DEEPHEALTH

D7.1 Dissemination and communication plans and report

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Document history

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5	29/07/2019	Reviewed version by EVR
6	30/07/2019	Pre-final version of D7.1
7	31/07/2019	Finalized version of D7.1

Table of contents

1 Executive summary

This document describes the dissemination and communication activities planned for the DeepHealth project including publications in journals, books and conferences, white papers, demonstrations, presentations at various relevant events, etc.. It identifies the major dissemination forums and depicts the plans for communicating the DeepHealth concepts and results into these forums. In addition, the achievements produced so far (related to all the previous) during the first 7 months of the project are shown.

The various dissemination activities envisaged for the DeepHealth project, ranging from scientific publications to presentations, require partly different approaches because the target audiences and purposes are different. Thus to make a thorough impact, it is important to plan the activities beforehand and have the right ways of working depending on the target forum.

The rest of this deliverable is organized as follows: Section 2 presents the overall dissemination strategy, target audiences, key messages and strategy to reach stakeholders as well as the Overall Dissemination and Communication Time plan. The various dissemination and communication plans and activities are presented in sections 3-7. Section 8 provides an overview of the assessment of the impact achieved while section 9 comprises the dissemination guidelines and procedures. Finally, conclusions are drawn in Section 10.

2 Dissemination strategy

2.1 Overall strategy and objectives

The dissemination strategy includes the following activities: Encourage adoption of project results mainly for expanding the adoption of HPC and Big Data Analysis in the medical domain and for image analytics, with special attention to the new business models that can be derived from this new approach. Foster possible future collaborations and avoid duplication of efforts in future research activities. Raise awareness on project achievements enhancing synergies with similar or complementary projects and/or research activities.

The general aim of communication activities will be to spread information on the project's aim and objectives as wide as possible in order to gain the attention of European, national and local authorities as well as of the scientific community at large. In turn, we clearly differentiate three types of actions according to the target audience**:**

- **Scientific and academic context actions**, such as the active participation and attendance to national and international workshops, seminars and conferences, focused on use of big data analytics and HPC for different applications from health to simulation, engineering and optimisation.
- **Industrial-oriented actions**, aiming at enhancing the visibility of the project results. The project will provide guidelines and best practice models and concrete use cases to efficiently apply the combination of Big Data and HPC to solve important Health problems. The replicability of the approach in similar contexts will be promoted.

Figure 1 depicts an overview of the organisation of the overall dissemination strategy for DeepHealth and all the means and tools the project has planned to employ for dissemination and communication

activities. Further details are provided in sections 3 on Channels, 4 on Communication Materials, 5 on Publications, 6 on Events and 7 on Collaborations.

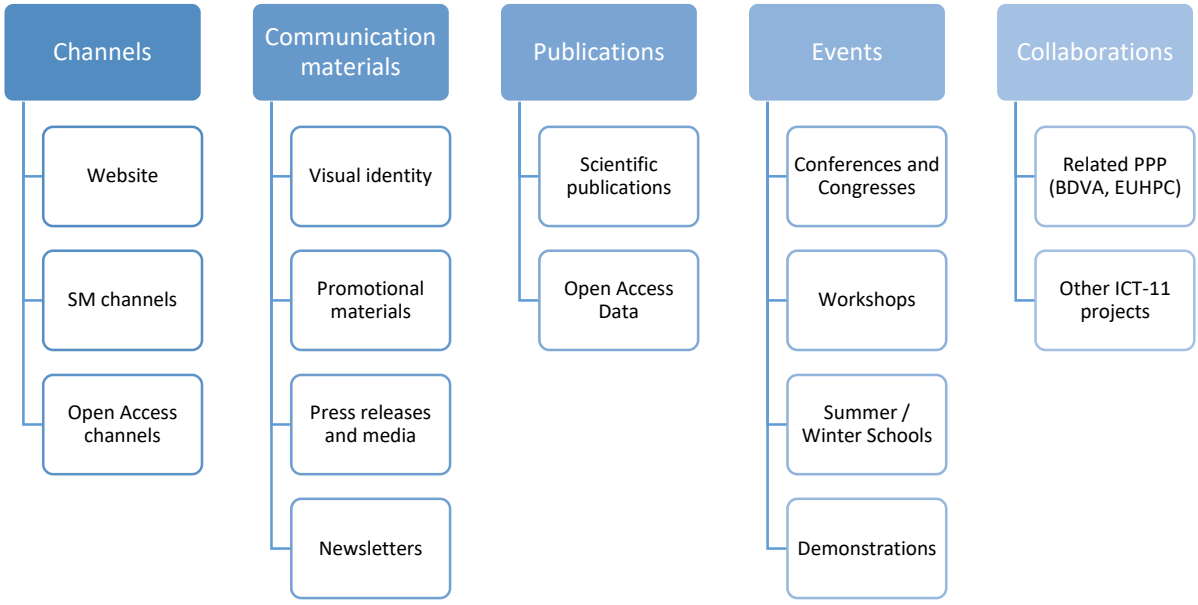

Figure 1: Overview of dissemination and communication means and tools

2.2 Target audiences

2.2.1 Analysis of stakeholders

Following the European Commission guidelines, in this section, we analyse the stakeholders related to the DeepHealth project:

- ***Scientific Community (Higher Education, Research)* – SC** including
  - Academic, Industrial and Medical representatives in the R&D,
  - Conference organizers and audiences as well as scientific publishers focussing on e.g., HPC and general parallel processing, Image processing, Data analytics, Big Data, Artificial Intelligence, healthcare domain, etc.,
  - European HPC community, Big Data and AI Community and related partnerships and projects and networks, partners from other national or international projects, HiPEAC, NESUS COST Action, cHiPSet COST Action, etc.,
  - Public Private Partnerships (e.g. ETP4HPC or BDVA) or partnerships for advanced computing (e.g. PRACE) or relevant network of excellences (e.g. HiPEAC), and
  - Healthcare providers by offering advanced courses within the Continuing Medical Education (CME);
- ***Industry (Ind.)*** audience includes, but is not limited to,
  - ICT potential vendors of the software solution,
  - hardware providers,
  - companies interacting and offering services/products to the healthcare domain,
  - companies interested in applying the proposed solutions and including them in their service/product portfolio or even build on top on the DeepHealth solutions for enhancing their current solutions/services, and
  - Health care Centers interested in applying the DeepHealth solutions;
- ***Civil Society (CS)*** and ***General Public (GP)*** rather overlap in the case of the DeepHealth project. They both refer to citizens not necessarily directly involved in the ICT or healthcare domain but interested in knowing the latest advances in these domains/verticals in terms of general knowledge;
- ***Policy Makers (PM)*** and ***Public stakeholders (PS)*** in the context of the DeepHealth target audiences include EU, national and regional government bodies, national governments,

regional authorities, European Commission (DG INFSO, DG Enterprise and Industry, DG Research) and the Executive Agency for Competitiveness & Innovation (EACI);

- ***Media (Med.)*** (including online media, Internet forums and blogs) are those stakeholders willing to get informed about the DeepHealth news and advances and accordingly disseminate the information to either the scientific Community (for HPC and general parallel processing, Image processing, Data analytics, Big Data, Artificial Intelligence, healthcare domain, etc.) or the general public;
- ***Investors (Inv.)*** are not directly a target audience for the DeepHealth project, i.e., the project as a whole in not expected to use specific channels (e.g., pitching opportunities) devoted to investors, but they are indirectly targeted due to their interest in knowing the state-of-the-art advances and funding solutions related to e.g., HPC and general parallel processing, Image processing, Data analytics, Big Data, Artificial Intelligence, healthcare domain;
- ***Customers (Cust.)*** (paying or not) may be either the industries mentioned above or public stakeholders wishing to apply the DeepHealth healthcare solutions in the public healthcare domain.

2.2.2 Key messages and strategy to reach stakeholders

For each of the stakeholder group / targeted audience, a different strategy for reaching out and different key messages will be exploited. Table 1 summarizes the key DeepHealth messages (in terms of message level / type of information to be communicated and the main focus of the communication activity) per stakeholder group / target audience.

Table 1. Key DeepHealth messages per stakeholder group

Stakeholders group	Target Areas	Message level / type	Main focus of the activity
▪ Scientific Community (Higher Education, Research); and ▪ Media	Technical	▪ Understandable by ICT systems developers and system managers. ▪ High level main scientific and technical innovations introduced by DeepHealth	▪ Specific project presentation; ▪ Focus on techniques and end-user requirements; ▪ Technical presentations; ▪ Focus on scientific innovations; ▪ Journal articles and conference papers;
▪ Industry; ▪ Customers; and ▪ Investors	Business	▪ Business opportunities ▪ Potential of technology ▪ Societal benefits.	▪ Business-oriented project presentation; ▪ Focus on scientific, business and technical innovations; ▪ Business opportunities identification; and ▪ Societal benefits identification.
▪ Civil Society and General Public; and ▪ Media	Social	Understandable by a large public of non-specialists	▪ General project presentation; and ▪ Economic impact and societal benefits.
Policy Makers and Public stakeholders	Legislative	Legislative and social implications	▪ Legal implications/ impediments; and ▪ Economic impact and societal benefits.

Dissemination activities (as proposed by EC) such as

- Scientific and/or peer-reviewed publications (PRP)
- Participation in activities organized jointly with other EU project(s) (JAct)
- Participation to a Conference (PartConf)
- Participation to a Workshop (PartWork)
- Participation to an Event other than a Conference or a Workshop (PartOther)
- Organisation of a Conference (OrgConf)

- Organisation of a Workshop (OrgWork)

are expected to have better impact in reaching out to a) the Scientific Community and b) the Policy Makers and the Public stakeholders, while communication activities (as proposed by EC) such as

- Website (Web)
- Press releases (PrR)
- Social Media (SM)
- Exhibition (Exh)
- Flyer (F)
- Non-scientific and non-peer-reviewed publications (popularised publications) (NSP)
- Training (Tr)

usually reach out better to a) the Industry, b) the Customers, c) Investors, d) Civil Society and General Public, and e) the Media. Table 2 prioritizes the dissemination and communication activities based on their expected impact on the considered stakeholder group.

Table 2. Dissemination and communication strategy per stakeholder group

Stakeholders group	Target Areas	Dissemination / Communication activity
Scientific Community (Higher Education, Research)	Technical	▪ All dissemination activities ▪ Website ▪ Exhibitions ▪ Flyers
▪ Industry; ▪ Customers; and ▪ Investors	Business	▪ Press releases ▪ Website ▪ Exhibitions ▪ Training ▪ Flyers ▪ Social Media
Civil Society and General Public	Social	▪ Social Media ▪ Website ▪ Press releases ▪ Exhibitions ▪ Flyer
Media	Technical and Social	▪ Conference and workshops (or other events) ▪ Exhibitions ▪ Non-scientific and non-peer-reviewed publications (popularised publications) ▪ Press releases ▪ Website ▪ Flyers ▪ Social Media
Policy Makers and Public stakeholders	Legislative	▪ All dissemination activities ▪ Non-scientific and non-peer-reviewed publications (popularised publications) ▪ Website ▪ Exhibitions ▪ Flyers

2.2.3 Overall Dissemination and Communication Timeline

The dissemination and communication strategy will accordingly be divided into the following phases:

- PH1: M1-M12: Raising awareness about the project and its objectives
- PH2: M13-M30: Release interim results for maintaining/increasing the interest of the target audiences/stakeholders
- PH3: M30-M36: Focus on showcasing results, exploitation and sustainability aspects.

3 Channels

3.1 Website

A publicly accessible project website (https://deephealth-project.eu/) has been launched in order to explain the goals, organizations involved, milestones and disseminate the press releases, reports and results of the project. The DeepHealth website front page is depicted in Figure 2.

