

A Management Framework for Consolidated Big Data and HPC

Project number: 45924

Deliverable 6.1 - Website and Dissemination Plan

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Table of Content

Executive Summary	5
1. Introduction	7
2. Dissemination Plan	8
2.1 Advertising	8
2.1.1 Logo	9
2.1.2 Factsheet	10
2.1.3 Flyer	10
2.1.4 Poster	10
2.1.5 Leaflet	10
2.1.6 General Presentation	11
2.1.7 Documents and Presentation Templates	11
2.2 Public Relations	11
2.2.1 Press Releases	12
2.2.2 Press Kit	12
2.3 Events and Training Activities	13
2.3.1 Events Organized by Other Entities	13
2.3.2 Events Organized by BigHPC Project	14
2.3.3 Training Activities	15
2.4 Digital Marketing	16
2.4.1 Website	16
2.4.1.1 Menus	17
2.4.1.1.1 Homepage	17
2.4.1.1.2 About	18
2.4.1.1.3 Consortium	18

2.4.1.1.4 News & Events	20
2.4.1.1.5 Dissemination Material	21
2.4.1.2 Footer	22
2.4.1.2.1 Contacts	22
2.4.1.2.2 Ethics and Funding	23
2.4.1.3 Targeted Stakeholders	23
2.4.1.3.1 Big Data and HPC Communities	23
2.4.1.3.2 General Public	24
2.4.1.3.3 Systems Administrators and Users who are Interested in the Management of Data Centers	24
2.4.1.3.4 Academic Institutions and Future Partners	25
2.4.1.3.5 Industry	25
2.4.1.4 How to Measure the Results	25
2.4.1.5 Technical Details of the Website	26
2.4.2 Social Media Channels	26
2.4.2.1 Visual Identity	27
2.4.2.2 “About” Information	30
2.4.2.3 Headings	31
2.4.2.4 Paid Campaigns	32
2.5 Direct Marketing	33
2.5.1 CRM Strategy	33
2.5.2 Newsletters	33
3. Integrated Communication Campaigns	34
3.1 First Integrated Communication Campaign	34
3.2 Second Integrated Communication Campaign	35
3.3 Third Integrated Communication Campaign	36

4. Targeted Stakeholders	38
5. KPIs Defined	39
6. Conclusions	40
References	42
Glossary	43

Executive Summary

The first deliverable of Activity 6, which goal is to disseminate and promote the knowledge, technical solutions and results achieved during the BigHPC project, is about dissemination planning while also including the website creation.

This deliverable is divided into six chapters: introduction, dissemination plan, integrated communication campaigns, targeted stakeholders, Key Performance Indicators (KPIs) and conclusions.

The dissemination plan chapter is divided into five subchapters that correspond to the five structural communication tools that will be used to communicate the BigHPC project to our targeted audiences. The communication tools that will be used and the communication actions related to these tools are:

Advertising (communication actions: logo, flyers, posters and leaflets);

Public Relations (communication actions: press release and press kit);

Events and Training Activities (communication actions: events organized by other entities, events organized by the BigHPC consortium and training activities)

Digital Marketing (communication actions: website and social media channels);

Direct Marketing (communication actions: contacts database and newsletters)

The goal of the integrated communications campaigns' chapter is to establish communication campaigns with an integrated marketing approach based on the different dissemination tools described in the dissemination plan chapter. This chapter is divided into three sub-chapters:

1st communication campaign in which the goal is to inform all the stakeholders about the existence of the BigHPC project and that will be implemented from April 2020 until March 2021.

The main goal of the **2nd communication campaign** is to engage with the audience regarding the big data and HPC subjects, namely focusing on the BigHPC impact.

3rd communication campaign will be implemented from April 2022 until the end of the project (March 2023) and will be important to target the stakeholders involved in a more direct way with the results of the project.

Chapter 4 of this deliverable corresponds to the targeted stakeholders. Even though all of the targeted stakeholders have already been identified in some of the communication actions, chapter 4 gathers all of them.

There are KPIs that were defined to each of one the communication tools presented in this deliverable. Chapter 5 summarizes all of the 10 KPIs considered for the dissemination activity.

This deliverable ends with chapter 8 (conclusions) that summarizes some results obtained in the first three months of the project, mentioning also other deliverables that are part of Activity 6.

1. Introduction

This deliverable is a plan that will detail the main strategies for dissemination of the project during the project's progress and also a report about the website creation. The dissemination objectives and activities will follow an integrated marketing communication approach, which "must be integrated to deliver a consistent message and achieve the strategic positioning" [KK12].

According to the approach presented above, the marketing communications mix is divided in eight major modes of communication: advertising, sales promotion, events and experiences, public relations and publicity, direct marketing, interactive marketing, word-of-mouth marketing and personal selling.

Six of the eight tools listed above will be part of BigHPC project dissemination strategy – advertising, events, public relations and publicity, direct marketing, interactive marketing and word-of-mouth marketing. All these communication tools will be described in the Dissemination Plan chapter, including the actions that will be implemented, the audience to which they are targeted and the implementation dates and the respective KPIs.

