



D7.1 Communication and dissemination plan, reports and materials.r1

Lead beneficiary	NOVA	Lead author	NOVA
Reviewers	IMEC, ISRD, CERTH	1	
Туре	R	Dissemination	Public
Document version	v1.0	Due date	30/06/2024















Project information

Project title	Net-Zero self-adaptive activation of distributed self-resilient		
	augmented services		
Project acronym	NATWORK		
Grant Agreement No	101139285		
Type of action	HORIZON JU Research and Innovation Actions		
Call	HORIZON-JU-SNS-2023		
Торіс	HORIZON-JU-SNS-2023-STREAM-B-01-04		
Start date	01/01/2024		
Duration	36months		

Document information

Associated WP	WP7	
Associated task(s)	T7.1	
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Туре	R — Document, report	
Dissemination level	PU - Public	
Due date	M6 (30/06/2024)	
Submission date	30/06/2024	







Document version history

Version	Date	Changes	Contributor (s)	
v0.1	31/05/2024	Initial version created	Ioannis Markopoulos (NOVA), Angelos Lampropoulos (NOVA)	
v0.2	14/06/2024	Contribution for section 5	Antonios Lalas, Anastasios Drosou, Virgilios Passas, Sarantis Kalafatidis (CERTH), Maria Safianowska (ISRD), Mays AL-Naday (UESSEX), Vincent Lefebvre (TSS), Merlijn Sebrechts (IMEC), Vinh-Hoa La (MONT), Vörös Péter (ELTE), Kostas Lampropoulos (PNET), Eryk Schiller, Nasim Nezhadsistani (UZH), Gür Gürkan (ZHAW), Francesco Paolucci (CNIT), Roberto Gonzalez (NEC), Angela Freiría López (GRAD)	
v0.3	14/06/2024	Version ready for review	Angelos Lampropoulos (NOVA)	
v0.4	26/06/2024	Implementation of review comments	Angelos Lampropoulos (NOVA)	
v0.8	28/06/2024	Final version delivered to COO	Angelos Lampropoulos (NOVA)	
v0.9	29/06/2024	Final review and refinements	Antonios Lalas (CERTH)	
v1.0	30/06/2024	Final version for submission	Antonios Lalas (CERTH)	







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List of acronyms and abbreviations

Abbreviation	Description	
5G	Fifth generation	
6G	Sixth generation	
AI	Artificial Intelligence	
D&C	Dissemination and communication	
EEEI	Institute of Electrical and Electronics Engineers	
ETSI	European Telecommunications Standards Institute	
EU	European Union	
ІСТ	Information and Communication Technology	
IETF	Internet Engineering Task Force	
KPI	Key Performance Indicator	
LLM	Large Language Model	
ΜΙΜΟ	Multi-input Multi-output	
OASIS	Organization for the Advancement of Structured Information Standards	
PI	Performance Indicator	
PLS	Physical Layer Security	
RAN	Radio Access Network	
RIS	Reconfigurable Intelligent Surfaces	
SME	Small and Medium-sized Enterprises	
SNS JU	Smart Networks and Services Joint Undertaking	
WGs	Working Groups	









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Executive summary

The deliverable D7.1 – "Communication and dissemination plan, reports and materials" outlines the communication and dissemination strategy and planning for Net-Zero self-adaptive activation of distributed self-resilient augmented services (NATWORK) project related to 6G network landscape in which the project resides.

The D&C strategy is based on a four-pronged methodology. The four-pronged strategy is the following:

- Why: The goal of dissemination is to enhance the awareness and uptake of research findings;
- What: Information that is going to be distributed throughout the D&C tools and activities;
- **To Whom**: Throughout the D7.1 deliverable, we will conduct a comprehensive investigation of these features, targeting groups interested in the NATWORK project;
- **How**: Key D&C tools and activities, on which information is going to be communicated to the intended target groups.

Dissemination tools and activities are prominent features of the D&C plan. Through those features NATWORK's progress, findings and recommendations are being communicated to the related audiences of the project. Digital channels, promotional materials, event participation, press releases and videos are all tools and activities of the D&C plan. Throughout D7.1 deliverable, a thorough investigation of these features is conducted.

The D&C plan will be monitored through a specific list of KPIs and PIs. KPIs and PIs are important components to evaluate the performance and the efficiency of the tools and activities of the dissemination and communication plan. These components will help determine D&C strategy's impact in a precise, objective and measurable way.

The last piece of the D&C plan is the individual D&C effort per consortium partner of the NATWORK project. Each consortium partner will be responsible for contributing to the different activities and through specific tools related to the dissemination and communication strategy of the project. Engagement of all partners is crucial for the NATWORK project to achieve high visibility and build knowledge for the themes NATWORK assesses.





1. Introduction

1.1. The NATWORK Vision

The main vision of NATWORK is to develop a novel bio-inspired cybersecurity and resilience framework for networking distributed systems that transcend a single administrative domain and cross a heterogeneous fabric of resources. This vision is motivated by the new ICT systems landscape and 6G vision. NATWORK will conduct research that is novel in four domains:

1. Close the security gap in innovation between software systems, resource management and networking architectures:

Through this action, a fully-fledged modular Net-zero software framework that orchestrates the interaction between software systems, edge computing resources and networking in a cross-domain, AI-based '-as-a-service' approach will be provided. Through the wide adoption of virtualisation and cloud-native micro-services, the framework will offer increased flexibility and modularity for optimal resource utilisation and create tangible benefits in costs and energy consumption. The orchestration of all the NATWORK components will progress from the existing centralized approaches by adopting a highly distributed approach, with domain-specific orchestrators relying on peering with each other.

2. Enable multiple providers to interconnect resources and services using simplified secure-by-design interfaces

NATWORK project will enable multiple providers to interconnect resources and services using simplified secure-by-design interfaces without having to go through rigid planning and engineering processes, while providing at the same time enhanced CTI and explainable AI interaction with increased trustworthiness. The latter promotes transparency and socio-economic benefits in the European region by supporting a level-playing field for SMEs through fairer opportunities in secure connectivity and breakdown from the monopoly of large service providers. This in turn will foster better support of the SME market and stimulate cooperation amongst different providers.

3. AI will be natively integrated into several layers of the network





Within NATWORK, AI will be natively integrated into several layers of the network, ranging from the physical layer to the vertical application layer. In addition to the network and security function placement, AI will be associated with multiple types of security functions, detecting attacks or restructuring the network to circumvent identified compromised points through AI-leveraged Moving Target Defense approaches. This method will revolutionize addressing zero-day attacks in a coherent way within 6G networks.

4. Provide a holistic framework to defend against Physical Layer Attacks

NATWORK will provide a holistic framework to defend against Physical Layer Attacks, since wireless networks are prone to various security threats, such as jamming, sniffing, and eavesdropping. Enhanced PLS will provide security mechanisms at the lowest level of communication, diminishing reliability, bandwidth and data rate limitations. Novel MIMO and RIS technologies will be employed for this purpose transforming their secure-by-design philosophy, and deriving new ways of defense at the core components of the 6G connectivity.

In the following sections of D7.1 document, the communication and dissemination strategy for NATWORK project is identified. Through this process, the four realms of the NATWORK project depicted above, are going to be featured to other audiences. Furthermore, ways to maximise the impact of these elements on individuals, entities and communities are being indicated.