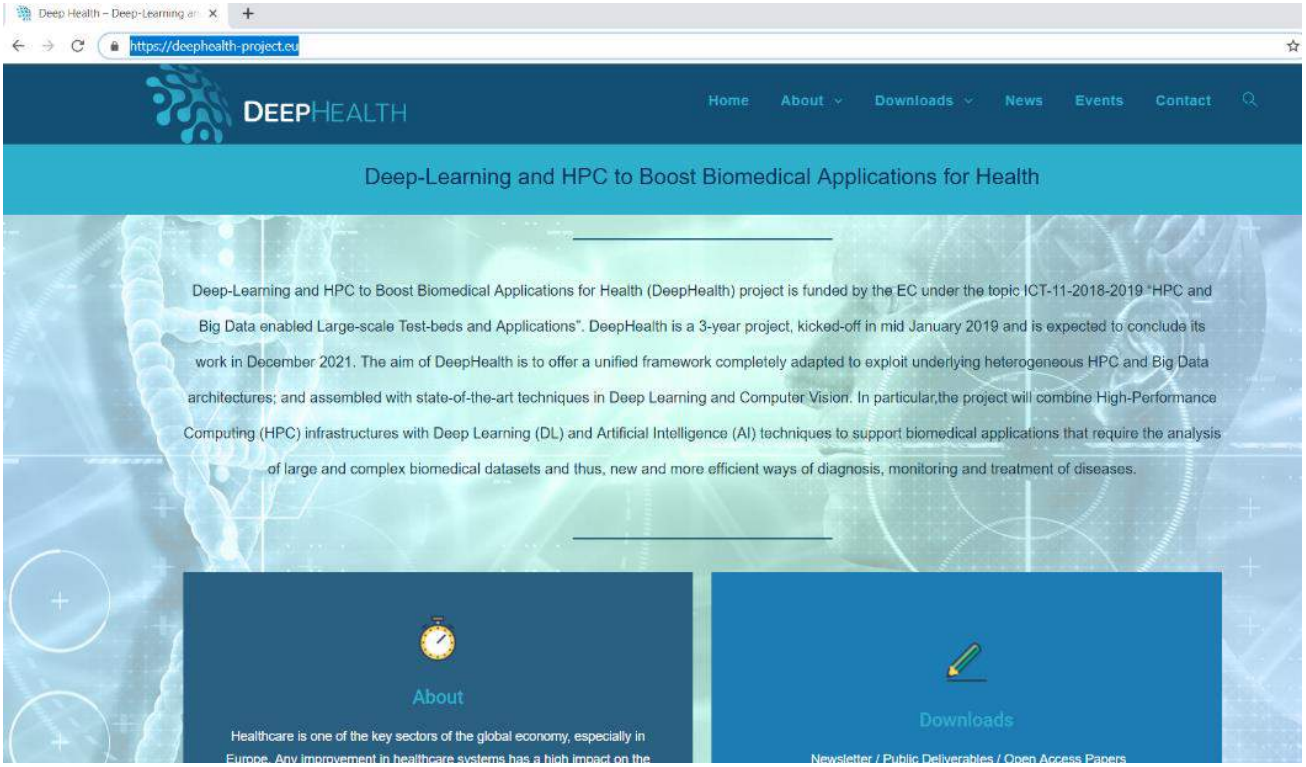

Figure 2: DeepHealth Website – Home Page

The website consists of the following webpages: Home, About (including a Project, a Partners and a Photo Gallery webpage), Downloads (including a Newsletters, a Public Deliverables and an Open access papers webpage), News, Events and Contact us. Moreover, through the website, the visitors can access DeepHealth social media as well as to subscribe to the DeepHealth newsletter (News webpage).

3.2 Social Media

In a further effort to disseminate news about the project to as wide an audience as possible, ranging from technical and enduser communities, to scientific communities and even members of the general public, DeepHealth is also exploiting social network profiles. Due to the variety of potential target communities, different types of social networks are used, i.e., LinkedIn (Figure 3) for business communities and Facebook (Figure 4) for consumers as well as Twitter for broader outreach (Figure 5). The social media accounts for DeepHealth are as follows:

- Facebook page: https://www.facebook.com/DeepHealthEU
- Twitter account: https://twitter.com/DeepHealthEU
- Linkedin page: https://www.linkedin.com/company/deephealtheu/

Partners are also advised to use the following hashtags when communicating something related to the DeepHealth project, so that the DeepHealth community can easily follow the news: #deephealtheu, #deephealthh2020, #deephealth.

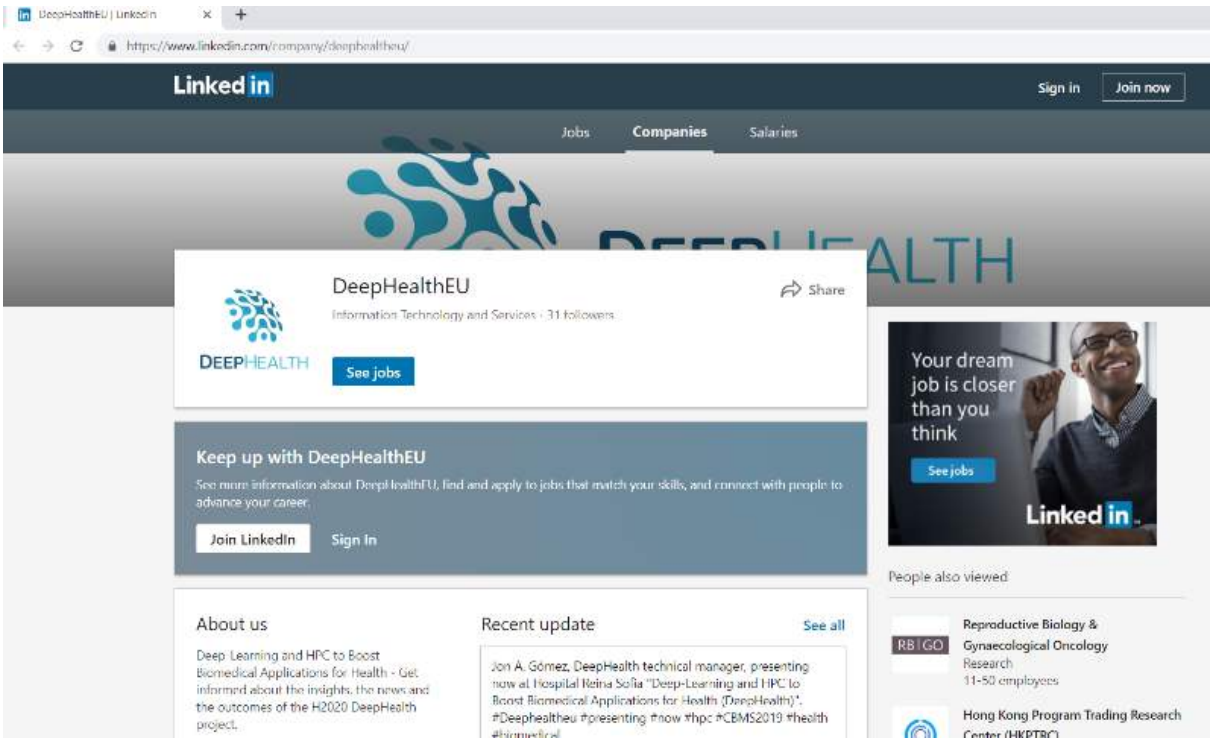

Figure 3: DeepHealth on LinkedIn

Figure 4: DeepHealth on Facebook

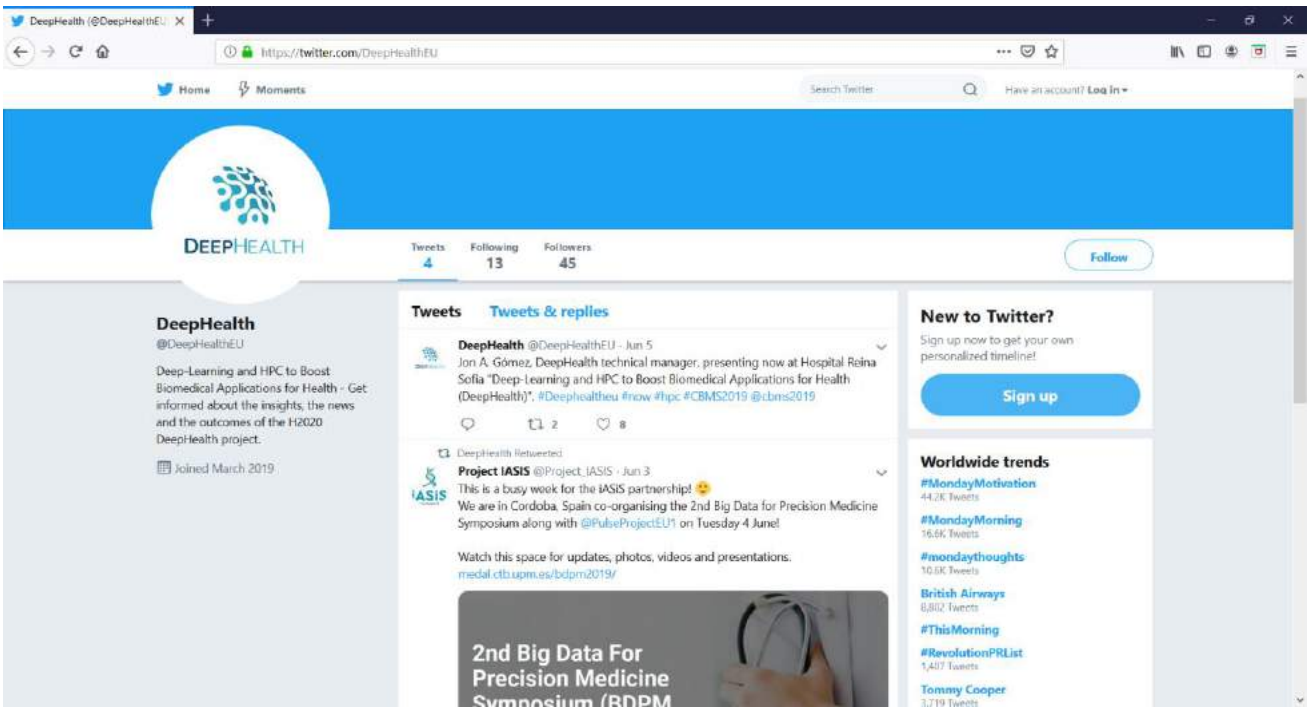

Figure 5: DeepHealth on Twitter

4 Communication materials

4.1 Visual identity

A logo, a project presentation template and a leaflet template have been created to promote the main ideas and create a unique visual identity for the project.

4.1.1 Project Logo

In order to create a unique visual identity for the project, a logo has been designed and a specific colour palette has been selected. The DeepHealth official logo is the one depicted in Figure 6 and Figure 7 (vertical and horizontal orientations accordingly).

Figure 6. DeepHealth official vertical logo

Figure 7. DeepHealth official horizontal logo

However, acknowledging that the needs (in terms of background as well as quality) may be different from time to time, the following versions (depicted in Figure 8 - Figure 12) are available. Note that Figure 10 - Figure 12 have been provided on a dark background so as to become visible.

Figure 8. DeepHealth vertical logo for dark background – alternative 1

Figure 9. DeepHealth horizontal logo for dark background – alternative 1

Figure 10. DeepHealth vertical logo for dark background - alternative 2

Figure 11. DeepHealth horizontal logo for dark background – alternative 2

Figure 12. DeepHealth horizontal logo for dark background – alternative 3

The different logo versions are available in EPS, PDF, JPG, PNG and SVG formats at the internal project repository in Sharepoint under the folder "04_Logos and Templates". DeepHealth partners are advised to use them as follows:

The default logo is the one called "DEEPHEALTH_logo" (Figure 6 – PNG format is without background while the JPEG format comes with a white background). "DEEPHEALTH_horiz_logo" (Figure 7) is the same logo (in terms of colouring) but on a horizontal basis. They can be used in white or light-coloured backgrounds.

On a dark background, the PNG format of the "DEEPHEALTH_white_logo" (Figure 8) and "DEEPHEALTH_white_horiz_logo" (Figure 9), "DEEPHEALTH_dark bkg_horiz_logo" (Figure 12), "DEEPHEALTH_all light blue_logo" (Figure 10) and "DEEPHEALTH_all light blue_horiz_logo" (Figure 11) are expected to be used depending on the exact colour of the background. The first two could be used on all dark backgrounds while in dark blue and black all of them can be used. For dark blue and black backgrounds, the 3rd one or the last two are suggested.

4.1.2 Project presentation template

Based on the designed logo and the selected colour palette, the presentation template depicted in Figure 13 was created. Note that Figure 13 depicts only a few of the available slides in the DeepHealth master view.