2. Dissemination Plan

Different target groups and dissemination channels will be used according to the different communication tools defined to disseminate the BigHPC project. Even though different target groups will be identified for different communication instruments, the effort of communicating the project in an integrated way is the main goal of this plan.

This chapter is divided into five sub-chapters - advertising, public relations, events and training activities, digital marketing and direct marketing - that correspond to the five structural communication tools that will be used to communicate the BigHPC project to our targeted audiences.

Internal Communication Strategy

In order to be able to disseminate all the results and outcomes of the project in a consistent and effective way, the consortium has implemented an internal communication strategy, which is to ask all partners for updates regarding the project progress - on a fortnightly basis and via email. It's important to mention that the updates regarding the project's progress could be: publications, organization of conferences or workshops, training activities, talks, project presentations, institutional news, newsletters and press releases, technologies and other relevant topics.

2.1 Advertising

"Advertising is defined as any paid form of non-personal communication about an organization, product, service, or idea (...)" [BB06].

Several communication materials are planned to be produced during the project's timeline and in order to be possible to advertise the project in a more institutional way. These materials are listed and explained, in an individual way, in the following sub-chapters.

The first material that needed to be defined before the launch of the others is the project logo.

2.1.1 Logo

The final version of the logo was presented in the kickoff meeting, in April 2020. The feedback of the partners was good and the final version was disseminated through all partners and is already available on the shared folder where all collaborators have access.

In what concerns the branding, the consortium have focused on the main characteristics or requirements of the infrastructure supporting the BigHPC project, namely high-performance computing, storage, big data and reliability.

We did not associate other graphic elements, and we focused on the lettering, resorting to monochromic elements and simple, perceptible and readable fonts (sans-serif). We combined the prefix “Big” with the “HPC” for a simple and compact final result, thus emphasising the project’s reliability and stability.

BigHPC’s logo is presented in the figure below.



Figure 1 - Project logo

Still regarding the logo, it’s important to mention that there are different versions of the logo, which can be used in different contexts. The figure below is an alternative black and white version of the main logo.



Figure 2 - Black version of the BigHPC's logo

2.1.2 Factsheet

A fact sheet will be produced in order to have the main technical information regarding the project available on a page with the key points concisely.

2.1.3 Flyer

A project flyer will be also produced as a brief presentation of the project. The objective is that the partners can distribute them to stakeholders identified as strategic ones, such as big data and HPC communities, general public, systems administrators and users who are interested in the management of data centers, academic institutions, industry, future partners, local authorities & national governments, and media.

The flyer ought to include relevant information about the project – namely the description, main outputs, partners, duration, funding and contacts.

2.1.4 Poster

A project poster will be produced and distributed to all partners. During the project it is expected that the partners participate in events, such as fairs or public presentations, which goal is to promote the BigHPC project. The target groups are the same as the ones written above: big data and HPC communities, general public, systems administrators and users who are interested in the management of data centers, academic institutions, industry, future partners, local authorities & national governments, and media.

For that reason, a poster will be created with information about the project's motivation, objectives, impact and outcomes, partners, duration, funding and contacts.

2.1.5 Leaflet

The project leaflet will have information about the general context of the project, objectives, main outputs, partners, funding and contacts. The main goal of this leaflet is the same as the flyer and the poster. Again, it is expected from the partners that they provide information about the project to their strategic stakeholders (already mentioned above).

There will be other, more specific leaflets, focusing on technical content and the project's progress. They will also address topics associated with big data, HPC, and also associated with the two data centers that are collaborating with the project, namely, MACC and TACC.

2.1.6 General Presentation

A general presentation of the BigHPC project will be also produced, in order to be able to present the project at different institutional and industrial events. This presentation will be modified according to the contexts. The idea is to have a version more segmented for the industrial public and other prepared for the academic and scientific audience.

2.1.7 Documents and Presentation Templates

Some documents and presentation templates will be produced in order to be coherent between all communication materials. All of these templates will be available on the share folder of the BigHPC project. The presentation template and the deliverables template are already available on the share folder of the consortium of BigHPC project.

According to the proposal and to the information above, the consortium will produce at least three different types of communication materials (leaflet, poster and flyer) and distribute a total of 300 recipients in some events and meetings during the project period.

Regarding the advertising material, it will be necessary to print some of these communication materials, in order to share with all partners to be possible to reach the local audiences interested in the BigHPC work and also to reach the participants in some scientific and industrial events. In this sense, the action will spend part of the budget for the dissemination activities planned for the project. It's important also to mention that an update of some of these materials will be done during the last year of the project's execution.

2.2 Public Relations

"(...) a variety of programs directed internally to employees of the company or externally to consumers, other firms, the government, and the media to promote a company's image or its individual product communications" [KK12].

The press releases and the press kit are the communication instruments used in this chapter.

