

# D6.2

## Dissemination and Exploitation Plan

PUBLIC

**Sami Lehtonen**

VTT  
P.O.Box 1000  
FI-02044 VTT

sami.lehtonen@vtt.fi  
+358-40-756 0927

<b>Project acronym</b> NaQCI.fi	<b>Project title</b> National Quantum Communications Infrastructure Finland	<b>Grant agreement No.</b> 101091479
<b>Deliverable No</b> D6.2	<b>Deliverable title</b> Dissemination and Exploitation Plan	<b>Version</b> 1.1
<b>Type</b> REPORT	<b>Dissemination level</b> PUBLIC	<b>Due date</b> 31.12.2023
<b>Lead beneficiary</b> VTT		<b>WP No</b> 6
<b>Lead author</b> Sami Lehtonen		<b>Contributing author(s)</b> Kari Seppänen
<b>1<sup>st</sup> Reviewer</b> Johan Laxén		<b>2<sup>nd</sup> Reviewer</b> Mikael Johansson
<b>Contributing author(s)</b>		<b>Pages</b> 14

#### Abstract

The Dissemination and Exploitation Plan is a crucial part of this project. This deliverable provides guidelines for communication and dissemination of project results to stakeholders. It identifies the stakeholders, provides means to engage those stakeholders and effectively manage the relationship with them. The end target is in supporting the impact of NaQCI.fi project.

Different stakeholder groups are identified and analysed to help understand the needs of each such group. Communication and dissemination activities are selected according to this analysis. The plan described outlines a strategy to effectively reach different audiences, select correct tools and channels that are needed in this phase of the overall EuroQCI project.

This deliverable is also a preliminary insight into the exploitation of the project results in accordance with communication and dissemination with different stakeholders. This deliverable plays a key role in the overall success of this project.

<b>Project Coordinator contact</b> Kari Seppänen VTT Technical Research Centre of Finland Ltd Tietotie 3, PL 1000, 02044 VTT, Finland E-Mail: <a href="mailto:kari.seppanen@vtt.fi">kari.seppanen@vtt.fi</a> Tel: +358 40 700 6887	<b>Technical Coordinator contact</b> Jani Myyry CSC - IT Center for Science E-Mail: <a href="mailto:jani.myyry@csc.fi">jani.myyry@csc.fi</a> Tel: +358 50 381 9517
<b>Acknowledgement</b> This project has received funding from the DIGITAL-2021-QCI-01 Digital European Program under grant agreement no 101091479.	

## HISTORY OF CHANGES

Date	Version	Author	Comments
20.12.2024	1.1	Sami Lehtonen	Revision after Project review
19.12.2023	1.0	Kari Seppänen	Reviewed version
19.09.2023	0.2	Sami Lehtonen	Revision
30.08.2023	0.1	Sami Lehtonen	Draft

## TABLE OF CONTENT

HISTORY OF CHANGES .....	3
TABLE OF CONTENT .....	4
EXECUTIVE SUMMARY .....	5
1 INTRODUCTION .....	6
2 DISSEMINATION AND EXPLOITATION PLAN .....	6
3 PROJECT VISUAL IMAGE .....	10
4 DISSEMINATION TOOLS AND ACTIVITIES .....	11
5 TRAINING .....	12
6 CONCLUSIONS .....	12

## EXECUTIVE SUMMARY

The Dissemination and Exploitation Plan is a crucial part of this project. This deliverable provides guidelines for communication and dissemination of project results to stakeholders. It identifies the stakeholders, provides means to engage those stakeholders and effectively manage the relationship with them. The end target is in supporting the impact of NaQCI.fi project.

Different stakeholder groups are identified and analysed to help understand the needs of each such group. Communication and dissemination activities are selected according to this analysis. The plan described outlines a strategy to effectively reach different audiences, select correct tools and channels that are needed in this phase of the overall EuroQCI project.

This deliverable is also a preliminary insight into the exploitation of the project results in accordance with communication and dissemination with different stakeholders. This deliverable plays a key role in the overall success of this project.

# 1 Introduction

## 1.1 Purpose of this document

This deliverable describes the dissemination and communication plan of the Horizon Europe NaQCI.fi project which in turn is part of the EuroQCI. This is both strategic and practical document in nature. Strategic in the sense that it handles the overall visibility of the project to the general public as well as different target audiences. Practical in a way as it describes means and simple tools and measurements to successfully carry out tasks of project results dissemination and generic communication.