The presentation template is available (both in 16:9 and 4:3 formats) at the folder "04_Logos and Templates/PPTs" of the Sharepoint. The partners are advised to use the 16:9 format unless they are explicitly requested for a 4:3 format.

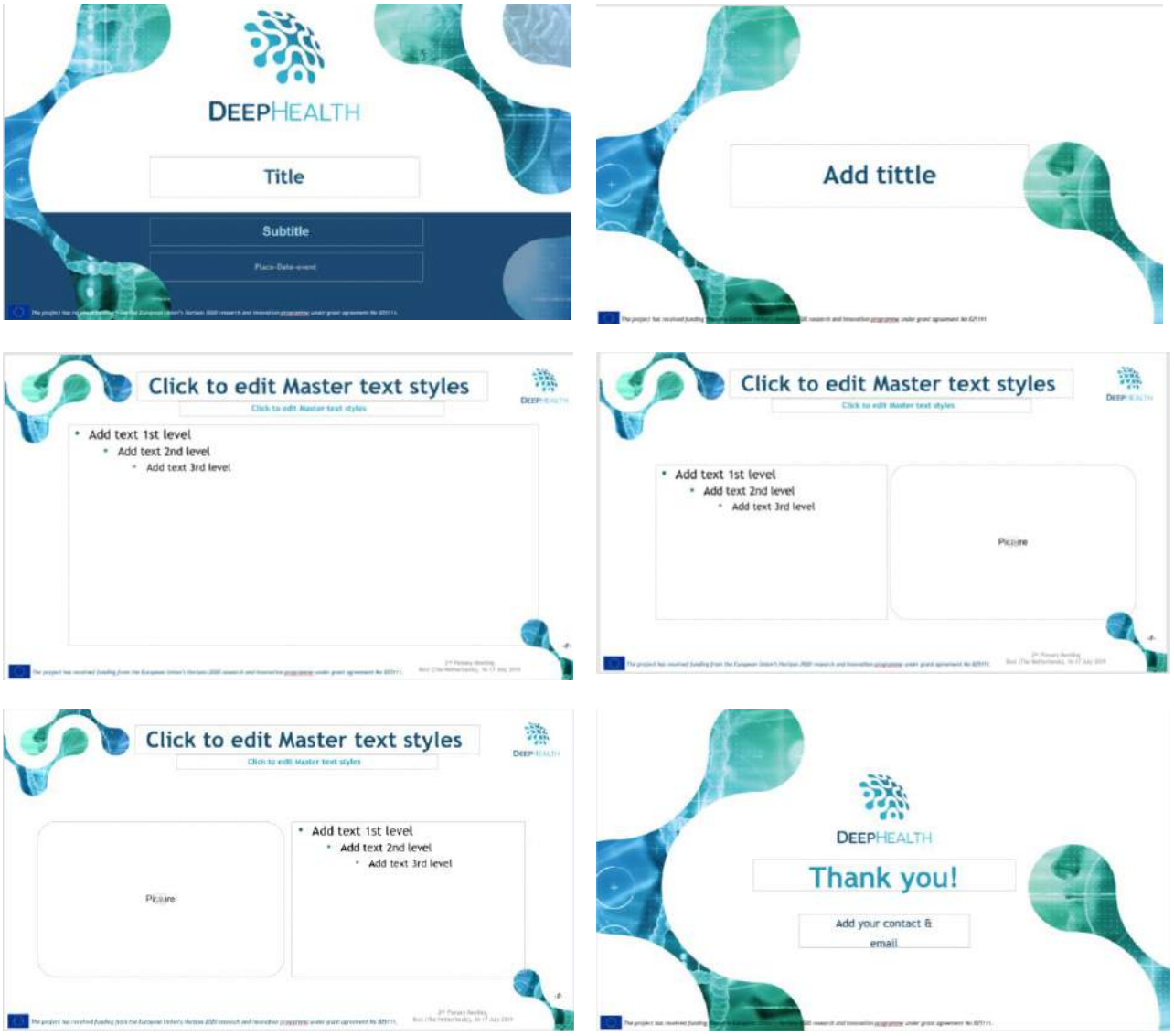

Figure 13. DeepHealth presentation template - indicative slides

4.1.3 DeepHealth leaflet

Similarly, the following template (see Figure 14) can be used for the leaflets to be produced during the DeepHealth lifetime.

The template is available at the Sharepoint under the folder "04_Logos and Templates".

Figure 14. DeepHealth leaflet template

4.2 Promotional materials

Recognizing the need for a common promotion strategy so as to better raise awareness of the DeepHealth project, an internal (to the consortium) document that summarizes the basic key messages of the project has been created. Any consortium partner can access it through the Sharepoint (WP7_Dissemination and Exploitation / T7.1 – Project presentation, website and maintenance / Communication Material) and use the provided text for press releases, announcements in their websites, newsletter, social media accounts, etc.

These main messages have also been used for a 1st version of the DeepHealth flyer to be used for raising awareness of the project across different events (conferences, workshops, invited talks, etc.) that the consortium partners will participate. Figure 15 and Figure 16 depict the front and the back page of this first DeepHealth flyer version. Currently, partners are working on it to produce the final version that will be offered in its digital version for partners to print when needed, as well as be uploaded to the project website.

The messages will be also included in a Project Presentation that is going to be created and which is currently on-going work. This project presentation, created in MS Powerpoint, could be distributed in PDF format and be published in the website, and could also serve partners to create specific and tailored presentations to introduce the project when needed.

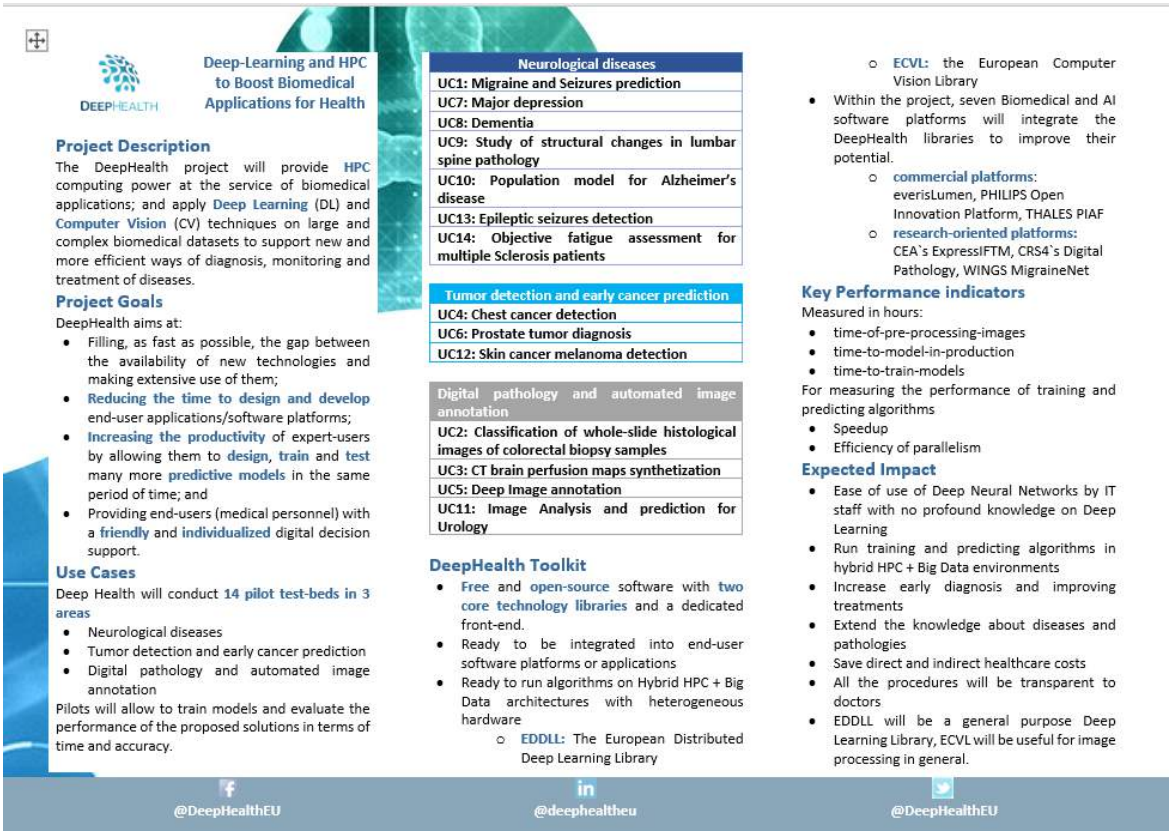

Figure 15. DeepHealth flyer - front page

Figure 16. DeepHealth flyer - back page

4.3 Newsletters

Stakeholders and interested parties can also follow DeepHealth news through the project's newsletters. To do so, they may subscribe using the form depicted in Figure 17 and available through the DeepHealth website (Downloads → Newsletter). Through the same webpage, one will also be able to download any newsletter that he/she may have missed.

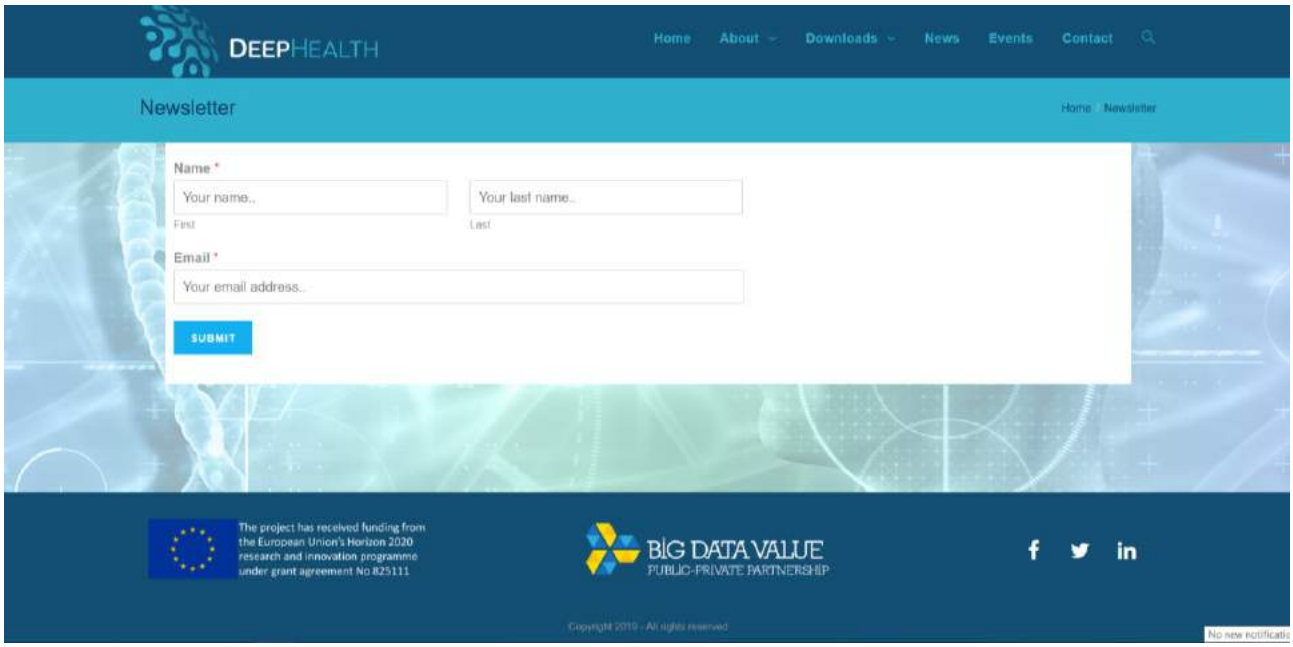

Figure 17. DeepHealth Newsletter webform registration

The aim is to distribute a minimum of two newsletters per year, although frequency may increase specially during the last year of the project. The next newsletter is planned for October 2019.

Furthermore, DeepHealth will also exploit their collaboration with the BDV PPP (see Section 7.1 for more details) and will publish regularly its news on the BDVA newsletter. A BDV PPP / BDVA newsletter is published every month and is sent to more than 1500 subscribers. Therefore, it is considered to be a very useful tool to present the DeepHealth work as part of the whole ecosystem.

