



## HORIZON EUROPE FRAMEWORK PROGRAMME



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# **Extreme Near-Data Processing Platform**

# D6.1 Communication plan

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# List of Abbreviations and Acronyms

API	Application Programming Interface
BSC	Barcelona Supercomputing Center-Centro Nacional De Supercomputacion
CC	Creative Commons
CSV	Comma-separated values
DELL	EMC Information Systems International Unlimited Company
DOI	Digital Object Identifier
EMBL	European Molecular Biology Laboratory
KIO	KIO Networks España S.A
NCT	Deutsches Krebsforschungszentrum Heidelberg (German Cancer Research Center)
OMICs	The set with genomics, transcriptomics and metabolomics
PR	Press Releas
SANO	Centre for Computational Medicine
SCO	Scontain UG
TUD	Technische Universität Dresden
UKHS	Department of Health of the United Kingdom
URV	Universitat Rovira i Virgili

#### **1** Executive summary

This first release of the NEARDATA Communication plan presents the definition of the required process and strategy for communication activities and expected progress reporting. It also describes the activities planned for the community involvement.

The strategy covers the whole duration of the consortium and encompasses goals, outputs, impacts, describes how to build the NEARDATA participants, its stakeholders, and how the engagement can influence on the positive perception from the community about the efforts taken to carry the project out. The building of the NEARDATA community together with the stakeholders is laid in this deliverable.

As an initial draft, this document aims at identifying the most adequate workflow to communicate news and ideas clearly amongst the participants and stakeholders.

#### 2 Strategic Vision

D6.1 Communication plan 1<sup>st</sup> Report is coordinated under WP6 Promoting Impact. It defines the required process and strategy for communication activities, as well as describes the planned communication activities and expected progress reporting. Furthermore, it also describes the planned community involvement activities. Communication activities go until the end of the 36 months, the time frame to deliver NEARDATA to the world.

The strategy defines the objectives and focus of communication and reporting, especially with the intention to provide means to evaluate the progress through the KPIs previously determined.

#### 2.1 Communication and dissemination objectives

The general objectives of the joint NEARDATA communication strategy are to disclose project results that can be used by the target audience to progress their own work, i.e., to build upon the knowledge generated by NEARDATA, fertilising the advancement of technology, science, industry, and policy. NEARDATA communication and dissemination activities aim to maximize the impact of the project, increasing awareness and engaging key stakeholders. Find below the dissemination and communication objectives that will help NEARDATA consortium to achieve it:

- 1. Definition of the communication and dissemination strategies with the aim of circulate the project's results via a public website, social media channels, news, participation in conferences and presenting papers to scientific journals;
- 2. Building a dynamic community of researchers and applications designers who engage with the project via the public website and social media channels;
- 3. Communicate the potential benefits of the NEARDATA research to industry stakeholders and the wider public via targeted events and project dissemination materials;
- 4. Facilitate cross-fertilisation with other projects working on overlapping areas.

#### 3 NEARDATA Participants and Stakeholders

The project is carried out by 10 participants:

- URV Universitat Rovira I Virgili
- BSC Barcelona Supercomputing Center-Centro Nacional De Supercomputacion
- TUD Technische Universität Dresden
- NCT Deutsches Krebsforschungszentrum Heidelberg (German Cancer Research Center)
- EMBL European Molecular Biology Laboratory
- SANO Centre for Computational Medicine
- KIO KIO Networks España S.A
- SCO Scontain UG
- DELL EMC Information Systems International Unlimited Company
- UKHS Department of Health of the United Kingdom

Stakeholders (not exhaustive list) that may be interested on the subject, or interact with the software produced are: user community composed by government agencies, hospitals, research labs, universities pharmacologic companies and industry. The communities of stakeholders can be grouped according to specifics of each audience [tab. 1]

Category of audience	Target Audience
Scientific community	Universities, Research labs
European Cloud providers	Storage Solutions staff, CTOs
Pharma industry	Technology managers
Hospitals	Technology managers
Public Health authorities	Tech experts, policy makers
Manufacturers	Mass spectrometry, Surgery and robotics
General Public	Youth public

Table 1: Stakeholders according to category of audience

#### 3.1 Communication, Dissemination and Stakeholder Engagement Strategy

The NEARDATA communication strategy will take into account the official European Commission's guidelines<sup>1</sup> to distinguish between communication, dissemination and engagement.

