section 3.1.2 the decision to close the Fortissimo Marketplace and not use it further for the FF4EuroHPC project was taken before project start by the board of Fortissimo Marketplace Ltd. It was then agreed between the FF4EuroHPC Coordinator and Fortissimo Marketplace Ltd. to transfer relevant content dedicated to the former Fortissimo projects, redesign the Fortissimo website and to design a new FF4EuroHPC website. The action was successfully concluded.
- Newsletter issues will not be published exactly every seven months; the schedule will instead be aligned with the project activities. By the end of the project, 6 issues will be published one additional issue is planned which was not anticipated in the DoA and in D5.1, but will bring an additional value.
- As we received little response from possible collaboration partners through the planned activities in T5.3, and hence the KPI Successful Contact Uptake was not achieved until M18 (end February 2022), new strategies (scope of possible collaboration partners will be widened) and milestones were set to reach the set goals and KPIs of this task: As a result, the timeline to reach the KPIs for this task was modified accordingly.

4 Milestones and Deliverables

Table 4 lists WP5 milestones and deliverables.

Number	Title	Lead	Type	Dissemination Level	Due Date	Status
D5.1	Dissemination, Communication and Collaboration Plan	Arctur	Report	Public	M3	Submitted
D5.2	First Dissemination, Communication and Collaboration Report	Arctur	Report	Public	M18	In Progress
D5.3	Final Dissemination, Communication and Collaboration Report	Arctur	Report	Public	M36	-
D5.4	Success Story Booklet 1st edition	Arctur	Report	Public	M27	-

D5.5	Success Story Booklet 2nd edition	Arctur	Report	Public	M36	-

Table 4: List of WP5 Deliverables.

According to the GA, Milestone one – Project kick-off, was reached and Deliverable D5.1 was submitted:

MS1: Project Kick Off, M1

The project kick-off has been organized and executed. All necessary management mechanisms are in place (set by WP1). WP5 offered all needed support to the PMT.

D5.1: Dissemination, Communication and Collaboration Plan, M3

In November 2020, D5.1 Dissemination, Communication and Collaboration Plan was prepared, submitted and published, and in November 2021, it was updated. D5.1 is a public deliverable, and can be accessed on the project website.

All public project deliverables are available on the project website, in the section Reports [35].

5 Conclusion

This Deliverable *D5.2 First Dissemination, Communication and Collaboration Report* outlined the WP5 work in the first 18 months of the project. It summarises all activities and achievements that were carried out according to the D5.1 Dissemination, Communication and Collaboration Plan and DoA, and explains any deviations from plan.

The first milestone achieved with the help of WP5 was *project kick-off* (MS1) in September 2020, and two more will be reached in the next reporting period – MS6 *Success Story Booklet 1 published* in M27 and MS7 *Success Story Booklet 2 published* in M36.

The communication and dissemination activities need to be carried out regularly according to the *D5.1 Dissemination, Communication and Collaboration plan*, and the dissemination materials and channels (project website) will be updated accordingly.

Most of the KPIs were achieved and were presented in detail through the separate chapters. Two of three KPIs from Task 5.3 were not reached within the dedicated timeline, thus the due dates were shifted.

In the next reporting period, dissemination and communication activities will focus on the creation and dissemination of experiment Success Stories, especially through events. The major obstacle in the past 18 months of project lifetime were Covid-19 restrictions, that led to the events being hold online and brought lower visitors' engagement. Therefore, we are hoping to present Success Stories to SMEs on face-to-face events/ booths in the near future.

The next report for WP5 is *D5.3 Final Dissemination, Communication and Collaboration Report* which will cover WP5 activities and results in the second half of the project lifetime, and will be submitted in M36.

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7 Appendix

7.1 Targeted Interest Groups

Communication Target	Direct	Indirect	Communication Channels					
		Via Hubs and Industry associations	Website	Videos	Press Articles and Materials (including art. in sec. mag.)	News-letter	Events, Conf., Trade fairs, Exhibitions, HPC conf.	Social Media
NCCs	x					x		
DIHs	x					x		
SMEs		x	x	x	x	x	x	
ISVs	x	x	x	x	x	x	x	
Industry associations	x					x		x
EU HPC Ecosystem players	x					x		x
HPC centres	x					x	x	
Commercial HPC providers						x	x	
Press				x	x			
General			x	x	x			

Table 5: Targeted Interest Groups and Communication Channels.

7.2 List of Events

All events with FF4EuroHPC participation occurring during the reporting period are listed in Table 6. Due to Covid-19 restrictions, all these events were held online.

Event title	Date	FF4EuroHPC Partner Involved
IDEO - Digital Infrastructure and IoT on Industry 4.0	6.10. – 7.10. 2020	Teratec
Teratec annual forum	13.10. -14 10. 2020	Teratec
Final Conference of the project SME / HPC (Erasmus+) organized by National Agency for Research and Development from Moldova	7.10.2020	Arctur
Asociación de Ingenieros de Telecomunicación de Galicia	6.10.2020	CESGA