1.2. Purpose and structure of the document

Deliverable "D7.1 – Communication and dissemination plan, reports and materials" is a public document of the NATWORK project in which the communication and dissemination strategy planning is thoroughly explained. The main goal for the D&C plan is to maximise NATWORK's impact and increase its visibility, aiming at reaching wide audiences with the outcomes of the project.

The sections of this document are shortly described as followed:





- In Section 1 Introduction, the vision of NATWORK project is identified. Aspects where NATWORK research is being conducted are explained. Furthermore, a concise description of the sections of the document is illustrated;
- In Section 2 Dissemination and Communication plan, the core elements of the D&C plan are outlined. Within this section, both the D&C objectives and the strategy of NATWORK are examined;
- In Section 3 Dissemination tools and activities, the related D&C tools and activities for NATWORK project are pinpointed;
- In Section 4 Information of KPIs and PIs, detailed information of the KPIs and PIs that monitor the D&C tools and activities are discussed. KPIs and PIs are critical components to assess the performance and the efficiency of the tools and activities of the dissemination and communication plan;
- In Section 5 NATWORK Partners individual D&C plans, the individual involvement per partner as part of the D&C strategy is assessed;
- In **Section 6 Conclusion**, the content of the document is discussed, reflecting on NATWORK's strategic direction and the related results of the project.

1.3. Indented Audience

The NATWORK Project's Communication and dissemination plan, reports and materials is devised for public use in the context of dissemination and communication activities of the NATWORK consortium, comprising members, project partners, and affiliated stakeholders. This document mainly focuses on the dissemination and communication methodologies, objectives, and anticipated benchmarks of the project, thereby serving as a referential tool throughout the project's lifespan.

1.4. Interrelations

The NATWORK consortium integrates a multidisciplinary spectrum of competencies and resources from academia, industry, and research sectors, focusing on user-centric service development, robust economic and business models, cutting-edge cybersecurity, seamless interoperability, and comprehensive on-demand services. The project integrates a collaboration of fourteen partners from ten EU member states and associated countries (UK and CH), ensuring





a broad representation for addressing security requirements of emerging 6G Smart Networks and Services in Europe and beyond.

NATWORK is categorized as a "Research Innovation Action - RIA" project and is methodically segmented into 7 WPs, further subdivided into tasks. With partners contributing to multiple activities across various WPs, the structure ensures clarity in responsibilities and optimizes communication amongst the consortium's partners, boards, and committees. The interrelation framework within NATWORK offers smooth operation and collaborative innovation across the consortium, ensuring the interconnection of the diverse expertise from the various entities (i.e., Research Institutes, Universities, SMEs, and Large industries) enabling scientific, technological, and security advancements in the realm of 6G. The Communication and dissemination plan addresses all D&C activities of the NATWORK project workplan.











2. Dissemination and Communication plan

2.1. D&C Objectives

The dissemination and communication plan for NATWORK project is a key element for the success of the project. Main goal for the D&C plan is to maximise the project's impact and increase the project's visibility. Furthermore, the results of the project should reach a wide audience. In order to achieve this goal, the following objectives should be addressed:

- Ensure that the key messages of the NATWORK project are communicated to both technical and non-technical audiences;
- Share NATWORK's outcomes including technical results, scientific findings and added value to all relevant stakeholders and related scientific communities;
- Create new interactions with external stakeholders (ICT Industries, research institutions and universities) that have interest in the NATWORK project;
- Identify D&C audiences, including, but not limited to, the following:
 - Specific industrial actors, mainly large telecom operators and system vendors, with strong presence in many international fora and standardisation bodies;
 - Industries with innovative research on verticals mainly in sectors of interest to NATWORK;
 - Open-source communities and initiatives such as the Linux Foundation, OpenStack, Kubernetes and OPNFV.
- Establish and sustain synergies with other relevant EU and SNS JU funded projects;
- Promote the NATWORK concepts beyond the project's timeframe;

2.2. D&C Strategy

The NATWORK project's Dissemination & Exploitation Strategy is based on a four-pronged methodology, in which the core elements on why, what, to whom and how to exploit and disseminate the project outcomes are being identified. Within this section, the promotion of the results, key facts, target groups and related digital channels that build effective awareness of the results of the NATWORK Project are determined.







Figure 1 Four-pronged methodology for NATWORK's Dissemination & Exploitation Strategy

More specifically, the four-pronged methodology is explained in detail:

• Why? The goal of dissemination is to enhance the awareness and uptake of research findings:

A high visibility of the project and promotion of an active interaction with key stakeholders are necessary elements to build NATWORK awareness. An advance notice of the project's current and future actions should be given to the public. By doing so, collaboration links with partners are strengthened and a wider networking activity is built up.

It is important to promote NATWORK results to external stakeholders in an effective way, starting the exploitation of the project's outcomes as early as possible. The





knowledge gained through the project, and more generally the information generated by the project, can be made available to all interested parties. Specific components of NATWORK, that excelled throughout the timespan of the project, can be reused or referenced in future projects exploring new developments. Overall, by enhancing the awareness of NATWORK project, it can have a positive effect on the scientific community.

• What? Information related to NATWORK Project:

The information that is going to be distributed throughout the dissemination methods & channels, explained in detail later in this section, should be expressed clearly without exposing any sensitive information. Having that in mind, the information related to NATWORK project that has already started to disseminate to the corresponding media are the following:

- Key facts for the NATWORK project from the initial stages of the project throughout its timespan and possibly beyond that;
- News related to the project;
- Events on which partners have been or will be invited as speakers or workshops that have been or will be organised by the consortium;
- Training & Educational sessions through the pilot sites and/or related use cases to the respective stakeholders.
- **To Whom**? Target groups interested in the NATWORK project:

Below is an indicative list of the target audiences regarding the dissemination and exploitation activities of the project:

- ICT Industry / System integrators: Corporations, SMEs and startups related to NATWORK project including, but not limited to, 5G and 6G networks, network slicing, cybersecurity and AI throughout the whole range of operations (service providers, integration techniques, interoperability techniques, etc.);
- End-users: Telecom operators and vendors, smart manufacturing sector, energy sector, automotive industry, media and the entertainment industry, education, transport, IoT industry, city management (smart cities and smart





municipalities), food and agriculture, financial services, UAV industry as well as healthcare sector.

- Standardisation bodies: Standardisation bodies play a crucial role in shaping industry landscapes by setting rules that define product compatibility, quality and safety. The focus will be mainly concentrated on these bodies where partners have extensive engagement with, including ETSI, ITU, 3GPP, IEEE 1920.1 and 1920.2 Aerial Networking standardisation WGs, IETF, OASIS and Open RAN Alliance.
- Scientific community: This part of the target audiences is in the fields of academic and research institutes associated with the EU funded projects, related committees and international fora in research areas that the NATWORK project focuses on.
- How? Key dissemination & communication tools & channels

The terms "communication" and "dissemination" possess their own distinct meaning. In practice, however, both concepts are very closely interlinked and will often overlap depending on a given activity. The following dissemination tools and activities depicted below are expressed fully in the next section:

- Events: Partners from NATWORK project will participate and organize workshops and events promoting ideas related to the project.
- Academic publications: Throughout the duration of NATWORK project, the consortium will contribute to peer-reviewed publications in top refereed scientific journals.
- EU Projects related to NATWORK: By highlighting EU projects related to NATWORK, themes similar to NATWORK will be promoted.
- Online presence: This part of the communication tools includes both the NATWORK site as well as the related social media accounts explained in detail in the following sections.
- Promotional material: Promotional material to promote the project at selected events providing general information and preliminary results, addressing both technical and non-technical public results, are going to be developed.