2.2.1 Press Releases

One of the target stakeholders to reach within the BigHPC project is the media. The importance of good media coverage is to gain credibility, acceptance and knowledge about the project. Through the media, we are able to spread our goals and vision to other stakeholders (big data and HPC communities, general public, systems administrators and users who are interested in the management of data centers, academic institutions, industry, future partners and local authorities & national governments).

There is a need of establishing metrics to quantify the impact of the press releases. Regarding this communication tool, the consortium decided to release three press releases during the project's period (one per year) and obtain around 30 news items during the entire project.

A first press release about the BigHPC project has been prepared, in order to be disseminated to the media at the end of the month 3 (June 2020).

In the case of the national media, on the first press release we will launch the project's message through LUSA – Portugal Agency News. After that, the main goal is to segment the best national media to spread the message better.

Regarding the international media, we will send a translation of each press release for the American's partners in order to spread the project's impact through American media channels. All these results will be available on the website of the project.

However, the strategy to release information to the media will be detailed in chapter 3 "Integrated Marketing Communication Campaigns" and the current results of the KPIs that have been defined will be detailed in chapter 5 "Defined KPIs".

2.2.2 Press Kit

Apart from the press release, a press kit has been produced and uploaded on the project's website. This kit will be sent to journalists, whenever they ask for further information about the project.

Since it is not expected to introduce the project in every communication done to the media, the press kit also works as a general guideline with key information about BigHPC in order to support the journalist while she is writing the news piece.

An English version of the press kit will be also shared with the consortium. Since every partner is responsible for sending information to their national media there may be a need of translating the press kit to their native languages. Apart from the press release, a press kit will be produced and uploaded on the project's website. This will be sent to the journalists, whenever they ask for information about the project.

2.3 Events and Training Activities

“Many firms are creating their own events and experiences to create consumer and media interest and involvement” [KK12].

Two types of events can occur within the scope of the BigHPC project: events organized by other entities or institutions (conferences, workshops, exhibitions, industrial events, etc.) or events organized by the consortium (meetings, workshops, etc.).

2.3.1 Events Organized by Other Entities

Participating in events organized by other entities and submitting scientific publications and papers are ways to cement technological and scientific reputation among stakeholders, such as the academic institutions, big data and high-performance computing communities and other projects.

Considering the scientific dimension, the consortium will participate in several conferences, workshops, and other scientific events, and aims to disseminate academic articles reporting the ideas and results of the project among leading conferences and journals in the fields closely related to the project. The KPI defined for that is to issue around eight publications throughout the project.

Some examples of top-tier publication venues:

- CCGrid;
- HPCA;
- EuroSys;
- Usenix ATC;
- OSDI;
- Usenix FAST;
- NSDI;
- ACM TOCS;
- ACM TOS;
- And others.

Moreover, the BigHPC will participate in industry-related events e.g. exhibitions, fairs and industrial meetings with potential customers of our industrial partners.

According to the tradition of our partners, and considering their participation in the events, the BigHPC will be one of the projects addressed at industrial venues, in order to disseminate the project's results among broader audiences.

Some examples of industrial venues:

- SuperComputing;
- EuroHPC Summit;
- ISCHPC;
- SuperComputing Asia;
- And others.

2.3.2 Events Organized by BigHPC Project

The organization of events targeting relevant stakeholders, such as scientific communities or those from industry, are important to ensure the fulfilment of the project's objectives.

The proposal foresees the organization of six events throughout the project (two per year), with approximately 30 people. In order to accomplish that, the consortium will organize one major workshop at an A/A* ranked conference, in order to provide the project findings to the scientific and industrial communities. Other activities such as meetings, workshops and

seminars/webinars were planned, in order to update all partners regarding the project's progress, and to contribute to scientific, industrial and public awareness.

The BigHPC will also be part of certain events that are usually organized by each partner, according to the respective events' strategy.

Some examples of the events:

- Seminars and webinars;
- Meetings with customers and potential customers;
- Symposiums;
- Conferences;
- Workshops;
- Other.

2.3.3 Training Activities

The project also focuses on improving the curricula of graduate courses provided by the academic partners, namely through the project's results. The consortium decided to organize close to 10 lectures throughout the project, targeting the students of the respective courses in each academic institution. These lectures should be about key areas related to the project, such as HPC, distributed systems and big data, etc. The academic partners can include these lecturers in the initiatives already planned.

Besides the events mentioned above, the BigHPC project can also be introduced to students and researchers, according to the scientific area related to each course. Some of these lectures could concur with the aforementioned events, thus reaching different targets in the same contexts and events.

The consortium partners are also expected to support and supervise Master's and PhD theses on the project's topics, and will welcome international interns to work on the project related areas.

2.4 Digital Marketing

One of the communication media's defined as the base for dissemination activities is the Internet. This communication tool involves, inevitably, the management of a website and social networks, which makes the interaction between people and companies, brands, and projects more and more frequent.