The main purpose of the **communication activities** is to promote the project and make the research activities known to multiple audiences, beyond the project's own community in a way that they can be understood by non-specialists. Additionally, communication intra-project is very important to keep the participants well-informed regarding the project's developments.

Typical communication activities and channels include visual and branding, the project website, promotional materials such as brochures, rollup and flyers, social media, videos, press releases, etc. Communication activities can be carried out from the very beginning of the project until its end.

**Dissemination activities** are undertaken to make the project's results public, focusing on specific target groups that are potential users of the research results. This is not limited to industry players but also includes the scientific community, policy makers, etc.

Typical dissemination activities include peer-reviewed publications, presentations at scientific conferences, practical demonstrations, etc. Dissemination activities can be carried out as soon as the project has produced significant results.

Whilst **engagement activities** corresponds to efforts on building a consolidated network of relevant stakeholders coming from industry, research but also establishing synergies with peer projects and relevant initiatives.

Typical engagement activities include participation in third-party events, workshops and webinar organisation, feedback channels etc.

#### 3.2 Communication activities

Publicize results in social media accounts dedicated to the project. Anybody in the internet interested in the subject should be able to find information about the project, its activities and it should be easy to understand by the general public. The website, Twitter, LinkedIn, YouTube (in case the partners manage to produce educational and informative videos) and the usage of keywords will help to increase volume of references in web searches and, with that, perceived relevance of the project to the public.

#### 3.3 Dissemination activities

Forward results and status updates to selected audience, respecting specific needs and interests according to each category defined in [tab. 1]. LinkedIn is good place to determine and interact with selected stakeholders.

So far, the following activities have been carried out or planned to execute by partners URV [tab:2], DELL [tab:3], NCT [tab:4], EMBL [tab:5], SANO [tab:6], SCO [tab:7] and TUD [tab:8].

<sup>1</sup>https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/support/faq;keywords=/933

Event	Event	Title	Location	Date	Type of	Referen-
Туре					audience	ce/Link
Press release	URV digital newspaper	The URV obtains € 2.000.000 to promote four international proj- ects on cloud comput- ing and artificial in- telligence	Online	25/1/23	Scientific community, General Public	url <sup>a</sup>
Present- ation	Get-to-know" introductory workshop and welcome day to HE Data projects (WP2021-22)	NEARDATA project presentation	Online	23/2/23	Scientific community, European Cloud providers	url <sup>b</sup>
Present- ation	International Data Spaces Association	Extreme Data Spaces in the NEARDATA project	Online	6/3/23	Scientific community, European Cloud providers	url <sup>c</sup>
Interview	FET a Tarragona Magazine	European projects presentation	Online	18/3/23	General Public	url <sup>d</sup>
Present- ation	Presentation of EU projects to T-Systems	Presentation of EU projects to T-Systems	Tarragona	08/03/23	European Cloud providers	event <sup>e</sup>
Present- ation	Presentation of EU projects to Arsys	Presentation of EU projects to Arsys	Online	15/03/23	European Cloud providers	event <sup>f</sup>
Present- ation	Presentation of EU projects to Telefonica Research	Presentation of EU projects to Telefonica Research	Online	21/03/23	European Cloud providers	event <sup>g</sup>
Present- ation	Presentation of EU projects to Xartec Salut	Presentation of EU projects to Xartec Salut	Online	12/05/23	Scientific community, Pharma industry, Hospitals, Public Health authorities	event <sup>h</sup>

