



HellasQCI

Deploying advanced national QCI systems and networks in Greece

Deliverable D6.2

Dissemination, communication, clustering and exploitation activities

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Abstract: This interim report provides a comprehensive overview of the dissemination and communication strategies employed by the HellasQCI project during its first 15 months. As an integral component of the EuroQCI initiative, HellasQCI aims to establish a secure quantum communication network to protect the EU against emerging cyber threats. This report details the extensive dissemination and communication activities undertaken to inform stakeholders across the EU about the project's achievements and objectives.

The document outlines the establishment of a robust online media presence, including a redesigned responsive website and frequently updated social media platforms ([Twitter](#), [Facebook](#), [LinkedIn](#), and [YouTube](#)) to enhance brand identity and raise awareness. It also describes the development of the HellasQCI online training platform and the methodology behind the first training event, aiming to

educate and involve the HellasQCI community and stakeholders in quantum communication and cybersecurity.

Further, the report presents numerous dissemination and communication activities, such as clustering activities, collaborations with EU-funded projects, conference participations, and scientific publications. It meticulously tracks the project's achievements against predefined KPIs, providing insights into the effectiveness of the dissemination efforts.

This deliverable, forming part of the Work Package 6 "Communication, Dissemination, and Exploitation", highlights the project's commitment to raising public awareness, engaging with targeted stakeholders, and fostering a community around the HellasQCI network. By implementing the dissemination and communication plan laid out in D6.1, the project seeks to broaden its reach and impact, ensuring the successful exploitation of its results and contributions to EuroQCI Initiative and beyond.

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List of Acronyms

QCI	Quantum Communication Infrastructure
CSA	Coordination and support action
QKD	Quantum Key Distribution
WP	Work package
NatQCI	National QCI project
DCB	Dissemination and Communication Board
EuroQCI	European Quantum Communication infrastructure
PETRUS	EuroQCI coordination and support action
OGS	Optical ground station
KPI	Key Performance Indicator
DEP	Digital Europe Programme
UX	User Experience
PMB	Project Management Board
NRENS	National Research and Educational Networks

Executive Summary

The HellasQCI project, a key component of the European Quantum Communication Infrastructure (EuroQCI) initiative, is dedicated to establishing a "secure quantum communication shield" to safeguard the EU society and economy against emerging cyber threats, particularly those posed by advancements in quantum computing. The project's primary objectives include the development and deployment of cutting-edge quantum communications systems and networking technologies in Greece, demonstration of advanced use cases across various application scenarios, provision of comprehensive training for technical, research, and end-user staff, collaboration with PETRUS CSA and other National QCI Proposals to collectively build the EuroQCI, and the establishment of the HellasQCI community involving all relevant national stakeholders. Additionally, the project aligns with QKD security standards, certifications, and regulations, aiming to enhance national and European scientific and technological capabilities in quantum communication and cybersecurity.

This Work Package 6 (WP6) "Communication, Dissemination, and Exploitation" interim dissemination report of the HellasQCI project, covering the first 15 months, offers a detailed overview of the dissemination and communication activities and the project's achievements thus far, as well as the impact of disseminating project findings to key stakeholders across EU countries.

Communication and dissemination activities were carefully planned, implemented and monitored throughout the past 15 months. All project partners are involved in dissemination and exploitation to foster awareness and transfer knowledge within their own communities.

The document outlines the dissemination activities performed in the context of the project and shows how the plan laid out in D6.1 has been implemented so far with the aim of reaching a wider yet targeted audience.

1. Introduction

HellasQCI is a European project, supported in part (50%) by the European Union under grant agreement No 1001091504 and in part (50%) by national funds. The project is also supported by the Greek Government through the Ministry of Digital Governance. HellasQCI is coordinated by GRNET S.A. – National Infrastructures for Research and Technology and consists of a 13-partner consortium (after the withdrawal of COSMOTE from the HellasQCI consortium).

The project will design and implement the first Greek national experimental quantum communication network in three major urban centres and make it interoperable with the space segment of the EuroQCI. The deployed networks will serve as the backbone of the Hellenic national quantum infrastructure on which a diverse range of use cases and pilot scenarios will be investigated to introduce ultra-secure encryption of sensitive data and communication, using Quantum Key Distribution (QKD) technology, in the governmental, industrial and research sectors.

This deliverable is part of Task 6.3 “Dissemination and Communication Activities” of WP6 “Communication, dissemination and exploitation”. It reports the detailed dissemination, communication and exploitation activities taken place until M15 and presents the impact that these activities had. Related key performance indicators (KPIs) help in measuring the effectiveness of the communication and dissemination activities and in realigning the strategy where needed.

1.1. Relation to the project

WP6 is a horizontal work package and is responsible for the communication of the project, its outreach and the stakeholders’ involvement, including the creation of the HellasQCI community. Its core objectives are: a) to increase awareness about the project activities, outcomes and benefits, b) to ensure the involvement of National stakeholders and create the HellasQCI community, c) to support exploitation of the project results by allowing open access to selected HellasQCI tools and d) to support standardization activities of the project results in European and international Standards Development Organizations (SDOs). Work package 6 is led by the National Center for Scientific Research Demokritos (NCSR) while nine (9) other members of the consortium participate in its activities. Six (6) partners of the consortium contribute to this deliverable: NCSR, GRNET, MinDigital, NOA, QUBITECH and SPACE HELLAS).

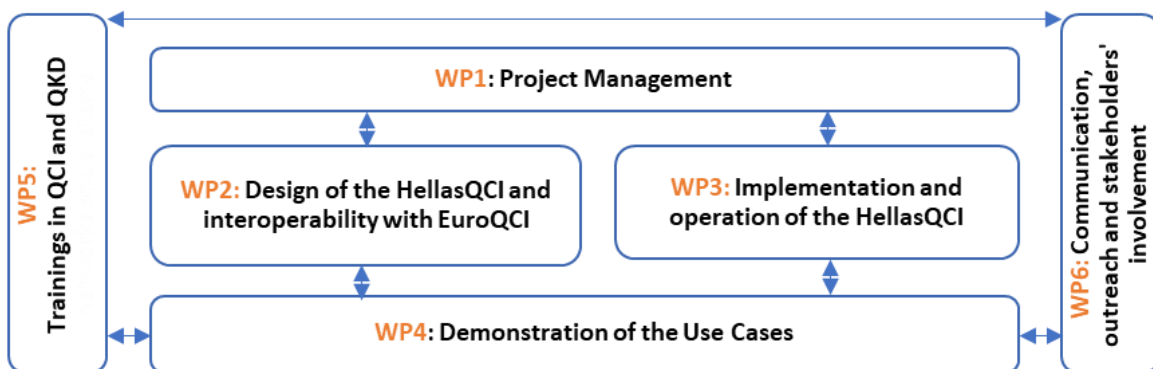


Figure 1: Dissemination and communication WP relative to other WPs

1.2. Communication guidelines, Security Advisory Board (SAB)

The HellasQCI project has established a Security Advisory Board (SAB).

The SAB reviews all project deliverables of any type, assesses whether they include any security-sensitive information and proposes timely measures to prevent the misuse of such information and to be compliant with the EuroQCI security guidelines.

Additionally, the SAB has established a process to review sensitive content, ensuring it's not shared or published in any communication or dissemination channels for the HellasQCI project.

This ensures that materials containing sensitive information undergo SAB filtering, and communication and dissemination activities are regulated to prevent the release of certain materials.

The process that has been established to regulate all communication activities, including publications in journals, conferences, newsletters, website and social media announcements, and information shared at training events is summarized below:

Authors of all content produced in the context of the HellasQCI project i.e. publications / presentations / deliverables etc. ensure to forward the content item to the SAB member designated responsible for publicity approvals, 10 days before the submission/publication deadline.

For publications, all authors have to ensure that no sensitive information is included in the copywrite. The SAB member reads the item, confirms there is no sensitive information included and grants approval for submission/publicity. The content item forwarded to the SAB member need not be in final form as long as it contains any important information.

For presentations at conferences, workshops, etc. if the presentation is for a publication covered in the previous paragraph and contains no additional information, there is no need to go through the SAB. Otherwise, it has to follow the same process as above.

Specific provisions to prevent leakage through social engineering were implemented. Appointing representatives to appear at conferences, present project progress, etc. items outside the project team have been considered.

1.3. Document structure

The document has seven (7) distinct sections. It starts with Section 1, with an Introduction of the document's purpose and content. Moving forward, Section 2 presents the Dissemination and communication tools and methods – HellasQCI online presence, shedding light on the methods employed to share and communicate information on online tools. In Section 3, the focus shifts to the projects Dissemination and communication activities – HellasQCI offline presence. Section 4, titled Monitoring Performance, presents the measurable results of the implementation of the Communication and Dissemination Strategy. Section 5, addresses the Exploitation plan and Methodology, outlining the approach for utilizing acquired information effectively. Section 6 includes Partners' on-line media channels for communication of exploitation outcomes. The document ends with Section 7 which is a conclusion. This structured framework ensures a logical flow of information, guiding the reader through the key sections of the document.

2. Dissemination and communication tools and methods – HellasQCI online presence

The online media presence of the project helps in disseminating the project's updates, progress and achievements to all target audience groups. Having an online presence allows a Digital Europe Program (DEP) project to reach more people and build a stronger awareness around the concept of Quantum Communication Infrastructure. With the right content news about the HellasQCI project can reach more target audience groups and build a more recognizable brand.

Online Campaigns make it easier for the project to reach more key stakeholders. The HellasQCI key messages are targeted to the right audiences through search engine optimization and other online marketing strategies (i.e. social media marketing) to ensure the targeted campaigns reach the target audiences and hence most likely to be interested in it.

HellasQCI Online Media Presence is comprised of the official website (www.hellasqci.eu), the Training Portal, the HellasQCI social media channels (i.e. [LinkedIn](#), [Facebook](#), [Twitter](#), [YouTube](#)) and the [Newsletters](#).

2.1. Website

A website is crucial for implementing a DEP project, such as is HellasQCI, due to its role in disseminating information, transparency, accessibility, engagement, documentation, and promotion. It serves as a central hub for sharing project information, fostering trust and accountability. It ensures that information is accessible to a wide audience, fostering a sense of community and collaboration. A well-designed website can attract key community audience registrations including policymakers, while also serving as a repository for project documentation. It also helps promote the project, ultimately contributing to its success and impact.

The HellasQCI project website is a crucial communication tool for the consortium, serving as a central node for activities and identity. It links all online communication actions and tools, enabling easy access to open access tools and publications. The website is maintained by NCSR D, with partners contributing content. It also serves as a hub for communication materials and link to social media accounts. The website features a subscription tool for interested parties and complies with the EU General Data Protection Regulation. The HellasQCI website provides information and support for businesses, organizations, and individuals in Greece regarding quantum communication infrastructure implementation.

The HellasQCI website was established in the early stages of the project (M4), to serve as a central hub for communication and dissemination. The website is the digital place where all online communication actions and tools are connected, while open access tools and scientific publications are easily accessible, all while respecting the EU General Data Protection Regulation (GDPR). The website is managed by NCSR D, while consortium partners contribute to its content. The website also serves as an online repository for communication materials, media kit, flyers, press releases, and links to the project's social media channels.

The project website features a subscription tool to the project's activities and newsletter. Stakeholders are encouraged to choose to be alerted to news from individual Work Packages, complying with the EU General Data Protection Regulation (GDPR).

The HellasQCI website provides information and support to businesses, organizations, and individuals in Greece regarding the implementation of quantum communication infrastructure. It offers a range of functionalities, including information, directories, search tools, training courses, news and events.

An overview of the main functionalities and pages of the website is provided in the following sections.

Information about the project and its objectives

The website provides information on the project and its objectives and on its partners. A list of Frequently Asked Questions is also available. This information can be useful for businesses and organizations seeking to understand the role of the HellasQCI and how it intends to improve the communication infrastructure in Greece (**Figure 2**).

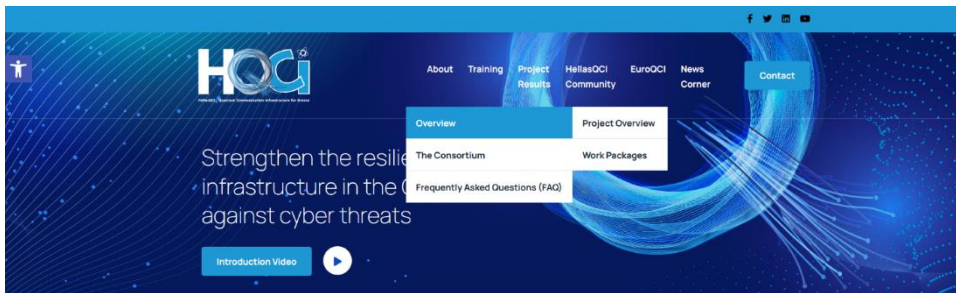
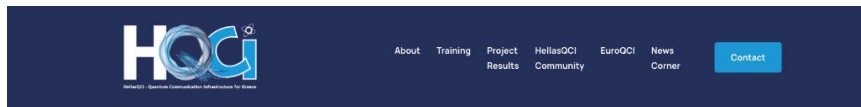


Figure 2: Example of HellasQCI menu overview

- **The consortium:** In this page the partners are listed. For each partner there is a logo, their name and link to their websites.
- **FAQs:** In this page a list of Frequently Asked Questions is available



GET TO KNOW THE PARTNERS

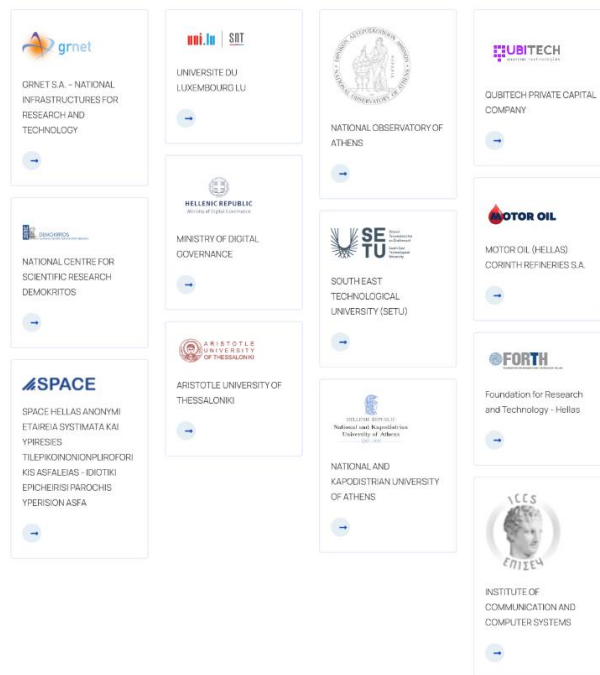


Figure 3: Example of HellasQCI webpages

Training

The portal provides information about the Training Events of the project (Figure 4). It provides an overview of the training methodology and a detailed information page about the 1st training event (4 days) with two thematic axes. Under the “Training” menu, visitors of the website have access to the [training platform](#), where learning material is provided. Training platform functionalities are further analysed in Section 2.2

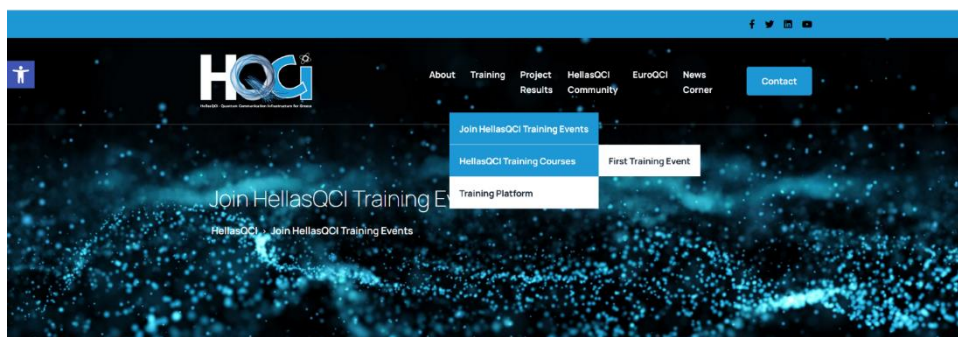


Figure 4: Example of HellasQCI Training Menu

Project results

- **Public deliverables:** Project deliverables are available to the general public, key stakeholders, industry partners and policy makers.
- **Publications:** Project presentations and publications are available for download.

- **Scientific publications:** This section features scientific publications in open access journals and white papers.
- **HellasQCI procurements:** This section features announcement of the procurements procedures that have been carried out in the context of the project.

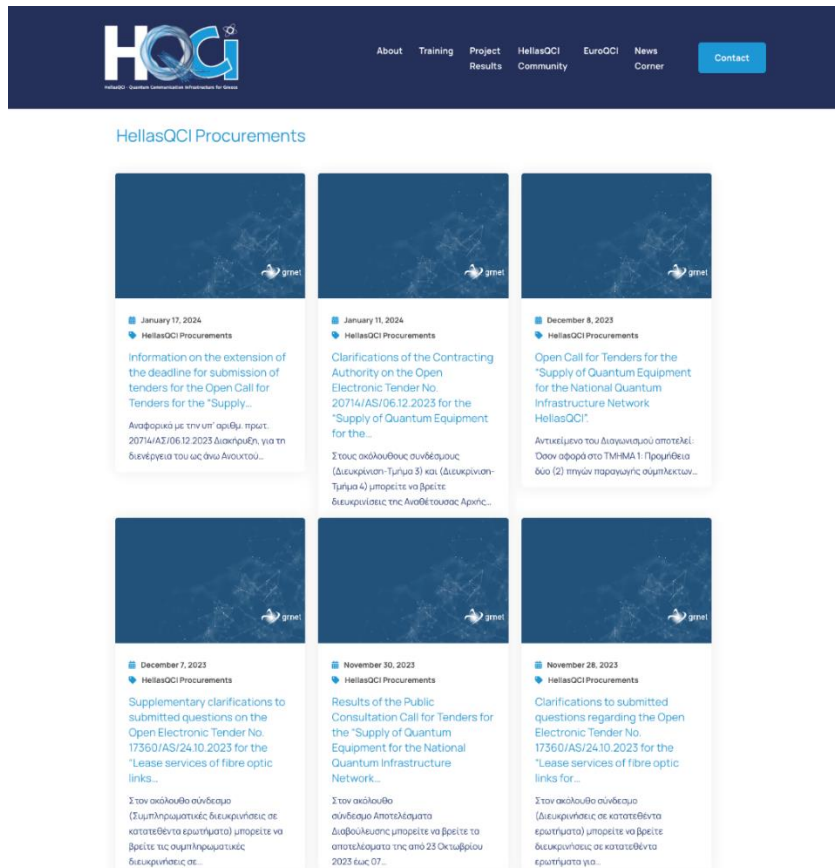


Figure 5: Example of HellasQCI webpages

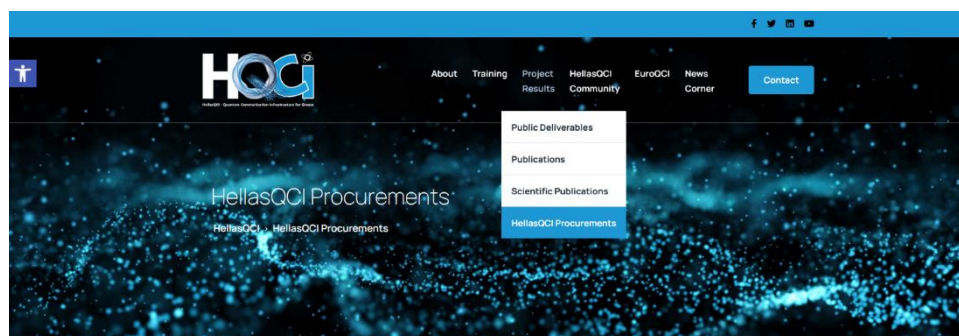


Figure 6: Example of HellasQCI project results menu

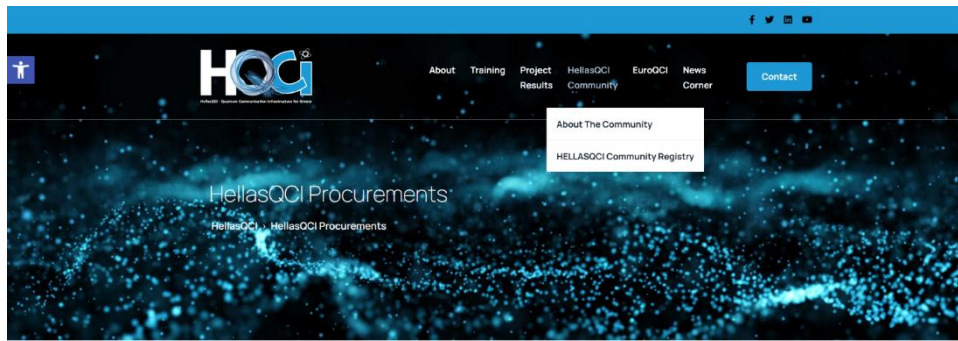


Figure 7: Example of HellasQCI website community menu

HellasQCI community

To promote the use of Quantum Communication Technologies throughout Greece, HellasQCI aims to establish a community and ecosystem around its activities. This Community will foster and enhance the development of quantum communication technologies in Greece, by engaging national participants in governmental, industrial, academic, start-up, and SME sectors, as well as local stakeholders who use conventional telecommunications networks. Therefore, a relevant Tab on the website has been set up to facilitate the creation, growth and maintenance of this community (registration form) and to inform all interested parties of this community.

- **About the community:** In this section, the user can find information about the aims of the HellasQCI Ecosystem.
- **Community repository:** In this section, the interested national stakeholders can register to become part of the HellasQCI community.

The image shows a dark blue header with the HellasQCI logo on the left and navigation links: About, Training, Project Results, HellasQCI Community, EuroQCI, News Corner, and a blue 'Contact' button. Below the header is a message: "If you cannot 'view' the subscription form, please remove any third party 'adblocker'".

The main content is a white-bordered form titled "Join Our Community". The form contains the following fields and options:

- Organization (text input)
- Sector Association (dropdown menu)
- Specify other Sector Association (text input)
- Address (Street, City, Postal Code, Country) (text input)
- Telephone (text input)
- Email (text input)
- Website (text input)
- Position in Organisation (text input)
- First Name (text input)
- Last Name (text input)
- Your Organization Interest in HellasQCI (dropdown menu)
- I would like to be informed of (dropdown menu)
- Other: (please propose) (text input)
- I have read the [Privacy Statement](#) and declare that I* consent to receive updates on the HellasQCI news, events, activities and research projects.
- Subscribe (grey button)

The footer is dark blue and contains: Coordinator, About Us, Contact, and Newsletter. Under "Coordinator" is the grnet logo. Under "About Us" are links for Privacy Policy and Terms and Conditions. Under "Contact" are phone (+30 2107476276) and email (info@hellasqci.eu) icons. Under "Newsletter" is a blue button that says "Register to receive our newsletter".

Figure 8: Example of HellasQCI community webpages

EuroQCI

- **EuroQCI overview tab:** In this section, information about the cooperation of HellasQCI and EuroQCI is showcased in a comprehensive way. This serves as a central information point to EuroQCI activities.
- **PETRUS: This section features information about Petrus consortium.** More specifically, HellasQCI will compile testing and verification results from the National QCI network and share them with EuroQCI CSA PETRUS and provide a list of best practices.
- **HellasQCI standardisation tab:** This section features information about the support of the HellasQCI project to relevant standardization activities. This involves designing and implementing a secure architecture to comply with EU and international QKD standards and join standardization initiatives relevant to EuroQCI developments.

News corner

News and events: The website provides news and information regarding upcoming events related to the project's activities in Greece, including conferences, seminars, and workshops. This information can be useful for individuals and organizations seeking to stay up to date on the latest developments in the field.

- **Newsfeed:** In this page the user can be informed about the latest news of the project.

- **HellasQCI press coverage:** The user can see on this page what the press published about HellasQCI.
- **Newsletters:** The latest newsletters are uploaded on this page.
- **Events:** In this page users can be informed about the future Events
- **Media kit:** Project logo and brand book with guidelines of logo usage and application, pictures of rollups, project logo, presentation templates are available to the user.

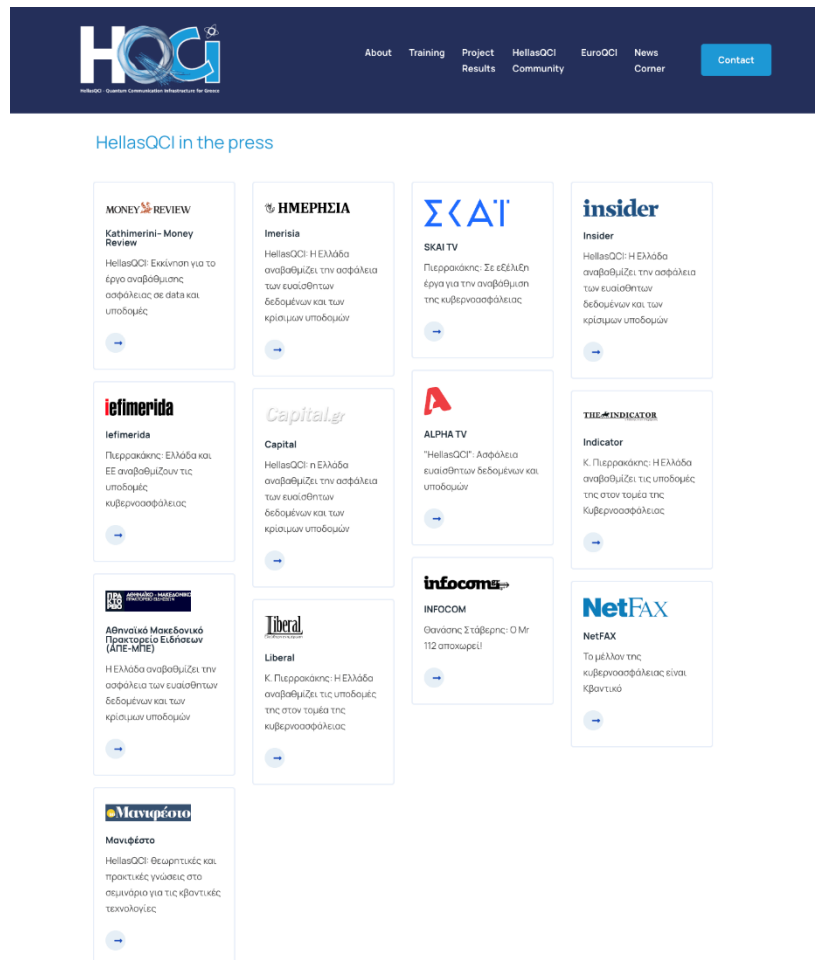


Figure 9: Example of HellasQCI newscorner webpages

Contact: The contact button directs the user to a page where they can communicate with one of the available methods that provides the available communication tools: postal address, email, phone and can subscribe to receive newsletters and send a message through the available form.

Even though the website was initially scheduled to be operational by M6, due to the participation of HellasQCI project partners in high-level and significant Quantum thematic conferences and national and European events, for boosting the dissemination and interacting with other EuroQCI projects and the PETRUS CSA, it was imperative to design, develop and make the HellasQCI website operational and available earlier. HellasQCI has succeeded in this task, and with the relevant partners' contribution, the website was made available and fully operational from M4.

Website interface – enhanced user experience (UI/UX)

HellasQCI website interface is the first “contact point” for the visitor who wants to understand what the project aims and objectives are. For this reason and to enhance the brand's visual identity and

improve the site's responsiveness establishing a strong user experience, many elements were progressively redesigned to better align with the HellasQCI vision.

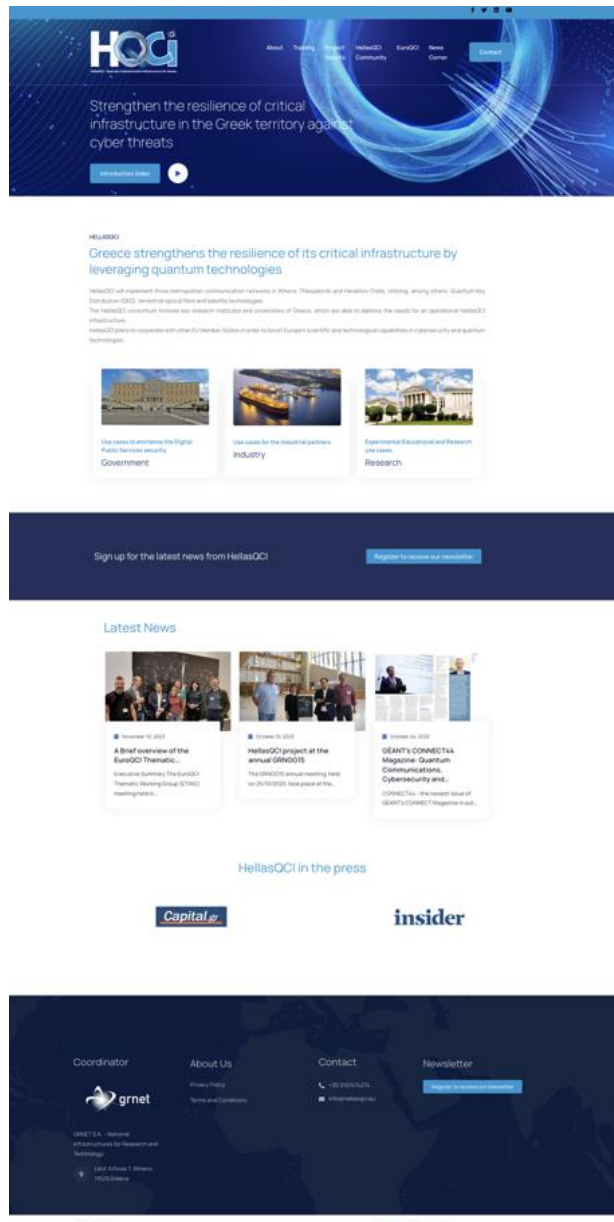


Figure 10: Example of HellasQCI website redesign

Key focus areas:

The key elements that were redesigned include the graphics and color palette, the responsiveness and the visual background. These elements are considered crucial in order to promote a strong HellasQCI brand and allow the project to leverage this visibility to reach a wider range of audiences.