In recent years digital media platforms have revolutionized marketing, offering new ways to reach, inform, engage, sell to, learn about, and provide service to customers [L16].

2.4.1 Website

According to the proposal, the BigHPC project's website will be one of the main communication tools used in this project for reaching external targets and raising public awareness. Not only because we have defined unique strategies targeted to specific audiences to be disseminated throughout the website, but also because it will also aggregate most of the other tools used to communicate with our target audience during the project, such as news feeds, press releases, scientific publications, newsletters or public deliverables.

This subsection of the dissemination plan will focus on the website.

The website is online and available at www.bighpc.wavecom.pt and it was launched one week before the kickoff meeting, which took place on April 20, 2020 via a virtual platform.

This communication channel is one of the main communication tools that are going to be used to communicate the project's progress and results to the relevant stakeholders and parties interested in the BigHPC framework.

A website as a communication tool is only effective when all these notions and aspects are defined and well targeted. [C11] defined stakeholder as "any group or individual who can affect or is affected by the achievement of the organization's purpose and objectives".

Taking into consideration that this is a scientific project, and not an organization, we will follow an integrated marketing communication strategy. In this sense the BigHPC wants to promote ideas to different target groups, so this online presence is a crucial aspect. The

project website will assure wide awareness of the BigHPC project and help facilitate stakeholder engagement with the project.

This deliverable will present the strategy behind and the structure and the initial content of the project's website. The website content will be continuously updated as the project progresses. The website is not a static channel. In this sense, menus like scientific publications, dissemination material, blog posts and others will be available during the next months.

2.4.1.1 Menus

At this moment, three main menus compose BigHPC's website: about, consortium and news & events.

2.4.1.1.1 Homepage

BigHPC's homepage is designed according to the last trends in web design, since the project is using a modern template. On the top of the homepage, on the left side, there is an image of the project logo. After that, we have the three menus listed.

As you can see in the figure 3 title saying "A management framework for consolidated big data and high-performance computing" together with a background image with data centers to help visitors understanding the scope of the project.

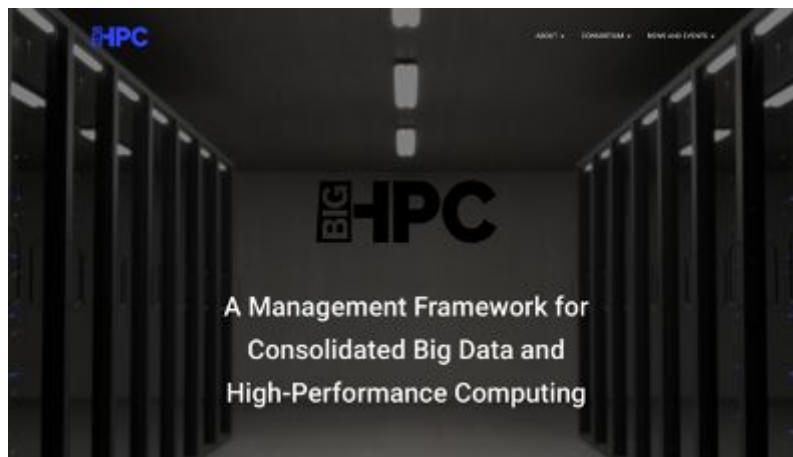


Figure 3 - Homepage

2.4.1.1.2 About

The first menu of the BigHPC website is the “About” so that the user can easily access the general explanation about the project.

On the menu About, which is divided in three different sub-menus, the website gives information regarding the problem with a short description of the general scope of the project, the main objectives and the results and impact of BigHPC.



Figure 4 - About

2.4.1.1.3 Consortium

The Consortium menu is divided in two sub-sections: 1) a page with general information about the partners of the project and 2) an individual page with more detailed information about each partner.

A map of a graphical representation of the world is the sub-section 1, where it is possible to see the different countries and partners that are participating in the project. It's important to mention that this partner's mention has the official url link for the respective website.

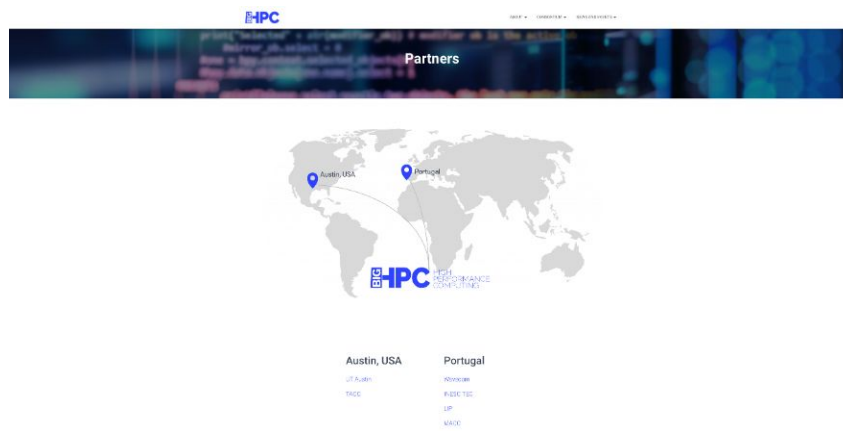


Figure 5 - Consortium sub-section 1

Underneath the map, the website has sub-section 2 with a summary of the teams' members that are participating in the project and with some information about each member.