4.4 Other communication channels

Apart from the official DeepHealth communication channels, DeepHealth partners will also use their affiliations communication (and sometimes personal) channels to promote DeepHealth objectives, messages and outcomes. In particular, partners' websites, social media, newsletters and other networks (e.g., Big Data Value Association – BDVA – through EVR, UPV and WINGS, Council on Electronic Design Automation – CEDA – through EPFL and High Performance and Embedded Architecture and Compilation - HiPEAC – through EFPL) will contribute to the DeepHealth communication activities depending on their institutions' common practices. Press releases and other media (non-scientific) publications (e.g., Blog posts and digital articles) are also encouraged and supported through the "basic key messages" available to all partners at the Sharepoint (WP7_Dissemination and Exploitation / T7.1 – Project presentation, website and maintenance / Communication Material).

4.4.1 Partners' websites

Table 3 summarizes the partners' websites that will be used for DeepHealth communication activities followed by their target groups and language in which the content is provided while Table 4 provides the DeepHealth links in partners' websites.

Table 3. Partners' website that will be used for DeepHealth communication activities

Partner	Website link	Target group	Language
EVR	www.everis.com	the general public, Industry	Spanish/English
UPV	www.prhlt.upv.es	the general public, Industry, Academics	Spanish/English
SIVECO	www.siveco.ro	the general public, media, Industry	Romanian / English
WINGS	https://wings-ict-solutions.eu/	the general public, media, Industry, Academics	English
CEA	http://www-list.cea.fr/	the general public, Industry, academics	French / English
UNITO	www.di.unito.it, www.unito.it	Industry, Academics	English / Italian
UNIMORE	http://aimagelab.unimore.it	the general public, media, Industry, Academics	English
CRS4	http://www.crs4.it/	the general public	English / Italian
CDSS	https://www.cittadellasalute.to.it	the general public, media, academics, Radiologists, radiographers	Italian
OVGU	www.kpsy.ovgu.de	the general public, media, Industry, Academics	English
SCHTB	https://burghele.ro/	the general public, media, Industry, Academics	Romanian
EPFL	https://esl.epfl.ch/	the general public, academics	English
CHUV	http://neurotech.healthcare/	the general public, Industry, Academics	English
TREE	http://treetk.com/en	the general public, media	Spanish/English
PRODESIGN	https://www.prodesign-europe.com/en/home	the general public, media, Industry, Academics	English

Table 4. DeepHealth information in partners' websites

Partner	Link
UPV	https://www.prhlt.upv.es/wp/project/2019/deephealth-deep-learning-and-hpc-to-boost-biomedical-applications-for-health
WINGS	https://wings-ict-solutions.eu/projects/verticals/deephealth
UNIMORE	http://imagelab.ing.unimore.it/imagelab/project.asp?idprogetto=74
TREE	http://treetk.com/en/R&D_DeepHealth.html
BSC	https://www.bsc.es/research-and-development/projects/deephealth-deep-learning-and-hpc-boost-biomedical-applications

4.4.2 Partners' social media accounts

Table 5 summarizes the partners' social media accounts that will be used for communicating DeepHealth activities and news. Depending on the language, the social media may have a broader or a wider outreach. Besides, some individual partners will also use their personal Social Media Accounts to spread the word. Examples in twitter are: Monica Caballero - @MonKnighG (Project Coordinator) and Jorge Albericio -@albericious (EVR), Roberto Paredes - @RobertoParPal (UPV) or Maria de la Iglesia - @maigva (FISABIO).

Table 5. DeepHealth partners social media accounts

Partner	Twitter		Facebook		LinkedIn	
	Account	Language	Account	Language	Account	Language
EVR	https://twitter.com/everis (Spanish tweets) https://twitter.com/everis_EN (English tweets)	Spanish/ English	https://www.facebook.com/everis/	Spanish	https://www.linkedin.com/company/everis/	Spanish
SIVECO	https://twitter.com/SIVECORomania	Romanian / English	https://www.facebook.com/siveco	Romanian	https://www.linkedin.com/company/siveco-romania/	Romanian / English
WINGS	https://twitter.com/wings_ict	English	https://www.facebook.com/WINGS.ICT/	English	https://www.linkedin.com/company/wings-ict-solutions/	English
CEA	Not available	Not applicable	Not available	Not applicable	https://www.linkedin.com/company/cea-tech/	French
UNITO	https://twitter.com/diunito	English / Italian	https://www.facebook.com/diunito/	English / Italian	https://www.linkedin.com/company/diunito/	Italian
OVGU	https://twitter.com/ovgupresse	German	https://de-de.facebook.com/OVGU.Magdeburg/	German	https://de.linkedin.com/school/otto-von-guericke-university-magdeburg/	German
CRS4	https://twitter.com/crs4research	Italian	https://www.facebook.com/pg/crs4fb	Italian	https://www.linkedin.com/company/crs4/	Italian
TREE	https://twitter.com/treelogic	Spanish/ English	Not available	Not applicable	https://www.linkedin.com/company/treelogic/	Spanish/ English

4.4.3 Press releases

To communicate the projects results to the public, suitable press releases will be drawn up at appropriate times during the project. Table 6 provides information with respect to the partners that envision to release DeepHealth information to the press.

Table 6. Partners common practices with respect to press releases

Partner	Language	Geographical coverage	Envisioned number during the project
EVR	Spanish / English	EUROPE/ LATAM	3
CDSS	Italian	Piedmont and Italy	5
OVGU	German	Germany	1
EPFL	English	International	2
TREE	Spanish	Spain	1

Accordingly, Table 7 summarizes the press releases conducted by DeepHealth partners based on their affiliation practises while Figure 18, Figure 19 and Figure *20* depict part of these press releases.


europa press

europapress / c. valenciana / valencia innova

La UPV y Fisabio participan en un proyecto europeo para usar Big Data e Inteligencia Artificial en Medicina

Publicado 17/04/2019 17:32:34 CET

VALÈNCIA, 17 Abr. (EUROPA PRESS) -

Investigadores de la Universitat Politècnica de València (UPV) y Fisabio participan en un proyecto europeo que estudia el uso del Big Data y la Inteligencia Artificial al servicio de la medicina. El objetivo es desarrollar un sistema de reconocimiento de patrones que ayude al diagnóstico de enfermedades a partir de imágenes médicas.

Los expertos valencianos han recibido 12,7 millones de euros de la Unión Europea para participar activamente en el desarrollo de un software para el análisis y almacenamiento de gran cantidad de datos, principalmente imágenes médicas, que sirva como herramienta de apoyo a los facultativos en el proceso de toma de decisiones sobre el diagnóstico.

Últimas noticias / C. Valenciana

- El examen de Matemáticas II de las PAU arroja una nota media de 4,47 y un 42,9% de aptos
- Dianne Reeves presenta su disco 'Beautiful Life' este jueves en el Festival Internacional de Jazz de Peñíscola
- Una exposición rendirá homenaje a los 60 años del Festival de la Canción de Benidorm

Figure 18: Press release by FISABIO


everis

what we do industries careers about us newsroom

everis to coordinate a European initiative aimed to improve patient diagnosis using Artificial Intelligence

Tuesday, 23 April, 2019

everis coordinates DeepHealth, a European initiative funded within the Horizon 2020 programme, whose objective is to address the health sector's needs and to help doctors in their daily work.

DeepHealth will use High Performance Computing to improve biomedical applications, applying forefront features based on Deep Learning, Artificial Intelligence and Computer Vision to deliver new efficient tools for diagnosis, monitoring and disease treatment. The initiative, active until December 2021, will be funded with 12 million Euro and will have 21 partners from 9 EU countries, representing key sector players such as health organisations, research centres and industrial partners.

DeepHealth's objective is to offer a unified, flexible, scalable and adapted framework. The idea is to combine High Performance Computing with Big Data environments to improve the scope of work of medical professionals regarding biomedical image labelling

Figure 19: Press release by EVERIS

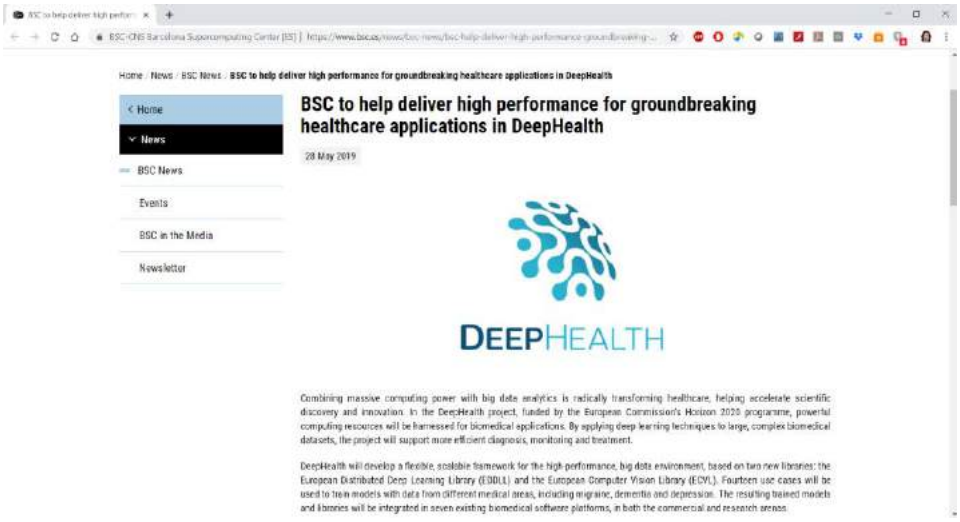

Figure 20. Press release by BSC

Table 7. Press releases from DeepHealth partner

Partner(s)	Title	Date	Audience	Nº persons reached	Geogr. relevance	Focus
FISABIO	Researchers from the UPV & FISABIO participate in a European project that analyses the use of Big Data & AI in medical sciences[1] (Figure 18)	17/04/19	General Public	>5000	Global	General presentation of the project and UPV & FISABIO roles
EVERIS	EVERIS to coordinate a European initiative aimed to improve patient diagnosis using Artificial Intelligence[2] (Figure 19)	23/04/19	General Public	>5000	Global	General presentation of the key lines of the DeepHealth
BSC	BSC to help deliver high performance for groundbreaking healthcare applications in DeepHealth[3] (Figure 20)	28/05/19	Scientific Community (Higher Education, Research)	>50	EU	General presentation of the project and BSC role

1 https://www.europapress.es/comunitat-valenciana/innova-00214/noticia-upv-fisabio-participan-proyecto-europeo-usar-big-data-inteligencia-artificial-medicina-20190417173234.html

2 https://www.everis.com/global/en/news/newsroom/everis-coordinate-european-initiative-aimed-improve-patient-diagnosis-using-artificial

3 https://www.bsc.es/news/bsc-news/bsc-help-deliver-high-performance-groundbreaking-healthcare-applications-deephealth

4.4.4 Other media (non-scientific) publications

Apart from the press releases, other media publications will also be used for disseminating the project activities and outcomes. These may include (but are not limited to) those listed in Table 8.

Table 8. Partners common practices with respect to other media publications

Partner	Media type	Language	Geographical coverage	Frequency of releases
EVR	Blog Post and Digital Articles	Spanish / English	EUROPE/ LATAM	Quarterly
PRODESIGN	Elektronik Praxis of Vogel Verlag	German	Europe	ard. 10,000 copies

For example, Radio Valencia, CADENA SER, on May 5th, 2019, published the article "Big Data para mejorar diagnósticos médicos" referring to researchers from the UPV & FISABIO participating in a European project that analyses the use of Big Data & AI in medical sciences. The article can be found at https://cadenaser.com/emisora/2019/05/02/radio_valencia/1556792172_111769.html (*Figure 21*) and has already reached 480,000 persons.

Figure 21. Article from the Radio Valencia, CADENA SER

Diario Medico de Valencia (magazine) on-line and printed, on May 15th, 2019, has also published the article "'Big data' e IA en busca de patrones diagnósticos" after interviewing Maria de la Iglesia-Vayà (FISABIO), Jon A. Gómez (UPV) and Monica Caballero (EVR) with respect to the DeepHealth project. The digital version of the article can be found at https://www.diariomedico.com/tecnologia/big-data-e-ia-en-busca-de-patrones-diagnosticos.html (see Figure 22) and is expected to reach more than 1000 Spanish people from the industry domain.