Table 2:	Dissemination	Activities:	partner	URV

<sup>*a*</sup>https://diaridigital.urv.cat/en/urv-obtains-two-million-euros-promote-four-international-projects-cloud-computing-artificial-intelligence

<sup>c</sup>https://internationaldataspaces.org/

<sup>&</sup>lt;sup>b</sup>https://www.bdva.eu/get-know%E2%80%9D-introductory-workshop-and-welcome-day-he-data-projects-wp2021-22

<sup>&</sup>lt;sup>d</sup>https://www.fetatarragona.cat/2023/03/05/el-fet-58-es-presentara-a-la-necropolis/

<sup>&</sup>lt;sup>e</sup>Internal meeting at URV. Attendance: 8

<sup>&</sup>lt;sup>f</sup>Internal online meeting. Attendance: 3

<sup>&</sup>lt;sup>g</sup>Internal meeting in Barcelona. Attendance: 5

<sup>&</sup>lt;sup>h</sup>Internal online meeting. Attendance: 3

Event	Event	Title	Location	Date	Type of	Referen-
Туре					audience	ce/Link
Congress	MWC23	Dell stand	Barcelona (Spain)	27/02/23 to 02/03/23	European Cloud providers, Pharma industry, Hospitals, Public Health authorities, Manufact- urers	url <sup>a</sup>
Present- ation	Presentation of EU projects to Radia Perlman	Presentation of EU projects to Radia Perlman	Cork (Ireland)	06/03/23	European Cloud providers	event <sup>b</sup>
White Paper	NEARDATA White Paper for Dell Research Office	NEARDATA - Extreme Near-Data Processing Platform (White Paper)	n/a	30/03/23	Scientific community, European Cloud providers	event <sup>c</sup>
Workshop	Workshop co-located with IEEE ICNP'23	Cloud-Edge Continuum Workshop	Reykjavík (Iceland)	10/10/23	Scientific community, European Cloud providers	url <sup>d</sup>
Blog post	Pravega in European Research Projects	Pravega in European Research Projects	n/a	06/06/23	General Public	url <sup>e</sup>

#### Table 3: Dissemination Activities: partner DELL

<sup>a</sup>https://www.mwcbarcelona.com/. Attendance: 100.000

<sup>b</sup>Internal meeting at Dell

<sup>c</sup>Internal document. Attendance: 200+ potential readers

<sup>*d*</sup>https://cec23.github.io/. Attendance: 30-50 (expected)

<sup>e</sup>https://cncf.pravega.io/blog/2023/06/06/pravega-in-european-research-projects/

#### 3.4 Engagement activities

Request and induce feedback from the part of the stakeholders, according to the communication and dissemination elements delivered to them. The building of a network requires that the parties relate to the subject, find it important to them beyond the simply communication of its existence or occurrence. Therefore it is important to establish feedback channels, especially, again, via LinkedIn.

#### 4 Planning the Activities to Fulfill the Strategy Vision

NEARDATA will use various communication channels leveraged on the project partner networks and will produce a set of tailored communication formats targeting different stakeholder groups.

WP6 will ensure all necessary elements are carefully and strategically coordinated such that communication, dissemination and engagement activities can move seamlessly across the audience groups identified and across national borders, including multi-stakeholder engagement, EU and international perspectives.