## 1.2 Structure of this document

This document has the following parts. First the overall dissemination and communication plan is documented. This is a refined version of the initial draft plan depicted in the PartB or Grant Agreement.

The project visual image is presented next. It is foreseen that a unified visual image makes the project communication easier as the project will be easily identifiable and distinctive.

Chapter 4 describes dissemination and communication tools and activities in more detail.

The project training is described in chapter 5. It is a key part of communication in this project as it further serves as the starting point of exploitation of the project results.

Last chapter includes some preliminary conclusions and lists some activities due later.

# 2 Dissemination and Exploitation plan

Effective dissemination, communication and exploitation activities are extremely important for the success of the NaQCI.fi project and will therefore be carefully planned and executed. These activities foster targeted promotion of project results towards key target groups via tailored action assuring a committed participation and interest in the project by key stakeholders. Preliminarily identified target groups on the technical and operational side include service and component providers such as industrial players in cybersecurity, secure communication networks, satellite communication, optical fibre networks, and optical fibre components, as well as end users such as financial institutions, healthcare companies, and governmental institutions. It will also be important to reach financial actors, policy makers and regulators including standardization bodies, as well as the civil society and public at large to popularise the benefits of the QCI for Finland and the EU; in short, to motivate and justify the investment of public money.

It is important to disseminate information about the new opportunities provided by the deployed QCI infrastructure as widely as possible, also beyond “obvious” early adopters. A new technology can, and usually does find utility in unexpected applications. We will therefore do our best to also reach those stakeholders that we are currently unaware of. The plan includes the development and deployment of a wide range of channels and tools, including quantitative and qualitative criteria for evaluating and measuring dissemination, exploitation, and communication success. The NaQCI.fi project will capitalize the networking potential of each partner involved to maximize the outreach of the project’s dissemination and awareness raising activities and guarantee exploitation of results beyond the project duration. Important, already existing communication channels include the BusinessQ network, the main Finnish forum for co-operation and discussion between enabling technology providers and end-user companies, predominantly in Finland, that will be the direct and indirect beneficiaries of quantum technologies. BusinessQ is connected to InstituteQ, The Finnish Quantum Institute, which has a goal of raising the readiness of Finnish society for the disruptive potential and implications quantum technologies will have for society and the economy at large. On the non-commercial side, the annual “Funet Technical Days” event reaches stake-holders and existing users of the Funet network.

## 2.1 Dissemination

NaQCI dissemination actions transfer knowledge and project results to promote and enable the use and exploitation of project outcomes during and beyond the project lifetime.

Key actions include:

- Review of preliminarily identified target groups and selection of key stakeholder among them;
- Identification and delivery of specific key messages for each target group;
- Interaction and engagement activities including NaQCI.fi key national events where to engage potential stakeholders; organise workshops about the Open QKD testbed and the deployed links available for use cases
- Measures to evaluate dissemination success, communication tools and channels.

The dissemination activities will be done in close collaboration with the Advisory Board. A draft plan is presented in Table I below.

Table I. Draft plan for dissemination activities

Channel	Objective of dissemination	Type of audience	KPI	Schedule
Project website	Events, progress / status updates, results, deliverables	Stakeholders, interest groups, general public	Number of website visitors	Once per month
National events (relevant fairs, conferences, and workshops)	Identify stakeholders and promote the access to the open QKD testbed	Stakeholders including providers of components and services as well as potential users	Number of Interested stakeholders	Every six months
Project Workshop	Promote the access to the open QKD testbed and to the deployed links available for use cases	Stakeholders including providers of components and services as well as potential users	Number of events and their participants	M18, M24
Social media channels	Visibility for the project results, of the testbed and of the use cases	General public, media, decision-makers, stakeholders	Number of engagements	All project duration and beyond

Identify and discuss with potential end users and plan demonstrations on both the GOV and PUB network.

- Identify and discuss with potential industrial players for the emergence of an autonomous EU quantum communication industry
- Dissemination of the EuroQCI initiative, of the project and of the achievements to general audience and to technical audience
- Organise workshops and hands-on events for schools and universities
- Train users how to use and to deploy QKD systems in real networks

### 2.1.1 Scientific dissemination

As a research and innovation action project, NaQCI.fi aims at disseminating its results in scientifically high quality. Project results will be published in scientific journals, articles, conference proceedings, and workshops. Additionally, the project team will follow standardization processes and if applicable, contribute to them. Project results can be used in scholarly thesis works.