MILOCER Development Forum	23.10.2020	Arctur
CASTIEL/EuroCC Conference	29.10.2020	scapos
Digital Innovation Hub DIHGIGAL: "Taller de Proyectos de I+D+i	30.10.2020	CESGA
Webinars for CoEs	12.11.- 13.11.2020	scapos
SC20 HLRS Virtual Stand Presentation	17.11.2020	scapos
Sparse Days Cerfacs	23.11- 24.11.2020	Teratec
NAFEMS 20 France conference	25.11.- 26.11.2020	Teratec
ORAP Forum	24.11. 26.11.2020	Teratec
Confindustria industry association - restricted presentation	25.11.2020	CINECA
BI-Rex - presentation	25.11.2020	CINECA
Presentation of the Open Call to the Spanish NCC members inside EuroCC General Assembly	25.11.2020	CESGA
FocusCoE workshop - presentation	27.11.2020	CINECA
Digital Innovation Hub DATAlife: "Supercomputación, empresas y oportunidades de financiación	1.12.2020	CESGA
International CAE conf - presentation	2.12.2020	CINECA
International CAE Conference	2.12.2020	Arctur
Webinar on Open Call for Sesame.net network	4.12.2020	Arctur
Webinar for NCC and SMEs, Macedonia	4.12.2020	Arctur
Webinar for NCC Montenegro	3.12.2020	Arctur
Webinar on Open Call, open to public	7.12.2020	Arctur

Webinar from NCC Germany about FF4EuroHPC Open Call	8.12.2020	HLRS
LEGACOOP industry association - restricted presentation	9.12.2020	CINECA
Open Call in Spanish	15.12.2020	CESGA
Webinar on Open Call, open to public	16.12.2020	Teratec
Webinar for French SMEs	8.01.2021	Teratec
EuroCC: NCC Session 2021 #2: Interaction	23.02.2021	scapos (& HLRS)
EuroHPC Summit Week	22.03.2021	HLRS
Workshop CASTIEL for NCCs	18.03.2021	Teratec
Workshop CASTIEL for DIHs	15.04.2021	Teratec
DIGI-SI Community Days 2021	15.04.2021	Arctur
Hyperion HPC User Forum	12.05.-14.05.2021	HLRS
ASHPC21 Conference	31.05.-2.06.2021	Arctur
ISC High-Performance Conference 2021	29.06.2021	scapos
ISC High-Performance Conference 2021	1.07.2021	CINECA
Teratec annual forum	23.6.2021	Teratec
2nd CASTIEL/EuroCC Conference	23.06.2021	scapos
BI-Rex - restricted presentation	9.07.2021	CINECA
EuroCC: North Macedonia	1.07.2021	Arctur
HPC info day for companies	2.07.2021	Arctur
CoLogistics Business Accelerator (CBA)	9.07.2021	CESGA
NCC Serbia	15.07.2021	Arctur
NCC Greece	15.07.2021	Arctur
FF4EuroHPC: Open Open Call-2 presentation for NCCs	16.07.2021	scapos/HLRS
Supercomputing Frontiers 2021	19.07.2021	Arctur

Infinite Area DIH restricted presentation	22.07.2021	CINECA
FF4EuroHPC webinar	27.07.2021	HLRS, scapos, Teratec, Arctur
DIH presentation	14.09.2021	CESGA
SLING Slovenija	13.10.2021	Arctur
Exascale Day	18.10.2021	Arctur
SC21	18.11.2021	scapos
ITG Instituto Tecnológico de Galicia	23.11.2021	CESGA
Digitalisation & innovation: A key to Industry 4.0"	8.12.2021	Arctur

Table 6: List of Events.

7.3 Success Story Template (Booklet)

PAGE 1

Title of the success story

Max 60 characters (with spaces)

Organisations

500 – 600 characters (with spaces)

+ Logos (2-3: End User, HPC Expert, HPC Provider, ISV, …) and organization URL

+ EU Map with location

The challenge

400 – 450 characters (with spaces)

+ 2 photos (Min 1500 pixels width/height, 300 dpi resolution)

 Simulation/ end-product / software/ data analytics

PAGE 2

Experiment highlights

- Industry sector
- Country
- Software used

The solution

450- 500 characters (with spaces)

+ 1 photo production/ team at work

Business and social impact

1.200 – 1.300 characters (with spaces)

Benefits

3-4 bullets, max 100 characters (with spaces) each

7.4 Success Stories Template (Flyer)

PAGE 1

Title of the success story

Max 60 characters (with spaces)

FF4EuroHPC experiment facts

- Industry sector
- Country
- Software used

Organisations involved

500 – 600 characters (with spaces)

The challenge

600 -800 characters (with spaces)

The solution

600 - 700 characters (with spaces)

Business and social impact

600 – 700 characters (with spaces)

Benefits

600 – 700 characters (with spaces)

The FF4EuroHPC project

650 - 700 characters (with spaces)

FF4EuroHPC Experiment Partners:

Names + logos

More Information:

- Website
- Info email

4-5 photos

Min 1500 pixels width/height, 300 dpi resolution

- Simulation/data analytics
- End-product
- Production / Software
- Team at work

7.5 Success Story Template (Website)

INSTRUCTIONS (please respect strictly these requirements): The text will be used to populate the project's website. Send information as a .docx (or eventually .odt) file. The images must be in high resolution and in a format suitable for a website.

First description of all Experiments (before they become Success Stories)
Title of the experiment Max 60 characters (with spaces)

Presentation of the problem and objective of the experiment
Max 550 characters (with spaces) + at least 1 photo (Min 1500pixel width/height, 300 dpi resolution)

Short description of the experiment
650-750 characters (with spaces)

Experiment organisations (all partners)
- Name of the organisation
- Logo (see instructions)
- Full address
- Email address
- Website
- Twitter
- LinkedIn
- Industry sector
- Short description of the organisation - 600-700 characters (with spaces)