- Newsletters: Newsletters will be created and uploaded to the NATWORK site at regular intervals, providing an overview of the activities the NATWORK project performs.
- Press releases: Detailed information of the project on press format including blog and magazine articles as well as white papers related to NATWORK ideas.
- Videos: A NATWORK video depicting the project scope and promoting the NATWORK project will be released.

The four-pronged methodology for NATWORK project will be monitored and measured through a detailed set of KPIs and PIs. These KPIs and PIs will guide the D&C strategy regarding its impact and the visibility of the project through a specific approach. A detailed description of this methodology can be found in Section 4.











3. Dissemination tools and activities

3.1. Events

NATWORK partners foresee to present the results of the project to several areas including, but not limited to, relevant forums, networks, conferences, and technical events throughout the time frame of NATWORK. These events will have a direct or indirect relation to NATWORK's vision. Currently, partners of NATWORK project have already participated to the events and workshops below:

- ZHAW / 6Gsec Common Path and Cardinal Points "6Gsec CP²", Paris, France;
- TSS / INCYBER FORUM EUROPE, March 2024, Lille, France;
- NEC / Ciber Jueves ICAI, April 2024, Madrid, Spain;
- CERTH / EuCNC & 6G Summit, June 2024, Antwerp, Belgium.

In particular, NATWORK Project participated in EuCNC & 6G Summit that was held from June 3-6 in Antwerp, Belgium. Dr. Antonios Lalas from Centre for Research & Technology Hellas (CERTH) presented NATWORK Project at the speaker's corner showing the vision, the objectives and the rationale of the project. Colleagues from NATWORK's consortium were also present at the EuCNC & 6G Summit including Dr. Ioannis Markopoulos from NOVA, Dr. J. Joaquín Escudero Garzás from Gradiant and Dr. Francesco Paolucci and Mr. Igor Barsanti from CNIT - Consorzio Nazionale Interuniversitario per le Telecomunicazioni.







Figure 2 Dr. Antonios Lalas presenting at the speaker's corner of EuCNC & 6G Summit



Figure 3 Colleagues from NATWORK's consortium at EuCNC & 6G Summit: Dr. Ioannis Markopoulos (NOVA), Dr. Antonios Lalas (CERTH), Dr. Francesco Paolucci, Mr. Igor Barsanti (CNIT)





In addition, information regarding the upcoming workshop to be organised by Montimage is presented below:

• The 4th International Workshop on Safety and Security Testing and Monitoring (STAM) hosted by the International Conference on Availability, Reliability and Security (ARES2024), July 2024, Vienna, Austria

3.2. Academic publications

Partners of NATWORK will present the results of the project in articles in academic journals and related conference proceedings. Specific scientific articles will be submitted on a regular basis containing information about each phase of the project. Project partners are encouraged to use the project findings through empirical research while analysing specific sets of information. Within the academic papers pertinent discoveries, trends, or insights related to the NATWORK project could be also included.

At present, the following scientific papers have been published to the relevant academic journals:

#	Partner	Title	Journal / Conference
	ZHAW		The 2024 IEEE 99th
1		Exploring Live Payload Migrations for MTD in	Vehicular Technology
1		Microservices Architecture	Conference: VTC2024-
			Spring
2	IMEC	Trusting the cloud-native edge	IEEE COHERENT 2024
2	IMEC	Feather: Lightweight Container Alternatives for	
5		Deploying Workloads in the Edge	CLO3ER 2024
4	CNIT	In-Line Any-Depth Deep Neural Networks Using	IEEE Open Journal of the
		P4 Switches	Communications Society

Table 1 Scientific papers published to academic journals
Image: Comparison of the second second

In addition, the scientific papers presented below have been submitted for publication:





Table 2 Scientific papers submitted for publication

#	Partner	Title	Journal / Conference
1	ZHAW,	Moving Target Defense (MTD) for 6G Edge-to-	IFFF Network
-	UZH	Cloud Continuum: A Cognitive Perspective	
		NEC AgentQuest: A Modular Benchmark Framework to Measure Progress and Improve LLM Agents	2024 Annual Conference
	NEC		of the North American
2			Chapter of the
Ζ			Association for
			Computational
			Linguistics
3	ELTE	ELTE Extensible FRER Security Testbed in a Box	IEEE NetSoft PhD
			Symposium 2024

3.3. EU Projects working on themes similar to NATWORK

The NATWORK project has been chosen for funding under the European Smart Networks and Services Joint Undertaking (SNS JU). The NATWORK consortium, which combines multidisciplinary competences and resources from academia, industry and the research community, aims to promote a novel AI-leveraged self-adaptive security mechanism for 6G networks based on resilient bio-mimicry principles. Within this content, there are several projects that work under complementary themes.

Currently, NATWORK partners that are also associated with other EU Projects, that share similar themes with the ones of NATWORK project works with, can be found in the following list:

- Zero-SWARM: Zero -Enabling smart networked control framework for agile cyberphysical production system of systems, CERTH;
- ARROW: AI-powered Digital Security Processes over Cloud-native 5G and Beyond Networks (in the context of the 1st Open Call of the 6G-SANDBOX: Supporting Architectural and technological Network evolutions through an intelligent, secureD and twinning enaBled Open eXperimentation facility), CERTH;





- SwarmCatcher: AI-powered Anti-Drone and Surveillance Experimental Infrastructure over Cloud-native 5G and Beyond Networks (in the context of the 1st Open Call of the FIDAL: Field Trials beyond 5G), CERTH;
- FIDAL: Field Trials beyond 5G, NOVA, PNET;
- ACROSS: Automated zero-touch cross-layer provisioning framework for 5G and beyond vertical services, NOVA, PNET;
- ADROIT6G: Distributed Artificial Intelligence-driven open and programmable architecture for 6G networks, NOVA;
- DETERMINISTIC6G: DETERMINISTIC E2E COMMUNICATION WITH 6G, MONT;
- Desire6G: Deep Programmability and Secure Distributed Intelligence for Real-Time End-to-End 6G Networks, CNIT, ELTE, TSS.

3.4. Online presence

The NATWORK project has created its online presence through specific social media channels. Distinct accounts have been created for YouTube, X and LinkedIn and related information of the project is posted frequently. In addition, the NATWORK site was created early in the project. On the website, information about the NATWORK or of the consortium is being presented. In the following sub-sections, information related to social media and to the website is illustrated.

3.4.1 NATWORKS's online platform

The NATWORK's project website is <u>www.natwork-project.eu</u>. The main idea behind this website is to inform the scientific and non-scientific audiences regarding NATWORK's objectives, activities, use cases as well as the architecture of the project. Furthermore, the related results of the NATWORK project together with specific outputs are also presented.