Figure 6 - Consortium sub-section 2

A brief description of each partner's role in the project is presented on the homepage of the project, in order to have more information about each partner and scientific or industrial background.



Figure 7 - Partners

In this menu it is also possible to see a graphic representation of the overall structure of the work plan is part of the section “Project Structure”.

A description with the main goals of each activity is accessed by clicking on the activities titles on the page:



Figure 8 – Project structure

2.4.1.1.4 News & Events

The website will have a menu that works like an online newsroom. This menu will include the news stories that will be produced during the course of the project as well as information about the events where the BigHPC project or its partners will participate or will organize.

This menu has two different sub-menus - News and Events – so that the visitor can distinguish between the type of content that wants to read. On the homepage of the BigHPC’s website, the visitor can see the most recent articles related to the news and events.



Figure 9 - News and events

2.4.1.1.5 Dissemination Material

This menu is not yet available on the website, since the dissemination material will be produced between M3 and M6.

This menu will be divided in four different sub-sections: Public Deliverables, Scientific Communications, Press Releases and Newsletters.

There are several public deliverables in the project and since the website is one of the main communication tools of BigHPC it will be possible for the visitor to download public deliverables in the “Public Deliverables” sub-section.

Several scientific articles are expected to be written within the scope of this project. The references of these articles will be listed in the “Scientific Communications” sub-section.

All Press Releases launched to the media will be available in the “Press Release” sub-section.

The newsletters that will be produced during the three years of the project will be accessible in the “Newsletters” sub-section. It is already possible to subscribe to the newsletter mailing list in which case it will be sent directly to the visitor’s email address.



Figure 10 - Newsletter subscription

2.4.1.2 Footer

The footer has only a search bar, two links for documents with guidelines about the ethics requirements and some information regarding the funding of the project.

2.4.1.2.1 Contacts

The general email info.bighpc@wavecom.pt was created and is available on the homepage of the website, on the contacts' section. In addition, it is possible for visitors to submit a message directly from the website.

On this section are also available the links for the social media pages of the project (LinkedIn and Twitter), and also the mention to the UT Austin Portugal Program.

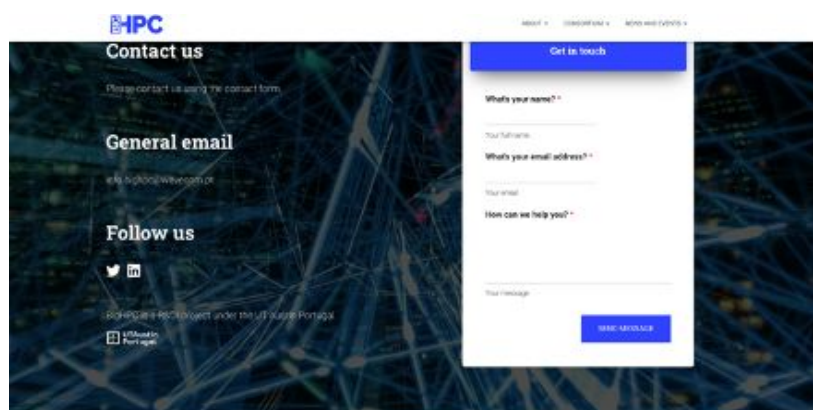


Figure 11 – Contacts and social media icons

2.4.1.2.2 Ethics and Funding

An ethics menu has been included which describes how the project will handle data protection and privacy issues and other ethical concerns that may arise during the project. The Privacy Policy and the Cookie Policy are available on the footer of the website.

Also in the footer, there is a search bar and the information regarding the funding, which shows the logos of the entities that are funding the project and also the textual acknowledgements.

2.4.1.3 Targeted Stakeholders

A website must have its target audiences well defined in order to be effective as a communication tool. However, the BigHPC project website is not like most of the other projects' websites that often target one type of audience; rather the BigHPC project has identified five specific target groups for the website who have very different needs, and communication goals for each target group therefore differ. The different target groups will be explained in detail below.

2.4.1.3.1 Big Data and HPC Communities

The first target group defined is the specific communities on big data and HPC topics. The main objective here is to inform this target group about the main goals and structure of the project, as well as the latest updates, for example the latest news pieces or events in which the partners are participating and the available dissemination material, such as public deliverables or scientific publications. Some of this information is not on the website yet, since there are documents that will be uploaded over time, according to the project's progress.

2.4.1.3.2 General Public

By general public we mean every individual who has interest in advanced computing in general, and in topics related to big data and high-performance computing in particular. To capture the general public's interest in the project, we want to create a blog page on the website with the following goals:

- To create and raise consumer awareness about the topics related to the BigHPC;
- To increase the levels of engagement with the general public;
- To facilitate people to change their perceptions on these topics.