Event	Event	Title	Location	Date	Type of	Referen-
Туре					audience	ce/Link
Blog post		Shared and retweeted NEARDATA news by Twitter and by slack group	Online	24/02/23		
Blog post		Publish NEARDATA project with EU CORDIS link at our website	Online	01/03/23		url <sup>a</sup>
Meeting		Presentation NEARDATA by Projektcafé EKFZ	TU Dresden	30/03/23		event <sup>b</sup>
Present- ation	20th year of long night of science in Dresden	3 demonstrations of AI-based robot-surgery, surgical training and intraoperative navigation system of liver in the field of translat- ional surgical oncology	Dresden	30/06/23		event <sup>c</sup>
Workshop		Retreat on Endoscopic Vision with SYMIC and UCL-Weiss Centre		21/06/2023 to 24/06/2023		event <sup>d</sup>
Workshop	Life Sciences & Medicine	Surgical and Intervent- ional Engineering with a key point of cognitive sensor- guided robotically assisted surgery	King's College London	05/06/2023 to 09/06/2023		event <sup>e</sup>
Present- ation		Possibilities of Streaming Frameworks in the Surgical Domain	UKHD	16/05/23	Scientific community	event <sup>f</sup>
Workshop	6G-life General Assembly	concept of AI-based robotic surgery		11/05/2023 to 12/05/2023		event <sup>g</sup>

Table 4: Dissemination Activities:	partner NCT
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 ${\it ^{a}https://www.nct-dresden.de/forschung/departments-and-groups/department-for-translational-surgical-oncology/projects.html$ 

<sup>b</sup>Attendance: 50+

- <sup>c</sup>Attendance: 200
- <sup>d</sup>Attendance: 50

<sup>e</sup>Attendance: 20

<sup>f</sup>Attendance: 3

<sup>g</sup>Attendance: 200

#### 4.1 Corporate Image

NEARDATA is expected to be easily recognized due to the quality of data delivered and the efficiency on the data processing, therefore some aspects of visual identity were created to help achieve that, with respect to what will be immediately seen by the public.

#### 4.1.1 Templates, logo and fonts

Presentation templates, quarterly management report templates (QMR) and the stylebook (containing font types) are available at the consortium's shared cloud drive.

Event	Event	Title	Location	Date	Type of	Referen-
Туре					audience	ce/Link
Workshop	CZI Workshop	Metabolism Across Scales	San Francisco, USA	Feb '23		
Workshop	Uppsala workshop	METASPACE workshop on mass spectrometry imaging	Uppsala, Sweden	Mar '23		
Conference	ASMS	ThermoFisher User Meeting at ASMS	Houston, USA	Jun '23		event <sup>a</sup>
Conference	SCP2023	Single-Cell Proteomics Conference	Boston, USA	Jun '23		event <sup>b</sup>
Conference	DGMS	German Society of Mass Spectrometry	Dortmund, Germany	May '23		event <sup>c</sup>
Conference	EASL	Liver Cancer Summit	Lisbon, Portugal	Apr '23		event <sup>d</sup>

#### Table 5: Dissemination Activities: partner EMBL

<sup>a</sup>Attendance: 1000

<sup>b</sup>Attendance: 100

<sup>c</sup>Attendance: 500

<sup>d</sup>Attendance: 400

#### Table 6: Dissemination Activities: partner SANO

Event	Event	Title	Location	Date	Type of	Referen-
Туре					audience	ce/Link
		NEARDATA: a new				
Blog post	Sano website	ambitious project for	Online	28/03/23		url <sup>a</sup>
		Sano				
Present-	SDSI Conforma	Maciej Malawski	Marcaw	17/05/22		11m1b
ation	SDSI Comerence	Key role of data in AI	vva15aw	17/03/23		un

<sup>*a*</sup>https://sano.science/news/neardata-a-new-ambitious-project-for-sano/. 244 subscriptions <sup>*b*</sup>https://sdsi.pl/konferencja-2023/. Attendance: 100. YouTube video (in Polish)

Table 7: Dissemination Activities:	partner SCO
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Event	Event	Title	Location	Date	Type of	Referen-
Туре					audience	ce/Link
Webinar		Confidential Meshes, Azure	Online	09/02/23		
Conference	T-Sec Berlin	Keynote	T-Systems, Berlin	13/02/23		
Present- ation	Nvidia Horizon	Research Paper Presentations	Online	05/06/23		event <sup>a</sup>
Present- ation	Huawei Research Summit	Confidential Computing	Dresden	31/05/23		event <sup>b</sup>