In the following figures, the main page as well as the page that hosts the news & events of the project are illustrated:







Figure 5 News & Events page of NATWORK's website





3.4.2 Social media

Three social media channels were selected for the NATWORK project to spread project related news, present specific results of the project as well as show activities in which the partners of the projects participate. In the following sub-sections, the three social media accounts that were created in M2 are further explained.

LinkedIn

A LinkedIn account (<u>https://www.linkedin.com/company/natwork-project/</u>) was created as illustrated in the figures below:

Net-Zero self-adaptive activation of distributed self-resilient augmented services
A Message
Home About Posts Jobs People
Overview The ambition of the NATWORK project is to set the foundations and deploy the very first economically realistic, energy efficient and viable bio-inspired AI-based 6G cybersecurity and resilience framework for intelligent networking and services, taking a holistic approach and considering all elements in a cross-sector business environment to address the diverse requirements and challenges that arise. The NATWORK project aims to develop a novel AI-leveraged self-adaptive security mechanism for 6G networks based on resilient bio- mimicry principles. The goal is to improve the malleability and the self-resilience of future 6G network ecosystems to offer augmented and secure services at the lowest energy costs. The principle premise is to empower various entities of 6G ecosystems with the ability to self-regulate their conditions to provide service continuity in compliance with service SLAs.
Website http://natwork-project.eu/

Figure 6 NATWORK's LinkedIn about page







Figure 7 NATWORK's LinkedIn post

Through the LinkedIn channel, the following actions will be performed:

- Posting relevant information related to the NATWORK project (posts, articles, videos, etc.);
- Identifying content complementary with the NATWORK vision and re-share it;
- Notifying followers about events in which NATWORK partners will participate;
- Notifying followers about events that will be organized by NATWORK partners;
- Directing followers to the NATWORK project website.

Χ

An X account (<u>https://x.com/NatworkProject</u>) has been created as illustrated in the following figures:







Figure 8 NATWORK's X main page



Figure 9 NATWORK's X post





The main operations that will be performed by the X account are the following:

- Posting relevant information related to NATWORK project (posts, articles, videos, etc.);
- Re-sharing content, including articles and news, associated with NATWORK activities;
- Announcing events in which partners of the NATWORK project are participating;
- Inviting contacts from research and commercial organisations, and universities with interest in the NATWORK project;
- Directing followers to the NATWORK project website.

YouTube

A YouTube account (<u>https://www.youtube.com/@natwork-project</u>) has been created focusing primarily on videos associated to the NATWORK project. All videos shared to this account will be also shared on the other social media accounts. In the figure below, the YouTube account is portrayed:



Figure 10 NATWORK's YouTube main page





3.5. Promotional material

At present, the first promotional material release has been issued. More specifically, the first release of the flyer and the roll-up has been circulated and will be examined in the following subsections. In addition, the newsletter template has been created. The newsletters and the related promotional material will be used to promote the NATWORK project for both scientific and non-scientific audiences.

3.5.1 Flyer

A general-purpose flyer was designed during M3. The main purpose of this flyer is to inform the stakeholders of the project and other interested parties about NATWORK's objectives and the main activities of the project. In the figure below, the two sides of the flyer are presented:



Figure 11 NATWORK flyer / Front page







Figure 12 NATWORK flyer / Back page

Throughout the lifetime of the project, an estimation of 2,000 fliers will be printed and distributed to related audiences. A second version of the flyer will be produced around the mid-term review (M18) of the project.

3.5.2 Roll-up

A roll-up banner was composed during M2 depicting the core elements of the NATWORK project, including the vision and objectives of the project as well as acknowledgement of all consortium partners. The roll-out banner is depicted in the figure below:







Figure 13 NATWORK roll-up banner





3.5.3 Newsletter template

A newsletter template has been created as part of the first release of the promotional material. Within the newsletters, latest information regarding the NATWORK Project will be disseminated. Short articles related to the progress of the project and news about important facts happening in the fields of 6G, cybersecurity and networking will be covered. The related newsletters to be circulated will cover at least the following topics:

- Third-party events that NATWORK partners will participate in or organise;
- Press releases, including White Papers, associated to the NATWORK Project;
- Key project results of the project;
- Any other related activities on the wider range of 6G that are associated to the NATWORK Project.

At least one newsletter every six (6) months will be issued. They will be distributed widely in electronic form, using a joint distribution compiled by all partners. Below, the template newsletter is presented through the following figures:



Figure 14 NATWORK's newsletter template (1)





NATWORK Item #2

NATWORK consortium combines multidisciplinary competences and resources from the academia, industry and research community focusing on a user-centric services development, viable economic and business models, cybersecurity, interoperability, and on-demand, door-to-door services. It consists of fourteen (14) partners from ten (10) EU member states and associated countries.



NATWORK

This project has received funding from the European Union's Horizon Europe research and innovation programme under the Grant Agreement No 101139285



Figure 15 NATWORK's newsletter template (2)

3.6. Press releases

The press releases from the NATWORK project will be used to inform stakeholders about the status and progress of the project. They should contribute to the awareness of the NATWORK project and raise interest in the related activities for the project.

Some general directions on how to formulate press releases can be found below:





- Information presented through press releases should be refined in a way to promote NATWORK's activities to wider audiences;
- The title of the press release should convey a strong message with relation to the NATWORK project;
- The information provided should be clear, concise and can be read by non-technical audiences.

Thus far, two press releases have been circulated to the public:

- ZHAW researchers develop a secure architecture for future 6G mobile communications standard, March 2024;
- NATWORK Project focusing on an AI-based 6G cybersecurity and resilience framework, April 2024.

3.7. Videos

Apart from the promotional material described earlier, recorded material will be also used to promote NATWORK activities related to 6G networks. These videos will further enhance the dissemination and exploitation activities as well as the understanding of the impact of the NATWORK project. In addition, they can be used to give a quick overview of what NATWORK is about and what strategic activities promote the project.

At least one video will be created and uploaded on NATWORK's YouTube channel. The content will be based on the results of NATWORK, as well as the knowledge acquired during the project.





4. Information of KPIs and PIs

KPIs are a critical element to assess the performance and efficiency of the tools and activities of the dissemination and communication plan. These KPIs will help determine D&C strategy's impact in a precise, concrete and measurable way. Each KPI will evaluate a specific goal and target of the project. During this assessment, the dissemination and communication tools and activities will be assessed. If the activities and/or tools do not have the desired impact on the NATWORK project, alternative solutions may be considered.

In the following sub-sections, the KPI parameters, as well as the ways on which these parameters are monitored, will be presented.

KPIs and PIs 4.1.