Figure 22. Article at the Diario Medico de Valencia (magazine) on-line and printed for the DeepHealth project

5 Publications

5.1 Plan

5.1.1 Conferences

The conferences listed in Table 9 have been identified as candidates for submitting papers, presenting, promoting and disseminating DeepHealth objectives, progress and outcomes.

Table 9. Conferences of interest for the DeepHealth project

Conference	Field of Expertise	Geogr. level	Periodicity	Next (or last) event	Interested Partner(s)
High Performance and Embedded Architecture and Compilation (HiPEAC) Conference	HeLP-DC	European	annual	HiPEAC 2020 conference, https://www.hipeac.net/2020/bologna/, January 20th-22nd, 2020, Bologna, Italy.	EVR
International Conference on Future Internet of Things and Cloud (FiCloud)	IoT	Int	annual	7th International Conference on Future Internet of Things and Cloud (FiCloud 2019) - http://www.ficloud.org/2019/, August 26-18, 2019, Istanbul, Turkey	TREE
Big Things - Data & AI Conference, https://www.bigthingsconference.com/	Big Data, IoT, AI, computer vision	European	annual	8th Edition, November 20 & 21, 2019, Madrid, Spain	TREE
International Conference on Machine Learning (ICML), https://icml.cc/	Machine learning	Int	annual	37th International Conference on Machine Learning, ICML 2020, July 12-18, 2020, Vienna, Austria	UPV, CEA, UNITO
Conference on Neural Information Processing	Neural networks	Int	annual	33rd Conference on Neural Information Processing	UPV, UNITO

Systems (NIPS), https://nips.cc/				Systems (NeurIPS) 2019, December 8-14, 2019, Vancouver, Canada	
International conference on Artificial Neural Networks (ICANN)	Neural networks	Int	annual	28th International Conference on Artificial Neural Networks (ICANN 2019), https://e-nns.org/icann2019/, September 17–19, 2019, Munich, Germany	UPV, UNITO
International Conference on Pattern Recognition Systems (ICPRS), http://www.icprs.org/	Pattern recognition	Int	annual	10th International Conference on Pattern Recognition Systems (ICPRS 2019), July 8-10, 2019, Tours, France	UPV
Iberian Conference on Pattern Recognition and Image Analysis (IbPRIA), http://www.ibpria.org	Pattern recognition and image processing	Int	annual	9th Iberian Conference on Pattern Recognition and Image Analysis Madrid, Spain. July 1-4	
IEEE International Conference on Computer Based Medical Systems (CBMS)	Health and computer science, Computer Vision in Medicine or Healthcare	Int	annual	32nd IEEE CBMS International Symposium on Computer-Based Medical Systems, http://www.cbms2019.org/, June 5-7, 2019, Cordoba, Spain	UPV, UNIMORE
IEEE International Conference on Fuzzy Systems (FuzzIEEE)	AI	Int	annual	IEEE 2019 International Conference on Fuzzy Systems, https://attend.ieee.org/fuzzieee-2019/, June 23-26, 2019, New Orleans, Louisiana	CEA
International Joint Conferences on Artificial Intelligence (IJCAI), https://www.ijcai.org/	AI	Int	annual	IJCAI 2019, August 10-16, 2019, Macao, P.R. China	CEA
European Conference on Artificial Intelligence (ECAI)	AI	European	bi-annual	24th European Conference on Artificial Intelligence, http://ecai2020.eu/, June 8-12, 2020, Santiago de Compostela, A Coruña	CEA
Logique Floue et Applications (LFA)	AI	National, France	annual	28e(s) Rencontres Francophones sur la Logique Floue et ses Applications (LFA 2019), https://lfa2019.wp.imt.fr/, November 14-15, 2019, Alès, France	CEA
Computer Vision and Pattern Recognition conference (CVPR)	AI, Computer Vision, Pattern Recognition	Int	annual	Computer Vision and Pattern Recognition conference (DVPR) 2019, http://cvpr2019.thecvf.com/, June 16th-20th, 2019, Long Beach, California	CEA, UNIMORE
International European Conference on Parallel and Distributed Computing (Euro-Par)	HPC	European	annual	25th EURO-PAR Conference 2019, https://2019.euro-par.org/, Göttingen, Germany	CEA

International conference on image analysis and processing (ICIAP)	Computer vision, Pattern Recognition and Image Processing	Int	bi-annual	20th International Conference on Image Analysis and Processing, ICIAP2019, https://event.unitn.it/iciap2019/, September 9th-13th , 2019, Trento, Italy	UNITO, UNIMORE
IEEE International Conference on Image Processing (ICIP)	image processing, computer vision	Int	annual	IEEE ICIP 2019, http://2019.ieeeicip.org/, September 22nd-25th, 2019, Taipei, Taiwan	UNITO
IEEE International Conference on Multimedia and Expo (ICME)	image processing, computer vision	Int	annual	IEEE International Conference on Multimedia and Expo (ICME) 2019, https://www.icme2019.org/, July 8th -12th, 2019, Shanghai, China	UNITO
International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI)	Medical imaging and Computer Assisted Intervention	Int	annual	22nd International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI 2019), https://www.miccai2019.org/, October 13th-17th, 2019, Shenzhen, China	UNIMORE
International Conference on Computer Vision (ICCV)	Computer Vision	Int	bi-annual	International Conference on Computer Vision (ICCV) 2019, http://iccv2019.thecvf.com/, October 27th – November 2nd, 2019, Seoul, Korea	UNIMORE
European Conference on Computer Vision (ECCV)	Computer Vision	Int	bi-annual	European Conference on Computer Vision (ECCV) 2018, https://eccv2018.org/, September 8th – 14th, 2018, Munich, Germany	UNIMORE
IEEE International Conference on Bioinformatics and Bioengineering (BIBE)	Bioinformatics	Int	annual	19th IEEE International Conference on Bioinformatics and Bioengineering (IEEE BIBE 2019), https://bibe2019.ics.forth.gr/, October 28th-30th, 2019, Athens, Greece	CRS4
IEEE-EMBS International Conference on Biomedical and Health Informatics	Bioinformatics	Int	annual	IEEE-EMBS International Conference on Biomedical and Health Informatics (BHI'19), https://www.bhi-bsn-2019.org/, May 19th-22nd, 2019, Chicago, Illinois, USA	CRS4
Design Automation and Test in Europe Conference (DATE), https://www.date-conference.com/	EDA	Int	annual	DATE 2020, March 9th-13th, 2020, Grenoble, Frane	EPFL, CHUV, CEA
Design Automation Conference (DAC), https://www.dac.com/	EDA	Int	annual	DAC 2019, June 2nd-6th, 2019, Las Vegas, Nevada	EPFL
Embedded Systems Week (ESWEEK),	Comp. Engineering	Int	annual	October 13th-18th, 2019, New York	EPFL

https://www.esweek.org/					
Asia and South Pacific Design Automation Conference	EDA	Int	annual	25th Asia and South Pacific Design Automation Conference ASP-DAC 2020, https://aspdac2020.github.io/aspdac20/, January 13th-16th, 2020, Beijing, China	EPFL
International Conference on Computer Aided Design (ICCAD), https://iccad.com/	EDA	Int	annual	2019 International Conference on Computer Aided Design, November 4th-7th, 2019, Westminster, England	EPFL

5.1.2 Journals

Moreover, an indicative list of relevant high-impact journals includes (but is not limited to) the journals listed in Table 10.

Table 10. High-impact journals of Interest to DeepHealth concepts

Journal	Field of Expertise	Language	Open Access (OA)	Estimated date for submitting (Y1/Y2/Y3)	Interested Partner (s)
Pattern Recognition Letters, Elsevier	Pattern recognition including image processing	English	Elsevier Open Access policy[4]	Y2	UPV
Pattern Recognition, Elsevier	Pattern recognition including image processing	English	Elsevier Open Access policy[4]	Y3	UPV
Fuzzy Sets and Systems, Elsevier	AI	English	Elsevier Open Access policy[4]	Y3	CEA
IEEE Transactions on Fuzzy Systems	AI	English	No golden access – no information on self-archive	Y3	CEA
IEEE Trans. on Image Processing (TIP)	Image processing	English	Yes (paying)	Y3	UNITO, UNIMORE
IEEE Trans. on Medical imaging (TMI)	medical imaging	English	Yes (paying)	Y3	UNITO, UNIMORE
Journal of Pathology Informatics	Informatic applications for pathology	English	Yes	Y3	UNITO
Virchows Archiv, Springer	Pathology	English	No golden access – no information on self-archive	Y3	UNITO
Artificial Intelligence in Medicine, Elsevier	AI models and software	English	Elsevier Open Access policy[4]	Y3	UNITO, UNIMORE
Computers in Biology and Medicine, Elsevier	medical computing, Medical Informatics	English	Elsevier Open Access policy[4]	Y3	UNITO, UNIMORE
International Journal of Medical Informatics, Elsevier	computer and healthcare, Medical Informatics	English	Elsevier Open Access policy[4]	Y3	UNITO, UNIMORE
SoftwareX, Elsevier	Software	English	Elsevier Open Access policy[4]	Y2	UNITO

[4] Gold open access: $2500, excluding taxes – Green Open access: An author can also self-archive their author manuscript immediately and enable public access from their institution's repository after an embargo period.

Parallel Computing, Elsevier	Parallel Computing	English	Elsevier Open Access policy[4]	Y3	UNITO
Future Generation Computer System, Elsevier	Parallel Computing	English	Elsevier Open Access policy[4]	Y3	UNITO
Transactions on Biomedical Engineering (TBE)	Engineering development of biomedical applications, experimental and clinical investigations with engineering contributions	English	Open access available		CRS4
Giornale Italiano di Radiologia Medica	Radiology	Italian	Yes	Y3	CDSS
European Journal for Biomedical Informatics (EJBI)	data protection law, regulation, consumer, patient, policy-making, health informatics	English	Gold OA[5] and Green OA	Y3	STELAR
Computer Law & Security Review (CLSR)	data protection law, regulation, consumer, patient, policy-making, health informatics	English	Gold OA[5] and Green OA	Y3	STELAR
IEEE Trans. On Parallel and Distributed Systems (IEEE TPDS)	Comp. Arch.	English	Gold OA ($2,045) and Green OA	Y1, Y3	EPFL
IEEE Trans on Computers (IEEE TC)	Comp. Arch.	English	Gold OA ($2,045) and Green OA	Y2	EPFL
IEEE Trans on Computer Aided Design of Circuits and Systems (IEEE TCAD)	Comp. Arch.	English	Gold OA ($2,045) and Green OA	Y2	EPFL
IEEE Trans on Circuits and Systems I (IEEE TCAS-I)	Comp. Arch.	English	Gold OA ($2,045) and Green OA	Y2	EPFL
IEEE Trans on Circuits and Systems II (IEEE TCAS-II)	Comp. Arch.	English	Gold OA ($2,045) and Green OA	Y3	EPFL
IEEE Micro Journal	Comp. Arch.	English	Gold OA ($2,045) and Green OA	Y3	EPFL
IEEE Transactions on Biomedical Circuits and Systems (IEEE TBioCas)	Bio / Comp. Arch	English	Gold OA ($2,045) and Green OA	Y2	EPFL, CHUV
Epilepsia, Wiley Online Library	Epilepsia	English	Gold OA ($3,000) and Green OA	Y2	CHUV

[5] Gold OA with a fee of $ 2,400, excluding taxes

5.2 Actions performed

The current scientific and/or peer-reviewed publications that have been made so far are listed in the following table (Table 11).