<sup>*a*</sup>Attendance: 50

<sup>b</sup>Attendance: 500

Event	Event	Title	Location	Date	Type of	Referen-
Туре					audience	ce/Link
Present- ation		EU project, Confidential compute & SCONE	T-Systems, Berlin	13/02/23		
Conference	Annual Meeting of the WG	Formal Methods for Security	Roscoff, France	28/03/23 to 30/03/23		
Present- ation	CISPA Helmholtz Center for Inform- ation Security	Formal Specification and Verification of Attestation Mecha- nisms in Confidential Computing	Saarbrücken, Germany	15/03/23		

Table 8:	Dissemination	Activities:	partner	TUD
14010 01	Dissemination	11001101000	parater	100

The logo has a design that reminds the audience that NEARDATA is a cloud-based endeavour employed to process large amounts of data near to where they are stored [9].







Table 9: NEARDATA logos

Font types and colors have been also standardized [10].



Table 10: Font colors

The brochure for dissemination was also produced to be very clear and ease the understanding of specific and general public alike [4].

#### 4.2 Social Media and Professional Networks

Social media channels will be opened to publicize status updates and relevant facts with respect to the project development. These channels are an instant form of communication with community members and potentially interested people or organisations who do not belong to the NEARDATA consortium; they help to ensure continual visibility of the project's efforts to targeted stakeholders, with webinars, workshops or general events and announcements.

• Twitter (https://twitter.com/Neardata2023) provides news and brief real-time information.



Figure 1: Slides templates

NEARDATA uses this channel for posting instantaneous updates and advertising upcoming activities. Twitter functions as a means to publicize information, hence working very well as tool to communicate, disseminate and engage with a large audience.

- LinkedIn (https://www.linkedin.com/company/neardata-eu/) is the most recognised social media channel for building professional networking. It is the ideal channel to share regular updates, promote events, engage with members and expand the community.
- **Reserved area**. The employment of restricted access resources and systems to enable fast and public communication within the project is very important to keeping people updated and knowing what to do. The project already counts on a Google Drive shared among the participants and naturally the other cloud applications there can be used as well, like Chat, Meet and Forms. Google Chat allows for the creation of a Space, which is a channel where invited people can chat, share files and tasks. The teams organizer system Slack will be used as a primary channel to communicate and organize efforts with all the participants.

#### 4.3 Website Development and UX

The NEARDATA website (https://neardata.eu/) acts as one of the main channels for communication. The website serves as a timely and constantly updated repository of trustworthy sources of information linked to the project achievements: an easily accessible gateway where each section aims to respond to specific requests of the users. The website also needs to ensure a pleasant UX (User Experience) by increasing its visual appeal, sense of professionalism, usability and brand value.

#### 4.4 Press Releases

The Press Release (PR) is one of the main communication channels used to provide information, through official statements, about the main NEARDATA achievements. For this reason, PRs are going to be prepared in conjunction with the main project milestones to ensure timely communication of the project progress. In support of NEARDATA awareness raising and visibility, the PRs are going to be published on the NEARDATA and project partners websites.

Quarterly Management Report - QMR Q[Number] – [Month] 2023	NEARDATA	Quarterly Management Report - QMR Q[Number] - [Month] 2023
INSTITUCION		Conference publications [Author, "Title", Type of contribution (article, poster, demo, etc.), Conference, Publication, Location No. of Attender Vera Organizer, Status]
[Name (abbreviation)]		Educion, Ho. of <u>accentation</u> , Hoar, of guineen started j
Staff		Book edition [Author, "Title", Pages (start-end), Editorial, ISBN, Legal deposit, Year, Key (B = whole book, C =
[Name and Surname]		chapter, CE = critical editions, E = editor). Status]
Person-months spent in the period (estimation)		+ Open Source Repositories
X PM		[Repository, Title, Link, Year]
Tasks		
[Task name, Description of the task]		Datasets
		Existing datasets that will be processed to validate the project results
Dissemination activities		[Name, Ongin, Access, Volume, Variety, Prequency of update]
Dissemination activities [Date, Event Type, Title, Date, No. of attendees, Reference/Link]		Generated datasets in the process of validating the results of the project [Name, Description, Access, Volume, Variety, DOI]
Meetings [Date, Event Type, Title, Place, No. of attendees]		
		Meetings
		[Date, Event Type, Title, Place, Partners, No. of attendees]
Publications		
Journal publications [Author, "ITILe", Title of the journal, Number of the volume. Edition Number (Year): p Database name. Web. Access date. Status]	lages.	