Throughout NATWORK's time frame, the dissemination and communication strategy will be evaluated on a regular basis. There are a number of KPI types and related KPIs/PIs that will be monitored to assess the D&C plan. Below, the correlation between the types and the actual KPIs/PIs is depicted:

Туре	Metric	Parameter
	KPI	Number of attendees at the project workshop(s)
Community engagement	VDI	Number of partnerships with external institutions
	NF I	or EU projects working on similar themes
Lovel of integration among	KPI	Number of joint publications
	וחא	Number of visits to other partners for carrying out
partiers	KPI	joint work
Level of integration of Third	KPI	Number of Third Parties involved in extending
Parties (TP) in NATWORK		NATWORK Use Cases & services
	KPI	Average monthly visits of the project Web site
Level of visibility of the initiative	KPI	Total number of documents downloaded from the
at the European and global level		project Web site
	KPI	Number of articles in blogs/magazines/news
Progress on business modelling	KPI	Number of new business models identified in
activities		addition to the use cases anticipated in NATWORK

Table 3 Correlation between types and parameters of KPIs and PIs











Туре	Metric	Parameter		
	KPI	Number of users actively participating in the		
		NATWORK activities		
Progress on pilot sites	KPI	Number of institutions providing a formal		
		expression of interest in adopting the NATWORK		
		approach		
	PI	Number of Newsletters issued		
	PI	Number of Newsletter subscriptions		
	PI	Number of videos produced		
Promotional material	PI	Number of views of videos produced		
	PI	Number of brochures distributed		
	PI	Number of promotional material releases		
		(brochures, posters, etc.)		
Scientific excellent of project	KPI	Number of published works by Consortium		
scientific excellent of project		partners (single)		
research activity	KPI	Number of invited speeches/keynotes		
Cosial modia	PI	Social Media followers		
Social media	PI	Social Media posts		

4.2. Monitoring KPIs and PIs

Monitoring the dissemination and communication activities implemented is essential to keep track of the progress of NATWORK project objectives with relation to the KPIs and PIs defined above.

4.2.1 Target values

To measure the impact of the communication and dissemination activities, target values have also been identified for each KPI and PI. Below in Table 4, the target values of all KPIs and PIs are presented in three periods of the NATWORK project (M1 to M12, M13 to M24, and M25 to M36):

#	Metric	Parameter	M (12)	M (24)	M (36)
1	KPI	Number of published works by Consortium partners (single/cumulative)	5	12	25

Table 4 KPIs and PIs target values per year for NATWORK project.





#	Metric	Parameter	M (12)	M (24)	M (36)
2	KPI	Number of invited speeches/keynotes (cumulative)	3	6	10
3	KPI	Number of joint publications (cumulative)	3	6	12
4	KPI	Number of visits to other partners for carrying out joint work (cumulative)	3	6	10
5	KPI	Average monthly visits of the project Web site	300	500	1000
6	KPI	Total number of documents downloaded from the project Web site	250	500	800
7	KPI	Number of articles in blogs/magazines/news (cumulative)	12	15	20
8	KPI	Number of Third Parties involved in extending NATWORK Use Cases & services	-	5	10 - 12
9	KPI	Number of users actively participating in NATWORK activities	80	150	> 400
10	KPI	Number of institutions providing a formal expression of interest in adopting the NATWORK approach	3	15	25
11	KPI	Number of attendees at the project workshop(s) (cumulative for all organised projects)	30 – 50	50 – 100	400
12	KPI	Number of partnerships with external institutions or EU projects working on similar themes	3	5	7 – 10
13	KPI	Number of new business models identified in addition to the use cases anticipated in NATWORK	3	5	10
14	PI	Social Media followers	-	-	1000
15	PI	Social Media posts	24	48	72
16	PI	Number of Newsletters issued	2	4	6
17	PI	Number of Newsletter subscriptions	200	400	500
18	PI	Number of videos produced	-	-	1
19	PI	Number of views of videos produced	-	-	2000
20	PI	Number of brochures distributed	-	-	2000
21	PI	Number of promotional material releases (brochures, posters, etc.)	-	-	2









4.2.2 KPI Tracker

A KPI Tracker has been created and is available to all members of the consortium to view the status of the KPIs/PIs, or to register any activities they perform. Below is the KPI reporting screen providing the current status of the KPIs/PIs, the target values per period, and the related quarterly reports (more details are provided on the next section):

	Project name: GA number: Duration:		NATWORK 101139285 36 months		Dissemination Tracker & KPIs KPIs / PIs				
#	Metric 🔽	Туре	Group	Parameter	Current status	M (12)	M (3) report		
1	KPI	Scientific excellent of project research activity	Publications	Number of published works by Consortium partners (single / cumulative)	1,00	5,00	0,00	2,00	2,00
2	KPI	Scientific excellent of project research activity	Events	Number of invited speeches/keynotes (cumulative)	3,00	3,00	2,00	3,00	3,00
2.i			Events	Event participation (cumulative)	3,00		2,00	3,00	3,00
3	KPI	Level of integration among partners	Publications	Number of joint publications (cumulative)	1,00	3,00	0,00	1,00	1,00
4	KPI	Level of integration among partners	NATWORK activities	Number of visits to other partners for carrying out joint work (cumulative)	0,00	3,00	0,00	0,00	0,00
5	KPI	Level of visibility of the initiative at the European and global level	Views - Active users	Average monthly visits of the project Web site	245,00	300,00		40,83	27,22
6	KPI	Level of visibility of the initiative at the European and global level	Views - Active users	Total number of documents downloaded from the project Web site	12,00	250,00	0,00	12,00	12,00
7	KPI	Level of visibility of the initiative at the European and global level	Other activities	Number of articles in blogs/magazines/news (cumulative)	2,00	12,00	1,00	2,00	2,00
8	KPI	Level of integration of Third Parties (TP) in NATWORK	NATWORK activities	Number of Third Parties involved for extending NATWORK Use Cases & services	0,00		0,00	0,00	0,00
9	KPI	Progress on pilot sites	Views - Active users	Number of users actively participating to the NATWORK activities	0,00	80,00	0,00	0,00	0,00

Figure 16 KPI Tracker / reporting screen

Consortium partners are encouraged to fill in the dissemination and communication activities they carry out in any of the KPIs and PIs defined. In the figure below, part of the KPI Tracker, where a partner can register a joint or single academic publication related to the NATWORK project, is depicted:





	Project name: GA number: Duration:	NATWORK 101139285 36 months		Dissemination Tracker & KPIs Publications			
#	Partner (short name)	DOI	Type of publication	Repository link	Single/joint publication?	Status	Other partners participated (short names)
1	12 - ZHAW		Publication in Conference proceedings / Workshop		single	Submitted	
2	12 - ZHAW		Article in Journal		joint	Submitted	UZH
3	9 - NEC		Publication in Conference proceedings / Workshop		single	Submitted	
4	6 - ELTE		Publication in Conference proceedings / Workshop		single	Submitted	
5							

Figure 17 KPI Tracker / registration screen (publications)

Apart from the two KPI registration pages depicted above, there are respective parts of the KPI Tracker where the partners can register the rest of the KPIs/PIs.