Table 11. DeepHealth scientific and/or peer reviewed publications and conferences

Authors	Title	Publication / conference	Location	Date	Type[6]	Audience[7]	Nº persons reached	Geog. relevance
David Atienza (EPFL)	Brain-Inspired Many-Core Servers in the IoT Era	The 27th Euromicro International Conference on Parallel, Distributed and Network-based Processing (PDP 2019)	Pavia, Italy	13/02/19	P	SC	<500	EU
Monica Caballero (EVR), Jon Ander Gómez Adrián (UPV) and Aimilia Bantouna (WINGS)	Deep-Learning and HPC to Boost Biomedical Applications for Health (DeepHealth)	32nd IEEE CBMS International Symposium on Computer-Based Medical Systems (CBMS2019)	Cordoba, Spain	05-07/06/19	PP	SC	<100	Global
David Atienza (EPFL)	Smarter Electronic Systems to Rescue the Internet of Things	International Conference on Synthesis, Modeling, Analysis and Simulation Methods and Applications to Circuit Design (SMACD)	Lausanne, Switzerland	15-18/07/19	P	SC		Global

[6] P: Presentation; PP: Presentation and paper

[7] SC: Scientific Community (Higher Education, Research); Ind.: Industry; CS: Civil Society; GP: General Public; PM: Policy Makers; PS: Public stakeholders; Med.: Media; Inv.: Investors; Cust.: Customers

6 Events

6.1 Plan

6.1.1 Workshops, Forums, Congresses and general events

Table 12 lists the so far identified workshops, forums, congresses and general events that DeepHealth partners find interest to attend and promote DeepHealth concepts and objectives.

Table 12. Workshops, Forums, Congresses and general events of interest for the DeepHealth project

Event	Field of Expertise	Geographical level	Periodicity	Date	Interested Partner(s)
European Big Data Value Forum (EBDVF), https://www.european-big-data-value-forum.eu/	Big Data, IoT, AI, computer vision	European	annual	October 14th-16th, 2019, Helsinki, Finland	TREE, EVR, UPV, WINGS
ICT Proposer's day	ICT in general	European	annual	September 19th-20th, 2019, Helsinki, Finland [8]	EVR, WINGS
PHILIPS Public-private cooperation show	All	PHILIPS internal	annual		PHILIPS
Thales internal R&Tvevent	all	Thales internal	annual		Thales
UNIMORE hackathon	Computer Vision	Italian/ Int.	One shot		UNIMORE
Challenge on Skin Lesion Analysis Towards Melanoma Detection	Computer Vision, Medical Imaging	Int.	annual		UNIMORE
Big Data Value (BDV) Public-Private Partnership (PPP) Summit	Big Data, AI	European	annual	Approx. June, 2020 – the last event was BDV PPP 2019, June 26th-28th, 2019, Riga, Latvia	EVR, WINGS
IEEE International Parallel & Distributed Processing symposium (IPDPS), http://www.ipdps.org/	HPC	Int.	annual	34th IEEE International Parallel & Distributed Processing symposium[9] May 18th-22nd, 2020, New Orleans, Louisiana	CEA
Annual Meeting of the Association for Computational Linguistics (ACL)	Natural Language Processing	Int.	annual	57th Annual Meeting of the Association for Computational Linguistics (ACL), July 28th - August 2nd,	UNITO

[8] https://ec.europa.eu/digital-single-market/en/news/digital-excellence-forum-ict-proposers-day-2019
[9] http://www.ipdps.org/ipdps2020/2020ConferenceFlyer.pdf

				2019, Florence, Italy[10]	
Convegno Nazionale CINI sull'Intelligenza Artificiale (Ital-IA), http://www.ital-ia.it	Artificial Intelligence	National, Italy	annual	Ital-IA 2019, March 18th-19th, 2019, Rome, Italy	UNITO
Congresso Nazionale Società Italiana di Health Technology Assessment (SIHTA), https://www.sihta.it/web/	Health Technology Assessment (HTA), Health and ICT	National, Italy	annual	XII Congresso Nazionale 2019, October, 10-11, 2019[11]	CDSS, UNITO
Società Italiana di Radiologia (SIRM),	Radiology	National, Italy	bi-annual	Giornata Nazionale della Radiologia Senologica, March 8th, 2019[12]	CDSS
European Congress of Radiology (ECR), https://www.myesr.org/congress	Radiology	European	annual	ECR2020, March 11th-15th, 2020, Vienna, Austria	CDSS
World Psychiatric Association (WPA) World Congress of Psychiatry	Psychiatry	Int.	bi-annual	19th WPA World Congress of Psychiatry, August 21st-24th, 2019, Lisbon, Portugal[13]	OVGU
European Psychiatric Association (EPA) – European Congress of Psychiatry, https://epa-congress.org/	Psychiatry	European	annual	28th European Congress of Psychiatry, March 28th-31st, 2020, Madrid, Spain	OVGU
Romanian National Congress of Urology	Medicine, Urology	National, Romania	annual	www.romuro.ro	SCTHB
Romanian National Congress of Radiology	Medicine, Radiology	National, Romania	annual	https://www.srimr.ro	SCTHB
"Prof. Dr. Th. Burghele" Clinical Hospital Annual Congress	Medicine - Urology, Radiology, Cardiology, Internal Medicine	National and International Participation	annual	www.burghele.ro	SCTHB
International Symposium on High-performance Computer Architecture (HPCA)	Comp. Arch / HPC	Int.	annual	26th International Symposium on HPCA, February 22nd-26th, 2020, San Diego, California[14]	EPFL
ACM/IEEE International Symposium on Low	EDA	Int.	annual	ISLPED 2019[15] July 29th -31st,	EPFL

[10] http://www.acl2019.org/EN/index.xhtml
[11] https://www.sihta.it/web/12-congresso-nazionale-sihta/
[12] https://www.sirm.org/2019/02/07/giornata-nazionale-della-radiologia-senologica/
[13] https://2019.wcp-congress.com
[14] https://www.computer.org/conferences/cfp/HPCA2020
[15] http://www.islped.org/2019/

Power Electronics and Design (ISLPED)				2019, Lausanne, Switzerland	
International Symposium on Computer Architecture (ISCA)	Comp. Arch	Int.	annual	ISCA 46, June 22nd-26th, 2019, Phoenix, USA[16]	EPFL
International Congress on Mobile Devices and Seizure Detection in Epilepsy	epilepsy	Int.	bi-annual	2nd International Congress on Mobile Devices and Seizure Detection in Epilepsy September 6th-7th, 2019, Lausanne, Switzerland[17]	CHUV

6.1.2 Trade and Industrial fairs

Table 13 accordingly lists the trade and industrial fairs where DeepHealth DeepHealth concepts and objectives can be discussed and promoted.

Table 13. Trade and Industrial fairs of interest for the DeepHealth project

Event	Field of Expertise	Geographical level	Periodicity	Link	Partner
T3chFest, March 12-14, 2020, Madrid, Spain	Big Data, IoT, AI	Spain	annual	https://t3chfest.uc3m.es/2020/	TREE
ISC High Performance 2020, June 21st – 25th, 2020, Frankfurt, Germany	High Performance Computing	Int.	annual	https://www.isc-hpc.com/	CHUV, PRODESIGN
SC 2019, November 17th-22nd, 2019, Denver, Colorado	Super Computing	Int.	annual	https://sc19.supercomputing.org/	CHUV, PRODESIGN

[16] https://iscaconf.org/
[17] https://www.ilae.org/congresses/2nd-international-congress-on-mobile-devices-and-seizure-detection-in-epilepsy

6.2 Actions performed

The DeepHealth participations at various events (conferences, workshops, others) are listed in the following table.

Table 14. DeepHealth participations at events (conferences, workshops, others) without peer-review

Speakers / Presenters	Title	Event	Location	Date	Event Type[18]	Audience[7]	Nº persons reached	Geogr. relevance
Marco Grangetto (UNITO)	Deep Learning e calcolo ad alte prestazioni per l'elaborazione di immagini biomediche	Workshop AI for Health and Medicine (http://www.ital-ia.it/workshop/ai-for-health-and-medicine)	Rome, Italy	18/03/19	PartWork – PP[6]	SC	<500	National
Daniel Jimenez (EVR)	DeepHealth: Big Data, HPC e Inteligencia Artificial en busca de patrones biomédicos	Everis DNextConBNC19 / DnextConZGZ19	Barcelona,/ Zaragoza Spain /	24/05/19 / 19/07/19	PartConf	Ind	<500	National (internal everis)
Jon Ander Gómez Adrián (UPV)	Deep-Learning and HPC to Boost Biomedical Applications for Health (DeepHealth)	2nd Big Data for Precision Medicine Symposium (BDPM 2019)	Cordoba, Spain	04/06/19	PartOther	SC	<50	Global
T. Bäthge, N. Rudolph, A. Savchenko, J. Klemen, S. Wolter, H. dobrowolny, T. Frodl, R. Findeisen (OVGU)	Deep Learning Driven Personalised Medicine	AI Workshop	Magdeburg, Germany	12/06/19	PartWork	SC	<100	National

[18] **PRP**: Scientific and/or peer-reviewed publications; **JAct**: Participation in activities organized jointly with other EU project(s); **PartConf**: Participation to a Conference; **PartWork**: Participation to a Workshop; **PartOther**: Participation to an Event other than a Conference or a Workshop; **OrgConf**: Organisation of a Conference; **OrgWork**: Organisation of a Workshop; **Web**: Website; **PrR**: Press releases; **SM**: Social Media; **Exh**: Exhibition; **F**: Flyer; **NSP**: Non-scientific and non-peer-reviewed publications (popularised publications); **Tr**: Training

7 Collaborations

As part of its Dissemination and Communication plan, DeepHealth also aims to establish collaborations and public relations with other organizations and projects to contribute to raise awareness and communicate our project.

7.1 Big Data Value Association (BDVA)

DeepHealth, being one of the ICT-11 projects, have already been engaged with the Big Data Value Association (BDVA) activities in this area and become part of the BDV PPP community. In this context Monica Caballero from EVR participates in the Steering and the Communication Committee, Jon Ander Gómez Adrián from UPV participates in the Technical Committee, Aimilia Bantouna from WINGS participates in the Communication Committee and Marco Grangetto from UNITO participates both in the Technical and the Communication Committee. Table 15 summarizes the so-far performed activities of the DeepHealth project in the context of the BDV PPP community while the project will also be represented by Monica Caballero (EVR) and José Flich (UPV) in the upcoming European Big Data Value Forum 2019 (at the HPC session) that will take place in Helsinki, Finland, 14-16 Oct. 2019. Monica Caballero will make a brief introduction of the project while Jose Flich will detail on the HPC aspects and outcomes of the project.

Table 15. DeepHealth dissemination and communication activities in the BDV PPP community

Involved Partner	Title	Event	Location	Date	Event Type	Audience[7]	*Nº* persons reached	Geographical relevance
Monica Caballero (EVR)	DeepHealth- Deep-Learning and HPC to Boost Biomedical Applications for Health	BDVA Activity Group meeting (AG31) - http://www.bdva.eu/node/1227	Brussels, Belgium	27/02/19	Presentation	Ind.	<50	EU
Aimilia Bantouna (WINGS)	DeepHealth: Deep-Learning and HPC to Boost Biomedical Applications for Health (http://www.big-data-value.eu/deephealth-deep-learning-and-hpc-to-boost-biomedical-applications-for-health/)	Big Data Value PPP / BDVA Newsletter April 2019	NA	03/05/19	Newsletter article	SC	<500	Global

7.2 Collaboration with other ICT-11 and related projects

DeepHealth has also already established contact with the rest of ICT-11 projects LEXIS, EVOLVE, and CYBELE. The common framework of the BDV PPP also help us to do it.

At current an initial cooperation has started to organize a joint workshop at HiPEAC (HeLP-DC) around HPC and Big Data. Besides, some preliminary conversations have been held to collaborate in future pilots.

Furthermore, connection with other projects also working around HPC, Big Data, AI and Health are planned during the project. One example is the first interactions with the DataBench[19] project to explore collaboration with DeepHealth.

8 Impact assessment

Table 16 presents the Key Performance Indicators (KPIs) that will be used for the DeepHealth project for measuring the dissemination and/or communication activities impact, the targeted value as well as the impact achieved within the first seven (7) months of the project.

