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Grant Agreement N. 829005

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University of Toronto (UofT)

Foundation for Research and Technology Hellas (FORTH)

National Institute for Microtechnologies (IMT)

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EXECUTIVE SUMMARY

This deliverable reports on the IQubits website and logo. The domain www.iqubits.eu was registered on the 26th of June 2019 and home page went live on the 28th of June 2019. This document reports the structure of the website, as it will appear in its final form, which comprises both public and private areas. The public area includes an introduction to the project, the general description of the project, and the communication media. The private area provides to the consortium partners the discussion board and document library, which have been conceived to facilitate the implementation of an effective data management plan. This document reports primarily on the public section of the website and logo, whereas the private section will be described in further details in the deliverable on the management data plan. The logo, here appearing in the front page and the footers of this document, symbolizes the key multi-disciplinary constitutive elements of the project, all in one graphical object. Quantum Physics is captured by the Bloch sphere inside the letter Q. The integrated qubits are captured by the two black circles with short grey lines, representing the electrons/holes together with their energy levels. The electronic control and readout circuits are indicated with the characteristic triangles of the well-established amplifier/driver symbols in electrical engineering.



1 WEBSITE

The domain www.iqubits.eu was registered on the 26th of June 2019 and the home page of the website went live on the 28th of June 2019. The domain and the hosting service will be maintained for 8 years to facilitate long-term dissemination, two years beyond the original term reported in the project proposal. This section describes the structure of the website, as it will appear in its final form fully navigable at the end of November 2019. The website structure and contents have been conceived and defined in all its aspects by the Coordinator and implemented through the service offered by Web Bay, following an agile software development methodology carried out on a weekly basis over four months, from M6 to M10 (project started on the 1st of May, i.e. M5). The website adopts TYPO3 content management system and has been also optimised for navigation from mobile devices.

The website comprises both public and private areas, according to the following sitemap.

Public area

- o Home page
- About
 - What is IQubits?
 - Partners
 - Advisory board
 - Other initiatives
- o Project
 - Objectives
 - Synergy
 - Work packages
 - Timeline
 - Deliverables
 - Publications
 - Presentations
- Media
 - News
 - Events
 - Videos
 - Newsletter
- Contact

Private area

- Dashboard
- Discussions
- Document library
- News
- MyProfile



1.1 Public Area

The "Home page" design is illustrated in Fig. 1.1. At the top of the page there is a slider with three slides which facilitate the navigation through the main sections of the website. The first slide includes a short

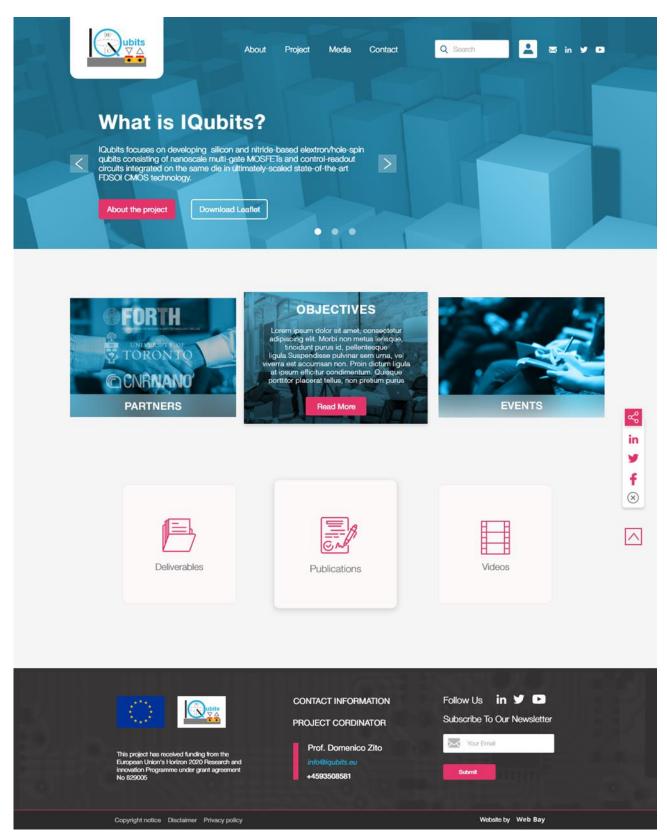


Fig. 1.1. Homepage design.



description of IQubits project. A leaflet with the project summary can be downloaded by clicking on the button "Download Leaflet". The six teasers Partners, Objectives, Events, Deliverables, Publications, and Videos facilitate the navigation through the website, with easy access to the key resources that are likely to become the most popular resources of the website.