A more detailed description of the work performed in each of the three areas is described below.

Graphics and color palette enhancement:

- **Brand book - logo adherence:** color schemes, typography, and design elements prescribed for the brand.

- **Brand book - color code integration:** Align the website's color palette with the logo brand book guidelines specified colors to ensure consistency and reinforce brand recognition.
- **Brand book - graphics refinement:** Update visual elements, such as banners, imagery, and graphic components, to complement the HQCI's logo style and tone.
- **Modifications to page elements** to facilitate readability.
- **Interface changes** such as Petrus page, News etc.

Responsive Design Implementation:

- **Mobile responsiveness:** Optimize the website's design for various devices, focusing on mobile responsiveness to accommodate the increasing mobile user base.
- **Cross-browser compatibility:** Ensure the website functions and displays consistently across different browsers and platforms.
- **User experience enhancement:** Streamline navigation, optimize loading times, and improve readability for users on different devices.



Figure 11: Example of HellasQCI website on mobile device

New key visual

Visual representation where vibrant, intertwining lines form a network of quantum entanglement, symbolizing the interconnectedness of quantum particles. These lines move dynamically, depicting the rapid transmission of information.

The color palette transitions from deep blues to energetic teals, creating a visually captivating and futuristic atmosphere, adding an extra layer of detail for those familiar with quantum communication. The overall visual aims to convey the cutting-edge nature of quantum communication.

The proposed key visual encapsulates the dynamic nature of quantum communication, leveraging visual elements and a thoughtful design to convey speed, connectivity, and the futuristic essence of this groundbreaking technology. It serves as a powerful representation of the brand's commitment to advancing communication in the quantum era.



Figure 12: HellasQCI new keyvisual

Application: This key visual can be applied across various mediums, including:

- Website banners and backgrounds (Figure 13).
- Social media posts and promotional content (Figure 14)

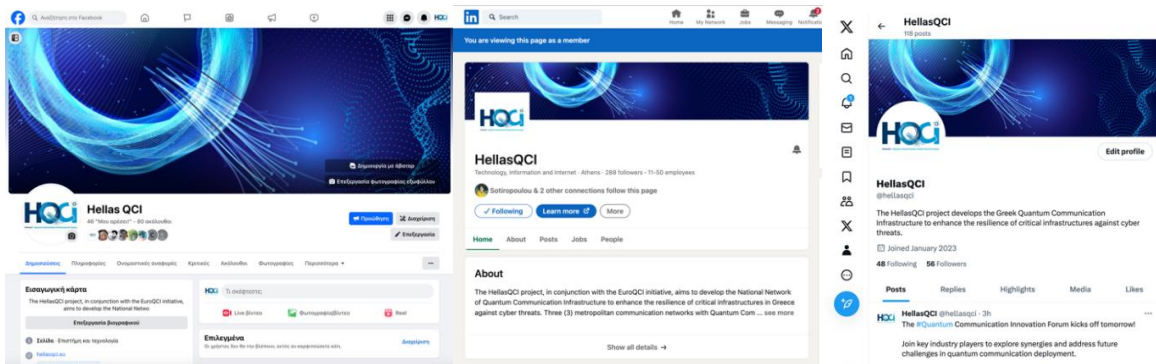


Figure 13: Example of HellasQCI social media covers



Figure 14: Example of HellasQCI social media posts

2.2. HellasQCI online training platform

HellasQCI has set up an online training platform where the groups who participated in the HellasQCI 1st two thematic axes sessions of training event as well as those of the forthcoming training events have access to training materials. Following an open course strategy, the materials such as presentations, recordings and videos of lab-demos used in the HellasQCI 1st two thematic axes sessions of Training Event are available on the platform and are provided to the attendees.

Users' invitation

The email depicted in the following image was sent to the participants of the HellasQCI 1st two thematic axes sessions of training event inviting them to access the HellasQCI [training platform](#). The invitation was also published in [social media](#) as well as in HellasQCI [Newsfeed](#) (**Figure 15**)

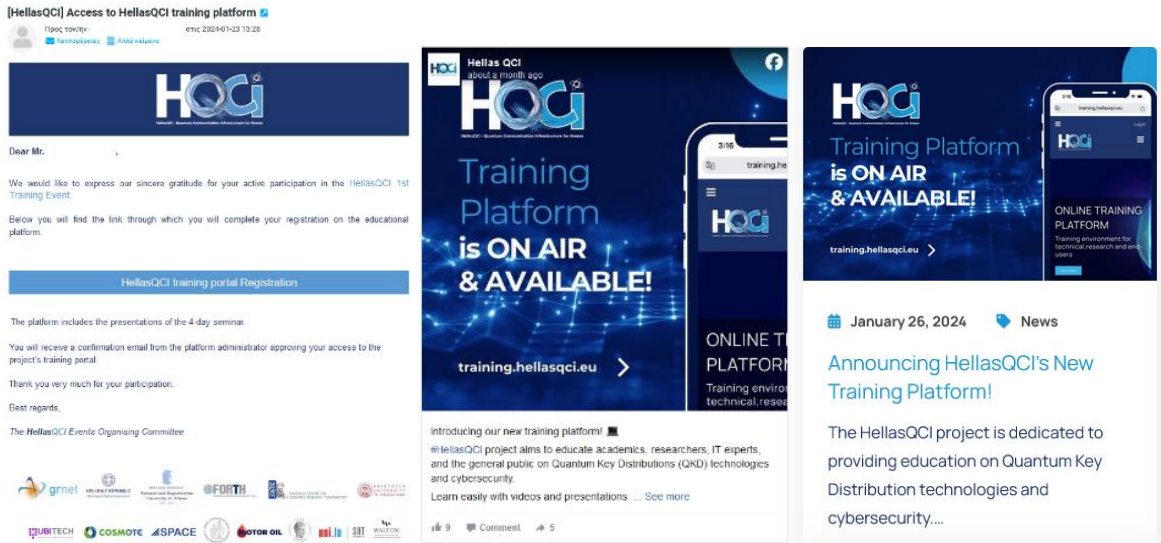


Figure 15: Example of HellasQCI training platform's campaign

Users' registration

By following the link in the body of the email, users can access the registration form. By clicking the "Create new account" button, they are requested to provide their profile information in the corresponding form. When this process is finalized the Administrator of the HellasQCI [training platform](#) is notified by email to confirm or cancel the request for access to the HellasQCI course material.

As soon as the users receive access to the training platform, they can navigate to the home page and access the course's materials.

Figure 16: Example of HellasQCI's training platform

Course format



The HellasQCI Project has received funding under the Grant Agreement No. 101091504

The courses consist of a series of video lectures from the HellasQCI 1st two thematic axes sessions of Training Event, as well as the presentations shown during these lectures. To display the video on the platform, Moodle's default application was used to play the video as we see in the example below from the course setting.

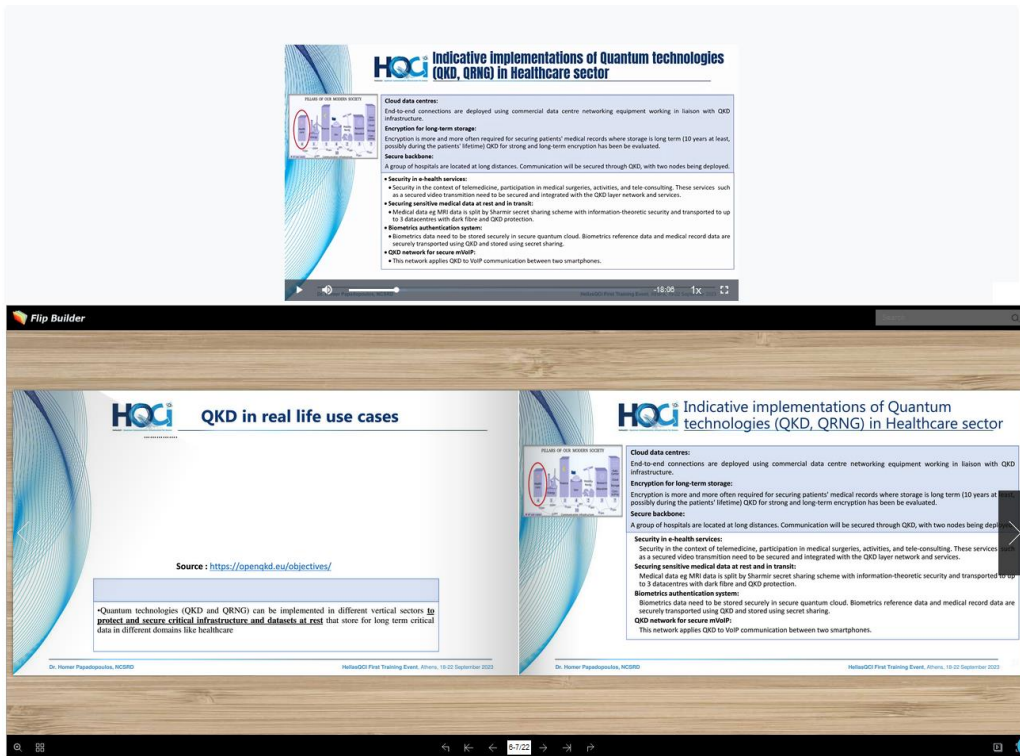


Figure 17: Online training platform video & flipbook presentation

Communication actions to promote the Training Platform

As of March 2024, the HellasQCI training platform has successfully registered **45 users**, demonstrating a growing interest in quantum computing and cryptography training. Invitation email was sent to **76 recipients** who were registered in the HellasQCI 1st two thematic axes sessions of Training Event email campaign lists. To augment the platform's visibility and engage a broader audience, WP6 announced the launch of the training platform across multiple social media channels. These efforts resulted in a notable online reach, with the announcement garnering **135 interactions on Facebook, 247 impressions on Twitter, and a significant 740 impressions on LinkedIn**. This multi-channel social media approach not only highlighted the platform's launch but also emphasized the consortium's commitment to fostering an engaged and informed community around the HellasQCI project.

Detailed description of the HellasQCI training platform as well as methodology of the HellasQCI 1st two thematic axes sessions of training event is provided in deliverable D5.1 Report on design of HellasQCI training methodology.

2.3. Digital communication channels

The HellasQCI Consortium has strategically established a comprehensive digital communication framework to optimize the dissemination and visibility of its activities and outcomes. By Month 4 (M4), this framework included the launch of a dedicated website alongside an integrated presence across key social media platforms—[Twitter](#), [Facebook](#), [LinkedIn](#), and [YouTube](#). These platforms serve

as the principal channels for disseminating information about the project, engaging with diverse audiences, and facilitate community interaction around the project's developments and achievements.

Website as a central hub

The project's website acts as the central hub for information, offering detailed insights into the project's objectives, updates, event information, and access to publications and resources. It is designed to be user-friendly, ensuring that stakeholders and interested parties can easily find relevant information and stay informed about the project's progress.

Social media for engagement and outreach

Social media channels play a critical role in the project's communication strategy:

- **Twitter and Facebook** allow HellasQCI to target a broader audience, providing updates, event announcements, and fostering community engagement through interactive content.
- **LinkedIn** allows HellasQCI to be presented in a more professional networking platform where the project's milestones, publications, and events are shared with industry professionals, academics, and other stakeholders.
- **YouTube** offers a visual and dynamic way to present the project's work, including interviews, project updates, and event recordings, making the project's outcomes more accessible to a wide audience.

Partner contributions to dissemination

In addition to these centralized efforts, all consortium partners actively contribute to the communication and dissemination of the project through their own networks and channels. This includes:

- Partners use their websites to highlight their involvement in the HellasQCI project, share news and updates, and link back to the project's main website for further information.
- Regular HellasQCI newsletters are circulated by partners to their networks, providing updates on the project's progress, upcoming events, and key achievements.
- Partners also leverage their social media presence to amplify the project's visibility, sharing content related to HellasQCI across their channels and engaging with their followers on the project's developments.

A list of partners' channels is available in ***Annex E - Partners' online media channels***.

This approach to digital communication ensures that the HellasQCI project maintains a strong online presence, engages with a diverse audience, and maximizes the impact of its dissemination activities across the quantum computing and cryptography communities and beyond.

2.3.1. Social media channels strategy

Social networking tools and social media are increasingly becoming an invaluable tool in the communication of developments in science and technology. They are used to increase the visibility of scientific achievements and stimulate interest in new technologies amplifying their impact. Popular social media platforms that allow bidirectional communication between the audience and project participants have thus become an important tool for dissemination and communication for research projects and scientific consortia.

For the purposes of the project's communication activities HellasQCI accounts were created on [Twitter](#), [LinkedIn](#), [Facebook](#) and [YouTube](#) at the early stages of the project, to support and promote the project's kick off meeting. The accounts are maintained and updated by NCSR D with contributions from participants of WP6. The social media accounts emphasize and strengthen the visual identity of the project by employing a cohesive visual identity based on the project's logo. The handling and updating of social media accounts' content are managed centrally by the WP6 leader with input from the rest of the partners and especially from the coordinating partner (GRNET).

A process has been devised by which suitable content that is to be uploaded on the social media accounts is first uploaded onto the project's messaging board on Microsoft teams, is evaluated for quality and suitability and whether it contains any sort of non-public and/or proprietary information regarding the project and is subsequently posted to the social media accounts. For generic posts regarding the project, and not a specific demonstration or use case of a single partner, the partner organizations accounts are tagged to maximize visibility and stimulate engagement and content sharing by the project's partners. To reach a wider targeted audience, the appropriate hashtags of the project are used with consistency, i.e.: **#HellasQCI**, **#QKD** **#QuantumCommunication**.

To promote the project's results and overall progress all social media accounts are linked to the project's official website and vice versa. Furthermore, all digital and printed promotional materials (i.e. flyers, newsletters) mention the project's social media channels.

The social media strategy follows four steps: **collect, share, engage and measure**. For the collection part all partners have the responsibility to collect and relay information regarding events, updates, milestones, and news that could be shared and disseminated. All consortium partners are involved in engaging with the content through, sharing, liking, and commenting on the content. Finally, the impact of the dissemination on social media is assessed at regular intervals (i.e. monthly and semi-annual) by monitoring the number of interactions per content posted on the different accounts aiming to reach a continuous increasing number of key stakeholders.

LinkedIn: (<https://www.linkedin.com/in/hellasqci/>), HellasQCI uses the platform to disseminate the project's background and objectives, ambition and achievements to engage with professionals and experts in the field of quantum technologies, telecommunications, and cybersecurity. As LinkedIn allows for longer narratives with detailed descriptions about the project's progress it is ideal to communicate photos, GIFs, videos, links, and press releases from the project and its partners relating to the project activities as well as to communicate project updates, press releases and newsletters. **X (Twitter):** (@HellasQCI), is one of the most widely used platforms for communicating scientific results and interacting with the wider public. It is used to share short comments, make announcements that instantaneously reach a large audience and retweet relevant content and links to publications and press releases. It is used to quickly engage with the communications of associated projects within the framework of the EuroQCI initiative as well as relevant technology standardization organizations and quantum technologies industry consortiums and the activities of the Quantum Flagship. Since there is a character limit in X, the posts are significantly shorter and serve as "nuggets" of information.

Facebook: (<https://www.facebook.com/hellasqci/>) is used mostly to communicate stimulating narratives about the project to engage the general public and foster an interest in the technologies and scientific concepts developed and utilized within the project in younger generations.

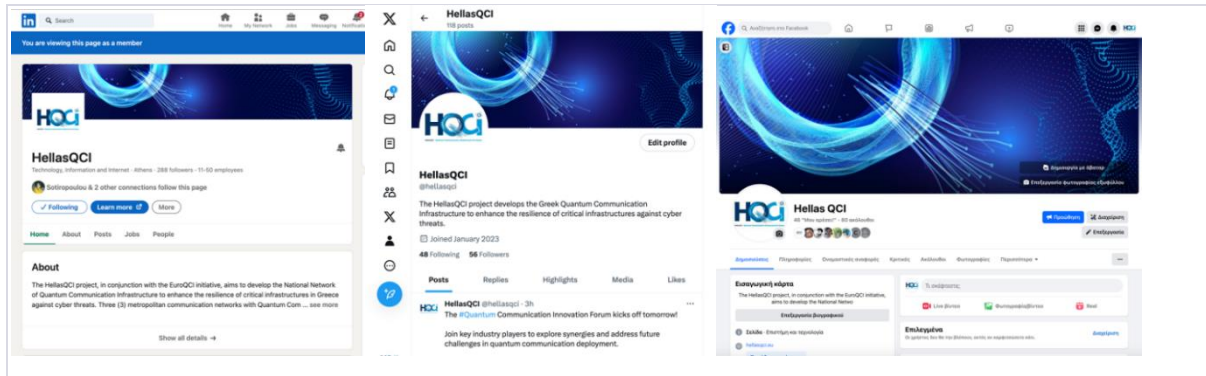


Figure 18: Example of HellasQCI's social media accounts

Dissemination and communication board (DCB) members are encouraged to engage with the social media posts by liking, sharing, or commenting from their company/institutional accounts to amplify and relay the information to their own audiences.

YouTube (<https://www.youtube.com/@hellasqci>): Throughout the duration of the project, several videos – related to the project's activities will be created, featuring interviews of project participants, mainstream media coverage as well as lectures and talks about the project progress, ambition, and potential impact. Also, technical videos about the project's implementation are produced throughout the project life cycle. These videos are collected and uploaded to the dedicated [YouTube](https://www.youtube.com/@hellasqci) channel of HellasQCI that was created and is maintained by GRNET. The DCB members collect videos related to the project and forward them using the project's dedicated management tool, Microsoft teams, to be uploaded to the channel. The uploaded videos are disseminated and linked through the other social media channels ([Twitter](#), [LinkedIn](#), [Facebook](#)) and the website.

2.3.2. Social media audience influence

The techniques for networking, interacting with important organizations, and keeping up with cybersecurity and quantum communication trends on social media, by following relevant entities, are explained in the following paragraphs.

Social media community building entails more than just one-way communication. It's all about interacting, exchanging, and connecting. Firstly, this can be achieved by contacting important stakeholders and project partners. Secondly, through interaction with related companies, associations, events, conferences, journals, and other projects in related fields. The use of tags and hashtags can increase the discoverability of the project's material. Interacting with others increases the projects' reach and aids in understanding the demands of stakeholders.

The community of interested people and organizations can be expanded by interacting with like-minded beneficiaries and drawing in each other's fan base and followers through actions like tagging, replying to, or following their posts. For this reason, it is important to follow and stay aligned with projects submitted under the same call, i.e. The Digital Europe Programme (DIGITAL), since there are shared goals, complementary outcomes and similar target audiences.

To follow relevant entities with HellasQCI on social media involves several strategic steps. This process is crucial for staying informed about Quantum Communication and Cybersecurity industry trends, networking, and engaging with key influencers or organizations.

Here's a structured approach (**Figure 19**) that is being followed by WP6 Leader (NCSR Innovation Office, knowledge management unit). This entity has extensive expertise in networking, dissemination, and exploitation activities.



Figure 19: Social media following methodology

2.4. Newsletters, press releases, periodicals (or media coverage)

To directly reach target audiences that have explicitly expressed an interest in being informed about the project activities and progress, more than 5 newsletters are planned to be created and disseminated during the project lifespan in regular intervals.

The newsletters are disseminated every 6 months, with a plan to be disseminated at more regular intervals, thus covering the entirety of the project's duration. The content of the newsletters features news and views about the projects from all the participating organizations, detailing their relation to the overall concept of the project, their activities within and their ambition and vision for the deployed infrastructure. More specifically until M12 two biannual newsletters have been released.

The first newsletter showcases the news regarding the future of cybersecurity with Quantum Technologies and PQC algorithms, in Greece and all over Europe. The second newsletter showed the latest progress and updates of the project nationally through the successful organisation of the HellasQCI 1st two thematic axes sessions of Training Event, as well as at European level by promoting EUROQCI activities.

Depending on the project phase, emphasis is given to the relevant activities and milestones of each iteration. The newsletter is provided with content, edited, and published with the help of the DCB. Each member is encouraged to come up with a proposal on a topic, event, update, milestone that is relevant to the project and present it to the group. The timely assembly and delivery for the newsletters is handled by participants of T6.1, namely NCSR D (2), QUBITECH (2) and GRNET (1) and is designed to be consistent with the project's overall visual identity. For the development and dissemination of the project newsletter as well as any relevant promotion campaigns an online promotion platform ([moosend](#)) is used to preserve the visual consistency throughout the project's duration.

1st newsletter

First newsletter 1/Jan-Jun 2023 was released (**Figure 20**).

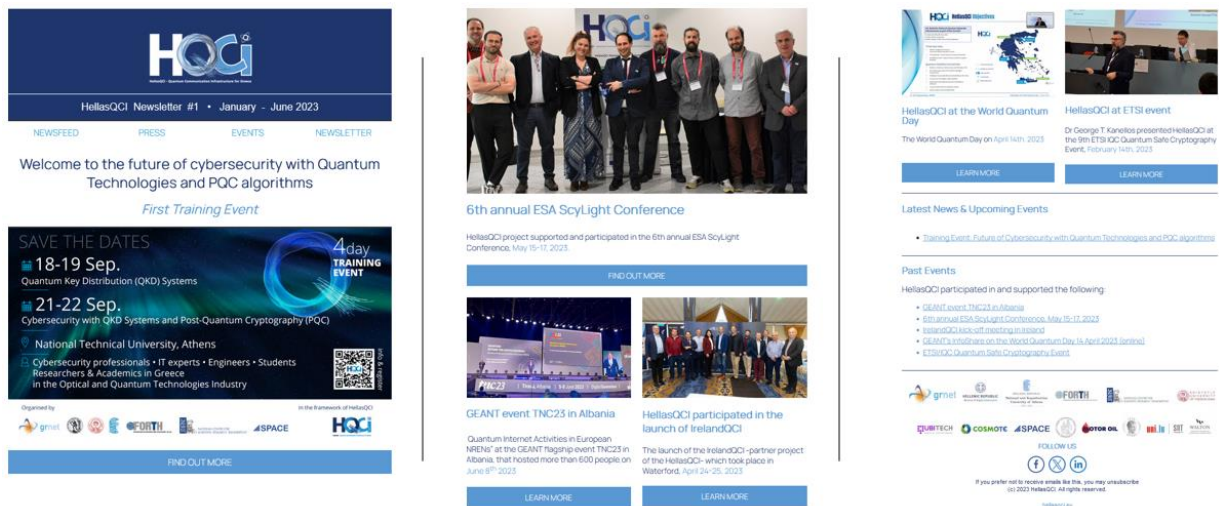


Figure 20: Example of the 1st HellasQCI newsletter

2nd newsletter

Second Newsletter 2/July-December 2023 was released (**Figure 21**).

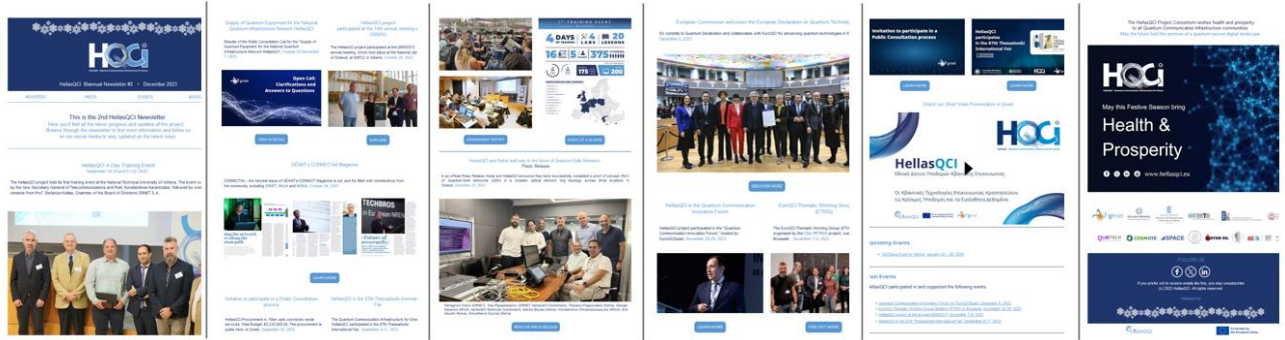


Figure 21: Example of the 2nd HellasQCI newsletter



Press-releases: Press-releases are one of the most efficient dissemination tools that highlight the project’s achievements and milestones including key project events. They are produced to boost awareness of the specific Milestones achieved and to highlight the role of different partners with regards to the different activities and achievements of the project. An official [press release](#) about the project objectives and goals was issued in M1 by the project coordinator GRNET in English and in Greek languages, under the supervision of the Ministry of Digital Governance. The press release, that was linked to the HellasQCI kick-off meeting in January 2023 was published in 55 local media. A subsequent [press release](#) was made for the participation of a delegation from HellasQCI to the kick off meeting of IrelandQCI. Additionally, the project partners are encouraged to prepare and publish through their own dissemination channels press releases

about the project and their role and activities together with their ambition and vision for the future use of the project’s deployed infrastructure and results. The content of each press release is subject to final approval by the WP leaders before publication.

[Press releases](#) also covered the HellasQCI 1st two thematic axes sessions of training event.

Coverage in media: The project aims to stimulate coverage of its activities in local news providers, periodicals and newspapers that will further amplify the key messages regarding the vision, activities, and potential impact of the effort. Many publications have appeared in local news media outlining the project’s vision and participants. Even prior to the commencement of the project, a prominent Greek periodical (NetWeek) [featured](#) in-depth interviews about the project and its aims with the General Secretary of Telecommunications and Post Dr. Athanasios Staveris, the CEO of GRNET Dr. Aris Sotiropoulos, the Prof. Dimitris Sivridis of NKUA and the Director of R&D of Space Hellas, Mr. Georgios Gardikis. Moreover, media articles were also published about the [Kick off meeting of the project](#). Nokia Proof Of Concept Media Articles positively emphasized the potential of Quantum Computing for societal issues like sustainability and defense, emphasizing the need for Quantum safe networks and the Nokia Security Management Server’s value. Media Article in online Newspaper (“[To Manifesto](#)”) was also published documenting the HellasQCI 1st two thematic axes sessions of Training Event. The DCB will monitor and track all relevant articles dedicated to the activities of the consortium while a selection of these will be relayed through the project’s social media channels. Press releases were also published about in official [Nokia website](#) and in [Greek Ministry of Digital Governance](#). [ALPHA TV](#) channel has published in its newsfeed an article on the 20th of January 2023 the projects lunch where it was highlighted the participation of Greece in EuroQCI and that the

project will contribute to the upgrading of the security of sensitive data and critical infrastructure at national and EU level.

2.5. Infographics

Two infographics have already been released which give a quick, straightforward overview of the most important aspects of the project so far and present the project's main outputs and objectives in a nutshell.

Infographics: were released for the [1st training event](#) of HellasQCI project with two thematic axes sessions (**Figure 28**) and [2023 Achievements](#) (**Figure 22**). The infographics were posted on the website's [Newsfeed page](#) and on social media ([Facebook](#), [Twitter](#) and [LinkedIn](#)).

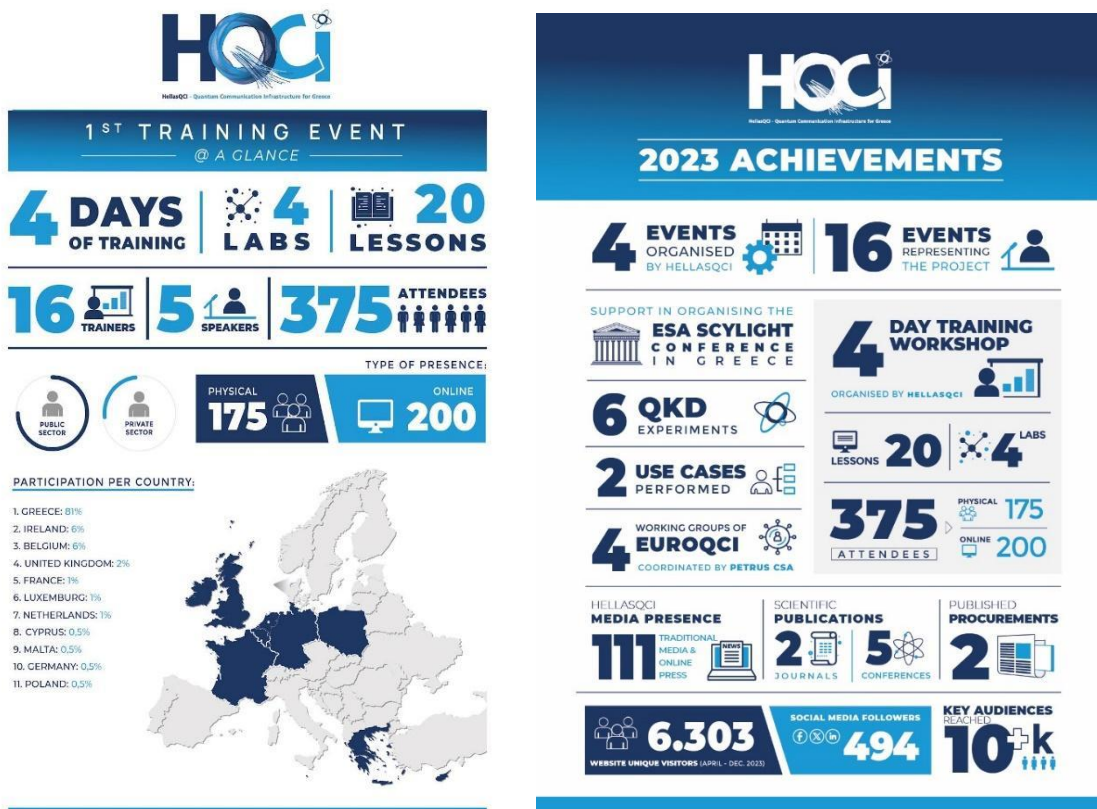


Figure 22: HellasQCI [1st Training Event](#) (two thematic axes sessions) - (on the left) and HellasQCI's [2023 Achievements](#) Infographic - (on the right)

2.6. Online seminar

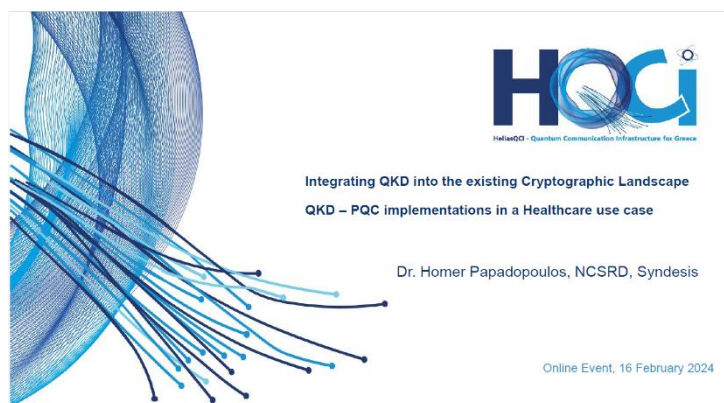


Figure 23: Online seminar presentation

An online workshop focusing on the latest advancements in the realm of hybrid Quantum Key Distribution (QKD)/Post-Quantum Cryptography (PQC) undertaken by NCSRDI within the HellasQCI project framework was hosted by the "Emerging and Disruptive Technologies" Unit of the Directorate-General for Communications Networks, Content, and Technology at the European Commission.