Table 16. Key Performance Indicators (KPIs) per dissemination/communication activity

Included in the GA	Activity	KPI	Target	Means of verification	Achieved so far
Y	Scientific and/or peer-reviewed publication	Number of journal paper submission during the project lifetime	15	Proof in Dissemination Reports	0
Y	Organisation of a Workshop	Number of workshops organized during the project lifetime	2	Proof in Dissemination Reports	0
Y	Organisation of a Workshop	Attendance per Workshop	30	Proof in Dissemination Reports	0
N	Press releases	Number of articles, sector press with project acknowledgements during the project lifetime	>5	Proof of publication and reporting in the dissemination reports	3
Y	Non-scientific and non-peer-reviewed publication (popularised publication)	Number of submissions in Magazines and technical press during the project lifetime	2	Proof in Dissemination Reports	2
Y	Exhibition	Number of Tutorials and/or Demos given during the project lifetime	5	Proof in Dissemination Reports	0

[19] https://www.databench.eu/the-project/

Y	Exhibition	Number of industrial exhibitions during the project lifetime	2	Proof in Dissemination Reports	0
Y	Exhibition	Number of medical exhibitions during the project lifetime	2	Proof in Dissemination Reports	0
Y	Exhibition	Attendance per tutorial/Demo	20	Proof in Dissemination Reports	0
Y	Training	Number of attendees in Summer/Winter School	60	Proof in Dissemination Reports	0
Y	Training	Number of academic institutions giving courses during the project lifetime	4	Proof in Dissemination Reports	0
Y	Training	Number of graduated students integrated in the project during the project lifetime	7	Proof in Dissemination Reports	0
N	Social Media, Twitter account	Number Followers in Twitter by the end of the project	>100	Twitter Analytics	53
N	Social Media, Twitter account	Number of Tweets by the end of the project	>150	Twitter Analytics	14
N	Social Media, Twitter account	Twitter Impressions	>4.000	Twitter Analytics	1,373
N	Social Media, Facebook account	Number of Followers in Facebook by the end of the project	>100	Facebook analytics	22
N	Social Media, Facebook account	Number of posts in Facebook by the end of the project	>150	Facebook analytics	4
N	Social Media, Twitter account	Number Followers in LinkedIn by the end of the project	>100	LinkedIn analytics	36
N	Social Media, Twitter account	Number of posts in LinkedIn by the end of the project	>150	LinkedIn analytics	5
Y	Website	Unique visitors per month by the end of the project	250	Google Analytics	44

Y	Website	Page view per month by the end of the project	1000	Google Analytics	302
Y	Website	New versus returning ratio by the end of the project	25 (-75%)	Google Analytics	61.4%
N	Website	Number of web visits by the end of the project	>4.500	Google Analytics	60
N	Website	Number of pages / session by the end of the project	>3.0	Google Analytics	5.03
N	Website	Avg. session time by the end of the project	>2.00 min	Google Analytics	4.5 min
Y	Participation to a Conference Participation to a Workshop	Number of conference and workshops paper submissions during the project lifetime	30	Proof in Dissemination Reports	6
Y	Newsletters	Number of newsletters per year	2	Proof in Dissemination Reports	1 (BDVA newsletter)
Y	Newsletters	Number of recipients by the end of the project	200	Proof in Dissemination Reports	300-500

9 Guidelines and procedures

9.1 Dissemination of Results – Intellectual Property (IP) protection measures

9.1.1 Legal basis

According to **Article 29.1 of the GA** each partner should disseminate its results, always taking into account the confidentiality agreements set in the GA and CA. This article governs the dissemination process during the project and for a period of 1 year after the end of the Project. This article states that a beneficiary that intends to disseminate must give **advance notice to the other beneficiaries of at least 45 days**, together with sufficient information on the results it will disseminate. Any other beneficiary may **object within 30 days** of receiving notification, if their legitimate interests in relation to the results or background would be significantly harmed. In such cases, dissemination may not take place unless appropriate steps are taken to safeguard these legitimate interests.

Section 8.4.2 of the Consortium Agreement governs dissemination of own results and specifies under which grounds an objection is justified:

a) the **protection** of the objecting Party's Results or Background would be **adversely affected**
b) the objecting Party's legitimate **interests in relation to the Results or Background** would be significantly **harmed**.
c) the proposed publication includes **Confidential Information** of the objecting Party

However, as it is also specified in the **CA in sections 8.4.3 and 8.4.4**, the objection has to include a precise **request for necessary modifications** and the involved Parties shall discuss how to overcome the justified grounds for the objection **on a timely basis** (for example by an amendment to the planned publication) and the **objecting Party shall not unreasonably continue the opposition** if appropriate measures are taken following the discussion. The Parties undertake to cooperate to allow the **timely submission, examination, publication and defence of any dissertation or thesis** for a degree that includes their Results or Background subject to the confidentiality and publication provisions agreed in this Consortium Agreement.

9.1.2 Responsibilities

The **Innovation Manager (IM)** is responsible for **establishing protocols and guidelines** so that partners are aware of exploitation concerns when disseminating, as well as communicating these procedures to the partners and supporting them with his advice in case of questions. The Innovation Manager also has responsibility to monitor and follow up notifications of dissemination actions.

The identification of potential confidential breaches or the identification of disclosure of potential exploitable results **do not fall under the IM's responsibilities**. The IM does not have the technical knowledge so as to know the current state of the art of the technology and which of the stated information corresponds to new developments carried out within the project. It is each partner's responsibility to check this and ask any questions to the innovation manager.

It is **each partner's responsibility not to disclose information which may jeopardise subsequent exploitation of the results**. For this, it is their responsibility to ask the partners whose results/background appear in the contents to be disseminated if they agree with disclosing that information to the public and to check if there is a risk for further protection of results, according to article 29.1 of the Grant Agreement.

It is **each partner's responsibility to revise** the contents that other partners are going to disseminate and to check if they jeopardise the protection of their results, their legitimate interests or if they include confidential information. In order to facilitate this, the IM has established the notification protocols mentioned below.

If they object to publication, it is **each partner's responsibility** to justify why and to discuss how to overcome the justified grounds for the objection **on a timely basis by including a precise request for necessary modification.**

9.1.3 IP protection dissemination protocol

In order to ensure compliance of the aforementioned GA and CA obligations and adapt them to the consortium's needs, the following IP protection dissemination protocol, together with the associated notification mechanisms, questionnaire and guidelines described below, are defined and presented in Figure 23:

1. Once you know your company is going to carry out a dissemination action, answer the **risk assessment questions** to assess the need to notify intention to disseminate. If you comply with these questions, you have green light to disseminate without prior notification to the partners. However, remember to notify the dissemination manager according to the processes described in the DeepHealth Dissemination and Communication Plan (DCP).
2. *Two **notification mechanisms** have been defined in order to adapt GA and CA obligations to each situation and* ensure a seamless as well as secure dissemination.
    a. Follow the **standard notification protocol** if you know you are going to carry on a dissemination action 45 days in advance.
    b. If there is not sufficient time to implement the standard notification protocol, follow the **urgent notification period**.

In addition to the previous protocol, have a look at the **IP protection dissemination guidelines** (section 9.1.4) described below before elaborating your dissemination materials. They will help you avoid IP protection risks and accelerate the approval process.

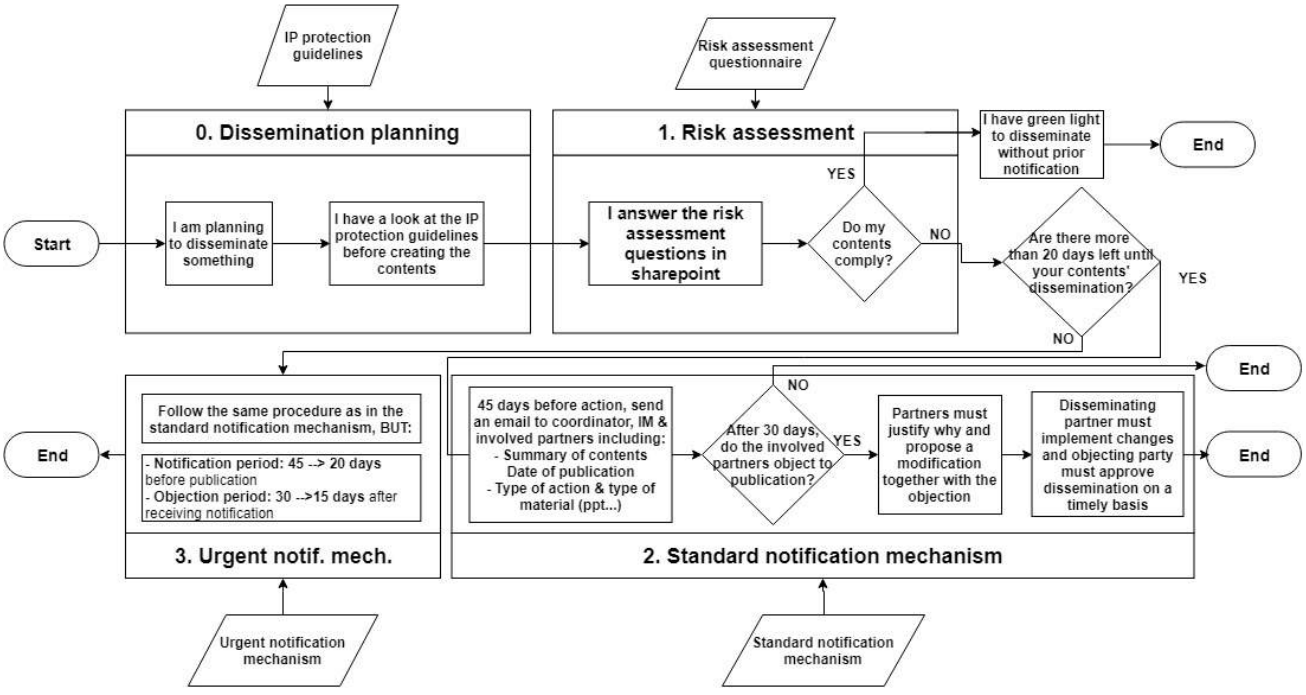

Figure 23. IP protection dissemination protocol flowchart

9.1.3.1 IP protection risk assessment questionnaire

If you stay within the contents of the **supporting communication materials** provided by the project and available at the "WP7_Dissemination and Exploitation / T7.1 - Project presentation, website and maintenance / Communication Material" folder of the Sharepoint, you will not have to deal with the notification protocols defined in sections 9.1.3.2 and 9.1.3.3. However, it is your responsibility to ensure this, as stated in section 9.1.2 Responsibilities. Answering the questions below, risk of

disseminating a specific material can be assessed and therefore your material can be **published without prior notification to the partners**:

A) Is the content of your material entirely based on the supporting communication materials or on materials which have already been disseminated or publicly available?
   - Yes → You have **green light** and there is no need for you to follow either of the notification mechanisms.

B) Does your material contain information or images from other partner's results (see guideline 5 in section 9.1.4), confidential information (see guideline 3 in section 9.1.4) or background (see guideline 4 in section 9.1.4)?
   - No → You have **green light** and there is no need for you to follow any of the notification mechanisms. However, please remember also to check whether you are jeopardizing your own result's exploitation (see guideline 6 in section 9.1.4). If you have questions, you can ask the Innovation Manager.

In any other case, you must follow the notification protocols described below.

9.1.3.2 Standard notification mechanism

1) The partner intending to disseminate shall inform DeepHealth coordinator, Innovation Manager and the involved partners via email at least **45 days before** final submission (**notification period**), including the following information:
   a) **Summary** in a paragraph of what they intend to disseminate
   b) Which **information about other partners** they intend to include (including images, etc.)
   c) **Type of activity** (Scientific publication, Conference, Workshop, Press release, etc.)
   d) **Supporting material** (publication, presentation, speaking notes, video, email, press release, flyer or brochure, images/photos, etc.)
   e) **Date** of submission/dissemination

Table 17. IP Protection Dissemination Protocol - Notification mechanism

IP Protection Dissemination Protocol - Notification mechanism						
Partner disseminating	***Dissemination Action Date***	***Type of activity***	***Supporting material***	***Summary of information disseminated***	***Which partners are you including info about (please write a line per partner)***	***information about other partners which you intend to include (including written information, pictures, snapshots, etc.)***

2) The involved partner(s) will check whether the material has any risk for subsequent protection of results, if this is intended and/or if they can be harmed in any way by this dissemination and notify the disseminating partner within 30 days (**objection period**). DeepHealth's Innovation Manager will revise that the process is followed correctly.
   a) If there is **no risk** in disseminating, the involved partner(s) will notify the disseminating partner and the content can be published as soon as this is notified.
   b) If the **partner objects** to disseminate the content:
      i) The objecting partner(s) should **justify why** (i.e., the protection of the objecting Party's Results or Background would be adversely affected; or the objecting Partner/s legitimate academic or commercial interests in relation to the Results or Background would be significantly harmed).
      ii) The objecting partner should propose how to overcome the justified grounds for the objection on a timely basis by including a **precise request** for necessary modification or stating which information shall not appear in the material. The disseminating party shall take this into account when writing or updating the content.
      iii) After writing or revising the material based on the feedback, the objecting partner(s) **approves the material on a timely basis (**within dissemination deadline), provided that the disseminating partner has performed the requested changes.