Figure 2: QMR template

	Example	Font
Logo	NEARDATA	Montserrat Classic
Titles	TITLE	Impact
Subtitles	Loren ipsum	Calibri
Body	Lorem ipsum	Calibri



### 4.5 Dissemination Workshops and Conferences

An important dissemination channel will be the attendance and presentation at different events, like workshops, and high-level peer-reviewed conferences. Presenting the latest updates of the project at such events, meetings or workshops will be an effective means of involving both the scientific community and industry leaders. Additionally, the public events are excellent places to engage with stakeholders other than the consortium's participants and to broaden the audience that may demonstrate interest in our work.

All events with NEARDATA participation will be previously announced on the "News" web page and Twitter account and, if necessary, disseminated through partner's social media accounts. A preliminary list of strategical events where NEARDATA aims to participate is summarized in the table 11.

### 4.5.1 M6 NEARDATA Internal Workshop

A NEARDATA internal workshop has been organized within the Jornadas de Concurrencia y Sistemas Distribuidos (JCSD23) (https://cloudlab-urv.github.io/jcsd2023/) on June 20, 2023 at the Universitat Rovira i Virgili. Figure 5 shows the participants of the JCSD23.

The fundamental objective of these conferences is to publicize the work that the different university departments, research centers, R&D departments and companies in the computer sector are



Figure 4: Brochure

Planned month	Type of event	Target audience
M6	NEARDATA Internal Workshop	-
M12	NEARDATA open workshop	Major conference, NSDI
M18	NEARDATA open workshop	USENIX ATC
M24	Dell workshop	Major conference Middle-
1112 1	Den workbrop	ware
M30	Major industrial event	CNCF, PyCon
M36	Final NEARDATA workshop in major conference	USENIX, Middleware

Table 11: Strategic events for NEARDATA

currently developing on issues related to concurrency and distributed systems (concurrent programming, systems in real time, modelling, analysis and control of concurrent systems, languages and architectures, etc.).

This type of meeting constitutes an excellent opportunity to establish cooperation links between the different research groups of the different Spanish universities. This cooperation usually translates later into the coordinated request for funding in joint research projects. The Conferences also constitute an excellent forum for industry and research centers to meet and exchange interests and



Figure 5: Participants to the JCSD23.

opinions.

On the other hand, conferences of this type give new researchers the opportunity to make their first research works known to the national community in an event that is already consolidated at the national level.

#### 4.5.2 M12 open workshop: Cloud-Edge Continuum Workshop 2023

Date and location: October 10th 2023. Reykjavik, Iceland.

We are going to organize a workshop, namely Cloud-Edge Continuum (CEC) workshop, to be co-located with IEEE ICNP'23 (https://cec23.github.io). The workshop topics of interest clearly align with NEARDATA objectives (e.g., network optimizations, novel system architectures, securi-ty/privacy, AI-enabled resource allocation, for the Cloud-Edge Continuum). DELL is supporting the organization of this workshop. This implies that the workshop will benefit from DELL's leading role in the technology sector and its marketing resources to maximize its impact. Concrete planned dissemination tasks include social media posts, generation of marketing material for the workshop, and internal talks to create awareness within DELL's engineering and research community.