The event was part of DG Connect's broader initiative to evaluate application scenarios for QKD deployment and to explore potential services emanating from projects under the EuroQCI initiative, funded by the Digital Europe Programme, including HellasQCI.

The webinar targeted European Commission personnel, drawing an interdisciplinary audience of scientists, engineers, policy makers, and other professionals from various units and directorates with interests in quantum technologies and cybersecurity. Conducted in English, this virtual seminar took place on February 16th, providing a significant platform for knowledge exchange and discussion on emerging QKD-PQC encryption technologies.

3. Dissemination and communication activities – HellasQCI offline presence

Dissemination and communication offline activities involve strategies and actions taken outside of the project's digital platforms to engage with stakeholders, raise awareness, and share project achievements. In the following sections the offline presence of HellasQCI is presented.

3.1. Dissemination and communication activities overview

Dissemination is the process of communicating project outcomes and information to stakeholders and communities to raise awareness and showcase the project's possible benefits. The HellasQCI project shares its findings and outcomes with a variety of stakeholders, including academics, policymakers, industry, and the general public.

Throughout the project's existence, the goal is to exchange information, develop collaboration, promote the use of Quantum Communication technologies and QKD systems and raise public awareness.

The project's dissemination approach focuses on developing a coherent narrative, supporting innovation and information transfer, demonstrating outcomes and spreading excellence. The key

dissemination objectives are to promote commercial acceptance of infrastructures and technology introduced over the project's lifespan.

The project's communication initiatives are intended to provide technical objectives and scientific results, emphasize anticipated advantages, and engage with the general public and key stakeholders. These activities are performed by consortium partners and individual partners through their own channels of communication and dissemination.

The implementation activities corresponding to the Dissemination and Communication plan described in Deliverable D6.1 "Dissemination, exploitation, and communication plan" are shown by category in the following tables.

Dissemination activities	Number
Events organised	3
Events participated	10
Exhibition (organised)	1
Infographics	2
Media articles	111
Newsletter	2
Press release	2
Promotional material	11
Digital communication channels	5
HellasQCI videos	2

Table 1: Number of dissemination activities

Communication activities	Number
Clustering activities	2
Collaboration with EU-funded projects	5
Conferences	3
Scientific publications	7
Training events	2
Project meetings	5
Public deliverables	2
Online Seminar	1

Table 2: Number of communication activities

In the following table the total number of dissemination activities is provided, categorized by type. All activities are further analyzed in the following sections.

Dissemination activity	Dissemination activity name
Clustering Activities: 2	World Quantum Day TNC23

Collaboration with EU Funded Projects: 5	Quantum Communication Innovation Forum (Bilbao, Spain) Quantum Secure Networks Partnership (EU-HE-QSNP) LaiQa project PTQCI Workshop - Round table with 5 NatQCI IrelandQCI Kick-off meeting
Conferences: 3	6th Annual ScyLight Conference ETSI/IQC Quantum Safe Cryptography Event GRNOG15
Scientific Publications: 7	https://hellasqci.eu/scientific-publications/
Training Events: 2	1st Training Event (Four-Day) - 2 thematic axes
Project Meetings: 5	HellasQCI Kick off meeting DEP call Kick off meeting 1st PMB 2nd PMB 3rd PMB
Public Deliverables: 2	D1.1 Project management information system D6.1 Dissemination, Exploitation and communication activities plan

Table 3: Dissemination activities

In the following table the total number of Communication activities is provided, categorized by type. All activities are further analyzed in the following sections

Communication Channel	Communication Activity Name
Events Organised: 4	HellasQCI Kick off meeting , 6th Annual ScyLight Conference Workshop - Quantum Internet , HellasQCI 1st two thematic axes sessions of training (September 2023)
Events Participated: 10	9th ETSI IQC Quantum Safe Cryptography Event , 3rd Ubitech Innovation Days , World Quantum Day (InfoSession) , IrelandQCI kick-off meeting , NOKIA Wavelengths 2023, TNC23 (GÉANT) , CEN/CENELEC Joint Technical Committee JTC 22, GRNOG15 , Quantum Communication Innovation Forum by EUROQCI Spain , European Thematic Working Groups (ETWG)
Exhibition (Organised): 1	87th Thessaloniki International Fair
Infographics: 2	HellasQCI 1st Year Achievements , HellasQCI 1st two thematic axes sessions of training in numbers
Media Articles: 111	HellasQCI Kick-off meeting Media Articles , Nokia Proof Of Concept Media Articles, HellasQCI: theoretical and practical knowledge in the quantum technologies seminar ALPHA TV
Newsletter: 2	1st Biannual Newsletter (July 23) , 2nd Biannual Newsletter (Dec 23)
Press Release: 2	HellasQCI Kick-off Meeting Press Release Nokia Proof Of Concept Press Release
Promotional Material: 6	Project Media Kit
Digital Communication Channels: 5	Social Media Channels (Facebook , Twitter , Linkedin , Youtube) & Website
HellasQCI Videos: 2	Videos (GR , EN)
Online Seminar: 1	Online Seminar on Hybrid QKD -PQC tests hosted by DG Connect

Table 4: Communication activities

3.2. HellasQCI events (organised, participated, liaison activities)

A way to enhance engagement with the project from potential stakeholders and target audiences is to actively participate in relevant events, thematic panels, workshops, conferences, poster

presentations, specialized exhibitions, and demonstrations. All partners are encouraged to participate in such events to enhance the visibility of the project and its activities, establish collaborations, showcase the project achievements, liaise, and interact with identified stakeholders. During these events, partners circulate prepared dissemination material (e.g., brochures, leaflets etc.) to fellow participants.

Project partners actively contribute to identifying external events of interest to the consortium. DCB members are responsible to oversee and update the list of the local events that their organization has participated in. The list of events is available in the project's online repository available through Microsoft teams as a live document. Consortium partners are asked to update their relevant contributions promptly for quality control monitoring and reporting of the project's dissemination activities. An indicative list of events is available at the end of this report as **Annex A - Dissemination activities**.

3.2.1. Events organised by HellasQCI

Within the framework of Work Package 6, a comprehensive process was implemented to support the visibility, engagement and effectiveness of HellasQCI various events. This approach was designed to promote these events and enhance their impact within the community. A breakdown of the actions taken is following:

1. **Visual content creation:** Where feasible, WP6 created engaging and relevant visual materials (digital graphics and other promotional materials) tailored specifically to each event.
2. **Event promotion on the project website:** Each event was featured on the project's website. This included the publication of detailed event descriptions, registration information where necessary, and any relevant updates. By leveraging the website's reach, the project ensured maximum visibility and accessibility, encouraging wider participation.
3. **Social media support:** WP6 provided active support through HellasQCI social media platforms before, during, and after the events. This strategy included the publication of announcements, live updates during the events to engage the online audience, and follow-up posts to maintain interest and momentum. Social media channels served as a key tool for extending the events' reach and fostering an interactive community dialogue.
4. **Post-Event report:** Following each event, a summary report was compiled. This document analyzed the event's execution and other important information that is related to the event. It served as a crucial tool for understanding the event's impact on the HellasQCI project.

HellasQCI Kick off meeting

On January 19-20th 2023, the HellasQCI project Kick off meeting took place, marking the beginning of the implementation for this very important project for Greece. The full report on the meeting of the event can be found in **Annex C - HellasQCI Kick off Meeting report**.

HellasQCI PMB meetings

During the 1st Year of the project 3 project meetings were held. These meetings were organised to share important updates and communicate the results among the consortium members.

1st PMB: The 1st PMB was held on the 5th of May 2023 in Athens.

2nd PMB: The 2nd PMB was held on the 20th of September 2023 in Athens.

3rd PMB: The 3rd PMB was held on the 8th of February in Athens.

6th annual ScyLight conference

The 6th edition of the annual ESA ScyLight Conference for Optical and Quantum Technologies successfully took place on 15-16 May 2023 at Eugenides Foundation in Athens, Greece, followed by a Workshop on Quantum Internet on the 17th of May in the city of Kalavryta.

ScyLight conference was co-organised and hosted by the European Space Agency (ESA), the Greek Ministry of Digital Governance and the General Secretariat of Telecommunications and Post. The conference was supported by the HellasQCI project, the City of Kalavryta and the National Observatory of Athens (NOA). During the event, more than 190 European, American and Canadian industry experts, researchers, academics and end users attended to share their expertise, discuss and plan the future of optical and Quantum Communication Technologies.

The conference began with welcome speeches addressed by: **Dr. Athanassios Staveris**, Secretary General of Telecommunications & Posts, **Dr. Francisco–Javier Benedicto Ruiz**, ESA Director of Navigation, **Dr. Harald Hauschildt**, ESA Program Manager for the ARTES ScyLight Program, **Dr. Spyros Vasilakos**, Director of IAASARS and Vice President of NOA and **Dr. Dimitrios Kagklis**, Head of Directorate of Wireless Communications, 5G Networks and Space of the General Secretariat of Telecommunications & Post.

Dr. Ilias Papastamatiou, senior Project Manager at GRNET and HellasQCI Project Coordinator, after the welcoming speeches, gave an overview of the EuroQCI initiative and the HellasQCI project and moderated the 1st panel of the conference which was consisted of key players from public and private sectors (GRNET – Dr. Ilias Papastamatiou, NOA – **Dr. Haris Kontoes**, Motor Oil Group – **Mr. Panagiotis Georgiou** and Lasting Software – **Mr. Daniel Zirmer**) as early adopters of the new emerging technologies on quantum and optical communications.

Dr. Papastamatiou, during his introductory remarks welcomed on behalf of the HellasQCI consortium and GRNET, the ScyLight Conference and acknowledged support from ESA, the Ministry of Digital Governance and the General Secretariat of Telecommunication and Posts in hosting this conference. Panel discussions identified significant challenges for the early users of Quantum and Optical Communications. During the two first days of the conference in Athens, several HellasQCI partners delivered speeches followed by Q&A sessions: **Dr. Manolis Xilouris** (IAASARS / NOA), **Dr. Giannis Giannoulis** (ICCS / NTUA) and **Dr. Deirdre Kilbane** (WIT / SETU).

The third day of the conference took place in Kalavryta city. The Mayor of the City **Athanasios I. Papadopoulos** and the Director and President of NOA **Dr. Manolis Plionis** launched the Workshop on Quantum Internet. Assistant Professor at the NKUA and HellasQCI Technical Coordinator **Dr. Georgios Kanellos** delivered a keynote speech on the road towards quantum communication at National and European level.

Over the three days of ScyLight Conference, exceptional speakers with expertise on Quantum and Optical Communications, from public and private sectors, offered and exchanged their knowledge, shaping the future of Quantum Communication Infrastructures in Europe, in the spectrum of EuroQCI, as well as globally.

Moreover, HellasQCI partners from the National Quantum Communication Infrastructures of Ireland (IrelandQCI), Cyprus (CYQCI) and Bulgaria (BGQCI), attended the conference contributing with their expertise and valuable technical knowledge amongst the four National Quantum Communication Infrastructures (NatQCIs), contributing to a successful EuroQCI.

HellasQCI also provided a dedicated branded booth at the conference, hosting specialists from the project's consortium (GRNET, NCSR Demokritos and Qubitech) setting the foundations for the establishment of the HellasQCI Community.



Figure 24: 6th Scylight conference

HellasQCI training event

The HellasQCI project held its first Training Event (on September 18-19 and 21-22, 2023), at the National Technical University of Athens, Greece. The Training was designed to provide participants with theoretical and practical knowledge on Quantum Communication, with the goal of enhancing the security of sensitive data and critical infrastructures in Greece and co-creating EuroQCI.

During the Four-Day HellasQCI training event two workshops were held; (a) The first on Quantum Key Distribution (QKD) Systems and (b) the second on Cybersecurity with QKD Systems and Post Quantum Cryptography (PQC). A full report is provided in ***Annex D - HellasQCI project HellasQCI 1st two thematic axes sessions of training event report.***

87th Thessaloniki International Fair

During the 87th Thessaloniki International Fair (TIF) from 9-17th September 2023, HellasQCI had an exhibition booth, in the specially designed space of the General Secretariat for Telecommunications and Post (GSTT) and gathered an audience of approximately 1500 exhibitors.

By participating at this event, HellasQCI increased its visibility and raised awareness about its objectives, initiatives, and achievements in improving cybersecurity in Greece.



Figure 25: HellasQCI in the 87th Thessaloniki International Fair

3.2.2. Events participation

HellasQCI has put in place many dissemination activities, such as workshops, exhibitions, and dissemination events aiming at relevant stakeholders, in order to keep them informed on the project results. In Reference with, [D6.1 Dissemination, Exploitation and communication activities plan](#) deliverable, HellasQCI consortium during the first 15 months of the project, have participated in meetings and events of the Quantum flagship, other NatQCI projects, PETRUS CSA as well as activities of relevant clusters and other European projects.

WP6 leader collects information and publicizes events in the content of the website and newsletters. Continuously updates the events list, collects feedback and pictures from events to be disseminated through the project official channels.

The Dissemination & Communication activities log of consortium partners, is a “live” document, where partners identify events of interest for the whole consortium and record their activities. The spreadsheet resides in the private repository of the project.

A list of these events is provided in the following table including the impact these events had to the project.

EVENT	DATE	VENUE	AUDIENCE SIZE	IMPACT
Euro Digital Projects call Kick off meeting	24 th January 2023	Brussels	100	Euro Digital Projects Kick off meeting at the EU Commission presents several opportunities for HellasQCI to strengthen its project, collaborate with others, and align with EU strategies
3rd Ubitech Innovation Days	7 th March 2023	Volos, Greece	150	Stay abreast of technological advancements, foster collaborations, gain recognition.
World Quantum Day (InfoSession)	14 th April 2023	Online	60	Synergies between NREs and National QCIs, attracting collaborations with countries like Poland, Ireland, Croatia, Romania, and the Czech Republic
IrelandQCI kick-off meeting	24 th April 2023	Waterford, Ireland	80	IrelandQCI and HellasQCI have launched a partnership to advance National Quantum Communication Infrastructures.

NOKIA Wavelengths 2023	25 th - 27 th April 2023	Vienna, Austria	500	Nokia Wavelengths is a telecommunications and connectivity solutions event, which offers HellasQCI an opportunity to gain knowledge, build connections, and explore innovative technologies.
TNC23 (GÉANT)	5 th – 9 th June 2023	Tirana, Albania	700	HellasQCI's participation in TNC23 facilitated networking, collaboration, knowledge sharing, and access to project opportunities within the European research and innovation community
CEN/CENELEC Joint Technical Committee JTC 22	3 rd October 2023	Berlin, Germany	40	The active participation of initiatives like HellasQCI in JTC 22 underscores the commitment of national entities to contribute to the standardization efforts and ensure that European standards reflect diverse perspectives and requirements.
European Thematic Working Groups (ETWG)	7 th – 9 th November 2023	Brussels	100	The momentum gained from this meeting reinforces Greece's project actions on cyber-resilience and fortifies the security of sensitive data and critical infrastructure.
Quantum Communication Innovation Forum by EUROQCI Spain	28 th November 2023	Bilbao, Spain	100	The Quantum Communication Innovation Forum facilitated collaboration among European experts to advance the EuroQCI initiative and integrate quantum-based systems into communication infrastructures. Overall, the forum fostered progress and cooperation, advancing towards a secure quantum communication network in Europe.

Table 5: Events and impact

3.2.3. Liaison activities

World Quantum Day 2023

In the context of World Quantum Day, GÉANT organised an online Quantum Technologies InfoSession, on April 14th 2023.

Experts from several European National Research & Education Networks (NRENs) presented their activities and projects related to quantum technologies. Through short, lightning-talk presentations, participants were able to learn about the status of NRENs' Quantum technology activities, ongoing projects, meet the NREN experts and navigate the Quantum ecosystem.

Dr. Ilias Papastamatiou, Senior Project Manager at GRNET's European Infrastructures & Projects Directorate and HellasQCI project coordinator, presented Greece's national Quantum Communication Infrastructure (HellasQCI) and its use-cases.

Overall, the event offered the opportunity for discussions, exchange of best practices and expertise and created synergies in the field of Quantum technologies between the NRENs and the National QCIs (National Quantum Communication Infrastructures) of Greece (**HellasQCI**), Poland (**PIONIER-Q**), Ireland (**IrelandQCI**), Croatia (**CroQCI**), Romania (**RoNaQCI**) and Czech Republic (**CZQCI**).

TNC23

TNC23 took place in Tirana from 5-9 June 2023, organized by GÉANT and hosted by RASH, the National Research and Education Network of Albania. GRNET, serving as Greece's NREN and the coordinator of the HellasQCI project, participated in the largest research and education networking conference. Dr. Ilias Papastamatiou (from GRNET/HellasQCI) together with Piotr Rydlichowski (from PSNC) presented the topic "**Quantum Internet Activities in European NRENs**" on June 8th, providing

an overview of Quantum Internet-related activities, including the national scale deployments of quantum communications systems and networks in European NRENs and the GÉANT Network Development project.

HellasQCI actively participated in the EuroQCI Forum and Working Groups meetings facilitated by the PETRUS CSA project (attending twice in Brussels and participating in numerous online meetings). They actively contributed to several EuroQCI Working Groups focused on topics like roadmap development, use case identification, QKD landscape analysis, architecture definition, and interoperability and standards.

Through these efforts, HellasQCI established new collaborations with **EuroQCI Spain** and **PTQCI** and together with **QCI-Cat** will co-organize the QCI DAYS 2025 in Athens, scheduled for Spring.

3.2.4. Collaboration with EU funded projects

The project aims at establishing synergies and coordination with similar EU projects on Quantum Communication. HellasQCI will communicate and interact with the European Initiative on Quantum Communication Infrastructure (EuroQCI) through the dedicated CSA project PETRUS in order to streamline communication, standardization and training activities when possible and to enhance coordination and transfer of knowledge and best practices between NatQCI projects. Moreover, project partners will seek to establish synergies on topics of joint interest with other national QCI consortia and their partners. Additionally, project partners will pursue to become engaged in the activities and events of the Quantum Flagship community as well in the ones of the quantum technologies clusters such as the Quantum Industry Consortium (QuIC) and the Quantum Business Network (QBN) to promote the project's activities and exchange best practices to further streamline the project's activities.

HellasQCI, through GRNET and the Ministry of Digital Governance, successfully forged **seven partnerships (Letters of Support – LoS)** during the proposal phase with National Quantum Communication Infrastructures (NatQCIs) in Austria, Luxembourg, Bulgaria, Cyprus, Malta, Poland, and Ireland.

IrelandQCI (Coordinated by Waterford Institute of Technology) and Lux4QCI (Coordinated by the University of Luxembourg) became Associated Partners of HellasQCI project and vice versa GRNET became Associated Partner to the IrelandQCI and LuxQCI projects, actively participating in various activities and to the Project Management Board meetings.

GRNET, the National Research and Education Network of Greece, is a member of the Pan-European Academic Network GÉANT. Within GÉANT, 10 National Quantum Communication Infrastructures (NatQCIs) collaborate through GN5-1 and the GÉANT Quantum Strategy Forum (including events like World Quantum Day and TNC23).

The HellasQCI project is coordinated by Greece’s National Research and Education Network GRNET. This NREN has established a close collaboration with nine National Research and Education Networks throughout Europe, which are the following:

1. PIONIERQ – Poland | PSNC
2. CroQCI – Croatia | CARNET
3. BE-QCI | BELNET
4. IrelandQCI – Ireland | HEANET
5. QCIHungary – Hungary | KIFU
6. RoNaQCI – Romania | RoEduNe
7. CZQCI – Czechia | CESNET
8. QCINed – The Netherlands | SURF
9. CYQCI – Cyprus | CYNET

Moreover, **HellasQCI** has established close collaboration with several National QCIs (National Quantum Communication Infrastructures) of European member states including Poland (**PIONIER-Q**), Ireland (**IrelandQCI**), Croatia (**CroQCI**), Romania (**RoNaQCI**), Czech Republic (**CZQCI**), Austria (**QCI-Cat**), Luxembourg (**Lux4QCI**), Bulgaria (**BG National QCI Plan**), Cyprus (**CYQCI**) and Malta (**PRISM**).

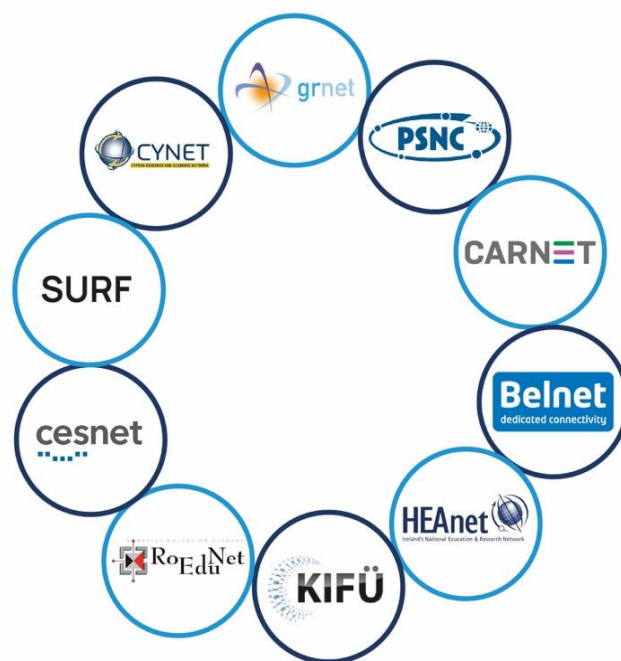


Figure 26: Collaboration with EU funded projects

HellasQCI in Bilbao, Spain

The Quantum Communication Innovation Forum, was held on 28-29 November in Bilbao, Spain. The Forum brought together experts from across Europe to discuss the progress of the EuroQCI initiative, ensure that the critical components of EuroQCI are based on European technologies, and ultimately boost Europe’s scientific, technological and industrial capabilities in cybersecurity and quantum technologies. Furthermore, the forum provided a platform for sharing insights, addressing current and future implementation challenges, and exploring future directions for Quantum Communications in Europe. Among many interesting sessions, there was a panel discussion, where HellasQCI participated together with other three NatQCI projects from (Spain, Italy and Portugal).

Dr. Ilias Papastamatiou from Greece, Senior Project Manager at GRNET and the HellasQCI project coordinator, presented the key elements of the project, its current updates, as well as the challenges faced and the way forward.

HellasQCI in Vienna, Austria

The QCI Days Vienna 2024, 25-26 January, was organised by the AIT Austrian Institute of Technology and the QCI-CAT project. During these two days, Quantum Communications experts from all over Europe met and discussed the latest trends and developments in quantum-secure communication. HellasQCI, participated in the event and shared important information.

Dr. I. Papastamatiou, GRNET, HellasQCI Coordinator and Prof. G.Kanellos, NKUA, HellasQCI Technical Coordinator represented the project. During the “Digital Europe Programme” session, Dr. Ilias Papastamatiou shared key 2023 project’s insights, updates, and achievements. These included the Use Cases and the QKD experiments performed, as well as the HellasQCI networks architecture, trainings, and the launch of the training platform.

Additionally, Prof. G.Kanellos participated in the “Satellite and Free-Space QKD” session, with a presentation on “OGS Integration in the HellasQCI Terrestrial QKD Segment in the Framework of EUROQCI and contributed at the Panel Discussion: Satellite and Free-Space QKD.

Finally, during the closing ceremony, the key for hosting the next QCI Days event passed (after Spain and Austria) to Greece, GRNET, the HellasQCI Coordinator. This symbolic transition marked that this well-established event that gathers Quantum Communications experts and policy makers from all over Europe will take place in Athens in Spring 2025.

HellasQCI in Aveiro, Portugal

HellasQCI participated in the workshop: “Quantum Communication Networks”, organised by the Portuguese Quantum Communications Infrastructure – PTQCI, which took place from 26 to 27 February 2024 in Aveiro, Portugal.

Dr. Ilias Papastamatiou, Senior Project Manager at GRNET shared the progress of the HellasQCI Quantum Communication Infrastructure of Greece, focusing on key milestones reached and achievements regarding the infrastructure developments, networks architecture, trainings, trusted nodes and all current EuroQCI synergies.

Additionally, the panel of National QCI Initiatives included Catarina Bastos of PTQCI, Vicente Martin of EuroQCI Spain, Sebastian Ramacher of QCI-Cat, Pierre Muller of Lux4QCI, Alin-Bogdan Popa of RoNaQCI, and Dr. Ilias Papastamatiou of HellasQCI (coordinated by GRNET). The panel was enhanced by two international initiatives: Mehdi Namazi from Qconnect Inc (USA) and Valeria Loureiro da Silva from Centro de Competencia Embrapii em Tecnologias Quanticas.

Finally, the 2-day event on Quantum Communication Networks (QCNs), featured special guest Mr. Mario Campolargo, **Secretary of State** for Digitalisation and Administrative Modernisation of Portugal and Pietro Paglierani, CMRE Centre for Maritime Research and Experimentation/**NATO**.

ICCS/NTUA in the Quantum Flagship project QSNP

NKUA is engaged and participates in 1) the Quantum Secure Networks Partnership (EU-HE-QSNP), a European Quantum Flagship project that aims to develop quantum cryptography technology to secure the transmission of information over the internet, 2) the Leap in Advancing of critical Quantum key distribution-spAce components (LaiQa) project, a HORIZON Research and Innovation action aiming to develop and advance critical components and technologies necessary to build a global spaced-based quantum network and, 3) QRONOS, a national HFRI project.

HELLASQCI will leverage the participation of its partners in EU-funded projects focusing on the development of the new generation of QKD systems for both terrestrial and space segments. ICCS/NTUA participates in the Quantum Flagship project QSNP¹, in which ICCS is working on the development of a deployment-friendly Single Photon Polarisation-Encoded Systems (SPPEs). Based on simple Commercial-off-the-shelf (COTS) components, the setup can be used for measuring the performance of QKD systems in fiber/FSO transmission links considered for the deployment phase of QKD networks. The research team of ICCS, working as QKD expert team of GRNET in the context of HELLASQCI project, will use the SPPEs within Phase 0 testing activities of WP3 to evaluate through

¹ <https://qsnp.eu/>

experiments the performance of QKD systems that will be deployed in Phase 1 and Phase 2 of the project.

ICCS/NTUA in the EU-funded LaiQa

ICCS/NTUA coordinates the EU-funded LaiQa project², focusing on the development of Prepare-and-Measure- and Entanglement-based QKD systems in support of satellite QKD networks. ICCS is working on the development of a software-based Network Planning Tool (NPT) for optimizing the Secure Key Rates (SKRs) offered by constellations carrying QKD payloads. The NPT will be used in support of the feasibility analysis towards the Phase 2 of the project, where the specifications of Eagle-1 will be available, and they will be used for performing feasibility analysis for the three Optical Ground Stations (OGSs) included in HELLASQCI.

QUBITECH in the EIC Pathfinder Challenge project Heisenberg

QUBITECH is a core partner of the EIC Pathfinder Challenge project Helsingberg under the call topic “alternative approaches to Quantum Information Processing, communication and sensing”. The project focuses on the development of a quantum photonic spatial annealer operating at room temperature, with all to all tunable connectivity of several thousands of optically encoded spins. HellasQCI partners have engaged in technical discussions on potential collaboration activities on providing quantum light states as an input to the quantum simulator through the quantum channels of the HellasQCI network.

3.3. Impact: Leveraging events to build the HellasQCI community

Events play a crucial role in the advancement and dissemination of European projects like HellasQCI. They serve as pivotal platforms for showcasing project results, fostering collaborations, and aligning with broader EU strategies. HellasQCI has established synergies with 16 NatQCIs (such as Lux4QCI, EuroQCI Spain, PTQCI, QCI-Cat) and is in active participation PETRUS CSA and collaboration with QT EU research projects while HellasQCI aims to establish a Hellenic community of stakeholders, including traditional telecommunications networks users, to benefit and support the HellasQCI network.

Therefore, HellasQCI's participation in a variety of workshops, exhibitions, and other dissemination activities emphasizes the project's commitment to engaging relevant stakeholders and keeping them informed. Such events not only facilitate the sharing of knowledge and expertise but also help in networking with potential collaborators, thereby strengthening the project's impact and visibility within the quantum communication infrastructure (QCI) ecosystem. Furthermore, the HellasQCI project has significantly contributed to the building and strengthening of the HellasQCI community, by participating in a wide range of events and forming strategic collaborations.