Papers and articles published in this project are aimed at well respected international journals and conferences in topics relevant to the project in the field of information security, cryptography, and photonics held by such organizations as IEEE and ACM. Conference rankings (like CORE) are taken into account when selecting publication platforms.

### 2.1.2 Dissemination to decision makers

QKD technologies can be seen as a major enabler in cybersecurity, defense and national security. It is fundamental that these technologies and their significance are familiar to the decision makers. Especially so as this project is only the first phase of the EuroQCI and further research and investments are mandatory to achieve a fully operational and useful QKD network in the future.

To this end, this project will also make use of targeted events, high-level panels, and policy briefs to reach this particular target group. The Advisory Board may play a key role in this part.

## 2.2 Communication

Communication activities promote the NaQCI.fi project and its impact on the security of the society widely to all stakeholders throughout the lifespan of the project. NaQCI.fi will reach out to society to show the benefits of the project for citizens and industry. A visual identity will be created for the project to raise interest, to clarify the main messages and to increase awareness of the project and its outcomes. A key aspect here is to connect the efforts within the national project to the larger, pan-European effort through the entire EuroQCI initiative. It is important that the QCI efforts are seen as a cornerstone of European digital communication in the upcoming future. This will catalyse early uptake of the technology among the public and private sector.

A social media strategy will be developed to maximise dissemination of the results and to create public engagement and interaction. Specific communication targets will include target number of publications and press releases as well as social media and website statistics.

The following main messages for specific audiences have been identified:

- Potential users: financial sector, healthcare sector, governmental sector, defence industry, suppliers of Finnish security authorities, logistic companies, industrial and automotive, telecom providers relying on highly secure facilities, aviation, police, border control, government, e-government, high performance computing, and e-businesses in general.
  - Main messages: what is the EuroQCI initiative, how it will help their security, the expected timeline for the infrastructure to be in place, how it will be accessed
  - How to reach them: general media, events and workshops (see Dissemination above), social media, project website.
- Industry (hardware and software): photonics, electronics, telecom, data storage, and cybersecurity
  - Main messages: what is the EuroQCI initiative, the importance of an EU-27 value chain, what business opportunities can bring to them, how to get involved
  - How to reach them: general media, events and workshops (see Dissemination above), social media, project website.
- Policy makers, national, regional and local decision makers



- Main messages: what is the EuroQCI initiative, and the expected applications of it. What actions is required from the decision makers to enable wider application of the technology in their area.
- How to reach them: general media, events and workshops (see Dissemination above), social media, project website. Direct contact to identified national policy makers, such as the relevant ministries in Finland, and NCSC-FI.
- Scientific community & academia
  - Main messages: what is the EuroQCI initiative, the importance of building an EU-27 ecosystem, the role of research and the Horizon Europe calls for R&D activities to support that, networking with EU-27 partners to build collaborations and consortia.
  - How to reach them: general media, conferences, events and workshops (see Dissemination above), social media, project website.
- Media
  - Main messages: what is the EuroQCI initiative, why it is important for Europe, how it will be accessed and who are the targeted users, why it is important to develop an EU-27 value chain
  - How to reach them: press releases, direct contact by communication experts of VTT and CSC
- General public
  - Main message: what is the EuroQCI initiative, why it is important for Europe, why it is important to develop an EU-27 value chain
  - How to reach them: general media, social media, project website

#### Communication channels:

- Project website for communicating the project concept, activities, and results (all stakeholders)
- Social media (LinkedIn, and YouTube), for promoting project events and result highlights (all stakeholders)
- Videos popularising the EuroQCI initiative to a Finnish audience (e.g. in YouTube; all stakeholders)
- Press releases of project highlights (all stakeholders)
- Trade journals: (market/industrial stakeholders)
- Fairs and other events: (market/industrial stakeholders, policy makers, national, regional and local actors)

## 2.3 Measuring and key indicators

The following (Table 2.) key performance indicators of communication activities have been identified.