In order to accomplish the above goals, different types of information in different phases of the project will be published on the dedicated page. The main objective of this page is to have information about the topics related to the project in a simple way, in order to be able to clarify the general public about complex ideas regarding the topics related to the project. The idea is to have a few blog posts written by the consortium's partners, specifically to people who have no knowledge about the area.

It's important to mention that the News and Events and the Dissemination Material menus can also inform this target group about the main outputs of the project.

[2.4.1.3.3 Systems Administrators and Users who are Interested in the Management of Data Centers](#)

The main objective here is to inform this target group about the main goals and the main achievements of the project, as well as about the latest updates, for example the latest news pieces or events in which the partners are participating and available dissemination material, such as public deliverables or scientific publications more in the future.

[2.4.1.3.4 Academic Institutions and Future Partners](#)

To capture the academic institutions' interest in the project, the website has to have all the information regarding the project, such as the mission, the main goals and also the scientific outputs (publications, presentations, technical public deliverables, etc).

By the academic institutions, we mean researchers and lectures and as well the students. For that, different kinds of information are available on the website, in order to create more interest in future partnerships and also in training activities related to the project's topics.

2.4.1.3.5 Industry

For the industry, including ICT and HPC providers, a specific information regarding the commercial technologies and the exploitation results can be also important. Since the results of the BigHPC project will be exploited and commercialized by the Wavecom, some information regarding the main results and about the pilot experiments will be provided by MACC and TACC.

The information about the project, including the mission, the main goals, and also the scientific outputs can be also an important information for the industry communities.

2.4.1.4 How to Measure the Results

By the end of each year of the project execution, we will evaluate the impact that the project's website is having on the different target groups. The main objective of this evaluation is to know if the strategies defined on the start of the project are being effective for the project's awareness or if we need to adapt some of them.

For that, a KPI is defined to analyze the impact of the website as an effective communication tool. According to the proposal, the consortium has established 1500 visitors on the project's website during the project's period (500 per annum). This metric can give us some feedback regarding the website traffic.

Once the website is already connected to the Google Analytics platform, this data will be extracted from this platform and presented in deliverables D6.2, D6.3 and D6.4.

2.4.1.5 Technical Details of the Website

The website of the BigHPC project was created and has been managed by the person who is responsible for the communication and dissemination of the project from INESC TEC. The technology used to create the website is the [Wordpress](#) platform. The template selected and used for the BigHPC's website is the [Hestia](#).

Technical questions, regarding the HTML and CSS, were solved by other INESC TEC's collaborator with Informatics' skills .

The website runs and is designed in a responsive way, in order to optimize it to different devices, whether they are desktop or mobile.

The website is hosted on a virtual machine, entitled “wordix2”, with 8 cpus, 24 GB ram on the virtualized server PowerEdge R640, with a processor Intel(R) Xeon(R) Gold 6148 CPU @ 2.40GHz (40 logical processors) running on VMware ESXi, v. 7.6.0.

The language used on the website is English, since it is an international consortium.

The BigHPC’s website is registered with an .wavecom.pt domain, as the Wacevom is the coordinator of the project, despite the INESC TEC being the responsible for Activity 6.

2.4.2 Social Media Channels

As established between all partners, the BigHPC project will be present on Twitter and LinkedIn, each one with a different purpose and different targets. Considering the wide potential of online tools, we aim at reaching different kinds of users – individuals, companies and Big Data and HPC specific institutions – informing and engaging them around BigHPC and its values.

As shown below, there’s a strategy behind each social network, depending on the target and the communication purpose:

	Twitter	LinkedIn
Target	Big data and HPC communities, general public, systems administrators and users who are interested in the management of data centers, academic institutions; industry; local authorities & national governments and media	Industry, academic institutions, local authorities & national governments and media

Goal	Create awareness, influence and future partnerships	Influence in order to attract investments, participants and future partnerships
Strategy	Premium access to build advocacy with the audience. Direct engagement with peer Short sentences, able to attract attention. Simple and very attractive language	Leverage skills and expertise data for influence and involve professionals. Longer and more descriptive phrases

Table 1 - Social media strategy

Different types of contents will be part of the social media strategy:

2.4.2.1 Visual Identity

It was the first step and it was designed in order to promote an integrative and coherent communication. It also matches with the visual identity designed to the website. It was also important to create different templates to use in different posts and dimensions, according to each social media network.

Some common elements were defined to the posts (visual elements, fonts, dimension, mask, frame, etc).

Blue Background (RGB Version)	Grey/White Background (Black 10% Version)	Black Background
--	--	-------------------------



Figure 12 - Logo's variations

Another point related to the visual identity it's the templates for the social media accounts.

Since people are not yet familiar with the project's logo, it is important to reinforce the visual identity by communicating it in a single way. Therefore, once we were using the color scheme of the second image for the website, it is important to keep it during the first step of all online communication tools. However, it may change in the future.