HellasQCI's active participation in events such as the Euro Digital Projects call Kick-off Meeting, Ubitech Innovation Days, and the World Quantum Day InfoSession has significantly contributed to the project's development generating impact. For instance, the kick-off meeting in Brussels provided HellasQCI with opportunities to align with EU strategies and collaborate with other projects. The Ubitech Innovation Days in Greece helped HellasQCI stay abreast of technological advancements and foster collaborations while NOKIA Wavelengths 2023 provided opportunities for knowledge exchange. World Quantum Day and the IrelandQCI kick-off meeting, among others, facilitated international collaborations and knowledge exchange on quantum technologies and infrastructure, which are critical for the development of a resilient quantum communication network in Europe.

² <https://www.laiqa-horizon.eu/>

Specifically, the partnership with IrelandQCI highlights how HellasQCI has worked towards advancing National Quantum Communication Infrastructures through cross-country cooperation, focusing on advanced QKD technologies and addressing common challenges in quantum technology development. This partnership, along with involvement in events like NOKIA Wavelengths and the TNC23 conference, showcases HellasQCI's commitment to networking, collaboration, and knowledge sharing within the European research and innovation community. Furthermore, HellasQCI's engagement in European Thematic Working Groups and the Quantum Communication Innovation Forum has reinforced its actions on cyber-resilience, security of sensitive data, and critical infrastructure, contributing significantly to the EuroQCI initiative.

Furthermore the 6th Annual Scylight Conference significantly impacted the HellasQCI consortium by fostering a strong sense of community among participants. It served as a platform for networking, sharing ideas, and discussing the latest advancements and challenges in quantum communication technologies. The sizable audience of 200 individuals provided a broad base for raising awareness about the consortium's objectives and initiatives, engaging a diverse group of stakeholders from academia, industry, and government. The location and scale of the conference underscored its importance in enhancing visibility and support for HellasQCI's activities within a wider audience. Similarly, the GRNOG15 with an audience size of 100, the event offered a more focused setting for in-depth interactions, fostering a strong community of professionals dedicated to advancing Greece's position in the global quantum communication landscape. The event was instrumental in raising awareness about HellasQCI's efforts and goals, engaging a specialized audience in meaningful dialogue about the future of quantum technologies in Greece and beyond.

The collaboration with EU-funded projects and the formation of partnerships with National Quantum Communication Infrastructures throughout Europe have significantly enhanced the HellasQCI ecosystem. The plan for Fostering Involvement and Community building around HellasQCI has already been designed [D6.1 Dissemination, Exploitation and communication activities plan](#). According to this, HellasQCI seeks to disseminate project outcomes to a broad range of targeted stakeholders. According to this document, HellasQCI aims to spread awareness of project outcomes across a wide array of key stakeholders. Communication efforts are tailored to incorporate the interests and activities of these stakeholders, inviting them to join the HellasQCI community and contribute to the project's goal of establishing a robust cluster.

The roadmap for achieving these objectives includes:

- Compiling a comprehensive database of relevant stakeholders and target audiences.
- Devise key messages and narratives regarding the project.
- Use appropriate communication tools to amplify the project visibility.
- Create and distribute dissemination material and content to promote HellasQCI to interested stakeholders.

All events have played pivotal roles in cultivating a community by offering opportunities for engagement among stakeholders with mutual interests in quantum communication technologies. Furthermore, these events serve as platforms for raising awareness about HellasQCI's vision and projects, helping to secure support and collaboration from key players in the field. The careful planning of these events reflects the WP6 dedication to maximizing their impact on HellasQCI's overarching objectives.

Moving forward, HellasQCI aims to continue fostering collaborations, and contributing to the development of a secure, interoperable, and robust European quantum communication network. Moving forward, HellasQCI aims to continue its active participation in key events leveraging these platforms for disseminating project outcomes, further expanding its network and influence. The project's future endeavors include co-organizing the QCI Days 2025 in Athens, which promises to be

a significant milestone, bringing together experts and policymakers from across Europe to discuss and drive forward the quantum communication agenda. Through continued engagement and collaboration, HellasQCI is well-positioned to contribute to the development of a robust and secure quantum communication infrastructure in Europe, aligning with the goals of the EuroQCI initiative and beyond.

3.4. Scientific publications

HELLASQCI uses scientific publications to inform the scientific and research community about the project's advancements. This is achieved through publications in scientific journals and conferences relevant to the scope of HELLASQCI. Reporting and updating of the scientific publications throughout the duration of the project is done using a live document in the coordinator's repository. Each consortium partner is responsible for updating the document at regular intervals.

Scientific publications facilitate knowledge dissemination, validation, and achievement of project goals. Specifically, researchers share their findings with the scientific community, enhancing collective understanding. Peer-reviewed publications provide a means for researchers to validate their findings and enhance their research outputs via collaboration with other experts in the field. Research published in journals increases visibility and impact, reaching policymakers and stakeholders. It also facilitates networking and collaboration, leading to synergies, shared resources, and increased innovation which can be beneficial for the project.

Until March of 2024 two scientific papers were submitted in Journals and five were submitted in Conferences. A detailed list is provided in **Annex F – Scientific publications**.

3.5. Promotional material

Promotional materials are essential to present the project, its objectives, expected results and benefits to stakeholders. They can also encourage participation in project activities, such as workshops or training activities, by highlighting the value of participation and encouraging stakeholders to contribute their expertise.

HellasQCI Logo: The HellasQCI logo was designed by partners from NCSR-D, with the support of GRNET, before the project kick off meeting in January (**Figure 27**) and it is analysed in detail in D6.1. It features the letters HQCI in blue and light blue while the Q is made up of strands of optical fibres. It is designed to be simple, clear, and relatable to the project. The final logo was chosen from a pool of 4 qualifying logos, from more than 30 initial designs, via an online poll conducted amongst consortium partners.



Figure 27: HellasQCI logo

Presentation templates: For the needs of the project HellasQCI 1st two thematic axes sessions of Training Event two distinct presentation templates were designed and given to project participants. These were used for the intra-project presentation needs, during meetings, workshops and reviews.

Partners are encouraged to use the templates when presenting the project in conferences, lectures and workshops. Additionally, the project’s deliverable template has been designed and used to maintain a coherent visual appearance for all the training events project’s deliverables and assessment reports.

Presentation templates (Marketing collaterals): Regarding the HellasQCI 1st two thematic axes sessions of training event, the four different banner rollups were used to enhance the project’s visual identity during the Training Events’ activities. These are also available to project partners for short term use in their own dissemination activities and events after communicating with the project coordinator (GRNET). A few other promotional materials like notebooks, pens and stickers were also designed and distributed during the training event (**Figure 28**).



Figure 28: HellasQCI promotional materials

HellasQCI Video Presentation: Videos in Greek and English were created by GRNET for the promotion of the project and was uploaded at the project's [YouTube channel](#). The video was also shown at the exhibition booth at Ministry of Digital Governance.

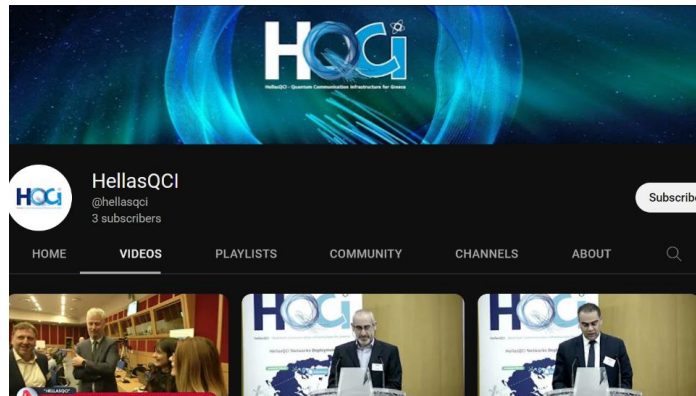


Figure 29: HellasQCI YouTube channel (video 1)



Figure 30: HellasQCI project YouTube presentation in Greek and English (YouTube channel)

3.6. Public deliverables

During the 1st Year of the project two public deliverables were submitted and are available online at the project's website. Namely these are: [D1.1 Project management information system](#) and [D6.1 Dissemination, Exploitation and communication activities plan](#)

4. Monitoring Performance

4.1. Website monitoring (Matomo)

Matomo is a downloadable, Free (GPL licensed) web analytics software platform. It provides detailed reports on your website and its visitors, including the search engines and keywords they used, the language they speak, which pages they like, the files they download and so much more. All online outreach activities are monitored on an ongoing basis with adjustments made as required.

The dissemination and communication activities log of consortium partners, is a “live” document, where partners identify events of interest for the whole consortium, and at the same time record their activities. The spreadsheet resides in the private repository of the project. For the monitoring and collection of statistics and analytics related to the project website the privacy preserving tool, [matomo](#), is used.

Throughout the project's implementation, rigorous monitoring is being done to ensure that communication and dissemination activities are implemented successfully and that the relevant objectives are met.

[Matomo](#) analytics is used to track and evaluate the communication's impact.

Website measurements

Website traffic is monitored using Matomo analytics. Data are collected monthly and provide information on users and their interactions with the site. For a better overview, the data are entered in the table and are depicted in the following diagrams.

Month	Number of Unique Visitors	Total Page Views
2023		
Apr-23	377	1317
May-23	390	993
Jun-23	337	1106
Jul-23	1104	2849
Aug-23	594	1382
Sep-23	1985	4529
Oct-23	550	1555
Nov-23	391	1559
Dec-23	575	1225
2024		
Jan-24	463	1413
Feb-24	513	1549
Mar-24	604	1374

Table 6: Website analytics

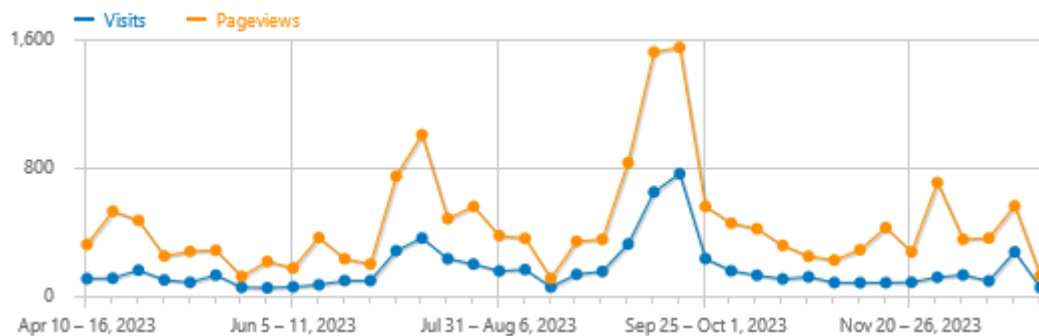


Figure 31: Graph of website visits and pageviews 2023

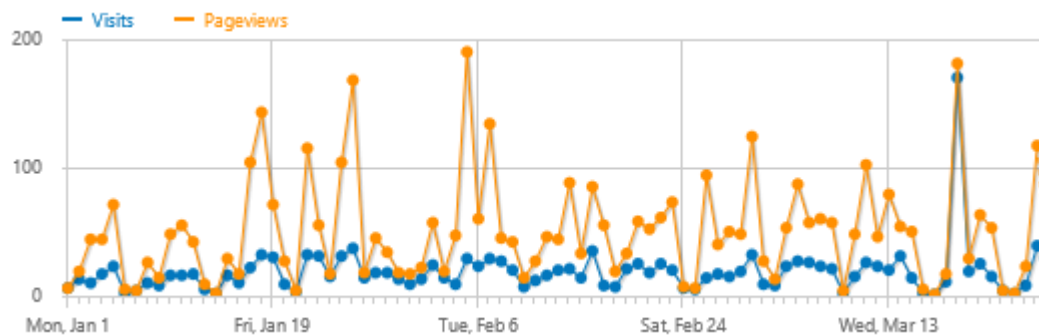


Figure 32: Graph of website and pageviews 2024

The provided website traffic data, tracked through Matomo analytics over the period from April 2023 to March 2024, offers a comprehensive view of user engagement and interaction with the website. The website's traffic data from April 2023 to March 2024 showcases periods of significant engagement and overall growth, highlighting the importance of the website content, effective communication activities eg Newsletters, Infographic, and continuous site optimization to sustain and build on this positive trend.

Analysis of Trends

- **Peak traffic:** The website experienced its highest level of traffic in September 2023, with 1,985 unique visitors and 4,529 total page views. This peak suggests the significance of the HellasQCI 1st two thematic axes sessions of Training Event, driving higher than average traffic to the site.
- **Significant growth in July 2023:** A notable increase in both unique visitors and total page views occurred in July 2023, with unique visitors almost tripling from June to July and page views more than doubling. This jump could be indicative of the results of the Skylight conference and the release of the first Newsletter that attracted more visitors.
- **Overall growth trend:** Despite monthly fluctuations, the general trend from April 2023 to February 2024 indicates an upward trajectory in both unique visitors and page views, suggesting growing interest and engagement with the website over time.
- **User engagement:** Higher page views per visitor, as seen in July and September 2023, suggest that users found the content engaging and were prompted to explore more pages within the site.

4.2. Social media channels monitoring

HellasQCI has four social media channels, namely [Twitter](#), [LinkedIn](#), [Facebook](#) and [YouTube](#). The analytics of each of these channels is presented in the tables that follow.

Twitter

	Impressions	New Followers	Engagement Rate
2023			
Jan-23		13	0.00%
Feb-23	6	4	0.00%
Mar-23	943	9	2.30%
Apr-23	427	6	9%
May-23	624	0	2.60%
Jun-23	149	-1	2.8%
Jul-23	152	2	10.10%
Aug-23	378	1	5.50%
Sep-23	2,604	12	5.60%
Oct-23	1,400	2	6.70%
Nov-23	1,919	0	8.40%
Dec-23	781	0	4.60%
2024			
Jan-24	1157	0	5.10%
Feb-24	623	0	15.60%
Mar-24	481	3	4.8%

Table 7: Twitter analytics

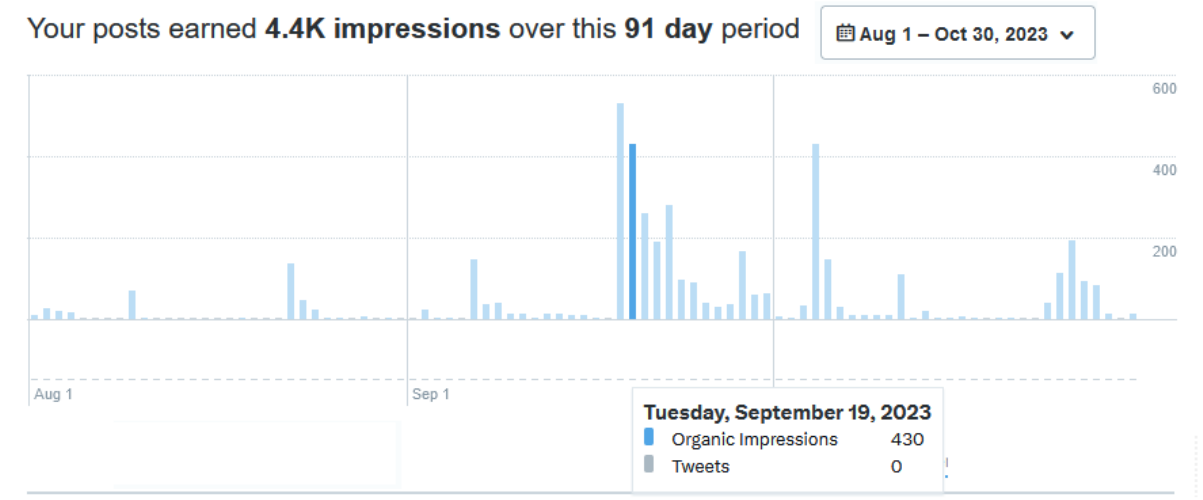


Figure 33: Twitter analytics Aug - Oct 2023

In the above graph is shown the number of impressions, tweets gained from 1st of August 2023 - 30th of October 2023, due to the limitation of Twitter analytics to show aggregate statistics for 3-month periods.

Twitter showed a notable increase in engagement starting in March 2023, with a peak in September 2023, achieving 2,604 impressions and a 5.6% engagement rate. This suggests a successful promotional period, tied to the HellasQCI 1st two thematic axes sessions of training event. The

engagement rate in February 2024 spiked to 15.60%, indicating a significant increase in quality interactions despite lower impressions compared to September 2023.

LinkedIn

	Impressions	Unique visitors	New Followers	Engagement rate
2023				
Jan-23				
Feb-23	133	5	2	1%
Mar-23	1246	49	73	1%
Apr-23	1658	18	37	7%
May-23	1583	27	29	19%
Jun-23	415	13	6	19.80%
Jul-23	592	20	9	7.70%
Aug-23	789	20	7	6.00%
Sep-23	10,200	156	54	8.10%
Oct-23	3,877	57	33	6.20%
Nov-23	2,565	49	25	8.80%
Dec-23	5,674	85	50	14.30%
2024				
Jan-24	2828	27	38	5.70%
Feb-24	4032	46	38	9.70%
Mar-24	2928	23	24	6.59%

Table 8: LinkedIn analytics

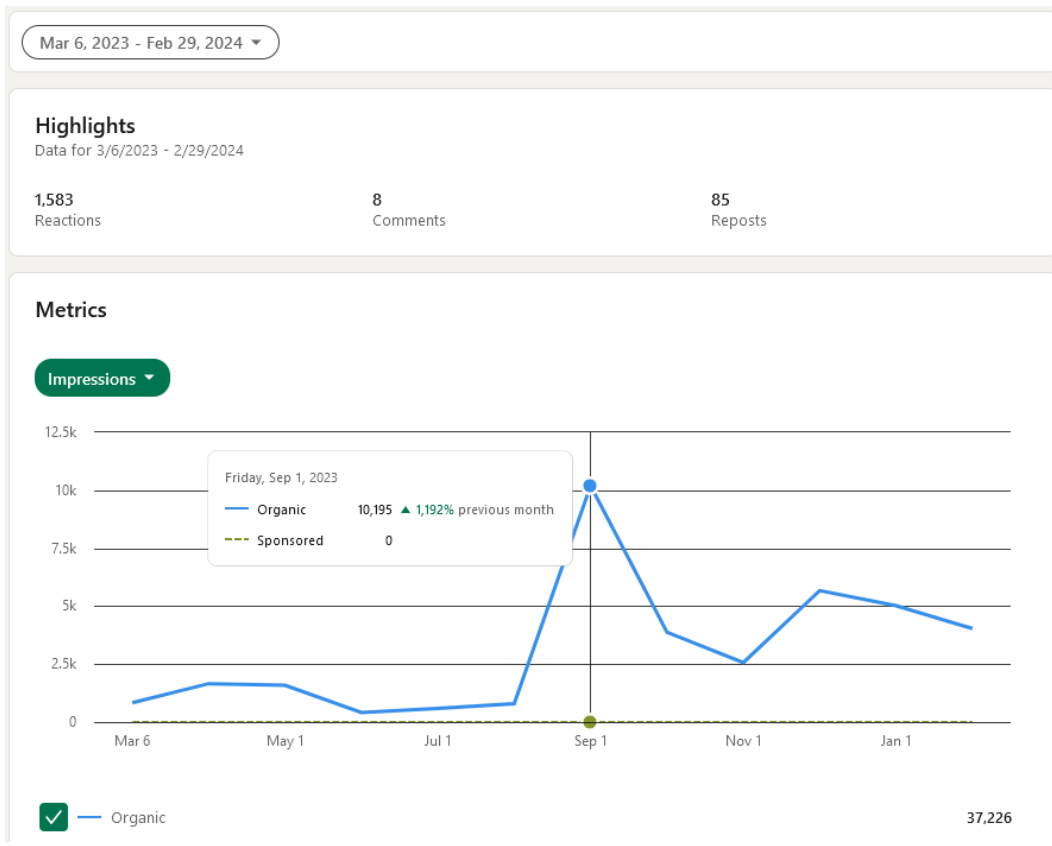


Figure 34: LinkedIn impression graph

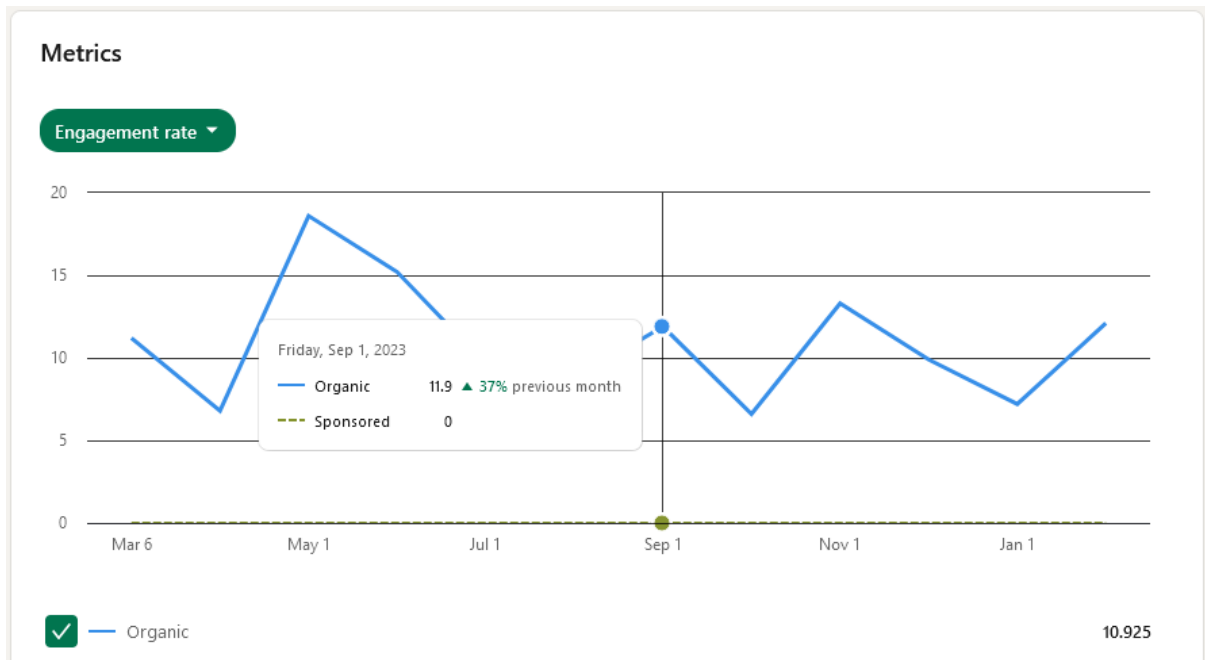


Figure 35: LinkedIn engagement rate graph

LinkedIn displayed consistent growth in impressions and new followers, with a substantial peak in September 2023 (10,200 impressions and 54 new followers), directly connected to promotion of the HellasQCI training event (two thematic axes). The engagement rate has seen significant fluctuations, reaching a high of 19% in May and June 2023, and peaking again at 14.3% in December 2023. The platform receives frequent visitors (new and returning) from all key audience groups, and has a steady increase in new followers after promotional activities of project-related events.

Facebook

	Interaction	Reach	New Followers	Engagement Rate
2023				
Jan-23	115	2200	14	5.23%
Feb-23	15	145	3	10.34%
Mar-23	73	3000	15	2.43%
Apr-23	63	1100	2	5.73%
May-23	28	108	3	25.93%
Jun-23	7	60	3	11.67%
Jul-23	39	781	4	4.99%
Aug-23	79	1900	8	4.16%
Sep-23	592	3000	21	19.73%
Oct-23	257	2300	2	11.17%
Nov-23	316	2100	9	15.05%
Dec-23	126	1900	5	6.63%
2024				
Jan-24	113	1200	5	9.42%
Feb-24	212	1500	11	11.21%
Mar-24	96	589	0	17.8%

Table 9: Facebook analytics

Performance

Daily Cumulative ⓘ

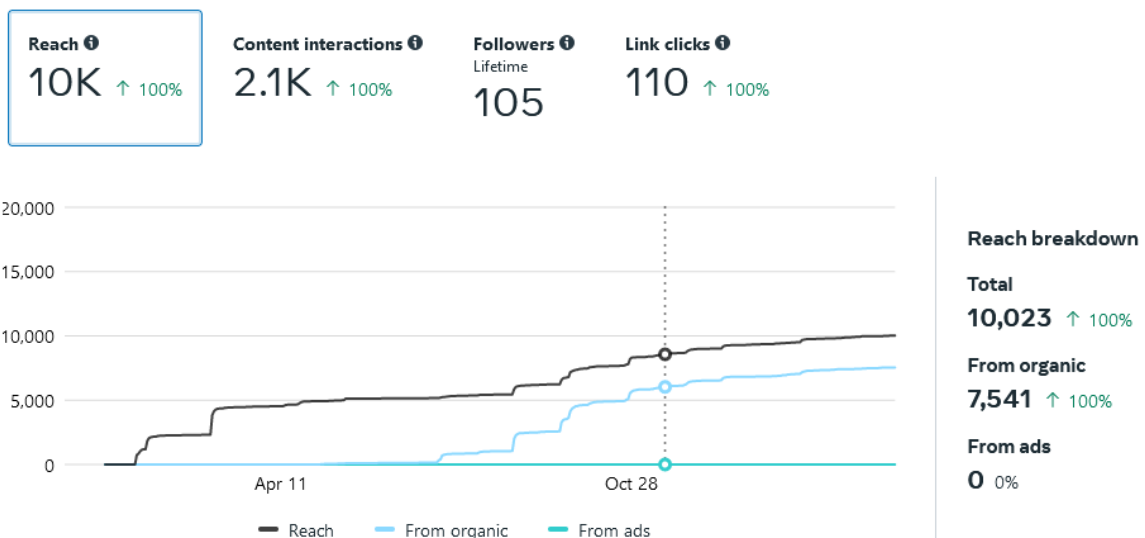


Figure 36: Facebook metrics graph

This graph shows how the Facebook content reach increased during 2023 until the end of March. Facebook showed a remarkable increase in interaction and reach in September 2023, with interactions hitting 592 and a reach of 3,000, supported by a 19.73% engagement rate. This suggests the content was highly relevant and engaging to the audience. The platform maintained steady

engagement rates, notably in February 2024, with a higher engagement rate of 11.21% compared to the previous year, indicating effective content strategy adjustments.

- * **Impressions/Interaction:** Times a user is served a post in timeline or search results
- * **New followers:** Number of new followers, social gained
- * **Visitors:** Number of times people visited HellasQCI profile
- * **Reach:** These metric counts reach from Facebook content, including posts, stories and ads.
- * **Engagement rate:** Number of engagements divided by impressions

Significant increase was recorded in Social Media metrics after the intense promotion of the HellasQCI 1st two thematic axes sessions of Training Event in September 2023

HellasQCI 1st training event: A success story of social media promotion

For the training event, an invitation (**Figure 37**) was designed and distributed via email and social media, and a reminder of the event at regular intervals. Instructions were also given on how to register and attend the courses and workshops. Branded HQCI pens, agendas, laptop stickers, pins and a brochure were distributed at the training seminar. The room and the surrounding area were adorned with 4 rollup banners that were used to enhance the project's visual identity.



Figure 37: HellasQCI training event invitation

A dedicated information menu was added to the project website about the four-day training event with two thematic axes sessions. In this page the agenda of the event is available as well as a Subscription Form which utilizes the online registration of participants.

Additionally, email campaign to invite the community was set in moosend and VIP invitations were sent separately to the Secretary General of Telecommunications and Posts and the President of GRNET

During the event promotional posts were published of the HellasQCI 1st two thematic axes sessions of training event on social media ([Facebook](#), [Linkedin](#), [Twitter](#)).

A channel for remote attendance was also created in GRNET DIAVLOS service.

A list of participants and registered users of the portal was created.

- **Follow-up actions and Feedback harvesting**

After the HellasQCI 1st two thematic axes sessions of training event the following reports were created to give to the public awareness about the event and receive students' feedback. This information will enable the project to enhance the quality of the next training sessions.

Certifications of the two thematic axes sessions

Certificate of attendance which are shown in the following pictures:



Figure 38: Certificate of attendance

Questionnaire / Follow-up

A satisfaction questionnaire was sent to the participants, which when completed also gave access to the HQCI training portal. The graph below depicts the attendees' satisfaction levels based on their experience.

Satisfaction Survey Replies

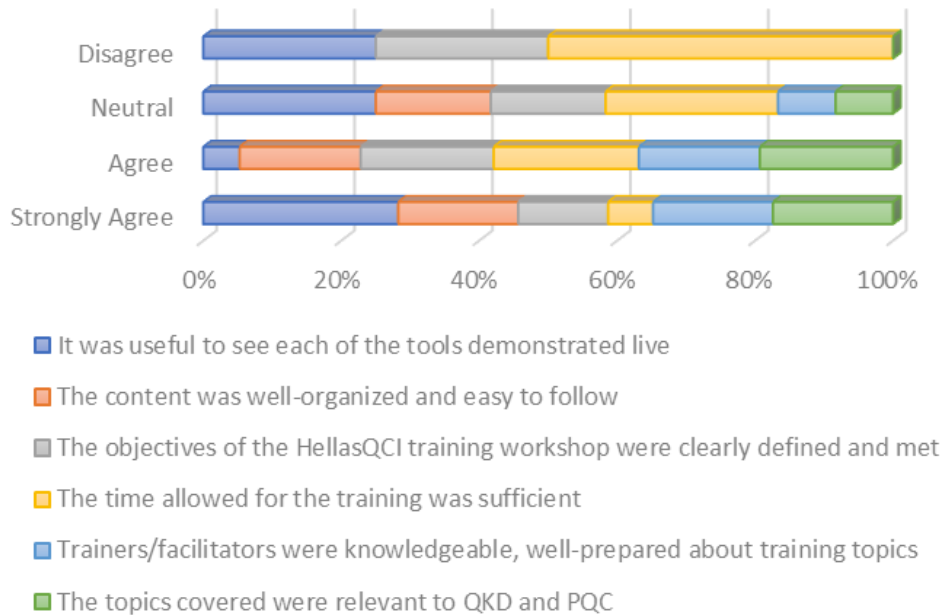


Figure 39: Satisfaction survey replies

Assessment Report

After the event, an assessment report was drafted to present the impact of the 1st two thematic axes Training Event. The assessment report has a dual purpose; the first is to acknowledge and highlight the importance of these training events in knowledge transfer and in community building and the second is to communicate the importance of the research carried out in the field of quantum communication, with the goal of enhancing the security of sensitive data and critical infrastructures in Greece and co-creating EuroQCI. The full text of the assessment report can be found in the Annex D (***Annex D - HellasQCI project HellasQCI 1st two thematic axes sessions of training event report***)

Infographic with KPIs

A summary infographic (2.5 section) was designed and was posted on the website's newsfeed page. The infographic was also posted on social media ([Facebook](#), [Twitter](#) and [LinkedIn](#)).