Table 2. Key Performance Indicators for communication activities

Key Performance Indicator	Value	Description
Website – average monthly single users	≥ 100	# of users accessing the project website
YouTube videos – views	≥ 1500	# of views
X (formerly known as Twitter) – engagements	≥ 600	# of engagements per post, at least 4 posts per project year
LinkedIn – engagements	≥ 200	# of engagements per post at least 4 posts per project year
Networking events	≥ 5	# of events attended by consortium members
Press releases	≥ 2	# of media mentions

These Key Performance Indicators will be monitored following with necessary actions during the whole duration of the project as well as in following related projects continuing the work started in this NaQCI.fi project.

Measures to minimize the risk of not achieving the KPIs are addressed in a following Table 3. Risk management strategy in PartA only covered one WP6 related risk concerning Vendor lock-in. All activities will actively highlight and acknowledge the decisive financial support from the EU for enabling the project.

Table 3. Risks related to Key Performance Indicators

Risk number	Description	Proposed Mitigation Measurements
1	Long delivery times of equipment delays the project	Dissemination activities are postponed until we have results to work with
2	Changes in selected communication channels	If a social media platform changes its focus or policies – dissemination activities are targeted to other platforms.
3	Engagements are not achieved	We emphasize the quality of dissemination activities over quantity.

## 3 Project visual image

This project aims at a unified visual image in order to brand the Finnish QCI activities under an easily identifiable and distinctive appearance.

### 3.1 Website layout

One way of popularising this project and its results is via a website. The project has opened the website NaQCI.fi. The webpage will include contents both in Finnish and English. The pages in English will be mainly to inform the other EU-27 countries about our progress and our learnings.

The website layout is shown in Figure 1.



Figure 1: NaQCI.fi website

### 3.2 LOGO design

A logo for this project was designed. This logo is used in all material from website to project result presentations as well as deliverables and other documents.



*Figure 2: NaQCI.fi logo*

## 4 Dissemination tools and activities

### 4.1 Newsletters and press releases

This project will publish press releases and newsletters of achieved results in a timely manner. This project also aims to popularise the EuroQCI initiative to the general public through general media and suitable press releases. The main goal is to tell the Finnish population why EuroQCI is important, relevant for the national security, and worth investing a significant amount of public funds.

### 4.2 Workshops

The project consortium will arrange workshops in the field of QKD to disseminate results as well as gather relevant information on stakeholder needs and expectations. The project personnel will attend workshops arranged by others. For example, collaboration with similar projects and their workshops in neighboring countries.

The workshops will be held mainly in the second half of the project, to show the results to stakeholders and draw their attention towards QKD. With a similar goal, we will also organise hands-on events, where people will have a chance to use QKD systems and see them in action in the demo room of the project.

### 4.3 Social media

Different social media channels were identified in the initial dissemination and communication plan draft, such as X (formerly known as Twitter), LinkedIn, and Youtube. Due to changes in moderation and policies and algorithms, apparent declining of engagement with the platform, and misinformation and hate speech on X, it is dropped from the list of used social media channels. of The project results and related activities will be promoted and endorsed in these social media channels – namely LinkedIn and YouTube. Separate project accounts are created for better visibility on both of these social media platforms.

## 5 Training

Potential users of QKD are identified in this project. This work starts with the list of use cases identified earlier in projects OpenQKD and OQTAVO. These potential QKD users in Finland will be contacted for both the GOV links and the PUB links. This project will also go through the whole QKD value chain to identify all existing Finnish companies that could help building the EU-27 value chain. In a second step, these possible players are contacted in order to make them aware of the business opportunities coming from the EuroQCI initiative. In a third step, we will plan the engagement of all companies that show interest in the EuroQCI initiative and will introduce them to the EuroQCI community.

To this end we will organise several training sessions, with different modalities and different target users. The goal is to train a large number of users to deploy and use QKD systems in optical fibre networks, based on the experience gained during the project execution. This activity will start in the last year of the project and will last till the end (M18-M30). A key educational tool for the training will be the Open QKD testbed developed in T2.3.

## 6 Conclusions

This deliverable described the dissemination and communication plan and related activities towards different stakeholders and audience groups. This is the starting point of these activities in the project. Towards the end of the project, planning the future reuse of the QKD hardware purchased during the project is carried out. In the long run, it will be reused for educational purposes but, before that, the same hardware will be useful for the next phases of EuroQCI, including cross-border deployment and possible satellite integration.



Horizon Europe – This project has received funding from the DIGITAL-2021-QCI-01 Digital European Program under grant agreement no 101091479.