To complement that, some templates were created in order to reinforce the visual identity in the posts as can be seen in the figure below.

Template	Mask + Text
Example	
Template	Image + Quote

<p>Example</p>	
<p>Template</p>	<p>Blue Background + Text</p>
<p>Example</p>	

Table 2 - Social media channels templates

There are some common elements between the above images:

- Logo: The logo is used in all the examples;
- Blue mask: blue was the chosen color to communicate the project. In this sense, it cannot be forgotten during the visual communication. BigHPC's colors are:
 - Blue (#005fff)
 - Black (#000000)
 - White (#ffffff)
- Logo in a monochromatic version.

Whenever possible, the images assume the 1:1 ratio (1080px x 1080px Twitter publication. In turn, LinkedIn recommends using a 1.91:1 aspect ratio, preferably 1200 pixels wide by 627

pixels tall. However, it is not always possible, thus the dimensions may be adapted to the content in question.

Regarding the fonts used, we use the Ubuntu font.

2.4.2.2 "About" Information

After defining the visual identity that guides the social networks' management, it was important to fill in some mandatory fields in all social networks.

Social Network	Screen Overview
Twitter	
LinkedIn	

Table 3 - Social media channels' "About" data

2.4.2.3 Headings

In order to make social networks more dynamic, organized and with relevant content we are starting to create some regular headings: Know us, Curiosity, Quote, etc. It's important to also have some visual content about MACC and TACC and BigHPC results (photos, infographics, etc).

According to the project's progress, we will create other headings, focusing on the results, as well as events, publications, newsletters, communication materials, etc.

Know us

Goal: to inform and involve different partner;

Curiosity

Goal: to increase the attractiveness of posts through scientific content;

Quote

Goal: to increase the credibility and the attractiveness of the publications;

Photos

Goal: to increase the attractiveness of posts.

According to the project's progress, we want to implement and adapt the type of content for the social media channels every month.

2.4.2.4 Paid Campaigns

The paid campaigns aim at increasing the reach of publications/tweets in order to communicate the project's values to a wider community.

Twitter

Twitter Ads objective based campaigns are designed to help people achieve results that drive action and add value to the project. Create campaigns tailored for a variety of business goals, from driving website traffic to increasing brand awareness.

LinkedIn

LinkedIn will be the social network used in order to reach the professionals in these areas.

Regarding the campaign costs, we will control these setting budgets (the maximum total amount we want to spend per day).

Before starting the paid campaigns on the social media accounts, it's necessary to define the strategy to implement this action. Also, whenever a publication is sponsored, INESC TEC will send its report to partners, until the day after the end of the promotion of the post.

The variability of the values will be justified by the different communication needs that the project may have.

The impact analysis of the BigHPC project on social media will be based on some quantitative and qualitative indicators, which must be reachable and realistic. In order to obtain that, the KPIs defined for the social media accounts were to achieve 200 followers during the entire project (50 in Y1, 100 in Y2 and 200 in Y3) and post bi-weekly updates.

Regarding the advertising of BigHPC project on the social media channels, this action will also spend part of the budget for the dissemination activities planned for the project. It's important also to mention that it's expected to implement paid campaigns on Twitter and LinkedIn during the second and third year of the BigHPC project.

In addition, INESC TEC (as the Activity 6 leader) commits to send a quarterly report to all partners, informing them about the insights observed in each social network - Twitter and LinkedIn.

2.5 Direct Marketing

"Direct marketing is much more than direct mail and mail order catalogs. It involves a variety of activities, including database management, direct selling, telemarketing, and direct response ads through direct mail, the Internet, and various broadcast and print media" [BB06].

Two related actions will be considered in this sub-chapter: customer relationship management (CRM) strategy and newsletters.

2.5.1 CRM Strategy

A communication strategy is more effective when an identified list of contacts with all target stakeholders exists.

This contacts database assumes the contributions of all of the partners in identifying the targeted stakeholders and other projects.

It's important to say that the newsletter's subscription is already available on the website of the BigHPC project.

2.5.2 Newsletters

Based on the contacts database which is available on the BigHPC's website it is expected to send regularly to the strategic stakeholders' information on the project's developments in a newsletter format.

A CRM platform named MailChimp is being used to send the newsletters. This platform allows to insert a segmented list of contacts and monitor the results of the deliveries.

3. Integrated Communication Campaigns

The purpose of the integrated communications campaigns is to establish communication campaigns with an integrated marketing approach based on the different dissemination tools already described.

3.1 First Integrated Communication Campaign

The goal of the first communication campaign is to inform all the stakeholders about the existence of the BigHPC project.

The implementation time of this campaign will occur from April 2020 until March 2021 (M1-M12).