Youtube

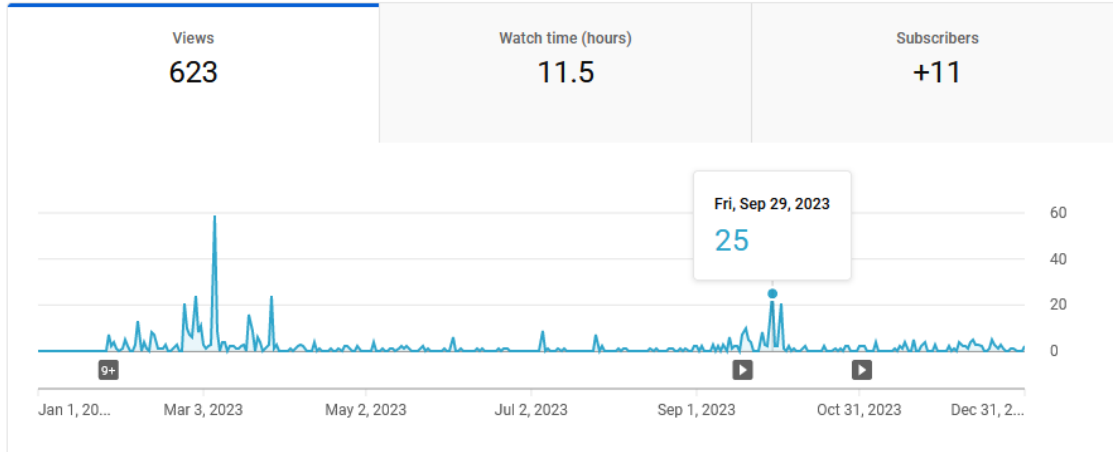


Figure 40: Youtube metrics graph 2023

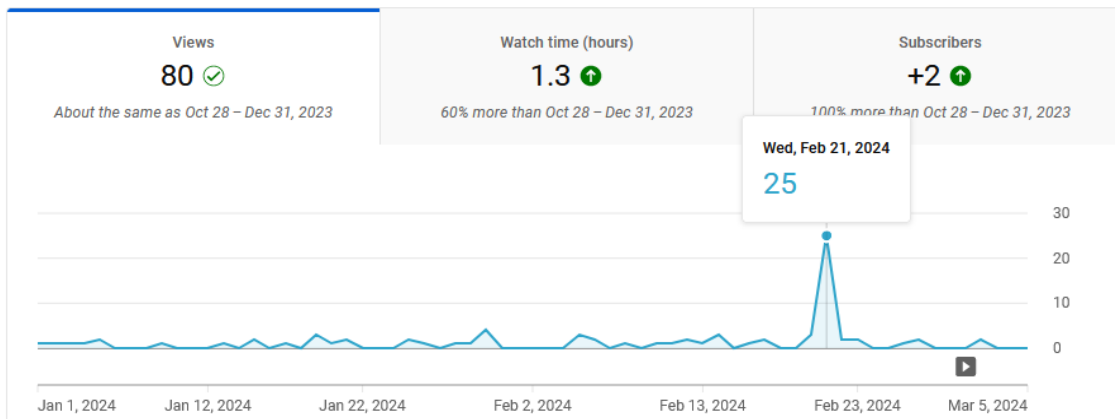


Figure 41: YouTube metrics graph 2024

Social media followers

Social Media Channels	Followers (M15)
LinkedIn	436
Facebook	105
X (Twitter)	71
YouTube	16

Table 10: Social media followers

Social Media Channels	Total Posts (M15)
LinkedIn, Fb, X, YouTube	109

Table 11: Social media posts

The intense promotion of the HellasQCI 1st two thematic axes sessions of Training Event in September 2023 significantly influenced social media metrics across all platforms, underlining the effectiveness of targeted promotional activities.

By M15 (15 months into the monitoring period), [LinkedIn](#) had the highest number of followers at 436, followed by [Facebook](#) at 105, [Twitter](#) at 71, and [YouTube](#) at 16. This growth pattern suggests [LinkedIn](#) was the most effective platform for expanding the community.

The total number of posts across [LinkedIn](#), [Facebook](#), [Twitter](#), and [YouTube](#) were **109**, indicating a robust content strategy aimed at engaging with the audience and promoting the project's activities.

Organizations that HellasQCI project follows/engages with

The HellasQCI project's engagement with various organizations across different fields of activity showcases its comprehensive approach in staying connected with key developments, standards, and innovations in cybersecurity, quantum computing, and other related domains. By following these entities, HellasQCI aligns itself with leading-edge research, industry standards, and best practices, reflecting its commitment to excellence and innovation in QKD and PQC.

The table below presents an overview of the types of organizations HellasQCI is associated with, while an analysis of each of the fields of activity follows.

Field of activity	Following
Cybersecurity	<ol style="list-style-type: none"> NIST (National Institute of Standards and Technology) ISSA Compass CISA (Cybersecurity and Infrastructure Security Agency) ISC2 (International Information System Security Certification Consortium) EFF (Electronic Frontier Foundation)
Quantum Computing	<ol style="list-style-type: none"> Q-CTRL Quantinuum D-Wave Systems Rigetti Computing IBM Quantum Qutech Quantum Machines Quantum Computing Technologies (QCT) QuSecure Quantum XC
Other	<ol style="list-style-type: none"> Open Web Application Security Project (OWASP) Fraunhofer Institute for Photonic Microsystems (IPT)

Table 12: Number and type of organizations HellasQCI follows

Cybersecurity

- **NIST (National Institute of Standards and Technology):** By following NIST, HellasQCI aligns itself with one of the most important standard-setting bodies, gaining insights into the latest frameworks and guidelines that influence global cybersecurity policies and technologies.
- **ISSA Compass:** Engagement with ISSA Compass provides HellasQCI access to a broad network of information security professionals, offering perspectives on evolving cybersecurity challenges and solutions.

- **CISA (Cybersecurity and Infrastructure Security Agency):** CISA's focus on protecting national infrastructure makes its resources and updates vital for HellasQCI, especially in understanding the cybersecurity landscape and threats at a national and international level.
- **ISC2 (International Information System Security Certification Consortium):** Following ISC2 suggests an interest in professional certification, education, and best practices within information security, which is crucial for maintaining a knowledgeable and skilled team.
- **EFF (Electronic Frontier Foundation):** EFF's objectives and activities in the digital world indicates HellasQCI's broader commitment to privacy, security, and freedom in the context of advancing technologies.

Quantum Computing

- The list of organizations within the quantum computing sector, including **Q-CTRL, Quantinuum, D-Wave Systems, Rigetti Computing, IBM Quantum, Qutech, Quantum Machines, Quantum Computing Technologies (QCT), QuSecure, Quantum XC**, represents a significant engagement with the entire spectrum of quantum computing. This range covers quantum hardware manufacturers (D-Wave, Rigetti, IBM Quantum), software and control solutions (Q-CTRL, Quantum Machines), and quantum security solutions (QuSecure, Quantum XC). This diversity indicates a holistic approach to understanding and leveraging quantum technologies, from foundational quantum physics to practical quantum computing applications and quantum-safe security solutions.

Other

- **OWASP (Open Web Application Security Project):** Following OWASP shows an interest in web application security, reflecting the importance of secure software development practices within HellasQCI's operations or research.
- **Fraunhofer Institute for Photonic Microsystems (IPT):** Engagement with Fraunhofer IPT, known for its research in microsystems technology, suggests an interest in the potential applications of photonic technologies in quantum computing or communications.

This varied engagement portfolio highlights HellasQCI's strategic approach to remain at the forefront of technology and security. The focus on cybersecurity organizations underlines the project's commitment to safeguarding quantum communications infrastructures against emerging threats. Meanwhile, the broad spectrum of quantum computing entities reflects a comprehensive interest in the quantum technology landscape, from theoretical foundations to practical applications and security implications.

By associating with a range of leading institutions and companies, HellasQCI not only stays informed about the latest developments and standards but also positions itself as a key player in the ongoing dialogue shaping the future of quantum technologies and cybersecurity. This network of associations is crucial for fostering innovation, collaboration, and knowledge exchange, enabling HellasQCI to contribute significantly to the advancement of QKD/PQC technologies and to the broader quantum computing and cybersecurity ecosystems.

4.3. Newsletter monitoring

From the following figure which is produced by the [moosend](#) platform it is recorded that 72 users are registered in Newsletter list from, 67 of them are active which is the 93,06%.

ALL 72	ACTIVE 67 93.06 % of members	UNSUBSCRIBED 3 4.17 % of members	BOUNCED 2 2.78 % of members	ARCHIVED 0 0.00 % of members
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Figure 42: Newsletter users

In the following graph the total number of subscribes/unsubscribes from 2023 until March 2024 is presented.

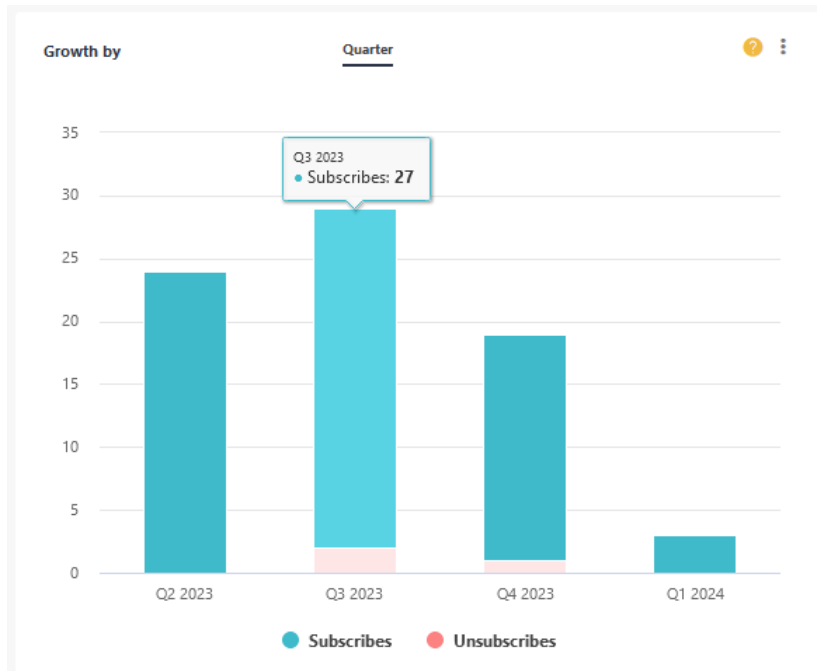


Figure 43: Subscribes/Unsubscribes per quarter

The [1st Newsletter](#) statistics are depicted in the following figure.

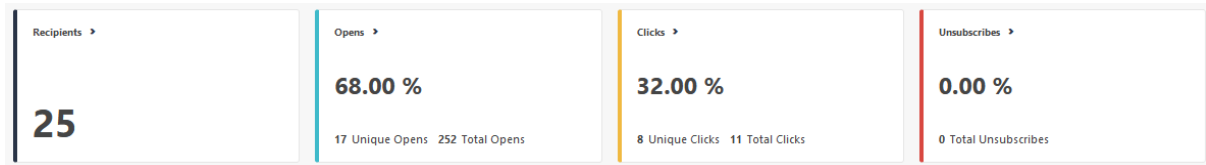


Figure 44: 1st Newsletter statistics

The [2nd Newsletter](#) statistics are depicted in the following figure.

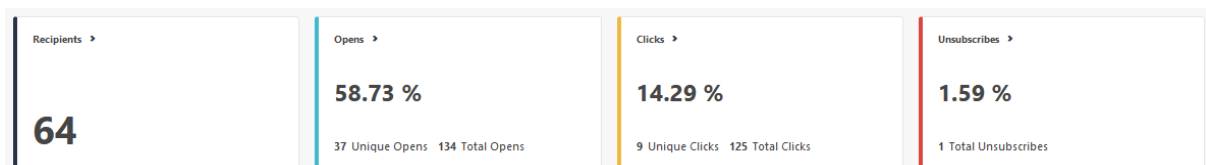


Figure 45: 2nd Newsletter statistics

The e-Newsletter analytics for the HellasQCI project reveal a strong foundation of subscriber engagement and steady growth. By building on the existing content strategy and focusing on personalized engagement, HellasQCI intends to continue to expand its reach and impact through its newsletter communications.

Audience engagement and growth



- **High active user rate:** The data indicates a high level of active engagement among the newsletter subscribers, with 93.06% (67 out of 72) of the users being active. This high percentage suggests the newsletter content is relevant and interesting to most of its audience.
- **Minimal losses:** The unsubscribe (3) and bounce (2) rates are relatively low, contributing to the high active user rate. This indicates effective audience retention strategies and a healthy email list.

Subscription Trends

- **Quarterly growth:** The quarterly subscription data show a steady increase in the number of subscribers throughout 2023, starting with 24 new subscribers in Q2, increasing to 27 in Q3, and slightly decreasing to 19 in Q4. The consistent growth, despite the slight decrease in the last quarter, suggests growing interest in the HellasQCI project and its communications.

Newsletter Performance

- **First newsletter performance:** The first newsletter achieved an impressive open rate of 68% with 17 unique opens and a total of 252 opens, indicating that the newsletter was not only widely read but also revisited multiple times by the recipients. The click-through rate (CTR) of 32%, with 8 unique clicks and a total of 11 clicks, further indicates the content's relevance and the audience's willingness to engage with it. The absence of any unsubscribes is a positive sign of the content's acceptance.
- **Second newsletter performance:** Despite an increased recipient count of 64 for the second newsletter, the open rate decreased slightly to 58.73% with 37 unique opens and a total of 134 opens. This suggests a wider reach but slightly lower engagement on a per-user basis. The CTR also decreased to 14.29%, with 9 unique clicks and a substantial increase to 125 total clicks, indicating that while fewer individuals clicked, those who did were highly engaged. The presence of a single unsubscribe is not necessarily indicative of a significant issue.

The high open rates and significant revisits (as indicated by the total opens) suggest that the newsletter content is resonating well with the audience. The engagement metrics (unique and total clicks) demonstrate an active interest in the topics covered and the resources provided. The steady growth in subscribers indicates effective outreach and audience interest. Continuing to promote the newsletter through various channels, including social media, events, and the HellasQCI website, can help maintain this growth trajectory.

Maintaining the low unsubscribe and bounce rates is crucial for sustained engagement. Therefore, WP6 intends to regularly update the email list implementing feedback mechanisms that can help in retaining the audience and keeping the bounce rates minimal.

4.4. Key Performance Indicators (KPIs) for HellasQCI project

This section outlines the Key Performance Indicators (KPIs) for the HellasQCI project, including various metrics related to event attendance, presence at conferences, dissemination of project use cases, publications, press releases, website traffic, and social media followers.

It is crucially important for the HellasQCI consortium to monitor the impact generated by the dissemination and communication actions and tools. The preliminary KPIs regarding the Dissemination activities (DKPIs) were identified in the project proposal and can be found in the table (**Table 13**) below.

KPI	KPI title	(M1-18)	(M19-30)	Overall	Reached by M15
DKPI 1	Number of events attended representing the project	1	1	2	16
DKPI 2	Presence at relevant conferences	2	2	4	3
DKPI 3	Number of people informed about HellasQCI use cases through dissemination events	100	300	400	9.363
DKPI 4	Number of articles published (including Open Access journals & conferences)	1	1	2	7
DKPI 5	Number of publications on EC channels (Cordis and others)	1	1	2	2
DKPI 6	Number of press releases delivered to traditional media	3	3	6	111
DKPI 7	Number of unique visitors to the website (based on Google Analytics)	300	700	1000	7909
DKPI 8	Social media followers (LinkedIn , Twitter , Facebook)	100	200	300	598

Table 13: Project's KPIs

The KPIs are explained in detail in the figure below:

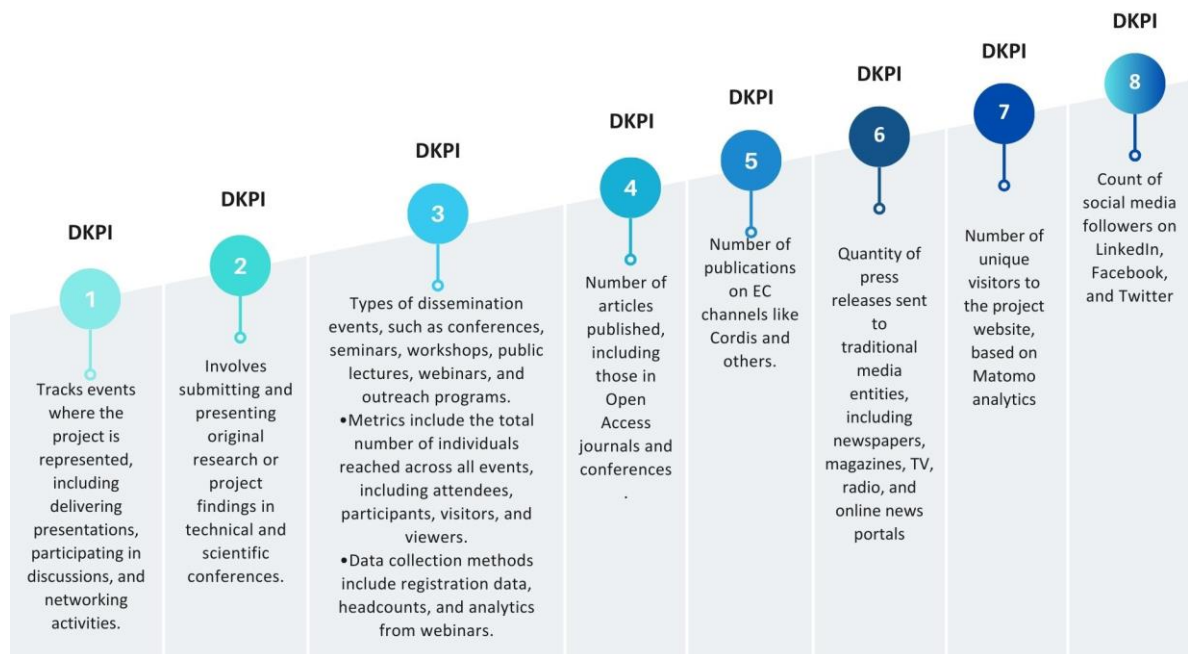


Figure 46: KPI explanation

The following table presents the DKPIs achieved by month 15:

KPI	KPI Numbers	Activities
DKPI 1	Number of events attended representing the project: 16	9th ETSI IQC Quantum Safe Cryptography Event , 3rd Ubitech Innovation Days , Celebrating The World Quantum Day , IrelandQCI kick-off meeting Waterford , NOKIA Wavelengths 2023 , GEANT event TNC23 , 6th Annual ScyLight Conference Workshop - Quantum Internet , CEN/CENELEC Joint Technical Committee JTC 22 , 87th Thessaloniki International Fair , GRNOG15 , Working Groups of the Petrus CSA project under the auspices of the EuroQCI , Participation in the 4th plenary meeting of CEN/CLC/JTC 22 “Quantum Technologies” , Quantum Communication Innovation Forum by EUROQCI Spain, UNDERPIN KoM
DKPI 2	Presence at relevant conferences: 3	6th Annual ScyLight Conference Workshop, 9th ETSI IQC Quantum Safe Cryptography Event, GRNOG
DKPI 3	Number of people informed about HellasQCI use cases through dissemination events: 9.363	List of Audiences is provided in Annex B - Communication activities
DKPI 4	Number of articles published (including Open Access journals & conferences): 7	https://hellasqci.eu/scientific-publications/
DKPI 5	Number of publications on EC channels (Cordis and others): 2	https://zenodo.org/communities/hellasqci/records?q=&l=ist&p=1&s=10&sort=newest
DKPI 6	Number of press releases delivered to traditional and online media: 111	press release about the project objectives M1, press release about IrelandQCI kick off, Press releases HellasQCI 1st two thematic axes sessions of Training Event, Netweek , Manifesto media article , HellasQCI Kick off meeting , Nokia website , Greek Ministry of Digital Governance , ALPHA TV
DKPI 7	Number of unique visitors to the website (based on Matomo) M15	7909
DKPI 8	Social media followers (LinkedIn Facebook and Twitter) M15	598

Table 14: DKPIs achieved by month 15

The HellasQCI project's dissemination and communication efforts have been highly successful, significantly exceeding its set targets. This success reflects the project's commitment to sharing its findings and engaging with a broad audience. Going forward, focusing on strategic, high-impact activities and continuous engagement will be key to sustaining and building upon this success.

By attending 16 events compared to the planned 2 events the project demonstrates a strong presence and active participation in the quantum computing and cryptography community. With a presence at 3 relevant conferences, the project exceeded the initial goal of 4 presences, considering the overlapping relevance of some events that might contribute to multiple KPIs.

The project remarkably exceeded its goal, informing 9,363 people about HellasQCI use cases, vastly surpassing the anticipated target of 400 people. This indicates highly effective dissemination efforts

and a strong interest in the project's outcomes. With 7 articles published, the project outperformed its original goal of 2 publications. This suggests robust research output and successful publication in reputable sources.

The delivery of 111 press releases is significantly higher than the anticipated 6 releases, showcasing an aggressive and successful media strategy that likely contributed to broader project visibility. The website attracted 7,909 unique visitors, surpassing the target of 1,000 visitors. This suggests the website was an effective tool in engaging an interested audience. The project's social media channels attracted 628 followers by Month 15, doubling the initial goal of 300 followers. This growth reflects a successful social media strategy and growing interest in the project's activities.

5. Exploitation plan and methodology

This Section the methodology followed to define the exploitation strategy of the project is analysed and outlined. First the potential types of exploitable outcomes are defined and classified accordingly. A distinct methodology is then introduced to outline the individual exploitation opportunities for the different types of exploitable outcomes and their respective implementation challenges. The objective is to identify the more mature exploitable outcomes and assets, and to support a business case development for their exploitation beyond the project's lifetime.

HellasQCI community

The initial goal for this task was to kick-start the process of building a community of stakeholders and interested parties around HellasQCI. To achieve this, the approach has been twofold: First to attract interest to the project activities through the dissemination efforts and mainly through the events where project activities have been presented, where other participants were engaged in one-on-one discussions, elaborating on how the project goals and expected results are relevant to their interests. After the HellasQCI community registration form was published on the project web site, interested parties were also encouraged to register through it to establish a database of contacts for the community network and ensure they can be directly engaged in further community building efforts and communications targeting their interests. Through such efforts 20 registrations were attracted in the HellasQCI community registry during the first year of the project.

Potential stakeholders engaged in the context of various events include for example the Hellenic Photonics Cluster (HPhos) and the Hellenic Space Center. Besides that, a meeting was held with members of the board of directors of the Hellenic Emerging technologies Association (HETiA), where the vision and the objectives of the project were presented. Potential future joint activities and collaborations were investigated. Enthusiasm and a shared commitment to explore innovative ways to foster collaborations between project partners and members of the association on quantum communication technologies were expressed. The meeting laid solid foundations for establishing synergies between the association and the project. The next steps involve in-depth discussions and a detailed exploration of the identified opportunities to establish a roadmap for collaboration and joint activities in the framework of future events of HellasQCI and of HETiA.

Project results with exploitation potential

HellasQCI consortium is composed of members from Academia and public research centers to public bodies and companies and industrial and SME members. Depending on the individual partner's expertise and area of interest, the exploitation strategy and plan can vary widely. Customarily Universities and Research Centers are more inclined to pursue exploitation activities related to

harnessing exploratory scientific results, while commercial partners are more likely to be interested in the exploitation of products with potential for commercialization, as well as for developing solutions that offer competitive advantages. We can categorize the main types of exploitable outcomes as follows:

Research achievements: These include publishing novel scientific results, forming IPRs, and developing prototypes. These can be produced by all partners.

Start-Up companies: Based on a specific research achievement or prototype a startup company can be established to foster the development and eventual commercialization. This is usually an exploitation avenue for research centers and Universities.

Product development: Based on the R'n'D activities performed within the context of the project commercial companies, industries and SMEs have the potential to develop products, enhance existing products with additional features that give them a competitive edge, or raise the technology readiness level (TRL) level of a prototype.

Business development: Commercial and SME partners can enhance existing processes and services through and even develop entirely new ones, based on the insights and know-how gained by participating in the project's activities.

Standardization: Partners that become actively involved in regulatory and standardization aspects within the project's framework, can promote relevant results and provide technical contributions to appropriate standards bodies. This actively supports the commercialization of the project's results and is usually undertaken by academic partners.

5.1. Exploitable result categories

HellasQCI results can be classified in the following categories:

- **Use cases** – HellasQCI involves a profound number (16) of individual use cases and demonstrations. These have been designed to test novel quantum communications applications and technologies leveraging the deployed infrastructure. The use cases range from Proof-of-Concept demonstrations to full scale solutions that address specific needs in the technological domains of cybersecurity, quantum technologies and quantum communications.
- **Validation results** –are intended to validate the operation of products designed to make use of the QCI. These activities aim to increase the TRL of the associated products, bringing them closer to the market.
- **Prototypes** are products (hardware and software) designed, developed, upgraded and enhanced within the project's context. Prototypes can be developed by commercial companies and SMEs or by academic and public research centers.
- **Standardization and publications** – these are not directly exploitable results but provide the basis for future development of prototypes by the parties involved.
- **Wider results** – activities/tools aiming at enhancing processes/services related to the introduction/deployment of the project results (e.g., studies, know-how, knowledge transfer).
- **HellasQCI networks** – The main result of the project is the development and deployment of the HellasQCI networks that will form the backbone of the Quantum Communication Infrastructure of Greece on which future quantum communication technologies will be deployed. This

constitutes the main exploitable outcome of the project that will be leveraged for encrypting sensitive communication channels within Greece, mainly for the Governmental and the Industrial sectors, as well as with national and EU partners after phase 2 of the project.

5.2. HellasQCI exploitable outcomes

Depending on the maturity of the individual use case scenarios and developed solutions, additional exploitable outcomes are expected to be formulated within the project’s duration.

As previously mentioned, the main exploitable result of the project is the deployment of the **National quantum communication infrastructure backbone** that will be deployed in three metropolitan centers. The architecture of the HellasQCI network is unique in the sense that it includes 3 National Optical Ground Stations that will be connected to the closest metropolitan network, allowing extensive testing of Sat-QKD connectivity and functionalities, when Eagle-1 will be operational. The developed networks will be leveraged by the relevant organizations (GRNET and MinDig) for encryption of sensitive communication channels and secure interconnection of governmental services.

Upon the end of the project the usage of the networks for external users, primarily research organizations but also industrial organizations, will be evaluated by GRNET and Hellenic Ministry of Digital Governance based on the requirements of interested stakeholders to promote the growth of quantum communication technologies and products that make use of the deployed infrastructure.

Finally, all partners are expected to benefit greatly from the expertise gained through the training sessions and the hands-on interaction with the QCI as part of their respective use cases. A preliminary SWOT analysis for the exploitable outcomes of the project is presented in D6.1

The following table lists the project’s main exploitable outcomes that have been identified so far.