The project summary is also available in "What is IQubits?" page. In the "Partners" page, there is a map locating the consortium partners. By clicking on a map pointer, a textbox with legal name, address, and country of the chosen institution pops up. Moreover, the legal name serves as a link to the page with consortium partner profiles. This latter page, within IQubits website, includes the description of the institution and short biographies of the key persons, with focus on their role in the project. A page is also dedicated to the Advisory Board. The "Other initiatives" page locates other projects with the goal to develop integrated qubits and qubit integrated circuits on the world map. The map locates both private and public initiatives, with special consideration for EU projects.

Project **objectives**, **work packages**, and **timeline** are summarized in dedicated pages. The "**Synergy**" page provides a pictorial description capturing in a condensed manner the main tasks, competences and interactions of the consortium partners. Also, there is a dedicated page to public **deliverables**, available for download in pdf format. In the "**Presentations**" page, slides created by consortium partners are available for download, facilitating the communication with the public and specialized audiences. The "**Publications**" page lists IQubits published articles and provides the links for download. Open-access accepted journal publications will be available for direct download from such a page, in compliance with the copyright laws.

The "News" page disseminates news on latest achievements. The "Events" page lists and advertises the events organized by consortium partners. The "Videos" page hosts the videos created by consortium partners and other videos relevant for the project. The page can also embed videos uploaded in the IQubits YouTube channel. A newsletter is also set up in order to allow any stakeholders to receive info and periodic bulletins about the project advances. All together, these four media support a largest spectrum of communication with the public and specialized audiences.

The email account info@iqubits.eu has been set up and is managed by the Project Coordinator. The e-mail is reported in the footer and in the "Contact" page, which contains also a form to send a message to info@iqubits.eu directly from within IQubits website.

1.2 Private Area

To access the private area, users must click on the icon, illustrated in Fig. 1.2, located on top of the public pages. After clicking on the icon, the login form pops up. The registration requests to the private area are handled directly by the Project Coordinator, who is in charge of granting the access according to the appropriate rights commensured to the role in the project.

The "**Dashboard**" is the first page accessed by a user after login. It includes menu items and teasers for easy navigation throughout the area. The private area includes a "**Discussions**" page to facilitate information sharing between the partners, and a "**Document library**" for sharing documents, so keeping track of document versions. **Tags** are attached to the documents and a **search tool** allows finding documents by date, tags, or keywords. A "**News**" page, reporting private news, is also included.



Fig. 1.2. Icon for private area log in.

1.3 Social Media

IQubits Twitter account has been set up and the username is @H2020_IQubits. IQubits YouTube channel has been created and will go live as soon as the first video will be available. The IQubits LinkedIn page has been designed to be available directly through a dedicated page of the Project Coordinator's personal LinkedIn profile.

Public pages of IQubits website such as Deliverables, Publications, News, Events, and Videos can be shared in LinkedIn, Twitter, and Facebook by clicking on the sharing buttons illustrated in Fig. 1.3.





Fig. 1.3. Sharing buttons in public pages of IQubits website.



2 LOGO

IQubits gathers together applied and theoretical physicists, material scientists, electronic engineers and silicon foundries to develop and demonstrate electron/hole-spin qubits and qubit integrated circuits onto the same silicon substrate as key enabling solution for building the first bricks of future quantum computing. These key elements, unique of this project, are all captured by IQubits logo, illustrated in Fig. 2.1, as discussed below.

Two-level systems are the very basis of quantum computing and the Bloch sphere (from quantum theory) is a graphical representation of the quantum states of a two-level system. The Bloch sphere is one of the graphical elements of the IQubits logo: it is obtained from the letter Q, including the symbols of quantum bits $|0\rangle$ and $|1\rangle$, and the dashed circle.

The grey rectangle, at the bottom of the logo, depicts the silicon substrate. The captivating yellow area, the red rectangles (portraying MOS gates) and the two black circles with short grey horizontal lines (capturing two electrons/holes together with their energy levels) represent the double quantum dot envisaged for the implementation of the integrated qubits. The drawing mirrors the actual physical device that will be delivered by the project. The red and grey colors are typically used in the electronic engineering community for MOS gate and substrate, respectively, so that electronic engineers should be able to identify these key elements easily. Last, the two triangles depict the electronic control and readout circuits, as commonly adopted symbols in electronic engineering.

All these distinctive graphical objects in each discipline involved in the project are translated in the key ingredients of the logo and harmonized in relation to the objectives of the project, so to symbolize its strong multi-disciplinary nature, synergy and complementarity, as well as the addressed scientific and technological challenges.

The logo defines the visual identity for the project, and has been proved to be scalable, with no or reduced degradation of intelligibility. The colors of the IQubits text in the logo are mirrored in the website design and all the public documents produced by the Consortium.

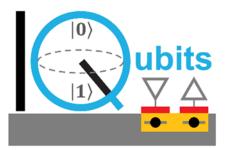


Fig. 2.1. IQubits logo.