Tool	Action	Timing
Advertising	Creation of the logo	M1-M3

Digital Marketing	Development of several communication materials to be sent to the key stakeholders	M3-M6
	Creation of a project website	M1-M3
	News pieces, dissemination material and events and regular updates on the project website	M1-M12
	Creation of different content and weekly updates on the project's social media channels	M1-M12
Public Relations	Press release dissemination	M1-M3
	Press kit creation	M3-M6
Events and Training Activities	Organization of meetings, lectures and other types of events. Preparation of training activities	M6-M12
Direct Marketing	Creation and update of contacts database	M1-M12
	Creation and dissemination of newsletters	M4, M8, M12

Table 4 - First integrated communication campaign

3.2 Second Integrated Communication Campaign

Regarding the second integrated communication campaign, the main goal is to engage with the audience regarding the Big Data and HPC subjects, namely focusing on the BigHPC impact. We have here the planned actions and the timing for the second year of the project.

Tool	Action	Timing
Digital Marketing	Creation of different content and weekly updates on the project's social media channels, in order to engage with the audiences	M13-M24
	News pieces, dissemination material and events and regular updates on the project website	M13-M24
Public Relations	Press release dissemination (focused on the big data and HPC subjects)	M18-M24
Events and Training Activities	Participation in scientific events related to the main topics of BigHPC. Organization of meetings, lectures and other types of events	M13-M24
Direct Marketing	Update of contacts database	M13-M24
	Dissemination of newsletters	M16, M20, M24

Table 5 - Second integrated communication campaign

3.3 Third Integrated Communication Campaign

In the final year of the project, it will be important to target the stakeholders involved in a more direct way. In this sense, the key objective of the third communication campaign is to present the results of the BigHPC project.

Tool	Action	Timing
Advertising	Development of communication materials, in order to focus the project results	M25-M36

Digital Marketing	Creation of different content and weekly updates on the project's social media channels, in order to be possible to disseminate the project results	M25-M36
	News pieces, dissemination material and events and regular updates on the project website	M25-M36
Public Relations	Final press release BigHPC results	M25-M36
Events and Training Activities	Participation in scientific events related to the main topics of BigHPC. Organization of meetings, lectures and other types of events	M25-M36
Direct Marketing	Update of contacts database	M25-M36
	Dissemination of newsletters	M28, M32, M36

Table 6 - Third integrated communication campaign

4. Targeted Stakeholders

Even though all the targeted stakeholders have already been identified in each one of the communication actions, it is important to group the key stakeholders in clusters and list them in one specific list:

- Big data and HPC communities;
- General public;
- Systems administrators and users who are interested in the management of data centers;
- Academic institutions;
- Industry;
- Future partners;
- Local authorities & national governments;
- Media.

5. KPIs Defined

A list of all of the KPIs defined along the document is presented in order to summarize it.

The KPIs defined regarding dissemination activity are 10:

- The number of leaflets, posters and flyers – 3 resources and 300 recipients;
- The number of press releases released to the media – 3 press releases (one per year);
- The number of news pieces published on the media – 30 news;
- The number of publications at top-tier peer-reviewed conferences and journals with an acceptance rate of at most 20%: 8 publications;
- The number of events organized by the BigHPC consortium: 6 events (2 per year);
- The number of participants per event: 30 participants per event;
- The number of lectures: 10 lectures;
- The number of visitors of the website – 1500 visitors (500 per year);
- Number of posts (Twitter and LinkedIn) - bi-weekly updates;
- Number of followers (Twitter and LinkedIn) - 200 followers.

6. Conclusions

This deliverable aimed at defining a dissemination strategy for the BigHPC project. Goals, strategies, target stakeholders and KPIs have been defined by taking into consideration the overall objectives and potential of the project.

Regarding the dissemination plan, the results achieved so far are very positive:

Digital Marketing

The website is already available and the project is already on the social media channels. Since the project is in the month 3, the social media networks it stands out as positive: frequency and number of publications; dynamism in the format of publications; the number of followers is also increasing;

Direct Marketing

Since the website is already available, we are already collecting contacts for our contacts database, which will receive the first newsletter during the month 4;

Public Relations

We already have a final version of the first press release about the BigHPC project which will be published on June 30, 2020. It is expected that these results may increase once all of the partners start to disseminate the project to their strategic channels.

Finally, three more deliverables related to the dissemination plans are expected to be submitted:

- First year dissemination report in month 12;
- Second year dissemination report in month 24;
- Third year dissemination report in month 36.

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Glossary

CC	Corporate Communication
CRM	Customer Relationship Management
CSS	Cascading Style Sheets
D	Deliverable
HPC	High-Performance Computing
HTML	Hypertext Markup Language
ICT	Information and Communication Technologies
INESC TEC	Institute for Systems and Computer Engineering, Technology and Science
IMC	Integrated Marketing Communication
KPIs	Key Performance Indicators
LIP	Laboratory of Instrumentation and Experimental Particle Physics
LUSA	Portuguese National News Agency
M	Month
MACC	Minho Advanced Computing Center
PhD	Doctorate
RGB	Red, Green, Blue
TACC	Texas Advanced Computing Center