HellasQCI Results	Partners	TRL (M01-M30)	Type of Exploitation after project end	SWOT analysis: Strengths, Weakness, Opportunities, Threats	Exploitation potential	Target market/users
<i>Quantum Communication infrastructure</i>	GRNET, MinDig	1-9	Operational backbone of quantum-safe communication, for National and European security purposes, as well as for public-safety, health applications and critical infrastructures	A SWOT analysis will be conducted based on the outcomes of the use cases implemented within the project's framework.	Very High: First quantum encrypted communication infrastructure in Greece	Governmental organizations, National Security Authorities, Research centers, Industrial organisations – including the SMEs, Quantum technology developers
<i>QKD and PUFs</i>	FORTH, NKUA	3-6	Integration of PUFs in QKD systems for authentication purposes	A SWOT analysis will be conducted based on the outcomes of the use case implementation	High: Alternative solutions involve PQC and are not information-theoretically secure	QKD-system developers and vendors
<i>Monitoring and Management enablers for QCI</i>	SPH	1-6	Added-value service over commercial QCI infrastructures	A SWOT analysis will be conducted based on the outcomes of the use case implementation	High: First Greek product of its type	QKD infrastructure operators
<i>Quantum encrypted communication application</i>	QUBI	4-7	Development of applications for QCI	S: Un-hackable communication application, W: requires hardwired connection to QCI, O: Need for quantum safe	High: Straightforward system to ensure sensitive communication	QKD infrastructure users

				communications increases, T : uptake of the QCI usage stalls	between remote users	
<i>Quantum Cloud Data Centers</i>	ICCS	4-6	Use Case Deployment	S : Best in-class security, enhance intra data-centre PLS (Physical Layer Security), increase post-processing throughput W : High cost and more complex setup O : Market first on quantum-enabled datacentres network, current products target intra-dc and metro T : PQC (Post Quantum Cryptography) as a competitor technology is well integrated in the roadmaps of prevalent standards such as NIST, which enjoy broad adoption by security experts	High: Secure interconnections inside Data Centers is mandated by the nature of the business	Technology Providers, Datacentre Operators & Integrators
<i>QKD 5G Backhaul</i>	ICCS, NKUA	4-6	Use Case Deployment	S : Targeting full-duplex coexistence optimized use of fibre resources can be achieved making the integration of QKD competitive. W : SFP transceivers with high sensitivity thresholds may lead to noise count rates that prohibit the key distillation, O : Due to 5G RAN densified and distributed architecture security becomes integral part of the deployment, that can be addressed by QKD, T : Quantum Resistant Algorithms (QRAs) are proposed as an alternative method by vendors that invest highly in this direction.	High: Due to the densified, often in zero-trust environments, public and shared infrastructure 5G NR access network deployments, security is a must.	Technology Providers, Metro, Optical Telecommunication Providers, Mobile Operators
<i>QKD FTTH</i>	ICCS, NKUA	3-5	Use Case Deployment	S : Un-hackable communication, offered by the telecommunications infrastructure to end-users, transparently to the capabilities of the resident equipment/systems/services, W : The integration of QKD link through the shared fibre infrastructure devoted for FTTH services may be limited due to noise photons linked with the intense classical light propagated over GPON infrastructure and high transmission loss due to the multiple splitter stages, O : FTTH security at the optical layer is missing, R : The challenge of maximising fibre utilisation for data traffic against the need for dedicated QKD channel, as well as, the	Medium: Shoe-horned affordable QKD devices must be made available for the (more mass-market related) FTTH deployment	Telecommunications Providers, End-users

				need for QKD integration in ONT (Optical Network Terminal) devices to minimise the number of CPEs that shall be necessary at the end-user premises		
<i>Training Material in Cybersecurity and QKD related aspects</i>	FORTH	4-5	Use in follow-up projects and similar training events. Use as a module in university curricula.	<p>S: high quality training material dealing with state-of-the-art topics</p> <p>W: There may be similar courses online which implies duplication of efforts and non-uniform approaches across the EU.</p> <p>O: This field attracts increasing interest</p> <p>T: Startup cost to purchase the equipment might be too high. Appropriate equipment availability may affect the practical part of the course.</p>	High: The area of QKD and Quantum Computing in general has attracted significant interest in Europe in both academia and industry.	Users of the Infrastructure and users of quantum key distribution technologies in general. University students as well as public/private sector employees interested in this specialization.
<i>Interfaces with QKD Key Management System</i>	NCSR D	3-6	Development of interfaces for QKD systems. Software: interface for key-management system to use PQC algorithms and cryptographic keys from QKD devices.	<p>S: Secure Key management interface for QKD devices, W: limited adoption of commercial QKD systems so far, O: Need of secure key handling in QKD systems, T: limited deployment of QKD systems due to high costs</p>	High: The integration of PQC algorithms with QKD systems will support the adoption of QKD systems in the existing telecom infrastructure	Telecom operators and users of QKD systems
<i>Deployment of QKD systems in industrial setting</i>	MOH	3-6	Development of know-how for the deployment of QKD systems to secure critical operations	<p>S: Quantum readiness, W: high cost of commercial QKD systems, O: future proofing of critical infrastructure against future cyber threats, T: potential lack of QKD trained personnel</p>	Medium: positioning of partner for deployment of intra company QKD network	Intra-company usage
<i>OGS Terrestrial module</i>	NOA, AUTH, FORTH	3-5	OGS Terrestrial module will be used as a starting point for a fully operational OGS	<p>S: Terrestrial part of the OGS in the framework of un-hackable communication, W: The integration of QKD link through the shared fibre infrastructure devoted for FTTH services and over several kilometres (to equipment's limits), O: design of an OGS capable of operation in QKD channels, R: The challenge of tracking and collection acceptable amount of photons in order to operate reliable the QKD receivers.</p>	OGS as a part of first quantum encrypted communication network in Greece.	Government organizations, Research centers, Quantum technology developers.

Table 15: HellasQCI exploitable outcomes

6. Partners' on-line media channels for communication of exploitation outcomes

HellasQCI partners share all official results and exploitation outcomes that are published on the official online project channels for the Hellenic community, via their official online media. Moreover, all partners created an info page on their websites and shared all relevant project related news both on their websites and their social media. A list of all partners' online channels is provided in **Annex E - Partners' online media channels**.

The most recent updates and publicity related to the project are continuously recorded in a live monitoring document, which serves as an internal project archive. This document is regularly updated to ensure it includes the latest developments, media mentions, and relevant communications.

7. Conclusion

The dissemination and communication activities utilized by the HellasQCI project during its initial 15 months have enabled project's engagement with key stakeholder groups, building a community centered around Quantum Communication infrastructure. By leveraging an approach that concerns online and offline HellasQCI presence, it was accomplished not only to raise awareness about the project's goals and achievements but also to foster collaborations and dialogues across Europe.

The strategic use of online platforms, including the project's website, social media channels, and the online training platform, has enabled HellasQCI to reach a wide audience, disseminate key findings, and facilitate access to cutting-edge Quantum Communication resources. The website, serving as the digital hub, alongside a robust social media presence, has effectively amplified the project's visibility, engaged stakeholders and drew attention to the significant developments made in quantum communication technologies.

Participation in key events, both as an organizer and as an attendee, has further highlighted HellasQCI's role within the Quantum Communication community. These events have not only served as platforms for showcasing the project's progress but have also provided opportunities for networking, knowledge exchange, and community building. The strategic collaboration with EU-funded projects and partnerships with other National QCI's underscores HellasQCI's commitment to fostering a collaborative ecosystem that drives innovation and standardization in Quantum Communication across Europe.

The outreach and engagement metrics reflect the efficiency of HellasQCI's WP6 dissemination and communication strategies. By achieving KPIs audience goals regarding website visitors and social media followers, the project has demonstrated its ability to generate and maintain a dedicated target audience group. These efforts have not only heightened interest in HellasQCI's activities but have also played a crucial role in advancing the dialogue around Quantum Communication technologies and their implementation.

As HellasQCI moves forward, WP6 will remain focused on sustaining stakeholder engagement, broadening the project's reach, and contributing to communicating and disseminating the development of a secure, interoperable, and robust European Quantum Communication network.

Annex A - Dissemination activities

Clustering activities

No	Dissemination activity name	Who? Target audience reached	Why? Description of the objective(s) with reference to a specific project output	Actions	Status
1	World Quantum Day	Industry, Business Partners, EU institutions, Research Communities, Specific end user communities	Dr. Ilias Papastamatiou, Senior Project Manager at GRNET's European Infrastructures & Projects Directorate and HellasQCI project coordinator, presented Greece's national Quantum Communication Infrastructure (HellasQCI) and its use-cases. This was presented in the context of World Quantum Day, and the InfoSession organised by GÉANT and 7 NatQCI's participated through their NRENs.	Presentation	Delivered
2	TNC23	Industry, Business Partners, EU institutions, Research Communities, Specific end user communities	TNC23 took place in Tirana from 5-9 June 2023, organized by GÉANT and hosted by RASH, the National Research and Education Network of Albania. GRNET, serving as Greece's NREN and the coordinator of the HellasQCI project, participated in the largest research and education networking conference. Dr. Ilias Papastamatiou (from GRNET/HellasQCI) together with Piotr Rydlichowski (from PSNC) presented the topic "Quantum Internet Activities in European NRENs" on June 8th. At TNC23 10 NatQCI's participated through their NRENs.	Presentation	Delivered

Table 16: Clustering activities

Collaboration with EU-funded projects

No	Dissemination activity name	Who? Target audience reached	Why? Description of the objective(s) with reference to a specific project output (max 200 characters)	Status of the dissemination activity	Actions
1	Quantum Communication Innovation Forum (Bilbao, Spain)	Industry, Business Partners, EU institutions, Research Communities, Specific end user communities	Dr. Ilias Papastamatiou from Greece, Senior Project Manager at GRNET and the HellasQCI project coordinator, presented the key elements of the project, its current updates, as well as the challenges faced and the way forward. Dr. Papastamatiou participated in a panel with the NatQCI's of ES, PT and IT. The forum provided a platform for sharing insights, addressing current and future implementation challenges, and exploring future directions for Quantum Communications in Europe organised by the EuroQCI Spain the NatQCI of Spain.	Delivered	Presentation and participation to a Panel with the NatQCI's of ES, PT and IT.
2	Quantum Secure Networks Partnership (EU-HE-QSNP),	Industry, Business Partners, EU institutions, Research Communities, Specific end user communities	NKUA participates in the EU-HE-QSNP, a European Quantum Flagship project that aims to develop quantum cryptography technology to secure the transmission of information over the internet.	Ongoing	Participation, Engagement
3	LaiQa project	Industry, Business Partners, EU institutions, Research Communities, Specific end user communities	NKUA participates in the LaiQa project, a HORIZON Research and Innovation action aiming to develop and advance critical components and technologies necessary to build a global spaced-based quantum network	Ongoing	Participation, Engagement
4	PTQCI Workshop - Round table with 5 NatQCI's	Industry, Business Partners, EU institutions, Research Communities, Specific end user communities		Ongoing	Participation, Engagement
5	IrelandQCI Kick-off meeting	Industry, Business Partners, EU institutions, Research Communities, Specific end user communities		Delivered	Presentation

Table 17: Collaboration with EU funded projects

Conferences

No	Dissemination activity name	Who? Target audience reached	Why? Description of the objective(s) with reference to a specific project output (max 200 characters)	Status of the dissemination activity	Actions
1	6th Annual ScyLight Conference	Industry, Business Partners, Research Communities, Specific end user communities	The 6th edition of the annual ESA ScyLight Conference for Optical and Quantum Technologies successfully took place on 15-16 May 2023 at Eugenides Foundation in Athens, Greece, followed by a Workshop on Quantum Internet on the 17th of May in the city of Kalavryta. The event was co-organised by the HellasQCI.	Delivered	Promotion Booth, presentations
2	ETSI/IQC Quantum Safe Cryptography Event	Industry, Business Partners, Research Communities, Specific end user communities	The HellasQCI: National scale deployment of quantum communications systems and networks were presented. In this presentation it was shown that there are more than 15 use-cases with various criteria and specs. It was explained that National and international QKD lines should rely on satellite connections. For use cases requiring high reliability, rely on commercial (Dynamic) DVQKD systems. For industrial applications, rely on commercial CVQKD. Use-cases for research and teaching should rely on bulk components	Delivered	Presentation
3	GRNOG	Industry, Business Partners, Innovators, Research communities	Presentation by Dr. Ilias Papastamatiou (Project Coordinator) during the GRNOG15 Meeting. The GRNOG15 meeting offered HellasQCI project a new platform of knowledge exchange and valuable connections.	Ongoing	Presentation

Table 18: Conferences

Scientific publications

1. <https://hellasqci.eu/scientific-publications/>

Training events

No	Dissemination activity name	Who? Target audience reached	Why? Description of the objective(s) with reference to a specific project output (max 200 characters)	Status of the dissemination activity	Actions
1	<i>HellasQCI 1st two thematic axes sessions of Training Event</i>	<i>Industry, Business Partners, Research Communities</i>	<i>The training was designed to provide participants with theoretical and practical knowledge on quantum communication, with the goal of enhancing the security of sensitive data and critical infrastructures in Greece. Two Thematic Axes: Workshop on Cybersecurity with Quantum Key Distribution (QKD) Systems, Workshop on Post-Quantum Cryptography (PQC)</i>	<i>Delivered</i>	<i>Lectures, Hands on training</i>

Table 19: Training events

Project meetings

No	Dissemination activity name	Who? Target audience reached	Why? Description of the objective(s) with reference to a specific project output (max 200 characters)	Status of the dissemination activity	Actions
1	<i>1st HellasQCI Kick off meeting</i>	<i>National authorities, Research Communities</i>	<i>Project overall introduction at the kick off meeting of the project</i>	<i>Delivered</i>	<i>Project Overview presentation</i> <i>Presentation Use cases</i>
2	<i>DEP call Kick off meeting</i>	<i>Industry, Business Partners</i>	<i>The HellasQCI project was presented in the Digital Europe Programme (DIGITAL) kick off meeting in Brussels.</i>	<i>Delivered</i>	<i>Presentation</i>
3	<i>1st PBM</i>	<i>Industry, Business Partners</i>	<i>4-monthly period (M1-M4) Achievements were presented by all partners in all WPs during the plenary project meeting on 5th of May 2023</i>	<i>Delivered</i>	<i>Work Package Presentations</i>
4	<i>2nd PBM</i>	<i>Industry, Business Partners</i>	<i>4-monthly period (M5-M8) Achievements were presented by all partners in all WPs during the plenary project meeting on 20th of September 2023</i>	<i>Delivered</i>	<i>Work Package Presentations</i>
5	<i>3rd PBM</i>	<i>Industry, Business Partners</i>	<i>4-monthly period (M9-M12) Achievements were presented by all partners in all WPs during the plenary project meeting on 8th of February 2024</i>	<i>Delivered</i>	<i>Work Package Presentations</i>

Table 20: Project meetings

Other

No	Dissemination activity name	Who? Target audience reached	Why? Description of the objective(s) with reference to a specific project output (max 200 characters)	Status of the dissemination activity	Actions
1	D1.1 Project management information system	Research Communities	<i>This deliverable includes all the relevant project management information: the project administrative overview, project definition, contractors' coordinates, work breakdown structure, responsibility matrix, deliverables schedule and workplans, WPs definitions, planned work, etc. This deliverable thus describes the reference project management tool for the project.</i>	Delivered	Public Deliverable
2	D6.1 Dissemination, Exploitation and communication activities planx	Research Communities	<i>This document is the Initial Communication, Dissemination and Exploitation plan for the HellasQCI project. It aims to define the dissemination, communication, and exploitation strategy to be implemented by the consortium throughout the project lifecycle, provide detailed information about the planned activities of project partners, identify target audiences, and describe the communication channels to be used. The plan will be updated halfway through the project duration to incorporate new developments and fine tune the communication strategy and update the lists of planned events.</i>	Delivered	Public Deliverable

Table 21: Other

Annex B - Communication activities

Social Media (Facebook, LinkedIn, Twitter)

No	Communication Activity Name	Description	Who? Target audience reached	Outcome	Status
1	KICK-OFF ANNOUNCEMENT (*5)	Announcing the kick off of the HellasQCI project on social media channels	Industry, Business Partners, Local authorities	1,7K Reach (Facebook) 30 Impressions (Twitter)	Delivered
2	EUROQCI	Participatin of HellasQCI in EuroQCI kickoff in Brussels	Industry, Business Partners, EU institutions	1,3 K Reach (Facebook), 80 Impressions (Twitter)	Delivered
3	ETSI-IQCI (*2)	The 9th ETSI-IQC discusses the development, deployment, and standardization of quantum-safe cryptography. Technical coordinator of HellasQCI Kanellos presents the project	Industry, Business Partners, Research Communities	95 Reach (Facebook), 244 Impressions (LinkedIn), 180 Impressions (Twitter)	Delivered
4	NOKIA QR-SC	HellasQCI participated in a demo presentation by NOKIA on the Quantum Resist Secure Connectivity (QR-SC)	Industry, Business Partners, Research Communities	3K Reach (Facebook), 767 Impressions (LinkedIn), 462 Impressions (Twitter)	Delivered
5	JTC22	The kick-off meeting of the CEN/CENELEC joint technical standardization group JTC22 for Quantum Technologies	Industry, Business Partners, Research Communities	59 Reach (Facebook), 216 Impressions (LinkedIn), 106 Impressions (Twitter)	Delivered
6	WORLD QUANTUM DAY (*3)	HellasQCI project was presented during the World Quantum Day	Industry, Business Partners, Research Communities	120 Reach (Facebook), 339 Impressions (LinkedIn), 63 Impressions (Twitter)	Delivered
7	WEBSITE LAUNCH	Announcing the launch of the new website	Industry, Business Partners, EU institutions, Citizens, Civil Society, Research Communities	563 Reach (Facebook), 755 Impressions (LinkedIn), 20 Impressions (Twitter)	Delivered
8	SCYLIGHT (*4)	The sixth edition of the annual Scylight Conference for Optical and Quantum Technologies where industry experts, researchers, academics and end users met to share their expertise and plan the future of optical and quantum communication technologies	Industry, Business Partners, EU institutions, National authorities, Regional Authorities, Local authorities	867 Reach (Facebook), 1,399 Impressions (LinkedIn), 655 Impressions (Twitter)	Delivered

9	4-DAY TRAINING EVENT (*40)	HellasQCI 1st two thematic axes sessions of Training Event that focused on Quantum Key Distribution (QKD) Systems and Cybersecurity with QKD and Post-Quantum Cryptography (PQC).	Industry, Business Partners, National Authorities, Research Communities	3,040 Reach (Facebook), 11,179 Impressions (LinkedIn), 3,190 Impressions (Twitter)	Delivered
10	IRELAND QCI KICK OFF (*2)	HellasQCI participated in the IrelandQCI kick-off meeting in Waterford on 24-25 April	Industry, Business Partners	314 Reach (Facebook), 416 Impressions (LinkedIn), 214 Impressions (Twitter)	Delivered
11	COMMUNITY REGISTRY LAUNCH	The HellasQCI Community Registry launch	Industry, Business Partners, EU Institutions, Civil society, Research Communities	47 Reach (Facebook), 409 Impressions (LinkedIn), 72 Impressions (Twitter)	Delivered
12	PETRUS MEETING	PETRUS project and EU Commission meeting to convene with other NatQCI coordinators	Industry, Business Partners, EU institutions	55 Reach (Facebook), 271 Impressions (LinkedIn), 462 Impressions (Twitter)	Delivered
13	TNC23	Presentation of the HellasQCI Project and the Quantum Internet activities at the TNC23 conference	Industry, Business Partners, EU Institutions, Research Communities	57 Reach (Facebook), 182 Impressions (LinkedIn), 81 Impressions (Twitter)	Delivered
14	PROOF OF CONCEPT (*2)	HellasQCI & Nokia reveal the Proof of Concept for Quantum Safe Networks	Industry, Business Partners, EU Institutions, Research Communities	2,006 Reach (Facebook), 5,315 Impressions (LinkedIn), 372 Impressions (Twitter)	Delivered
15	VIDEO PRESENTATION (GR -EN)	Short Video presentation of the HellasQCI project in Greek	Industry, Business Partners, Civil Society, Citizens	48 Reach (Facebook), 282 Impressions (LinkedIn), 38 Impressions (Twitter)	Delivered
16	INFOGRAPHIC (TRAINING)	Infographic of the HellasQCI 1st two thematic axes sessions of Training Event	Industry, Business Partners, Civil Society, Citizens	1,200 Reach (Facebook), 431 Impressions (LinkedIn), 729 Impressions (Twitter)	Delivered
17	GEANT CONNECT (*2)	CONNECT44 - the newest issue of GÉANT's CONNECT Magazine	Industry, Business Partners, Civil Society, Citizens	397 Reach (Facebook), 292 Impressions (LinkedIn), 328 Impressions (Twitter)	Delivered
18	GRNOG (*3)	HellasQCI was presented at the GRNOG 15th meeting among leading experts in the field	Industry, Business Partners, Innovators, Research Communities	1,832 Reach (Facebook), 1,653 Impressions (LinkedIn), 469 Impressions (Twitter)	Delivered
19	ETWG (*2)	Participation of the HellasQCI project at the European Thematic Working Groups (ETWGs) kick-off organised by PETRUS	Industry, Business Partners, EU Institutions, Research Communities	906 Reach (Facebook), 1,154 Impressions (LinkedIn), 642 Impressions (Twitter)	Delivered

20	BILBAO (*3)	Participation of the project at the Quantum Communication Innovation Forum in Bilbao organised by EuroQCISpain	Industry, Business Partners, EU Institutions, Research Communities	2,638 Reach (Facebook), 960 Impressions (LinkedIn), 706 Impressions (Twitter)	Delivered
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Table 22: Social media publications

Events

No	Communication Activity Name	Description	Who? Target audience reached	Outcome	Status
1	HellasQCI Kick off meeting	The HellasQCI project kick-off meeting took place in Athens, Greece at the Ministry of Digital Governance in January 2023. The project was officially launched by the political leadership of the Ministry highlighting Greece's commitment to the EuroQCI initiative	Industry, Business Partners, National authorities, Regional authorities, Local authorities, Civil society	80 participants	Delivered
2	6th Annual ScyLight Conference Workshop - Quantum Internet	European and Canadian industry experts, researchers, academics and end users shared their expertise and planned the future of optical and quantum communication technologies	Industry, Business Partners, Innovators	200 participants	Delivered
3	HellasQCI 1st two thematic axes sessions of Training Event 18-19 21-22 September, Athens, Greece	The training was designed to provide participants with theoretical and practical knowledge on quantum communication, with the goal of enhancing the security of sensitive data and critical infrastructures in Greece	Industry, Business Partners, Research Communities	175 participants + 200 online	Delivered
4	9th ETSI IQC Quantum Safe Cryptography Event	The event at ETSI discussed the development, deployment, and standardization of quantum-safe cryptography. The presentation of the HellasQCI was well received since Dr Kanellos emphasized the need for standardization so that the HellasQCI to become a quantum-safe Communication Infrastructure.	Industry, Business Partners, Research Communities	200 participants	Delivered
5	3rd Ubitech Innovation Days	An event focused around innovation	Industry, Business Partners, Research Communities	150 Participants	Delivered
6	World Quantum Day (InfoSession)	The event was addressed to academics, researchers, postgraduate students & industry members who work or research in the field of quantum communications, and/or are involved in a sector which can benefit from quantum technologies. Dr Ilias Papastamatiou, Senior Project Manager at GRNET's European Infrastructures & Projects Directorate and HellasQCI project coordinator presented Greece's national Quantum Communication Infrastructure (HellasQCI) and its use cases.	Industry, Business Partners, Research Communities, EU institutions	60 Participants	Delivered

7	IrelandQCI kick-off meeting	Dr Ilias Papastamatiou, chaired a session and presented the project overall and the synergies with IrelandQCI and Dr Manolis Xilouris, Research Director of the Institute of Astronomy, Astrophysics, Space Applications and Remote Sensing (IAASARS) of NOA presented the Optical Ground Stations in HellasQCI.	Industry, Business Partners, Research Communities	80 participants	Delivered
8	NOKIA Wavelengths 2023	An invitation only event, Wavelengths, offered exclusive insights into NOKIA's latest developments in optical network solutions	Industry, Business Partners, Research Communities	500 participants	Delivered
9	TNC23 (GÉANT)	Presentation by Dr. Ilias Papastamatiou (Project Coordinator) and PSNC's P. Rydlichowski (PIONEER-Q Coordinator) themed "Quantum Internet Activities in European NRENs	Industry, Business Partners, Research Communities	700 Participants	Delivered
10	CEN/CENELEC Joint Technical Committee JTC 22	Conference Presentation by H. Papadopoulos and A. Marousis during the JTC22. The JTC aims to produce standardization deliverables in the field of quantum technologies.	Industry, Business Partners, Innovators	40 Participants	Delivered
11	GRNOG15	Presentation by Dr. Ilias Papastamatiou (Project Coordinator) during the GRNOG15 Meeting. The GRNOG15 meeting offered HellasQCI project a new platform of knowledge exchange and valuable connections.	Industry, Business Partners, Innovators, Research communities	135 Participants	Delivered
12	Quantum Communication Innovation Forum by EUROQCI Spain	Presentation by Dr. Ilias Papastamatiou during the Quantum Communication Innovation Forum. The forum provided a platform for sharing insights, addressing current and future implementation challenges, and exploring future directions for Quantum Communications in Europe.	Industry, Business Partners, Innovators, Research communities	N/A	Delivered
13	European Thematic Working Groups (ETWG)	HellasQCI was represented in the working groups by the Coordinator Dr. Ilias Papastamatiou, GRNET, Technical Coordinator Prof. George Kanellos, NKUA, Homer Papadopoulos, NCSR and Giannis Giannoulis, ICCS/GRNET.	Industry, Business Partners, Innovators, EU Institutions, Research communities	N/A	Delivered

Table 23: Events

Exhibition

No	Communication Activity Name	Description	Who? Target audience reached	Outcome	Status
1	87th Thessaloniki International Fair	Booth and video presentation (in Greek) of the Project	Industry, Business Partners, Citizens, Civil Society	200 people	Delivered

Table 24: Exhibition

Infographics

No	Communication Activity Name	Description	Who? Target audience reached	Outcome	Status
1	1st training event in numbers	Training event at a glance	National authorities, Regional authorities, Local authorities, Civil society, Citizens, Research Communities	1 Infographic	Delivered
2	Year 2023 Achievements	Annual project highlights through infographic presentation	National authorities, Regional authorities, Local authorities, Civil society, Citizens, Research Communities	1 Infographic	Delivered

Table 25: Infographics

Media Articles

No	Communication Activity Name	Description	Who? Target audience reached	Outcome	Status
1	HellasQCI Kick-off meeting Media Articles	Media articles in the Greek press documenting the kick off of the HellasQCI projects. Acknowledged and well-known publications including: Kathimerini - Money Review, Imerisia, Alpha TV, Skai TV, Iefimerida, Capital, Insider, Liberal, etc. List of the media articles in the report here: https://hellasqci.eu/hellasqci-project-kick-off-meeting-report/	Local authorities, Civil Society, Citizens, Research Communities	55 media articles	Delivered
2	NOKIA PROOF OF CONCEPT MEDIA ARTICLES	Overall, coverage led with a primarily positive tone, emphasizing the positive potential for Quantum Computing, noting that government and other research organizations are already working to invest in, and utilize the technology to address various societal issues like sustainability and defense. Articles further enforce the need for Quantum safe networks and showcase the value added by the Nokia Security Management Server (SMS) to orchestrate Quantum-Safe keys and provide continuous monitoring and management of quantum secured connectivity.	Industry, Business Partners, Innovators, Research Communities	35 media articles	Delivered
3	HellasQCI: theoretical and practical knowledge in the quantum technologies seminar	Media Article in online Newspaper ("To Manifesto") documenting the HellasQCI 1st two thematic axes sessions of training Event. Link: https://tomanifesto.gr/hellasqci-theoritikes-kai-praktikes-gnoseis-sto-seminario-gia-tis-kvantikes-technologies-153848	Industry, Business Partners, Innovators, Citizens, Civil society	1 media article	Delivered

Table 26: Media articles

Newsletters

No	Communication Activity Name	Description	Who? Target audience reached	Outcome	Status
1	1st Biannual Newsletter (July 23)	The 1st official HellasQCI Newsletter provided news regarding the future of cybersecurity with Quantum Technologies and PQC algorithms, in Greece and all over Europe.	National authorities, Regional authorities, Local authorities, Civil society, Citizens, Research Communities	252 Total Opens	Delivered
2	2nd Biannual Newsletter (Dec 23)	The 2nd official HellasQCI Newsletter of 2023 showed the latest progress and updates of the project nationally, through the successful organisation of the HellasQCI 1st two thematic axes sessions of Training Event, as well as in European level by promoting EUROQCI activities.	National authorities, Regional authorities, Local authorities, Civil society, Citizens, Research Communities	132 Total Opens	Delivered

Table 27: Newsletters

Press Releases

No	Communication Activity Name	Description	Who? Target audience reached	Outcome	Status
1	HellasQCI Kick-off Meeting Press Release	Official Press Release from the Greek Ministry of Digital Governance: https://mindigital.gr/archives/4958	Industry, Business Partners, National authorities, Regional authorities, Local authorities, Citizens, Civil society	1 Press Release	Delivered
2	NOKIA PROOF OF CONCEPT PRESS RELEASE	Official Nokia website link: https://www.nokia.com/about-us/news/releases/2023/12/18/hellasqci-and-nokia-lead-way-to-the-future-of-quantum-safe-networks/#:~:text=Espoo%2C%20Finland%20%E2%80%93%20Nokia%20today%20announced,National%20Quantum%20Communication%20Infrastructure%20Consortium	Industry, Business Partners, Innovators, Research Communities	1 official press release	Delivered

Table 28: Press releases

Promotional Material

No	Communication Activity Name	Description	Who? Target audience reached	Outcome	Status
1	Project Media Kit	Project rollups, Flyer, Logo https://hellasqci.eu/media-kit/	Citizens	100 HellasQCI pins 100 HellasQCI coloured logo stickers 100 HellasQCI white logo stickers 90 notebooks 100 pens were distributed to the participants of the HellasQCI 1st two thematic axes sessions of Training Event	Delivered

Table 29: Promotional material

TV

No	Communication Activity Name	Description	Who? Target audience reached	Outcome	Status
1	HellasQCI in the press	https://www.alphatv.gr/news/koinonia/article/124805/hellasqciasf-aleia-euaisthion-dedomenon-kai-upodomon/?fbclid=IwAR1NdfFJn2lQaZNya_3P7ouNkM1gMxDq7Rbe9US6pBXeug1LxbeP9OD-nY	Citizens	Not available data because monitoring of website performance was not available on M1 of the project	Delivered

Table 30: TV

Videos

No	Communication Activity Name	Description	Who? Target audience reached	Outcome	Status
1	2 HellasQCI Videos	The videos show how Quantum Communication Technologies will protect critical infrastructure and data in Greece in English and Greek	Citizens	The visitors of the Newsfeed page(of the project was increased to 30% relatively to the previous (August 2023) and the next month (October 2023)	Delivered

Table 31: Videos

Website

No	Communication Activity Name	Description	Who? Target audience reached	Outcome	Status
1	Online Training platform (https://training.hellasqci.eu/)	The training HellasQCI platform provides the event speeches and presentations of the HellasQCI organization trainings for the purpose of providing information about quantum computing. The platform has been configured in such a way that users can access the event material in an easy-to-use environment.	Technical, research community, end-users	45 Users until March 2024	Delivered
2	Official Project Website (https://hellasqci.eu/)	The projects' Website	Industry, Business Partners, Citizens, Research Communities	7909 visitors until M15	Delivered

Table 32: Website

Website & Newspapers

No	Communication Activity Name	Description	Who? Target audience reached	Outcome	Status
1	Announcement - Invitation to participate in a Public Consultation process	Invitation to participate in public consultation processes in the context of the HellasQCI project, published in the Greek Newspapers and announced on the project's website. Link: https://hellasqci.eu/announcement-invitation-to-participate-in-the-public-consultation-procedure-on-the-text-of-the-open-electronic-tender-for-fiber-optic-link-leasing-services-for-the-implementation-of-the-terrestria/	Industry, Business Partners	9 Public Procurements & Clarifications	Delivered

Table 33: Website & Newspapers

Annex C - HellasQCI Kick off Meeting report



On January 19-20th 2023, the HellasQCI project kick-off meeting took place, marking the beginning of the implementation for this strategic project for Greece.