The workshop is expected to be a full day event. We expect to receive around 20 paper submissions and around 8 (40%) of the highest quality will be accepted. We also expect 2 keynote speakers to attend the workshop. Our current efforts are focused on disseminating the workshop to attract the highest number of high quality submissions. We have already used the mailing lists, social media, and web pages of multiple EU projects. We have also achieved to publicize the workshop in the EUCloudEdgeIoT site, as visible in Fig. 7. We will also leverage on the strong Program Committee that we have built for publicizing the workshop and attracting paper submissions: it is formed by 34 members, most of them being senior researchers and experienced industry leaders from multiple organizations, including Dell Technologies, Imperial College London, IBM, NVidia, Oxford university, and Intel, among others.

#### 4.6 Papers and Publications

The scientific contribution of NEARDATA will produce several technical publications which will be presented in different kinds of conferences and will be further utilised for communication and dissemination. Publications will be produced on the subjects of Extreme Data and related subjects of the various fields that support NEARDATA (distributed systems, HPC, artificial intelligence, Cloud Computing, Big Data, BioInformatics, Geospatial data and so on). This will improve the European leadership in the global data economy.

Open science practices must be observed on the production of papers and related resources that will be publicly available.



Figure 6: Screenshot of the IEEE ICNP'23 conference referring to the CEC'23 Workshop.

EUCioudEdgaleT.au	لا الله عمل المحمد
	CEC Workshop 2023
	Organized by: EEE (DP: 23 - The 31st IEEE International Conference on Network Protocols Supported by EU Commission October NR, 803 Co-Network MR, 1021
	CEC Workshop 2023 Organized by IEEE CAVE2-10 the Internet Interview Protocoll Bapterd by Commission
	Conicozeter with 6E1 (SM723 - Reykjout, loternd

Figure 7: Screenshot of the EUCloudEdgeIoT site referring to the CEC'23 Workshop.

Conferences include USENIX NSDI, IEEE, ACM, VLDB etc. Journals include Nature, ACM, Elsevier, IEEE, ACM etc.

So far, the following publications have been released or are planned to be by partners URV [tab:12], BSC [tab:13] and TUD [tab:14].

#### 4.7 Use Cases: the full life cycle of International Health Data Spaces

There are five Use Cases (UC) corresponding to 5 distinct areas established to assess the positive impacts NEARDATA has on various aspects of the health care activities. NEARDATA achievements' communication and dissemination will include the results from such use cases.

The progress in use cases developments is of interest of every partner, therefore the dissemination within the project is very important for the success to keep everybody in the same page. This sharing within a reserved area for the project can induce a healthy and productive environment; therefore, not by interfering, but by suggesting a way to solve an issue and hence meet deadlines and the expected quality.

#### • UC - Genomic Pathogens

Leader: UKHS. Clinical sequencing of human pathogens, viral and bacterial, in order to produce clinical reports and respond to outbreaks

#### • UC - Genomics Epistasis

Leader: BSC. Epistasis analytics in massive genomics datasets aims to explore the risk of certain combinations of genome mutations towards a specific disease, computing the statistical relevance of given sets of mutation across a large cohort of patients.

#### • UC - Transcriptomics Atlas

Leader: SANO. Transcriptomics data represent RNA transcripts and can be obtained using

Title	Authors	Publisher/Journal/	Date	DOI	Additional
		Magazine/Conference			notes
Exploiting Inherent Elasticity of Serverless in Algorithms with Unbalanced and Irregular Workloads	Gerard Finol, Pedro Garcia Lopez and M. Sánchez-Artigas	Submitted to Journal of Parallel and Distributed Computing	2023		
MLLess: Achieving Cost Efficiency in Serverless Machine Learning Training	P. Gimeno Sarroca and M. Sánchez-Artigas	Journal of Parallel and Distributed Computing, Elsevier	2023		info <sup>a</sup>
A Seer Knows Best: Auto-tuned Object Storage Shuffling for Serverless Analytics	G. Eizaguirre and M. Sánchez-Artigas	Journal of Parallel and Distributed Computing, Elsevier	2023		info <sup>b</sup>
Cloud-Native Data Types: Unstructured Data Management for Scientific Computing in the Cloud	Aitor Arjona and Pedro Garcia Lopez	VLDB	2023		info <sup>c</sup>
On Data Processing through the Lenses of S3 Object Lambda	P. Gimeno Sarroca and M. Sánchez-Artigas	Conferene paper @ IEEE INFOCOM'23	2023		url <sup>d</sup>