4.2.3 KPI reports

Through the KPI Tracker described earlier, one can identify the status of the KPIs/PIs in relation to time by generating KPI reports. Currently, the KPI tracker can generate quarterly, half annual and annual reports. However, it is also possible to produce ad-hoc reports (e.g. monthly). The first quarterly report is depicted in the table below:

Table 5	KPIs an	d PIs first	quarterly	report
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#	Metric	Parameter	M (3) report
1	KPI	Number of published works by Consortium partners (single/cumulative)	0
2	KPI	Number of invited speeches/keynotes (cumulative)	2
3	KPI	Number of joint publications (cumulative)	0
4*	KPI	Number of visits to other partners for carrying out joint work (cumulative)	0
5	KPI	Average monthly visits of the project Web site	245
6	KPI	Total number of documents downloaded from the project Web site	12









#	Metric	Parameter	M (3) report
7	KPI	Number of articles in blogs/magazines/news (cumulative)	2
8*	KPI	Number of Third Parties involved for extending NATWORK Use Cases & services	0
9*	KPI	Number of users actively participating in the NATWORK activities	0
10*	KPI	Number of institutions providing a formal expression of interest to adopt the NATWORK approach	0
11	KPI	Number of attendees at the project workshop(s) (cumulative for all organised projects)	0
12	KPI	Number of partnerships with external institutions or EU projects working on similar themes	0
13*	KPI	Number of new business models identified in addition to the use cases anticipated in NATWORK	0
14	PI	Social Media followers	46
15	PI	Social Media posts	15
16	PI	Number of Newsletters issued	0
17	PI	Number of Newsletter subscriptions	12
18	PI	Number of videos produced	0
19	PI	Number of views of videos produced	0
20	PI	Number of brochures distributed	0
21	PI	Number of promotional material releases (brochures, posters, etc.)	1

* As mentioned in Deliverable D1.1, during the first 6 months of the NATWORK project KPIs and PIs should be assessed and may be adjusted accordingly. After extracting the first quarterly report, there is an indication that KPIs 4, 8, 9, 10 and 13 are misaligned (target values) and it may be adjusted in future reports.





5. NATWORK Partners individual D&C plans

The dissemination and communication plan was defined and thoroughly described in the previous parts of the document. However, involvement of all partners is essential for NATWORK project to achieve high visibility and build awareness. Each consortium partner will be responsible for contributing different activities related to dissemination and communication of the project. In the following sub-sections the individual input per partner is explained further.

5.1. CERTH

<u>Major objectives:</u> CERTH is a leading European Research Institute in the ICT domain and its contribution to the dissemination strategy for NATWORK project results and advances will be based on a multi-scale approach with the central axis being academia, research and industry.

<u>Stakeholder groups to be targeted</u>: Academia, research and industry related to 6G and security aspects. Contacts with industry and the consequent opportunity to link the activities of Research Organisations with the ability of industry to observe and take advantage of opportunities for dissemination is also sought.

<u>Means of Dissemination</u>: CERTH will focus its activities on disseminating NATWORK solution through:

(a) presentations in major European and international conferences, such as:

- European Conference on Networks and Communications, and the 6G Summit (EuCNC & 6G Summit)
- IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC)
- IEEE Conference on Innovation in Clouds, Internet and Networks (ICIN)
- IEEE Global Communications Conference (Globecom)
- IEEE International Conference on Communications (ICC)
- European Conference on Antennas and Propagation (EuCAP)
- IEEE International Mediterranean Conference on Communications and Networking (MEDITCOM)





- IEEE International Workshop on Computer Aided Modeling and Design of Communication Links and Networks (CAMAD)
- IEEE International Conference on Computer Communications (INFO-COM)
- IEEE Wireless Communications and Networking Conference (WCNC)
- IEEE Symposium on Security and Privacy
- International Conference On Mobile Computing And Networking (MobiCom)
- International Conference on Availability, Reliability and Security (ARES)
- European Symposium on Research in Computer Security (ESORICS)

(b) publishing results in widely read well-known scientific journals/magazines, such as

- IEEE Access
- IEEE Journal on Selected Areas in Communications (JSAC)
- IEEE Transactions on Communications
- IEEE Transactions on Antennas and Propagation
- IEEE Systems
- Elsevier International, Journal of Critical Infrastructure Protection
- Elsevier, Computer Networks
- Elsevier, Computer Communications
- IEEE Networks
- IEEE Computer Networks
- IEEE Communications

(c) organization of events, such as

- dedicated workshops, providing a platform for engagement with researchers and industry professionals.
- special sessions in conferences, leveraging acquired knowledge
- other events for broad dissemination in local and diverse communities and stakeholders.

(d) proactive involvement in key organizations, including:

- The 6G Infrastructure Association (6G-IA), and related working groups, such as
 - 6G Architecture WG
 - o Reliable Software Network WG
 - \circ Vision WG





- $\circ \quad \text{Open SNS WG}$
- o Trials WG
- Pre-Standardization WG
- $\circ~$ 5G/6G for Connected and Automated Mobility WG
- o Security WG
- The IEEE Communications Society (ComSoc)
- One6G association
- 6G Flagship
- Physical layer security for trustworthy and resilient 6G systems (6G PHYSEC) –CA22168 Cost Action
- European Cyber Security Organisation (ECSO)
- European Union Agency for Cybersecurity (ENISA) enterprise security working group
- Standardization bodies, such as ETSI, ITU, 3GPP.

(e) social media (Linkedin, X, YouTube) and website, such as

- Regular posts in social media regarding dissemination activities and events
- Regular posts on the website regarding project progress, case studies, and expert opinions.

(f) its extensive European network of Research and Technology Organisations (RTOs), as well as its strong business network of innovative companies around Europe (including SMEs & large enterprises operating in the 6G and security sector).

5.2. GRAD

GRAD, as part of the consortium, will implement the strategic plan for dissemination and communication and will ensure that the NATWORK project results have a reach beyond the partnership and are multiplied and sustained after the project's ending. To do so:

- GRAD will utilise digital platforms for communication and dissemination, including corporate social media (especially on LinkedIn and Instagram) and website (https://www.gradiant.org/en/). The aim is to reach 3 social media posts per year, and 2 blog posts during the lifetime of the project.
- GRAD will also publish 3 papers to academic conferences and academic journals.





- GRAD aims to disseminate the project results on different platforms and organisations such as: 6G-IA and European Cyber Security Organisation (ECSO).
- GRAD will present the project results at conferences such as IEEE MeditCom, IEEE PIMRC, EuCNC & 6G Summit, IEEE BlackSeaCom, and IEEE Globecom.

5.3. TSS

TSS communication and dissemination plan integrates presentations of our results at INCYBER conference Lille, participation at telecom conferences such as ARES, EuCNC, IEEE netsoft (Secsoft workshop on software security). Our participation in Web-Assemblies forum will also be considered, pending the expected outcomes from our research in this direction.

Our communication plan will also integrate our website, our Linkedin profile where our key findings will be presented. Our presence inside 6G-IA association will be also leveraged to communicate on our novelties.

Our exploitation plan is to expand the support of our software security solution to Web Assemblies and to extend our security-oriented offer to performance-optimization service. Our core exploitation activity is patent application. An open source / premium business model will be considered.

5.4. CNIT

CNIT will disseminate the research outcomes of the project at international conferences, including but not limited to the EuCNC conference, the IEEE International Conference on Communications (ICC), IEEE High Performance Switching and Routing Conference (HPSR), the IEEE Global Communications Conference (Globecom), and the IEEE Conference on Network Function Virtualization and Software Defined Networks (SDN/NFV). Specific topics inherently connected with optical networking in the data plane will be also disseminated at Optical Fiber Conference (OFC).

In addition, CNIT will ensure the publication of these findings in highly regarded international journals such as Elsevier's Computer Networks, the IEEE Open Journal of the Communication Society (OJCOMS), the IEEE Journal on Selected Areas in Communications (JSAC), the IEEE/OSA





Journal of Optical Communications and Networking (JOCN), and Elsevier's Future Generation Computer Systems (FGCS).