HellasQCI, as part of the EuroQCI initiative, is co-funded by the European Union under the Digital Europe Programme grant agreement No. 101091504.

The HellasQCI project aims to deploy advanced national QCI systems and networks in Greece. The advancement in technologies that will be achieved by the realisation of the HellasQCI initiative will:

- Reinforce scientific and technological capabilities in cybersecurity
- Improve industrial competitiveness
- Strengthen European digital sovereignty

This project on behalf of Greece, together with other EU Member States, the CSA project PETRUS and the European Commission will achieve the co-creation of the EuroQCI.

The HellasQCI kick-off meeting was held at the premises of the Ministry of Digital Governance, Athens, Greece. Members from all of the fourteen (14) partners participated in the meeting, representing the Public services (Government, Military, National Intelligence Service and Law Enforcement), Industry and SMEs (Energy, Telecoms and Cybersecurity sectors) and Research domain (Research Institutions, Academy and Observatory ground Stations).

Moreover, there was a collaborative session with the Associated Partners (AP) SETU Waterford (WIT), the IrelandQCI project coordinator, and the University of Luxembourg (Uni.LU), the Lux4QCI project coordinator, to explore synergies between Greece's, Ireland's and Luxembourg's National QCI projects (NatQCIs).

The meeting was officially launched by the political leadership of the Ministry of Digital Governance, highlighting Greece's commitment to the EuroQCI initiative and the support to the HellasQCI project, followed by welcoming remarks by high level representatives from all the consortium partners.

The first part of the meeting was publicly open to all interested parties to attend either face to face, or via livestream through the GRNET DIAVLOS service. Approximately 60 representatives attended the meeting face to face, and 105 people attended the meeting via DIAVLOS web streaming service.

In the beginning of the meeting, **the Minister of State and Digital Governance, Kyriakos Pierrakakis**, addressed a welcome note to commence the kick-off project meeting. Within his message, the Minister highlighted: *“It is with great pleasure that HellasQCI project is officially launched. We are facing challenges around cybersecurity, challenges which are constantly increasing, and it is important for Greece to be able to enter into the map of new technologies such as Quantum technologies that can enable secure data transmission and protection of critical infrastructures”*.

The Secretary General of Telecommunications & Post at the Ministry of Digital Governance, Dr. Athanasios Staveris, at his welcoming speech stated: *“The Greek government has committed to support the development of a secure National telecommunication network. Quantum communication allows us to communicate and process information differently than the traditional technologies, because it is based on the laws of physics. HellasQCI, Greece’s project for the development of national quantum infrastructure networks involving fourteen of the best research institutions and Industrial partners in Greece, was evaluated and found technically sound by the European Union. The next step is to further develop the network in cooperation with other EU Member States as part of the EuroQCI Initiative. Congratulations to the team which worked very hard to submit this proposal”*.

The **CEO of GRNET, Aristeidis Sotiropoulos**, at his opening remarks emphasised the expertise of GRNET that implemented in total 180 digital services and supports the Gov.gr portal that served 230 million transactions since it was launched. Dr Sotiropoulos also noticed that *“it is a great honor for GRNET, that the Ministry of Digital Governance has entrusted us with the role of the HellasQCI project coordinator, establishing the National Quantum Communication Infrastructure, and this day marks the beginning of the implementation phase and becoming part of EuroQCI. The project will enable the upgrade of the security communication networks at National and EU level. GRNET also holds a key role in all European projects relating to cloud and service infrastructures such as EOSC, EUDAT, EGI, GÉANT, PRACE and EuroHPC and we are proud to be at the forefront of implementing this new quantum network infrastructure”*.

The purpose of the meeting was to kick-start the project, introduce the team members, establish goals and expectations, and discuss actions for the next period, based on the project timelines and milestones.

During the meeting, all participants and their roles in the project were introduced. This was followed by a discussion on the project's scope and goals. Moreover, a timeline for next actions was established for each phase of the project and identified milestones to track the project progress.

The discussion was productive and helped identify potential risks and challenges that might be encountered throughout the project and mitigation actions that might be needed. Technical knowledge concerning the implementation of the project and best practices were shared, including information about the:

- Design of the quantum communication architecture, the use-cases and the QKD (quantum key distribution) technologies that will be used throughout the implementation phase, as well as the initial steps for the trainings,
- National QCI proposals from Ireland and Luxembourg, and their aim to build networks using QKD technology within the EuroQCI framework.

Additionally, a main topic for discussion was the importance of communication and the key National stakeholders who will need to be informed about our progress and get engaged through the HellasQCI community were also identified.

The kick-off meeting gained intense publicity, as a press release was published, and social media announcements were made prior, during and after the event on GRNET and HellasQCI channels. Press and TV Channel journalists attended the event.

Via multiple channel dissemination activities, a variety of on-line, video and press media editorials were published and aired in the news, and you can find at section three the 55 media publications and at the [link](#) Alpha TV cover story about the HellasQCI Kick-off meeting.

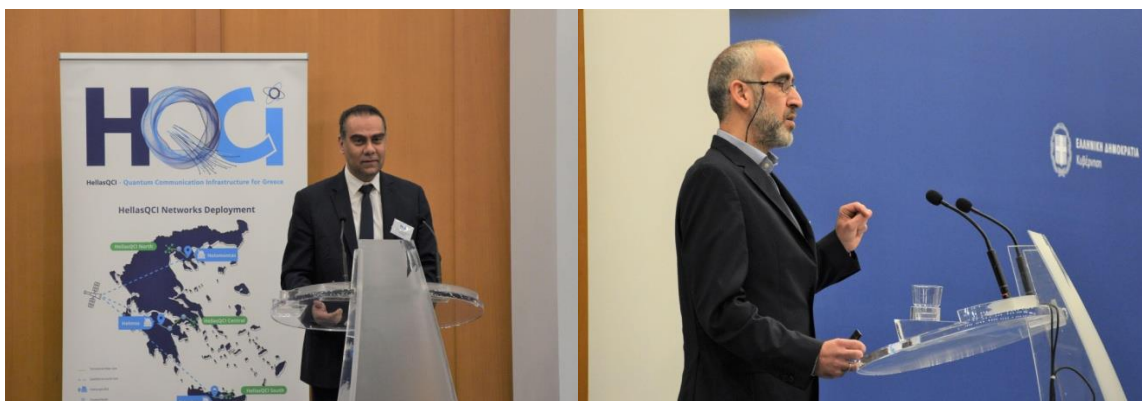
Useful information about the HellasQCI project kick-off meeting and the project's objectives:

- DIAVLOS, GRNET's web streaming service recording or the high-level welcome remarks: <https://diavlos.grnet.gr/room/611?eventid=13639>
- Meeting agenda and partners available here: <https://bit.ly/3JkDcZ9>
- Videos from welcome remarks, in GR language:
 - Welcome key note speech for the HellasQCI kick-off project meeting, Minister of State and Digital Governance, Kyriakos Pierrakakis: <http://bit.ly/3xWJ8Au>
 - Keynote speech for the HellasQCI kick-off meeting, Secretary General of Telecommunications & Post - Ministry of Digital Governance, Dr. Athanasios Staveris: <http://bit.ly/3EKXBDz>
 - Keynote speech for the HellasQCI kick-off meeting, CEO, GRNET, Dr. Aris Sotiropoulos: <http://bit.ly/3JONAE0>
 - List of videos on GRNET YouTube account of all Keynote speeches from the kick-off meeting: <https://bit.ly/3SA4tt3>
- Editorials are available in GR language only:
 - [Netweek editorial November 2022](#), by Journalist J.Rizopoulos
 - Press Release for the event Kick off <https://bit.ly/3Z9i0KC>
 - Press Release for the Project: <https://mindigital.gr/archives/4958>
 - List of Media Publications for HellasQCI Kick-off meeting: <https://bit.ly/3HCtUGs>
 - Alpha TV cover story about HellasQCI Kick-off: <https://bit.ly/3IBT5bM>

Other useful links and info:

- HellasQCI info page on GRNET website: <https://grnet.gr/business-directory/hellasqci/>
- [EuroQCI](#) info website page
- HellasQCI Social Media Channels: [Facebook](#), [Twitter](#), [LinkedIn](#), [YouTube](#)
- [HellasQCI portal \(Home - HellasQCI\)](#)
- Official project Hashtag: #HellasQCI
- Official kick-off meeting Hashtag: #HellasQCIkickoff2023
- GRNET Social Media Channels: [Facebook](#), [Twitter](#), [LinkedIn](#), [Instagram](#), [YouTube](#)

Kick-off photo material





Kick-off media publications

1. [Kathimerini– Money Review](#) HellasQCI: Εκκίνηση για το έργο αναβάθμισης ασφάλειας σε data και υποδομές
2. [Imerisia](#) - HellasQCI: Η Ελλάδα αναβαθμίζει την ασφάλεια των ευαίσθητων δεδομένων και των κρίσιμων υποδομών
3. [ALPHA TV](#) - "HellasQCI": Ασφάλεια ευαίσθητων δεδομένων και υποδομών
4. [SKAI TV](#) - Πιερρακάκης: Σε εξέλιξη έργα για την αναβάθμιση της κυβερνοασφάλειας
5. [Iefimerida](#) - Πιερρακάκης: Ελλάδα και ΕΕ αναβαθμίζουν τις υποδομές κυβερνοασφάλειας
6. [Capital](#) - HellasQCI: η Ελλάδα αναβαθμίζει την ασφάλεια των ευαίσθητων δεδομένων και των κρίσιμων υποδομών
7. [Insider](#) - HellasQCI: Η Ελλάδα αναβαθμίζει την ασφάλεια των ευαίσθητων δεδομένων και των κρίσιμων υποδομών

8. [Liberal](#) - Κ. Πιερρακάκης: Η Ελλάδα αναβαθμίζει τις υποδομές της στον τομέα της κυβερνοασφάλειας
9. [Αθηναϊκό Μακεδονικό Πρακτορείο Ειδήσεων \(ΑΠΕ-ΜΠΕ\)](#) - Η Ελλάδα αναβαθμίζει την ασφάλεια των ευαίσθητων δεδομένων και των κρίσιμων υποδομών
10. [Indicator](#) - Κ. Πιερρακάκης: Η Ελλάδα αναβαθμίζει τις υποδομές της στον τομέα της κυβερνοασφάλειας
11. [Newsbeast](#) - Πιερρακάκης: Αναβαθμίζουμε τον τομέα της κυβερνοασφάλειας, ξεκινά το έργο HellasQCI
12. [Reporter](#) - HellasQCI: Η Ελλάδα αναβαθμίζει την ασφάλεια ευαίσθητων δεδομένων και υποδομών
13. [Businessdaily](#) - Η Ελλάδα αναβαθμίζει την ασφάλεια των ευαίσθητων δεδομένων
14. [The Daily Post](#) - Η Ελλάδα αναβαθμίζει την ασφάλεια των ευαίσθητων δεδομένων και των κρίσιμων υποδομών
15. [ToManifesto](#) - Αναβαθμίζεται η κυβερνοασφάλεια σε δεδομένα και κρίσιμες υποδομές- Ξεκινά το έργο "HellasQCI"
16. [EnergyMag](#) - HellasQCI: Αναβαθμίζεται η ασφάλεια των ευαίσθητων δεδομένων και των κρίσιμων υποδομών
17. [NewMoney](#) - HellasQCI: Η Ελλάδα αναβαθμίζει την ασφάλεια των ευαίσθητων δεδομένων και των κρίσιμων υποδομών
18. [Sofokleousin](#) - HellasQCI: Η Ελλάδα αναβαθμίζει την ασφάλεια των ευαίσθητων δεδομένων και των κρίσιμων υποδομών
19. [Fibernews](#) - HellasQCI: η Ελλάδα αναβαθμίζει την ασφάλεια των ευαίσθητων δεδομένων και των κρίσιμων υποδομών
20. [Pentapostagma](#) - Πιερρακάκης: "Αναβαθμίζουμε τον τομέα της κυβερνοασφάλειας"
21. [Lykavitos](#) - Πιερρακάκης: Σε εξέλιξη έργα για την αναβάθμιση της κυβερνοασφάλειας
22. [Powergame](#) - HellasQCI: Έργο που αναβαθμίζει την ασφάλεια των δεδομένων
23. [Epixeiro](#) - HellasQCI: Η Ελλάδα αναβαθμίζει την ασφάλεια των ευαίσθητων δεδομένων και των κρίσιμων υποδομών
24. [EMEA](#) - Το μέλλον των τηλεπικοινωνιών ανήκει στην Ελλάδα
25. [Startupper](#) - HellasQCI: Το έργο που «θωρακίζει» την Ελλάδα απέναντι στις κυβερνοεπιθέσεις
26. [Infocom](#) - HellasQCI: η Ελλάδα αναβαθμίζει την ασφάλεια των ευαίσθητων δεδομένων και των κρίσιμων υποδομών
27. [BusinessNews](#) - HellasQCI: Η Ελλάδα αναβαθμίζει την ασφάλεια των ευαίσθητων δεδομένων και των κρίσιμων υποδομών
28. [Voria](#) - Πιερρακάκης: Αναβαθμίζονται έργα για την κυβερνοασφάλεια με το νέο έργο «HellasQCI»

29. [Rizopoulos Post](#) - Η Ελλάδα αναβαθμίζει την ασφάλεια των ευαίσθητων δεδομένων και των κρίσιμων υποδομών
30. [Ελλάδα 24](#) - Ξεκινά το έργο “HellasQCI” - Αναβαθμίζεται η κυβερνοασφάλεια σε δεδομένα και κρίσιμες υποδομές
31. [NOW – Net Over World](#) - HellasQCI: η Ελλάδα αναβαθμίζει την ασφάλεια των ευαίσθητων δεδομένων και των κρίσιμων υποδομών
32. [Politic](#) - Πιερρακάκης: Αναβάθμιση στις υποδομές στον τομέα της κυβερνοασφάλειας
33. [ICTPlus](#) - HellasQCI: Η Ελλάδα αναβαθμίζει την ασφάλεια των ευαίσθητων δεδομένων και των κρίσιμων υποδομών
34. [ThessToday](#) - Πιερρακάκης: Σε εξέλιξη έργα για την αναβάθμιση της κυβερνοασφάλειας
35. [Κοινή Γνώμη](#) - HellasQCI: η Ελλάδα αναβαθμίζει την ασφάλεια των ευαίσθητων δεδομένων και των κρίσιμων υποδομών
36. [Koinoniki](#) - Η Ελλάδα αναβαθμίζει την ασφάλεια των ευαίσθητων δεδομένων και των κρίσιμων υποδομών
37. [Agrinioreport](#) - HellasQCI: η Ελλάδα αναβαθμίζει την ασφάλεια των ευαίσθητων δεδομένων και των κρίσιμων υποδομών
38. [5minutes](#) - Θωρακίζονται από χάκερ οι κρίσιμες υποδομές της χώρας – Σε εξέλιξη έργα για την αναβάθμιση της κυβερνοασφάλειας
39. [FinUpNews](#) - Η Ελλάδα αναβαθμίζει την ασφάλεια των ευαίσθητων δεδομένων και των κρίσιμων Υποδομών
40. [EptaNews](#) - HellasQCI: Η Ελλάδα αναβαθμίζει την ασφάλεια των ευαίσθητων δεδομένων και των κρίσιμων υποδομών
41. [Emvolos](#) - HellasQCI: Η Ελλάδα αναβαθμίζει την ασφάλεια των ευαίσθητων δεδομένων και των κρίσιμων υποδομών
42. [Mykonospost](#) - Η Ελλάδα αναβαθμίζει την ασφάλεια των ευαίσθητων δεδομένων και των κρίσιμων υποδομών
43. [Techwar](#) - HellasQCI: η Ελλάδα αναβαθμίζει την ασφάλεια των ευαίσθητων δεδομένων και των κρίσιμων υποδομών
44. [GOVnews](#) - Πιερρακάκης: Ελλάδα και Ευρωπαϊκή Ένωση αναβαθμίζουν τις υποδομές κυβερνοασφάλειας
45. [Forin Σταματόπουλος](#) - Υπουργείο Ψηφιακής Διακυβέρνησης Η Ελλάδα αναβαθμίζει την ασφάλεια των ευαίσθητων δεδομένων
46. [MoveD](#) - HellasQCI: η Ελλάδα αναβαθμίζει την ασφάλεια των ευαίσθητων δεδομένων και των κρίσιμων υποδομών
47. [The Times](#) - HellasQCI: η Ελλάδα αναβαθμίζει την ασφάλεια των ευαίσθητων δεδομένων και των κρίσιμων υποδομών

48. [SEPE](#) - HellasQCI: Η Ελλάδα αναβαθμίζει την ασφάλεια ευαίσθητων δεδομένων και υποδομών
49. [CircoGreco](#) - HellasQCI: Η Ελλάδα αναβαθμίζει την ασφάλεια των ευαίσθητων δεδομένων και των κρίσιμων υποδομών
50. [OENET](#) - HellasQCI: Η Ελλάδα αναβαθμίζει την ασφάλεια των ευαίσθητων δεδομένων και των κρίσιμων υποδομών
51. [TyposThes](#) - Αναβαθμίζεται η κυβερνοασφάλεια στην Ελλάδα με το Ευρωπαϊκό έργο «HellasQCI»
52. [Analitis](#) - Η Ελλάδα Αναβαθμίζει Την Ασφάλεια Των Ευαίσθητων Δεδομένων Και Των Κρίσιμων Υποδομών
53. [EL](#) - Πιερρακάκης: Σε εξέλιξη έργα για την αναβάθμιση της κυβερνοασφάλειας
54. [MyOTA](#) - HellasQCI: η Ελλάδα αναβαθμίζει την ασφάλεια των ευαίσθητων δεδομένων και των κρίσιμων υποδομών
55. [Odelalis](#) - HellasQCI: Η Ελλάδα αναβαθμίζει την ασφάλεια των ευαίσθητων δεδομένων και των κρίσιμων υποδομών

DIGITAL-2021-QCI-01-DEPLOY-NATIONAL

HellasQCI

Deploying advanced national QCI systems and networks in Greece



HellasQCI Kick-off Meeting

Athens, January 19-20, 2023

Author(s): Ilias Papastamatiou
Date: November 28th, 2022
Code: HellasQCI-WP1-GR-Agenda-PMB01-2022-11-28

Abstract: This document provides the agenda for the HellasQCI Kick-off meeting hosted by GRNET and held in Athens on January 19-20, 2023.

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The HellasQCI Consortium consists of:

No.	Participant organisation name	Short name	Country
1	National Infrastructures for Research and Technology	GRNET	Greece
2	Ministry of Digital Governance	MinDigital	Greece
3	Ethniko kai Kapodistriako Panepistimio Athinon	NKUA	Greece
4	Idryma Technologias kai Erevnas	FORTH	Greece
5	National Center for Scientific Research "Demokritos"	NCSR"D"	Greece
6	Aristoteleio Panepistimio Thessalonikis	AUTH	Greece
7	Qubitech Idiotiki Kefalaioushiki Etairia	QUBITECH	Greece
8	Cosmote Kinites Tilepikoinonies Monoprosopi AE	COSMOTE	Greece
9	Space Hellas Anonimi Etairia Systimata kai Ypiresies Tilepikoinonion Pliroforikis Asfaleias	SPACE HELLAS SA	Greece
10	Ethniko Asteroskopeio Athinon	NOA	Greece
11	Motor Oil Hellas Diilistiria Korinthou AE	MOTOR OIL	Greece
12	Erevnitiko Panepistimiako Institutou Sistimaton Epikoinonias kai Ypologiston - EMP	ICCS	Greece
13	Universite du Luxembourg	uni.lu	Luxembourg
14	South East Technological University	WIT	Ireland

Document Revision History

Date	Issue	Author/Editor/Contributor	Summary of main changes
November 28 th , 2022	a	Ilias Papastamatiou	Draft
December 13 th , 2022	b	All	Updated draft
January 5 th , 2023	c	All	Updated draft

Introduction

Meeting called by	GRNET			
Type of meeting	Kick-off meeting			
Date	January 19-20, 2023			
Facilitator / Location	Hellenic Ministry of Digital Governance Fragkoudi 11, Athina 101 63			
Expected attendees	1	Dr. Aristeidis Sotiropoulos	GRNET	On-site
	2	Dr. Ilias Papastamatiou	GRNET	On-site
	3	Dr. Evangelia Athanasaki	GRNET	On-site
	4	Betty Evangelinou	GRNET	On-site
	5	Chrysostomos Tzouvaras	GRNET	On-site
	6	Zenon Mousmoulas	GRNET	On-site
	7	Artemis Psarianou	GRNET	On-site
	8	Thomas Kakavas	GRNET	On-site
	9	Memi Triantafyllidou	GRNET	On-site
	10	Alexandra Malouta	GRNET	On-site
	11	Giorgos Marandianos	GRNET	On-site
	12	Konstantinos Merentitis	GRNET	On-site
	13	Ioannis Kamonas	GRNET	On-site
	14	Dr. Ognjen Prnjat	GRNET	On-site
	15	Dr. Athanasios Staveris	MinDigital	On-site
	16	Dr. Dimitrios Kagklis	MinDigital	On-site
	17	Dimitrios Kalyviotis	MinDigital	On-site
	18	Sophia Papatathanasopoulou	MinDigital	On-site
	19	Dr. Georgios Pantos	MinDigital	On-site
	20	Nikolaos Giannakakis	MOTOR OIL	On-site
	21	Konstantinos Chatzifotis	MOTOR OIL	On-site
	22	Dionysis Vithoulkas	MOTOR OIL	On-site
	23	Christos Syngelakis	MOTOR OIL	On-site
	24	Vasilis Anastasiou	MOTOR OIL	On-site
	25	Fani Panagopoulou	MOTOR OIL	On-site
	26	Dr. Spiros Basilakos	NOA	On-site
	27	Dr. Manolis Xilouris	NOA	On-site
	28	Dr. Thanasis Marousis	NOA	On-site
	29	Fofy Setaki	COSMOTE	On-site
	30	Prof. Konstantinos Vyrsokinos	AUTH	On-site
	31	Dr. Alexis Askitopoulos	QUBITECH	On site
	32	Dr. Panagiotis Gouvas	QUBITECH	On site
	33	Socrates Costicoglou	SPACE HELLAS SA	On-site
	34	Dr. Georgios Gardikis	SPACE HELLAS SA	On-site
	35	Ilias Balampanis	SPACE HELLAS SA	On-site
	36	Dr. Ioannis Mertzanis	SPACE HELLAS SA	On-site
	37	Prof. Spiros Anastasiadis	FORTH	On-site
	38	Prof. Vassilis Charmandaris	FORTH	On-site
	39	Dr. Georgios Nikolopoulos	FORTH	On-site
	40	Prof. Vangelis Markatos	FORTH	On-site



	41	Prof. Panagiotis Lambropoulos	FORTH	On-site
	42	Dr. George Nounesis	NCSR"D"	On-Site
	43	Dr. Vangelis Karkaletsis	NCSR"D"	On-Site
	44	Dr. Omiros Papadopoulos	NCSR"D"	On-Site
	45	Prof. George Kanellos	NKUA	On-Site
	46	Prof. Dimitris Syvridis	NKUA	On-Site
	47	Prof. Kostas Christodoulopoulos	NKUA	On-Site
	48	Dr. Giannis Giannoulis	ICCS	On-site
	49	Dr. Evangelos Zacharakis	KETYAK	On-site
	50	Pol. Cap. Christos Alexis	Hellenic Police	On-site
	51	Pol. Col. Ioannis Petropoulos	Hellenic Police	On-site
	52	Pol. Cap. Aristeidis Bleris	Hellenic Police	On-site
	53	Col. Dimitrios Pissanidis	HNDGS	On-site
	All HellasQCI members			



Objectives

ID	Description	Covered
O1.01	High level opening from the Political Leadership of the Ministry of Digital Governance highlighting the commitment of Greece to the EuroQCI initiative - Introduction of the consortium members	
O1.02	Highlight the contract and consortium agreement sections and some of its articles	
O1.03	Present the management methods to be applied, DEP administrative aspects, communication tools, methods of information exchange, etc.	
O1.04	Understand the project context, baseline, documents, structure, responsibilities	
O1.05	Communicate the administrative and technical responsibilities of partners	
O1.06	Review the task definition, roles and responsibilities, critical path, schedule, resource loading and project budget, update objectives, milestones, results	
O1.07	Finalize the appointment of WP Leaders, PMB, TB, Deliverable editors	
O1.08	Review the overall objectives of the project, and detailed objectives of the WPs. WP leaders present the Workplan for the WPs.	
O1.09	Plan events for the 1 st project year	
O1.10	WP2: initial planning for the architecture of HellasQCI networks, procurement and interoperability, and synergies with other DIGITAL and Quantum Technologies Flagship projects	
O1.11	WP3: overall planning of the Implementation and operation of the HellasQCI and presentation of the project's 3 phases	
O1.12	WP4: overall planning of the demonstration of the use cases in National Security and governmental sector, in critical infrastructures, health sector and industry, in research and education, and the use cases involving the space segment	
O1.13	WP5: overall planning of the training plan for the research and education communities, the technical and security communities and the end-users training	
O1.14	WP6: initial marketing, dissemination, overall planning and the HellasQCI community	

Meeting agenda

ID	Start time	Planned duration	Item description	Presenter	Desired outcome
Thursday, January 19th, 2023					
Public High-Level Session					
1.01	9.30	15 min	Opening Remarks Project kick-off	Kyriakos Pierrakakis Minister of State and Minister of Digital Governance Dr. Athanasios Staveris Secretary General of Telecommunications & Post - Ministry of Digital Governance	
1.02	9:45	10 min	Welcoming Remarks	Dr. Aristeidis Sotiropoulos CEO, GRNET	
1.03	9:55	10 min	Introduction of the project overall	Dr. Ilias Papastamatiou HellasQCI Coordinator Senior Project Manager, GRNET	
1.04	10:05	5 min	HellasQCI use cases	Prof. George Kanellos HellasQCI Technical Coordinator Ass. Professor in the Dept. Of Informatics and Telecommunications of the NKUA	

1.05	10:10	25 min	Welcoming Remarks from partner's organizations (2' per partner)	<p>Dr. George Nounesis Director and Chairman of the Board at NCSR Demokritos</p> <p>Prof. Nektarios Tevernarakis (online) Chairman of the BoD for FORTH</p> <p>Dr. Spyros Basilakos Director of IAASARS & Vice President of the National Observatory of Athens President of the Greek National Committee for Astronomy</p> <p>Prof. Dimitris Syvridis Professor in the Dept. Of Informatics and Telecommunications of the NKUA and Head of the Optical Communications and Photonics Technologies Lab</p> <p>Prof. Hercules Avramopoulos (online) Professor of the School of Electrical and Computer Engineering at the NTUA and Head of the Photonics Communications Research Laboratory (PCRL)</p> <p>Prof. Konstantinos Vyrosokinos Ass. Professor at AUTH, WinPhos research group founding member</p> <p>Nikolaos Giannakakis Group Chief Information Officer (CIO) - Motor Oil</p> <p>Dr. Ioannis Mertzanis CEO, Space Hellas</p> <p>Dr. Panagiotis Gouvas Director of Research Qubitech</p> <p>Fofy Setaki COSMOTE R&D</p> <p>Dr. Evangelos Zacharakis Director of the Centre for Technological Support, Development and Innovations of the National Intelligence Service of Greece (KETYAK) (Letter of Support to HellasQCI)</p> <p>Col. Dimitrios Pissanidis Hellenic National Defence General Staff (Letter of Support to HellasQCI)</p> <p>Pol. Cap. Christos Alexis Hellenic Police Headquarters Technical Applications Division (Letter of Support to HellasQCI)</p>
	10:35	5 min	Photo Session	
	10:40	20 min	Coffee	
PMB Session – Technical Discussion				
1.06	11:00	15 min	Contractual commitments	<p>B. Evangelinou, GRNET</p> <p>Present the contract status and pending actions and highlight the main contract and consortium agreement articles, re-iterate payment procedures</p>



1.07	11:15	15 min	WP1: Management methods to be applied and Project Notebook	E. Athanasaki, GRNET	Understand Project Structure, Roles and responsibilities. Understand the Project Management Information System, WP Leaders, Task Leaders, PMB and baseline plan for the work in WP1
1.08	11:30	15 min	Communication tools and PR material	H. Papadopoulos, NCSR	Branding, methods of information exchange, website
1.09	11:45	45 min	Review of DoA and overall project objectives, main points to be discussed in activity sessions	G. Kanellos, NKUA	Provide review of the objectives, workplan, milestones, other aspects
	12:30	60 min	Lunch		
1.10	13:30	40 min	WP2: Design of the HellasQCI and interoperability with EuroQCI	I. Papastamatiou, GRNET C. Tzouvaras, GRNET G. Kanellos, NKUA D. Kagklis, MinDigital G. Giannoulis, GRNET/ICCS	Baseline plan for the work in WP2; initial works for the HellasQCI Architecture, the Procurement and the synergies between other DIGITAL and Quantum Flagship projects
1.11	14:10	40 min	WP3: Implementation and operation of the HellasQCI	G. Giannoulis, GRNET/ICCS G. Kanellos, NKUA V. Markatos, FORTH H. Papadopoulos, NCSR M. Xilouris, NOA T. Marousis, NOA	Baseline plan for the work in WP3; presentation of Phase 0- Network emulation and experimental setup and of the Network management, security and certification task of HellasQCI
	14:50	10 min	Coffee		
1.12	15:00	40 min	WP4: Demonstration of the Use Cases	G. Kanellos, NKUA H. Papadopoulos, NCSR T. Marousis, NOA	Baseline plan for the work in WP4; presentation of the initial works on National Security and governmental sector use cases, the Research, Education and innovation use cases, the Critical infrastructures, health sector and ICT industry and the use cases using space segment
	15:40		End of day 1, social dinner in the evening		

ID	Start time	Planned duration	Item description	Presenter	Desired outcome
Friday, January 20th, 2023					
1.13	9:30	40 min	WP5: Trainings in QCI and QKD systems and networks	K. Vyrsoinos, AUTH G. Giannoulis, GRNET/ICCS V. Markatos, FORTH G. Kanellos, NKUA	Baseline plan for the work in WP5; presentation of initial works on the training plan for the research and education communities, the technical and security communities and the end-users training
	10:10	10 min	Coffee		
1.14	10:20	40 min	WP6: Communication, dissemination and exploitation	H. Papadopoulos, NCSR A. Askitopoulos, QUBITECH Z. Mousmoulas, GRNET A. Psarianou, GRNET	Baseline plan for the work in WP6; presentation of initial works on marketing, dissemination, overall planning and the activities on for the establishment of the HellasQCI community
1.15	11:00	40 min	Industry Session	F. Setaki, COSMOTE G. Gardikis, Space Hellas A. Askitopoulos, Qubitech D. Vithoulkas, Motor Oil Hellas	Presentation of initial works (10' per partner)
1.16	11:40	60 min	Fine-tuning of the technical activities for the first year	G. Kanellos, NKUA I. Papastamatiou, GRNET	Wrap-up of technical planning, actions
1.17	12:40	40 min	EuroQCI Associated Partners (AP) Session with Ireland and Luxembourg (in English)	I. Papastamatiou, GRNET D. Kilbane, WIT (online) W. Alves Martins, uni.lu (online)	HellasQCI, IrishQCI, LuxQCI presentation and synergies
1.18	13:20	5 min	Wrap up and close	I. Papastamatiou, GRNET	
	13:25	60 min	Lunch		
	14:25		End of day 2		

Logistics

Venue information

Fragkoudi 11, Athina 101 63

Zoom Link for both days:

<https://grnet.zoom.us/j/65424922686?pwd=ZDZSOHluTktOMjB5b3FvNkQvMlV1dz09>

Meeting ID: 654 2492 2686

Passcode: 725783

Annex D - HellasQCI project HellasQCI 1st two thematic axes sessions of training event report

HellasQCI 1st two thematic axes sessions of Training Event: Assessment Report

18-19 & 21-22 September 2023, Athens, Greece

The [HellasQCI project](#) held its first training event on September 18-19 and 21-22, 2023, at the National Technical University of Athens, Greece. The training was designed to provide participants with theoretical and practical knowledge on quantum communication, with the goal of enhancing the security of sensitive data and critical infrastructures in Greece and co-creating EuroQCI.