#### Table 12: Publications Released: partner URV

<sup>a</sup>Under second round of review

<sup>b</sup>Under second round of review

<sup>c</sup>Submission to VLDB

<sup>d</sup>https://infocom2023.ieee-infocom.org/

RNA-Seq techniques. This use case aims to build a transcriptomics database based on publicly available datasets, related to selected organs and tissues, to build a transcriptomics atlas.

#### • UC - Metabolomics

Leader: EMBL. Metabolomics METASPACE is an open federated platform for data analysis, sharing, and visualization in spatial metabolomics used by hundreds of scientists worldwide from universities, pharmaceutical companies, and governmental organizations.

#### • UC - Surgery

Leader: NCT. The aim of computer-assisted surgery (CAS) is to provide the surgeon with the right type of assistance at the right moment.

Title	Authors	Publisher/Journal/	Date	DOI	Additional
		Magazine/Conference			notes
Challenges and Opportunities for RISC-V Architectures towards Genomics- based Workloads	Gonzalo Gómez- Sánchez, Aaron call, Xavier Teruel, Lorena Alonso, Ignasi Moran, Miguel Ángel Perez, David Torrents, Josep Ll. Berral	First International workshop on RISC-V for HPC, of ISC High Performance conference	2023		info <sup>a</sup>
An Exhaustive Variant Interaction Analysis using Multifactor Dimensionality Reduction	Gonzalo Gómez- Sánchez, Ignasi Morán, Lorena Alonso, Miguel Ángel Pérez, David Torrents, Josep Ll. Berral	Nature Scientific Reports.	2023		url <sup>b</sup>

#### Table 13: Publications Released: partner BSC

<sup>a</sup>Submitted

<sup>b</sup>Submitted, expected May 2023. More on https://github.com/MortI2C/genomics\_riscv\_openrepo Open-data repository of genomics results on RISC-V architectures

Title	Authors	Publisher/Journal/	Date	DOI	Additional
		Magazine/Conference			notes
Trustworthy confidential virtual machines for the masses	Anna Galanou, Khushboo Bindlish, Luca Preibsch, Yvonne-Anne Pignolet, Christof Fetzer, Rüdiger Kapitza	Middleware 2023	2023		info <sup>a</sup>
SinClave: Hardware-assist- ed Singletons for TEEs	Franz Gregor, Robert Krahn, Do Le Quoc, Christof Fetzer	Middleware 2023	2023		info <sup>b</sup>
CRISP: Confidentiality, Rollback, and Integrity Storage Protection for Confidential Stateful Computing	Ardhi Putra Pratama Hartono, Andrey Brito, Christof Fetzer	SoCC 2023	2023		info <sup>c</sup>

#### Table 14: Publications Released: partner TUD

<sup>a</sup>under submission

<sup>b</sup>under submission

<sup>c</sup>under submission

#### 5 Conclusions

The 1st version of NEARDATA Communication, Dissemination and Stakeholder Engagement plan represents the cornerstone of every communication and dissemination activity to be carried out over the project's lifetime and the foundations for exploiting and sustaining the results. As such, it has been developed and agreed-upon by all Partners involved in WP6. It defines the essential subjects to the interactions to outside the consortium and inside as well, as a means to keep the teams in synergy and attained to achieve the goals expected or better than. The communication artifacts produced throughout the project lifetime will help the participants to assess their progress.