In addition, CNIT will take a proactive role in organizing specialized workshops that will engage other projects focusing on 6G security and data plane programmability. Noteworthy among these projects are DESIRE6G and CLEVER. Through these workshops, CNIT will facilitate the exchange of knowledge and advancements, and it will actively disseminate the results within the 6G Infrastructure Association (6G-IA) community.

CNIT will make use of the Linkedin channels to reach out the scientific community about the news, the outcomes and the events related and promoted by NATWORK.

5.5. ISRD

ISRD will post its progress on social media (LinkedIn and X).

ISRD will present results on major industry events. Usual industry conferences we participate in are the following:

- MWC Barcelona
- Globcom
- EuCNC
- Smart City and Summit Taiwan
- Computex Taiwan
- Small Cells World Summit
- Wireless Japan
- i14y Lab Summit
- Berlin Open RAN Working Week
- Open RAN World
- FYUZ
- GITEX
- 5G Techritory
- LEAP

ISRD will promote the project on our website: https://www.is-wireless.com/research/natwork/





ISRD will organize workshops and other events to update interested companies and researchers about its progress. Example of such an event is 5G Techritory in Latvia - ISRD organizes one of the key side events during the conference. We also organize closed events for our partners and clients to update them about our progress.

5.6. ELTE

ELTE will actively disseminate the research outcomes of the project at prominent international conferences, including but not limited to:

- EuCNC
- IEEE Global Communications Conference (Globecom)
- ACM SIGCOMM

ELTE will participate in workshops, focusing on emerging technologies and challenges in 6G security and network programmability. These workshops will serve as platforms for in-depth discussions and knowledge exchange among researchers, and industry professionals.

ELTE will ensure the publication of the research outcomes in highly regarded international journals, such as:

- IEEE Journal on Selected Areas in Communications (JSAC)
- IEEE Transactions on Communications
- IEEE Access

These publications will facilitate the dissemination of our research to a global audience, contributing to the advancement of knowledge in the field.

ELTE will engage with the broader research and industrial communities through proactive involvement in key organizations, including:

- The 6G Infrastructure Association (6G-IA)
- The IEEE Communications Society (ComSoc)

Participating in such organizations will enable ELTE to contribute to and shape the future research agenda and standards in telecommunications.





ELTE will leverage digital platforms, including social media such as LinkedIn, to maximize outreach and engagement.

ELTE is committed to integrating the latest advancements in telecommunication and programmable network skills into its curriculum. This includes:

- Continuously updating courses and modules that cover cutting-edge topics in telecommunication technologies, and network programmability.
- Offering hands-on laboratory sessions where students can work with state-of-the-art equipment and software tools, gaining practical experience.
- Encouraging student participation in research projects and innovation challenges.

By equipping students with up-to-date knowledge and skills, ELTE ensures that the next generation of professionals is well-prepared to contribute to this evolving field.

5.7. MONT

- MONT will actively disseminate project results through various channels to maximize reach and impact. This includes presenting at conferences such as ARES (Associated with ICSOFT) and EuCNC, and participating in industry forums like European Cyber Week. MONT plans to publish findings in reputable journals such as IEEE Access and ACM DTRAP.
- To foster collaboration and knowledge exchange, MONT will organize specialized workshops, providing a platform for engagement with researchers and industry professionals. Moreover, MONT will leverage its involvement in key organizations such as 6G-IA, the Systematic regional cluster, and the ENISA enterprise security working group. Through these channels, MONT aims to disseminate results broadly, influencing various communities and advancing the field.
- MONT will also utilize digital platforms for dissemination, including social media and the Montimage website. Social media posts will highlight key milestones, research findings, and upcoming events, engaging a wider audience and fostering community interaction. In addition, blog posts on the Montimage website will provide detailed insights into project progress, case studies, and expert opinions. These posts will serve as a valuable resource for both industry professionals and the general public, promoting transparency and ongoing dialogue about the project's impact and innovations.





5.8. IMEC

- IMEC will post its results on social media. Estimation: 3 social media posts per year.
- IMEC will publish papers to academic conferences and academic journals. Estimation: 3 conference papers and 1 journal paper, of which 1 is a joint publication with UESSEX.
- IMEC will publish blog posts about its work. Estimation: 2 blog posts.
- IMEC will organize workshops and other events to update interested companies and researchers about its progress. Estimation: 1 event per year.

5.9. NEC

To ensure the effective dissemination and adoption of CTI (Cyber Threat Intelligence) solutions developed during the NATWORK project, we will engage with the scientific community, industry professionals, and our internal business units through targeted communication strategies. For the scientific community, we will publish research papers in high-impact, peer-reviewed journals, and present our findings at major conferences and symposiums such as the IEEE Symposium on Security and Privacy and the ACM Conference on Computer and Communications Security. This approach will foster collaboration and advance knowledge in the field of cybersecurity.

In reaching industry professionals, we will demonstrate the practical applications and benefits of our CTI solutions by participating in industry events or trade shows like Black Hat and DEF CON, as well as conducting webinars or publishing white papers and case studies. These activities will help establish NEC as a leader in cybersecurity innovation and drive the adoption of our solutions across various sectors. Additionally, we will provide detailed presentations and engage in discussions to highlight the impact and implementation of our CTI solutions, thereby addressing the needs and challenges faced by industry experts.

Internally, we will focus on seamless integration and adoption of the CTI solutions within NEC's operations through regular updates via newsletters and bulletins, comprehensive training sessions, and interactive workshops. By organizing internal conferences and meetings with key stakeholders, we will gather feedback and continuously improve our strategies. The adoption rate and feedback from internal business units will be monitored closely to ensure that the solutions are effectively implemented and utilized, contributing to NEC's overall cybersecurity posture.





5.10. NOVA

NOVA will disseminate NATWORK project outcomes, including technical results and scientific findings to all relevant stakeholders and scientific communities through the tools and activities of the D&C strategy thoroughly described in the current document. More specifically, NOVA will be part of the following actions:

- NOVA will participate in conferences and events related to NATWORK's themes, including EuCNC & 6G Summit, IEEE Conference on Computer Communications and Mobile World Congress;
- NOVA will co-author academic publications in top refereed scientific journals and conferences;
- NOVA will also be engaged in 6G-IA Working Groups so that themes that NATWORK project assesses, will be accessible to broader scientific communities.

As far as the online content is concerned, NOVA will be responsible for coordinating the relevant information and placing it to the appropriate digital channels. Posts, articles and videos will be placed to the social media accounts: - LinkedIn, YouTube and X. Notifications regarding events, conferences and related content will be sent to the followers on a regular basis. This digital content will be shared to both technical and non-technical audiences. NOVA will be responsible for the availability of the social media accounts to all partners of the NATWORK's consortium.

5.11. PNET

p-NET is a Competence Center for Emerging Smart Networks and Services. It is a public-private partnership and involves 21 shareholders representing industrial and business sectors, research and academia, public authorities, consulting and entrepreneurship support companies. Activities related to raising awareness and visibility are key factors to the success of the Competence Center, as they will engage stakeholders and contribute to knowledge transfer and exchange between actors from different sectors (e.g. government, policy makers, academia, industry, companies, NGO's, etc.). all of whom constitute target groups of P-NET's dissemination activities. p-NET will also contribute to sustainability and impact maximization through channeling and promoting project outcomes to its partner organizations and their wide networks.





p-NET will actively contribute to the (co-)organization of open events (conferences, workshops, webinars), development of capacity building programs, joint publications. Examples follow:

Active Participation in International Conferences: EuCNC, MWC, 5G Techritory. Can contribute towards the organization of sessions dedicated to NATWORK in the scope of 5G Techritory

Participation and/or (co-)organization of Workshops/Webinars: on 1.5G/6G technologies for telecoms professionals; 2. 5G/6G technologies for vertical applications developers; 3. cybersecurity and resilience frameworks for smart networking and services.