The 4-day event was launched by the new Secretary General of Telecommunications and Post, Konstantinos Karantzalos, followed by welcoming remarks from Prof. Stefanos Kollias, Chairman of the Board of Directors GRNET S.A. The keynote speech, "Quantum Technologies - QKD Landscape in Europe," was given by Dr. Eleni Diamanti, CNRS research director at Sorbonne University in Paris.

The training was open to cybersecurity professionals, IT managers and engineers, security and IT experts, researchers, students, and practitioners in the field of quantum communication, as well as decision-makers interested in future-proofing their organisation's security infrastructure. Participants could attend in person or via livestream through the [GRNET DIAVLOS](#) service. The event had two different thematic axes, namely the "**Workshop on Quantum Key Distribution (QKD) Systems**" held on 18 and 19 of September and the "**Workshop on Cybersecurity with QKD Systems and Post-Quantum Cryptography (PQC)**" held on 21 and 22 of September. The two workshops were well-received, with an average of 100 attendees at the first workshop and 75 at the second. In total, **175 unique people** attended the workshops. Additionally, an average of **100 people per day participated online** via the GRNET Diavlos livestream service. **Sixteen trainers** provided insights and knowledge on quantum communication.

The new Secretary General of Telecommunications and Post, Konstantinos Karantzalos, addressed a welcome note to commence the 4-Day Training Event. The Secretary General mentioned: "I would like to recognize the previous leadership of the Ministry and GRNET for their work on this important project. I wish everyone a successful start to the 4-day training event".

The Chairman of the Board of Directors GRNET S.A., Prof. Stefanos Kollias, in his welcome speech stated: "Quantum technology is one of the technologies that already concern us and will be of great interest to us in the coming period. It will have an impact on all sectors. I am personally involved in machine learning and artificial intelligence and we're trying to develop technologies compatible with quantum technology. So we found ourselves today at an advanced meeting and training that concerns both engineers, researchers, and students. GRNET, as coordinator of the HellasQCI project, will strive in cooperation with the partner universities to achieve the best education of engineers, students, and researchers in these technologies. I wish you a good start and good luck in this seminar".

The event was reported on in the NetFax daily digital newsletter (on September 19, 2023), which fully covers Greek and international news in the areas of information technology and telecommunications, the internet, and e-commerce. Journalist Y. Rizopoulos emphasised that "*in an era when our daily lives are increasingly dependent on digital technology, cybersecurity is a critical factor on which our very survival depends.*"

With the conclusion of the 4-day event, technical knowledge concerning the implementation of the project and best practices were shared, including information about the:

- Design of the quantum communication architecture, the use-cases and the QKD (quantum key distribution) technologies that will be used throughout the implementation phase, as well as the initial steps for the trainings,
- National stakeholder engagement through the HellasQCI community,
- National QCI projects from Ireland, Luxembourg and Poland and their aim to build networks using QKD technology within the EuroQCI framework.

The 4-day training on quantum communication infrastructure generated strong interest from the Greek and the European quantum community. Social media announcements were made to support and document the important work carried out and succeeded in driving more traffic to the training event, as evidenced by the significant increase in social media engagement and website visits during and after the event. The organisers of both events, in the framework of the HellasQCI project were: GRNET, National Technical University of Athens, Aristotle University of Thessaloniki, National and Kapodistrian University of Athens, Foundation for Research & Technology – Hellas, National Centre of Scientific Research "Demokritos" and Space Hellas.

Useful information about the HellasQCI project and the project’s objectives:

- Meeting agenda, trainers and partners available here : <https://hellasqci.eu/first-training-event/>
- Video from the presentation of the project: <https://shorturl.at/sCK13>

Other useful links and info:

- HellasQCI info page on GRNET website: <https://grnet.gr/en/business-directory/hellasqci-en/>
- [EuroQCI](#) info website page
- HellasQCI Social Media Channels: [Facebook](#), [Twitter](#), [LinkedIn](#), [YouTube](#)

4-Day Training photo materials



Plenary Session at the Multimedia Amphitheater, NTUA, Athens



Prof. Konstantinos Karantzas, Secretary General of Telecommunications & Posts,



Prof. Stefanos Kollias, Chairman of the Board of Directors GRNET S.A.



Keynote speech by Dr. Eleni Diamanti, CNRS research director at Sorbonne University, Paris



Prof. Konstantinos Vyrsokinos (AUTH), Prof. Stefanos Kollias (Chairman of the Board of Directors GRNET S.A.), Prof. Konstantinos Karantzalos (Secretary General of Telecommunications & Posts, Hellenic Ministry of Digital Governance), Dr. Ilias Papastamatiou, HellasQCI Project Coordinator, GRNET S.A., Ass. Prof. Kanellos (NKUA - HellasQCI Technical Coordinator), Yannis Rizopoulos, Journalist, Bousias Media



Dr. Homer Papadopoulos, (National Center for Scientific Research Demokritos), Dr. Johanna Sepúlveda Chief Engineer Quantum-Secure Communications, Airbus Defence and Space, Artemis Psarianou BA, DipM, ACIM, MA, AC, (Head of Marketing and Communications Department - GRNET S.A.), Prof. Konstantinos Vyrsokinos (AUTH), Dr. Ilias Papastamatiou, (HellasQCI Project Coordinator, GRNET S.A.), Yannis Rizopoulos, Journalist, (Bousias Media), Dr Deirdre Kilbane Director of Research in Walton Institute for Information and Communication Systems SETU, IrelandQCI Coordinator, Ass. Prof. Kanellos (NKUA - HellasQCI Technical Coordinator)



*Photonics Communications Research Laboratory (PCRL) - Hands On Experience @ NTUA
Operating Principle of Single Photon Avalanche Detectors (SPAD)*



Research Laboratory - Hands On Experience @ NKUA
National and Kapodistrian University of Athens

Training Event Media publications

<https://tomanifesto.gr/hellasqci-theoritikes-kai-praktikes-gnoseis-sto-seminario-gia-tis-kvantikes-technologies-153848>

Full media publications (PDF)

NetFAX

#5134

Τρίτη
19/09/2023

Το μέλλον της κυβερνοασφάλειας είναι κβαντικό

Τετράημερο εκπαιδευτικό σεμινάριο για το έργο HellasQCI



Σε μια εποχή που η καθημερινότητά μας εξαρτάται ολοένα περισσότερο από την ψηφιακή τεχνολογία, η κυβερνοασφάλεια αποτελεί κρίσιμο παράγοντα, από τον οποίο ουσιαστικά εξαρτάται η ίδια η επιβίωσή μας.

Οι κβαντικές τεχνολογίες -όριμες πια και έτοιμες να ανταποδώσουν στην κοινωνία όσα έχουμε επενδύσει επάνω τους- θα αρχίσουν τα επόμενα χρόνια να δίνουν λύσεις σ' αυτά και πολλά άλλα θέματα, που ξεκινούν από τη μετεωρολογία και τους ταχύτερους υπολογιστές και φτάνουν ως την Τεχνητή Νοημοσύνη και τη Μηχανική Μάθηση. Όμως, πριν από την εφαρμογή, πρέπει βεβαίως να προηγηθούν η (θεωρητική και πρακτική) εκπαίδευση και εξοικείωση των χρηστών και αυτός ακριβώς είναι ο στόχος του πρώτου τετράημερου σεμιναρίου, στο πλαίσιο του ευρωπαϊκού συγχρηματοδοτούμενου έργου HellasQCI, που ξεκίνησε χθες, στις φιλόξενες εγκαταστάσεις του ΕΜΠ. Το σεμινάριο, στο οποίο απήχθησε χαιρετισμό ο νέος ΓΓ Τηλεπικοινωνιών και Ταχυδρομείων, Κωνσταντίνος Καραντζάλας υποσχόμενος τη στήριξη του, απευθύνεται στη νέα γενιά μηχανικών, επαγγελματιών της κυβερνοασφάλειας, αλλά και εκπροσώπους της πανεπιστημιακής κοινότητας, φοιτητές, ερευνητές και καθηγητές που εσπάζουν στους τομείς των οπτικών και κβαντικών τεχνολογιών, με απώτερο σκοπό την προετοιμασία της χώρας για τη λειτουργία της Ευρωπαϊκής Υποδομής Κβαντικών Επικοινωνιών EuroQCI, ειδικά σ' ό,τι αφορά στα «κβαντικά «κλειδιά» και τη μετα-κβαντική κρυπτογραφία.

Εταίροι και συνεργείς

Εκτός από τους εταίρους του «HellasQCI» (Εθνικό Δίκτυο Υποδομών Τεχνολογίας και Έρευνας, Εθνικό Μεταόβιο Πολυτεχνείο, Αριστοτέλειο Πανεπιστήμιο Θεσσαλονίκης, Εθνικό & Καποδιστριακό Πανεπιστήμιο Αθηνών, Ίδρυμα Τεχνολογίας και Έρευνας, ΕΚΕΦΕ «Δημόκριτος», Αστεροσκοπείο Αθηνών και Space Hellas, στο σεμινάριο συμμετέχουν επίσης -αναδεικνύοντας τον διεθνή χαρακτήρα της ελληνικής προσπάθειας- απεσταλμένοι από τους διεθνείς εταίρους, τα αντίστοιχα Εθνικά Δίκτυα Κβαντικών Επικοινωνιών της Ιρλανδίας, της Πολωνίας, και της Κύπρου. Στην ενάρκτρια συνεδρίαση του σεμιναρίου και μετά τον χαιρετισμό του προέδρου του ΕΔΥΤΕ, καδ. Στέφανου Κόλλια, η κύρια ομιλήτρια, Δρ. Ελένη Διαμαντή (διευθ. ερευνών του CNRS, στη Σαρβάνη), έδωσε τη διεθνή εικόνα των δυνατοτήτων των κβαντικών τεχνολογιών και των εφαρμογών τους με συγκεκριμένα παραδείγματα από τη Χημεία, τη Φαρμακολογία, τις Χρηματοοικονομικές υπηρεσίες, τα νέα Υλικά, την Ιατρική, τη Μετρολογία, την Άμυνα, και φυσικά, την ασφάλεια, ειδικά των κρίσιμων υποδομών, τονίζοντας ότι μπορούμε να καταφέρουμε πολλά. Την ελληνική πραγματικότητα (ενταγμένη, προφανώς, στην ευρωπαϊκή εικόνα, όπου οι προτάσεις μας διακρίνονται ιδιαίτερα - πέρσι, αναδείχθηκαν δεύτερες καλύτερες στην ΕΕ) περιέγραψε το στέλεχος του ΕΔΥΤΕ και συντονιστής του HellasQCI, Δρ. Ηλίας Παπασπασίου. Ανέλυσε τη δομή του επιγείου (ετοιμάζονται 12 κόμβοι ανά την Ελλάδα) και του δορυφορικού σκέλους (γίνονται εργασίες στα αστεροσκοπεία του Χελμού, του Χολομιάνα και του Σκίνακ, για την υποδομή των κβαντικών σημάτων και τη σύνδεση με τα κοινά μητροπολιτικά κέντρα) και αποκάλυψε πως ο χρονικός στόχος για τη λειτουργία του συστήματος, είναι το 2027.

ΓΙΑΝΝΗΣ ΡΙΖΟΠΟΥΛΟΣ



LANCOM: ΑΝΑΔΕΙΞΗ ΤΗΣ ΧΩΡΑΣ ΣΕ ΤΗΛΕΠΙΚΟΙΝΩΝΙΑΚΟ ΚΟΜΒΟ ΤΩΝ ΒΑΛΚΑΝΙΩΝ

Στο Βελγιοράι και στην Πράγα παρευρέθηκαν για άλλη μία χρονιά τα στελέχη της Lancom συμμετέχοντας στο Central and Eastern Europe Carriers and Enterprises Event και στο European Peering Forum αντίστοιχα.

Το CEE CEE Summer Event 2023, που πραγματοποιήθηκε στις 7-8 Σεπτεμβρίου, συγκέντρωσε τα κορυφαία στελέχη του κλάδου των τηλεπικοινωνιών της Κεντροανατολικής Ευρώπης σε σταθερές επικοινωνιακές συσκευές. Ακολούθως, στις 11-13 Σεπτεμβρίου στην Πράγα, στο European Peering Forum, μια εκδήλωση έντονου ενδιαφέροντος για τηλεπικοινωνιακού παρόρους και εκπροσώπους, Internet Exchanges, τα στελέχη της Lancom πραγματοποίησαν εκτός των τεχνικών σεμιναρίων και πλήθος συνομιλιών με υπάρχοντες και εν δυνάμει συνεργάτες.

Παραγωγικές συναντήσεις

Κατά τη διάρκεια των δύο συνεδρίων, τα στελέχη της Lancom παρουσίασαν το όραμα της εταιρείας για την αναδείξη της χώρας στο νέο τηλεπικοινωνιακό κόμβο των Βαλκανίων, με οχμία το Balkan Gate Thessaloniki, το οποίο, όπως αναφέρεται, «πλέον χρίζει διεθνούς αναγνώρισης καθώς έχει συγκεντρώσει και παρέχει υπηρεσίες φιλοξενίας-θεσούδεσης σε μερικές από τις μεγαλύτερες πολυεθνικές και ελληνικές εταιρείες τηλεπικοινωνιών». «Οι συναντήσεις μας στο εξωτερικό ήταν ιδιαίτερα παραγωγικές, και περιμένουμε να ανακοινώσουμε πολλές νέες σημαντικές συνεργασίες μέσα στους επόμενους μήνες», δήλωσε η διευθύντρια πωλήσεων της Lancom Λένα Σανθουπούλου.





HellasQCI

Four-Day Training Event

18-19 & 21-22 September 2023

National Technical University of Athens

Zografou campus



The project has been funded by the European Union under the Digital Europe Programme grant agreement No. 101091504





Program of the Workshop on Quantum Key Distribution (QKD) Systems

1st Day Training - September 18th, 2023

Welcoming Session

(In this session spoken Language will be Greek)

Moderator: Yannis Rizopoulos, Journalist, Boussias Media

Location: NTUA Zografou Campus Multimedia Amphitheatre on the basement of the NTUA Central Library

Directions: <https://goo.gl/maps/NkcFx7woMTUMNc2q9>

08:30-09:00	Registration
09:00 – 09:10	Welcoming Remarks by Prof. Konstantinos Karantzalos, Secretary General of Telecommunications & Posts, Hellenic Ministry of Digital Governance
09:10 – 09:20	Welcoming Remarks by Prof. Stefanos Kollias, Chairman of the Board of Directors GRNET S.A.
09:20 – 09:25	Welcoming Remarks by the European Commission (video message)
09:25 – 09:40	Keynote speech “Quantum Technologies - QKD Landscape in Europe” by Dr. Eleni Diamanti, CNRS research director at Sorbonne University in Paris
09:40 – 09:50	“HellasQCI project overview and synergies with EuroQCI” by Dr. Ilias Papastamatiou, HellasQCI Project Coordinator, GRNET S.A.



This project is co-funded by the European Union under the Digital Europe Programme grant agreement No. 101091504



The HellasQCI Project has received funding under the Grant Agreement No. 101091504



09:50 – 09:55	“Overview of Four Day HellasQCI Training” by Prof. Konstantinos Vyrsoinos, Aristotle University of Thessaloniki - AUTH
09:55 – 10:10	Q&A
10:10 – 10:25	Coffee Break

Second Session:

(Spoken Language will be English)

Moderator: Yiannis Yianoulis, NTUA

Location: NTUA Zografou Campus Multimedia Amphitheatre on the basement of the NTUA Central Library

Directions: <https://goo.gl/maps/NkcFx7woMTUMNc2q9>

10:25 – 11:00	Eleni Diamanti, CNRS CNRS research director at Sorbonne University in Paris Plenary Session
11:00 – 11:30	George Nikolopoulos, FORTH Basic Principles of QKD
11:30 – 12:15	Konstantinos Vyrsoinos, AUTH QRNGs
12:15 – 13:00	George Kanellos, NKUA QKD Networks
13:00 – 14:00	Lunch Break
14:00 – 14:45	Giannis Giannoulis, NTUA/GRNET From billion photons to single photon experimental setups



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14:45 – 15:05	Ilias Balampanis, Space Hellas SA QKD with Raspberry PI's as encryptors/decryptors
15:05 – 15:30	Homer Papadopoulos, NCSRDI QKD with PQC for a Healthcare use case
15:30 – 15:45	Deirdre Kilbane, WIT IrelandQCI
15:45 – 16:00	Konstantinos Katzis, EUC CyQCI
16:00 – 16:15	Piotr Rydlichowski, PSNC PIONIER- Q
16:15-16:45	Conclusions and Discussion (Q&A)

2nd Day Training - September 19th, 2023

(Spoken Language will be English)

Moderator: Konstantinos Vyrsoinos, AUTH

Location: NTUA Zografou Campus, Multimedia Amphitheatre on the basement of the NTUA Central Library

Directions: <https://goo.gl/maps/NkcFx7woMTUMNc2q9>

09:00 – 10:00	Aris Stathis, Argiris Ntanos, NTUA/GRNET Theoretical background and equipment description for hands-on experiments
10:00 – 10:45	Nikos Lyras, Argiris Ntanos, NTUA/GRNET QKD in Space, satellite-to-ground QKD links
10:45 -11:00	Coffee Break
Change Room: Photonics Communications Research Laboratory (PCRL)	
Directions: https://goo.gl/maps/4CyFnLFENcgkX3GN9	



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11:00 -13:00	<p>Hands On Experience @ NTUA</p> <p>Operating Principle of Single Photon Avalanche Detectors (SPAD)</p> <p>Coherent Light: Poissonian Photon statistics and single photon interference</p> <p>Generation, transmission and detection of encoded single-photons over a dark fiber</p> <p>Transmission and detection of single- photons over free space</p> <p>Coexistence of classical and quantum signals over converged fiber/FSO link</p>
13:00 – 14:00	Lunch Break
14:00 – 17:00	<p>Hands-On Experience @ NKUA</p> <p>Optical Communications and Photonics Technology Laboratory (Room Y2)</p> <p>National and Kapodistrian University of Athens Department of Informatics and Telecommunications Panepistimiopolis, Ilisia Athens, 16122</p> <p>https://www.di.uoa.gr/department/contact-location</p>



This project is co-funded by the European Union under the Digital Europe Programme grant agreement No. 101091504



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Program of the Workshop on Cybersecurity with QKD Systems and Post-Quantum Cryptography (PQC)

**3rd Day Training - September 21st, 2023: Introduction to cryptography
Lectures and hands on experience**

(Spoken Language will be English)

Moderator: Harry Manifavas, FORTH

**Location: NTUA Zografou Campus Multimedia Amphitheatre on the basement of the
NTUA Central Library**

Directions: <https://goo.gl/maps/NkcFx7woMTUMNc2q9>

09:00 - 09:15	Welcome Session
09:15 – 10:15	Harry Manifavas, FORTH Cybersecurity and the role of Cryptography The Weakest Link Property The Adversarial Setting Cryptography Pitfalls Security and Other Design Criteria Security Strength levels
10:15 - 11:00	Harry Manifavas, FORTH Basic cryptographic primitives Symmetric Cryptography Public Key Cryptography Cryptographic Hash Functions Applications of cryptography in real life
11:00 – 11:15	Coffee Break
11:15 – 12:00	Harry Manifavas, FORTH



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	<p>Cryptographic Attacks and Failures</p> <p>Ciphertext-Only and Known-Plaintext Attacks</p> <p>Brute Force Attack</p> <p>Cryptographic key length Recommendations</p> <p>Public Key Algorithms Security</p> <p>The Factoring Problem</p> <p>Man-in-The-Middle and Replay Attacks</p> <p>Cryptographic Failures: Case Studies</p>
12:00 - 13:00	<p>Emmanouil Papadogiannakis, FORTH</p> <p>Demonstrations</p> <p>Attacking a social network</p> <p>Bypassing authentication</p>
13:00- 14:00	Lunch Break
14:00 – 17:00	<p>Emmanouil Papadogiannakis, FORTH</p> <p>Practice session: labs and exercises</p> <p>Exploiting cryptographic failures</p> <p>Cipher misuse</p> <p>Crypto misconfiguration</p>



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4th Day Training - September 22nd, 2023: Introduction to Post Quantum Cryptography and Quantum Key Distribution

Lectures and hands on experience

(Spoken Language will be English)

Moderator: Homer Papadopoulos, NCSRDI

Location: NTUA Zografou Campus Multimedia Amphitheatre on the basement of the NTUA Central Library

Directions: <https://goo.gl/maps/NkcFx7woMTUMNc2q9>

09:00 – 10:00	<p>Harry Manifavas, FORTH</p> <p>Introduction to Post-Quantum Cryptography Quantum Computing Threat Landscape for Symmetric and Public-Key Cryptography Challenges: Retrospective Decryption, Shor's and Grover's Algorithms Quantum Computing Threat Mitigation Post-quantum Cryptography NIST PQC Standardization Effort PQC Transition Recommendations and Cryptographic Agility</p>
10:00 – 11:00	<p>Harry Manifavas, FORTH</p> <p>Introduction to QKD Quantum Cryptography and Quantum Encryption QKD Use Cases QKD Requirements, Security and Protocols Attacks and Limitations Challenges and Criticism Quantum Random Number Generators</p>
11:00 – 11:15	<p><i>Coffee Break</i></p>



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11:15 – 12:00	<p>Homer Papadopoulos, NCSRD</p> <p>Integrating QKD into the existing Cryptographic Landscape: Addressing Challenges in Practical Deployments of QKD and Quantum-Safe Cryptography, and Exploring Current Trends</p> <p>QKD standardization efforts and challenges</p> <p>EuroQCI</p>
12:00 - 13:00	<p>Antonis Korakis, George Balaskas, Homer Papadopoulos NCSRD</p> <p>Demonstrations</p> <p>Extract keys from a QKD device.</p> <p>Digital signatures with PQC algorithms</p> <p>Encrypt files with PQC algorithms</p> <p>Enable computations on encrypted data without decryption.</p>
13:00- 14:00	<p><i>Lunch Break</i></p>
14:00 – 17:00	<p>Antonis Korakis, George Balaskas, Homer Papadopoulos NCSRD</p> <p>Practice session: labs and exercises</p> <p>Walk through step-by-step instructions for setting up the encryptor and key retrieval from the QKD device. Encrypt your files with AES 256.</p> <p>Set up your own digital signatures using PQC Dilithium library to authenticate yourself to the encryptor.</p> <p>Encrypt your files with PQC Kyber's encryption methods to access the encryptor.</p>



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HellasQCI - Quantum Communication Infrastructure for Greece

	Learn the Homomorphic techniques for encrypting your files, enabling secure cloud computations, while maintaining complete data encryption
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Annex E - Partners' online media channels

Online Media Channels / Partner	Facebook	LinkedIn	Twitter	Instagram	YouTube	Website/info page and initial publicity
GRNET (all project related announcements have been shared on GRNET online channels)	grnet.gr	grnet sa	grnet.gr	grnet.gr	grnet edyte	www.grnet.gr HellasQCI info page Related Press Releases on grnet website Reporter publicity
AUTH	https://www.facebook.com/Aristoteleio/	https://www.linkedin.com/school/aristotle-university-of-thessaloniki-auth/	https://twitter.com/Aristoteleio	https://www.instagram.com/auth_university_thessaloniki/	N/A	https://www.auth.gr/en/
NKUA	https://www.facebook.com/uoa.official	https://www.linkedin.com/school/nkua/	https://twitter.com/uoaofficial	https://www.instagram.com/nkua.gr/	https://www.youtube.com/@nkua	https://en.uoa.gr/
NOA	https://www.facebook.com/pages/National-Observatory-of-Athens/	https://www.linkedin.com/company/national-observatory-of-athens/	N/A	N/A	https://www.youtube.com/channel/UCoJhWyGmrTii_l8LlwhbO9A	https://www.noa.gr/
FORTH	https://www.facebook.com/FORTH.ITE	https://www.linkedin.com/company/foundation-for-research-&-technology-hellas-forth/	https://twitter.com/FORTH_ITE	https://www.instagram.com/forth_ite/	https://www.youtube.com/forth-ite	www.forth.gr
NCSR-D	https://www.facebook.com/pages/NCSR-Demokritos/311021049022821	https://www.linkedin.com/company/ncsr-demokritos/	https://twitter.com/NCSR_Demokritos	https://www.instagram.com/ncsrdemokritos/	https://www.youtube.com/channel/UCokquGFyZzKAdXQLNL6NdgQ	central website: https://www.demokritos.gr/ , via the IIT Newsletter (https://www.iit.demokritos.gr/newsletters/), and News in the IIT's site : www.iit.demokritos.gr/newsevents/ , via the groups e-health and knowledge management unit site (https://ehealthunit.demokritos.eu/)
COS	www.facebook.com/cosmote/	https://www.linkedin.com/showcase/cosmote/	twitter.com/cosmote	https://www.instagram.com/cosmote_greece/	https://www.youtube.com/user/cosmote	www.cosmote.gr
SPH	/SpaceHellas Official	/company/space-hellas-s.a./	@SpaceHellas	N/A	N/A	www.space.gr

MOH	N/A	https://gr.linkedin.com/company/motor-oil-hellas	N/A	N/A	https://www.youtube.com/channel/UCTUYuKMVr0iyAi_sVQ57oWA	www.moh.gr
QUBI	N/A	q-ubitech	@Q_Ubit_Tech	N/A	N/A	q.ubitech.eu/Press release

Annex F – Scientific publications

Scientific papers submitted in Journals

- D. Zavitsanos et al., "Feasibility Analysis of QKD Integration in Real-World FTTH Access Networks," in Journal of Lightwave Technology, [Link](#), vol. 42, no. 1, pp. 4-11, 1 Jan.1, 2024, doi: 10.1109/JLT.2023.3303908.
- Georgios M. Nikolopoulos and Marc Fischlin "Quantum Key Distribution with Post-Processing Driven by Physical Unclonable Functions" [Link](#), Appl. Sci. 2024, 14(1), 464; doi: 10.3390/app14010464 Published: 4 January 2024

Scientific papers submitted in Conferences

- Makris, A. Ntanos, A. Papageorgopoulos, A. Stathis, P. Konteli, I. Tsoni, G. Giannoulis, F. Setaki, T. Stathopoulos, G. Lyberopoulos, H.Avrampoulos, G. T. Kanellos, D. Syvridis. "DV-QKD link over multiple ONT loaded carrier-grade GPON for FTTH applications". 2023 (Accepted at SPIE Photonics West 2024). [Link](#)
- G. T. Kanellos, K. Christodoulopoulos, I. Tsoni, A. Papageorgopoulos, N. Makris, P. Konteli, D. Syvridis. "Advanced key management in switched QKD networks with non-optimized QKD links". 2023 (Accepted at SPIE Photonics West 2024). [Link](#)
- N. Makris, A. Papageorgopoulos, P. Konteli, I. Tsoni, K. Christodoulopoulos, G. T. Kanellos, and D. Syvridis. "Relayed-qkd and switched-qkd networks performance comparison considering physical layer qkd limitations". 2023 (Accepted at OFC 2024).
- N. Makris, A. Ntanos, A. Papageorgopoulos, A. Stathis, P. Konteli, I. Tsoni, G. Giannoulis, F. Setaki, T. Stathopoulos, G. Lyberopoulos, H.Avrampoulos, G. T. Kanellos, D. Syvridis. "O-band QKD link over a multiple ONT loaded carrier-grade GPON for FTTH applications". 2023 (Accepted at OFC 2024). [Link](#)
- K. Christodoulopoulos, N. Makris, G. T. Kanellos, D. Syvridis. "Optimizing Key Consumption in Switched QKD Networks". 2023 (Accepted at OFC 2024).