9.1.3.3 Urgent notification mechanism

When there is not sufficient time to implement the standard notification protocol (e.g. the opportunity has appeared just recently), an **urgent notification protocol** is established, which can be used if partners do not know that a dissemination action will take place 45 days in advance. The General Assembly has approved this Urgent notification mechanism, which shortens notification and objection periods as follows:

- **Notification period**: At least 20 days before the publication date.
- **Objection period**: 15 days after receiving the notification or sooner.

9.1.4 IP protection dissemination guidelines

These guidelines help the partners take into account that other partners' legitimate interests in relation to the results or background protection cannot be harmed. They support the partners when elaborating materials to be disseminated to stay on the safe side and not to disclose issues which may jeopardize exploitation. Their intention is to **accelerate the dissemination approval** by other partners.

1. ***Already published/disseminated materials*** *will be uploaded to the repository established in sharepoint. They can also be* ***checked*** *in case of questions about risk of unnapropriate disclosure, since they have already been approved for dissemination.*
2. *When* ***writing about other partners****, check that information provided by them (Name, brands/trademarks/product's name, logos, corporate description, etc.) is correct.*
3. Each partner will deal with other partners' information as **confidential unless otherwise stated** and will not disclose it to third parties unless the information is publicly available (this is stated in GA article 36) or the other partner has given prior written approval.
4. ***It is mandatory to check with the involved partner*** *any information concerning their* ***background or confidential information*** *(technical info, software screenshots, pictures where their staff/facilities/products appear, etc.) to see if they agree with the publication.*
5. ***It is mandatory to check with the involved partner*** *technical information about developments concerning* ***results*** *present in the excel sheet* ***DeepHealth Outcomes Template_merged*** *available in sharepoint in Task 7.3 folder as these shall not be disclosed*

*before checking with the involved partner(s). This is especially relevant in case the results have **exploitation interest** stated as "YES" (in column "Do you want to do a commercial and/or sustainable exploitation?").*

6. It is also mandatory to check whether you are **jeopardizing your own result's exploitation**. If you have questions about this, you can ask the innovation manager.

9.2 Open access publications and data

As of the articles 29.2 and 29.3 of the DeepHealth Grand Agreement (GA), each beneficiary must ensure open access (free of charge online access for any user) to all peer-reviewed scientific publications relating to its results.

In particular, it must:

a) as soon as possible and at the latest on publication, deposit a machine-readable electronic copy of the published version or final peer-reviewed manuscript accepted for publication in a repository for scientific publications; Moreover, the beneficiary must aim to deposit at the same time the research data needed to validate the results presented in the deposited scientific publications.
b) ensure open access to the deposited publication — via the repository — at the latest:
   a. on publication, if an electronic version is available for free via the publisher, or
   b. within six months of publication (twelve months for publications in the social sciences and humanities) in any other case.

b) ensure open access — via the repository — to the bibliographic metadata that identify the deposited publication. The bibliographic metadata must be in a standard format and must include all of the following:
   a. the terms "European Union (EU)" and "Horizon 2020";
   b. the name of the action, acronym and grant number;
   c. the publication date, and length of embargo period if applicable, and
   d. a persistent identifier

Similar terms apply for the research data as well. However, both articles apply to the extent that they do not jeopardize exploitation plans of the partners and without changing the obligation to protect results in Article 27, the confidentiality obligations in Article 36, the security obligations in Article 37 or the obligations to protect personal data in Article 39, all of which still apply.

In the light of the above-mentioned articles, DeepHealth partners may use any of the following open access options for their publications:

- *Open access publishing (also called 'gold' open access)* means that an article is immediately provided in open access mode by the scientific publisher. The associated costs are usually shifted away from readers, and instead (for example) to the university or research institute to which the researcher is affiliated, or to the funding agency supporting the research. Gold open access costs are fully eligible as part of the grant. Note that if the gold route is chosen, a copy of the publication has to be deposited in a repository as well.
- *Self-archiving (also called 'green' open access)* means that the published article or the final peer-reviewed manuscript is archived by the researcher - or a representative - in an online repository before, after or alongside its publication. Access to this article is often - but not necessarily - delayed ('embargo period'), as some scientific publishers may wish to recoup their investment by selling subscriptions and charging pay-per-download/view fees during an exclusivity period

The open access publications will accordingly become available through:

- the DeepHealth ZENODO (https://zenodo.org/communities/deephealth/about/) account, managed by Marco Grangetto (UNITO);

- the DeepHealth website, Section Downloads→ Open Access Papers (https://deephealth-project.eu/open-access-papers/), managed by Aimilia Bantouna (WINGS); and
- Partners / authors institutional or personal websites.

Open access data will also become available through the DeepHealth ZENODO account.

9.3 Disclaimer/Acknowledgment

As of the Article 29.4 of the DeepHealth Grand Agreement (GA) "Information on EU funding — Obligation and right to use the EU emblem of the GA", unless the Commission requests or agrees otherwise or unless it is impossible, any dissemination of results (in any form, including electronic) must:

a) display the EU emblem (– the EU emblem can be found in the "WP7 Dissemination and Exploitation / T7.2 - DeepHealth project dissemination" folder of the sharepoint) and
b) include the following text:

"This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 825111".

For the purposes of their obligations under this Article, the beneficiaries may use the EU emblem without first obtaining approval from the Commission. When displayed together with another logo, the EU emblem must have appropriate prominence. This does not however give them the right to exclusive use. Moreover, they may not appropriate the EU emblem or any similar trademark or logo, either by registration or by any other means.

Moreover, as of the Article 29.5 of the DeepHealth Grand Agreement (GA) "Disclaimer excluding Commission responsibility of the GA", any dissemination of results must indicate that it reflects only the author's view and that the Commission is not responsible for any use that may be made of the information it contains.

Summarizing the requirements of both GA articles (29.4 and 29.5), **all submitted publications/communication activities should contain the following Acknowledgement/Disclaimer:**

This article describes work undertaken in the context of the DeepHealth project, "Deep-Learning and HPC to Boost Biomedical Applications for Health" (https://deephealth-project.eu/) which has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 825111". The contents of this publication reflect only the author's view, *can in no way be taken to reflect the views of the European Union and the Community is not liable for any use that may be made of the information contained therein.*

9.4 Other Guidelines in Grant Agreement

9.4.1 Dissemination of another Party's unpublished Results or Background

A Party shall not include in any dissemination activity another Party's Results or Background without obtaining the owning Party's prior written approval, unless they are already published. The mere absence of an objection is not considered as an approval.

9.4.2 Cooperation obligations

The Parties undertake to cooperate to allow the timely submission, examination, publication and defence of any dissertation or thesis for a degree that includes their Results or Background subject to the confidentiality and publication provisions agreed in this Consortium Agreement.

A party may refuse its consent if it proves that its legitimate interests would suffer significant harm.

If the owner Party raises an objection the involved Parties or third Parties shall discuss in the same terms as it is set forth in section 9.1.

9.4.3 Use of names, logos or trademarks

Nothing in this Consortium Agreement shall be construed as conferring rights to use in advertising, publicity or otherwise the name of the Parties or any of their logos or trademarks without their prior written approval.

9.5 Reporting of dissemination activities

The dissemination and communication activities of the DeepHealth project will be reported 3 times until the end of the project:

- D7.1 “Dissemination and comm. plans and report”, due M07 (July 2019);
- D7.2 “Dissemination and comm. plans and report (II)”, due M18 (June 2020); and
- D7.3 “Dissemination and comm. plans and report (III)”, due M36 (December 2021).

In order to facilitate keeping track of dissemination activities an excel spreadsheet titled as “DeepHealth_DisseminationActivities_20190423” is available on the project repository (“WP7_Dissemination and Exploitation / T7.2 - DeepHealth project dissemination” folder of the Sharepoint). This spreadsheet is used so that partners can provide details on specific dissemination activities they undertake, allowing them to report on the activity as soon as it is decided (limiting the risk of omitting something for the report) and the D7.x editor to have the respective information available whenever needed. The information that need to be provided in this excel is related to:

- Year/Month/Date
- Type of activity
  - Scientific and/or peer-reviewed publication, Organisation of a Conference, Organisation of a Workshop, Press release, Non-scientific and non-peer-reviewed publication (popularised publication), Exhibition, Flyer, Training, Social Media, Website, Communication Campaign (e.g. Radio, TV), Participation to a Conference, Participation to a Workshop, Participation to an Event other than a Conference or a Workshop, Video/Film, Brokerage Event, Pitch Event, Trade Fair, Participation in activities organized jointly with other EU project(s), Other
- Title of Activity/if relevant and Organiser
- City, Country
- Representative/Author and Partner Org
- Type of Audience reached
  - Scientific Community (Higher Education, Research), Industry, Civil Society, General Public, Policy Makers, Media, Investors, Customers, Other
- Title (for presentation or paper)
- Number of persons reached
  - < 50, <100, <300, <500, <1000, >1000, >5000, >10,000
- Geographical relevance
  - EU, Global, National, Regional
- Website (if relevant)
- Supporting material
  - programme conference with speaker name, publication, presentation, speaking notes, video, email, press release, flyer or brochure, images/photos, other
- Project material distributed/if relevant, i.e., a link to the supporting material as uploaded in the DeepHealth Sharepoint

10 Conclusions

This deliverable has a) defined the dissemination strategy of the DeepHealth project, b) identified the means to apply it (in terms of target audiences, key messages to be delivered, channels to exploit, etc.), c) collected the major dissemination activities envisaged for the DeepHealth project and d) reported on the results produced during the first seven (7) months of the project.

In particular, dissemination and communication activities include publications in books, journals and conferences, presentations at various events, press releases and posts on social media. The messages (their content as well as its technical level/terminology) will vary depending on the target audience.

An important goal is to produce high quality scientific results that are published in the most prestigious international conferences and journals. Towards this direction, an important number of dissemination activities have already been carried out during the first seven (7) months of the project.

On the other hand, it is not desirable that a project simply promotes its own ideas without interactions with the other key players in the area. The approach to be taken for the promotion of the DeepHealth project concepts and results into various forums has been that of cooperation. By cooperating with different stakeholders outside the project and considering their opinions through various events as well as collaborations, it is possible to build stronger initiatives and advances that can result in achieving a bigger impact. Towards this direction, DeepHealth has already started its collaboration with the BDV PPP community and thus, the other ICT-11 project which aims to strengthen in the coming months.

11 List of acronyms and abbreviations

Acronym	Definition
ACM	Association for Computing Machinery
AI	Artificial Intelligence
BDVA	Big Data Value Association
BDV PPP	Big Data Value Public-Private-Partnership
CS	Civil Society
Cust	Customers
GA	Grand Agreement
GP	General Public
EBDVF	European Big Data Value Forum
EU	European Union
Exh	Exhibition
F	Flyer
JAct	Participation in activities organized jointly with other EU project(s)
IEEE	Institute of Electrical and Electronics Engineers
Ind.	Industry
Inv.	Investors
IP	Intellectual Property
Med	Media
NSP	Non-scientific and non-peer-reviewed publications (popularised publications)
OA	Open Access
OrgConf	Organisation of a Conference
OrgWork	Organisation of a Workshop
P	Presentation
PartConf	Participation to a Conference
PartOther	Participation to an Event other than a Conference or a Workshop

PartWork	Participation to a Workshop
PM	Policy Makers
PP	Presentation and paper
PRP	Scientific and/or peer-reviewed publications
PrR	Press releases
PS	Public Stakeholders
SC	Scientific Community (Higher Education, Research)
SM	Social Media
Tr	Training
Web	Website