Contribute to project Publications: contribute to peer-reviewed publications in top refereed scientific journals and conferences, such as the IEEE Communications Surveys and Tutorials, the IEEE Communications Magazine, the European Conference on Networks and Communications (EuCNC); the International Conference on emerging Networking EXperiments and Technologies.

5.12. ZHAW

As a Swiss university of applied sciences, ZHAW has a strong network within academia, and as such, ZHAW will mainly disseminate the results and achievements of the NATWORK project to the scientific community through academic publications and demonstrations in reputable journals and conferences. Moreover, ZHAW will also make contributions via graduate-level (i.e., MS and PhD) theses regarding the research questions raised in the project.

ZHAW also plans to organize certain events, in collaboration with other partners, regarding the outputs produced in the NATWORK project. These events will mostly include workshops, tutorials, and special sessions that aim to explain the project results in detail while discussing possible improvements that could be made in the future. As part of an additional knowledge transfer activity, ZHAW will utilize the findings of the project by compiling the gathered knowledge into new graduate courses and also by incorporating the results into existing security courses, so that students can benefit from the project outcomes as well.

Due to being an active member of IEEE 1920.2 Standard for Vehicle-to-Vehicle Communications for Unmanned Aircraft Systems and IEEE 3394 Standard for Space System Cybersecurity Work Groups, ZHAW will seek opportunities to play a role in the standardization process by utilizing the project results to contribute to the important use cases of satellite communications and aerial communications in 6G networks, such as air mobility and unmanned aerial platforms.





5.13. UZH

The University of Zurich (UZH) is one of the leading universities in Europe, recognized for its commitment to academic excellence and innovation. Established in 1833, UZH is the largest university in Switzerland, offering a diverse range of programs across seven faculties. Renowned for its research and teaching, UZH fosters an environment encouraging curiosity, critical thinking, and intellectual exploration. The university's vibrant community includes diverse students, faculty, and researchers dedicated to addressing global challenges and advancing knowledge in various fields. The Institute of Computer Science (IFI) at UZH, established in 1970, is a hub of cutting-edge research and education in computer science. The institute focuses on various areas, including algorithms, data science, machine learning, and networked systems. IFI aims to develop innovative solutions that advance scientific and technological frontiers. With state-of-the-art facilities and a collaborative research environment, the institute provides an excellent platform for students and researchers to engage in pioneering work. Its programs are designed to equip students with theoretical foundations and practical skills, preparing them for successful careers in academia and industry. The Communication Systems Group (CSG) at IFI, UZH, established in 2004, is dedicated to research and education in communication networks and systems. The group focuses on various aspects of networked systems, including network architecture, protocols, performance analysis, and network security. The core of CSG activities is to be actively involved in research projects on next-generation networks, such as 5G/B5G, emphasizing innovation and practical application. Led by an experienced researcher, prof. Burkhard Stiller, the CSG aims to push the boundaries of what is possible in communication technologies, contributing to developing robust, efficient, and secure network solutions. As part of the NATWORK EU project, CSG will prioritize disseminating research findings and technological advancements through various academic and professional channels. Our efforts will include publishing in esteemed scientific magazines (e.g., IEEE COMMAG) and journals (e.g., IEEE TNSM) and presenting at leading conferences (e.g., IEEE LCN) and workshops (e.g., Mobiarch). We will continue to organize and contribute to prominent events such as the IEEE LCN, ensuring broad visibility of NATWORK and CSG's engagement in 5G/B5G projects. Additionally, CSG will actively contribute to the development of standardization documents, such as those from ITU and IETF, ensuring that the innovations and technologies developed within the NATWORK project are widely recognized and adopted. Through these activities, CSG aims to highlight the innovations developed within the NATWORK project, fostering collaboration and knowledge exchange in 5G/B5G communication networks.





5.14. **UESSEX**

UEssex will disseminate the achievements of the NATWORK project, including scientific developments and proof-of-concept technical innovation. Dissemination will target the relevant research and industrial communities, via general as well as UEssex channels. Specifically,

- UEssex will disseminate NATWORK findings in relevant Working Groups of 6G-IA, initially the vision and security WGs.
- UEssex will share insights from NATWORK in relevant white papers, coordinated by 6G-IA and/or AIOTI.
- UEssex will publish papers in scientific conferences and journals, with initial estimation of 3 conference papers and 1 journal paper, 1 of which is a joint publication with IMEC.
- UEssex will share news of its research and innovation developments as well as community engagement over social media, with estimated 2 social media posts per year.











6. Conclusion

The deliverable D7.1 "Communication and dissemination plan, reports and materials" aims to provide important information regarding the main goal for D&C plan, which is to maximise the project's impact and increase the project's visibility. In this respect, the deliverable defines the D&C plan and assesses specific aspects on which the goal of D&C plan is going to be reached.

The first step during the interpretation of D&C plan was to determine the key message of NATWORK project. The information that is going to be distributed throughout the dissemination tools and activities will be communicated clearly in a consistent way. News related to the NATWORK project, key facts of the project from the initial stages towards the end, events linked to the project, and training & educational sessions are all part of the key message that is going to be distributed through the D&C channels.

Next step was to identify the audience of the NATWORK's key message. The audience that was identified is both scientific and non-scientific including the ICT industry, the standardization bodies and the scientific community. ICT corporations, SMEs, system integrators and startups, that have interest in NATWORK project themes, can be the key recipients. In addition, standardization bodies play a crucial role in shaping industry landscapes by setting rules that define product compatibility, quality and safety and it would be beneficial to create and maintain a two-way communication with them. The third dimension of NATWORK's audience is the scientific community. This part is associated with the EU funded projects, related committees and international fora in research areas that NATWORK project focuses on.

Finally, the dissemination tools and activities that will help reach the D&C goal were identified. These tools and activities are important factors to communicate the progress of NATWORK project. Through them the related project outcomes (technical results, scientific findings, etc.) are circulated to the stakeholders and to the wider audiences. Specific tools and activities – including events, academic publications, social media presence, press releases and so forth – have been already established. Regarding the Online Presence of NATWORK, NATWORK's website and the related social media accounts have been also created. Moreover, the first promotional material release has been issued.

These activities and tools need to be monitored in a consistent and precise way. To do so, specific KPIs and PIs have been identified to start measure NATWORK's activities. These KPIs help





determine D&C strategy's impact through a concrete manner. Each KPI evaluates a specific goal and a specific target towards the project.

A key element for the dissemination and communication plan to succeed is the individual involvement of all partners. Each consortium partner will be responsible for contributing to different activities related to dissemination and communication of the project. This will allow NATWORK project to achieve high visibility and share knowledge on themes it manages.

It has been ensured that for the dissemination and communication plan developed, all the factors, that will contribute to the visibility and impact of the NATWORK Project, have been taken into consideration.







