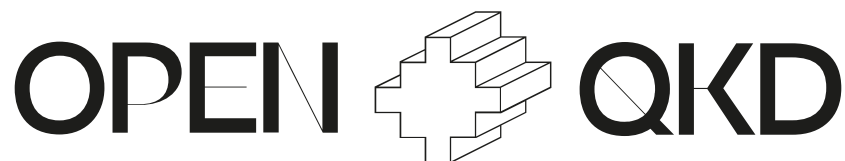




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## Document Information

### Author List

Organization	Name	E-mail
PSNC	Piotr Rydlichowski	prydlich@man.poznan.pl

### Reviewer List

Organization	Name	E-mail
IMDEA SOFT	David Rincon	david.rincon@imdea.org
MLNX	Paraskevas Bakopoulos	paraskevasb@mellanox.com

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1.0	31.01.2021	Final edit and review	Piotr Rydlichowski

## Executive Summary

This report presents assumptions, underlying principles and process of creating OPENQKD promotional video. Project video is important element in the wide project promotion activities and complements the activities performed under the WP10 dissemination and exploitation activities.

The material was created as joint partners effort and is targeted for public reception and understanding. It introduces the QKD technology, project partners, goals and strategy for the project videos.

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## **1. Introduction**

### **1.1. Purpose and scope of the document**

The purpose of Deliverable D104. *Project Video* is to present the goals, principles and process of creating the OPENQKD promotional project video. The initial results are presented.

### **1.2. Target audience**

The targeted audience consists of various stakeholders: general public, research institutions, companies integrators and end users. Industry vendors entities can gain awareness from this report on the existing use-cases landscape and activities within OPENQKD and implementation possibilities. Researchers who work in the area of QKD can gain perspective which elements, systems, components are investigated under OPENQKD and where further potential for development is recognized. It is expected that the document is positioned as a guide for the future OPENQKD dissemination work.

### **1.3. Relation to other project work**

The present deliverable captures the current status of the existing OPENQKD dissemination activities. Furthermore, broader global overview is presented. Dissemination and exploitation strategy and activities are closely related to all OPENQKD elements and partners of the QKD technologies and transmission systems. The WP10 activities are related and connected with all other OPENQKD work packages.

### **1.4. Structure of the document**

This document is structured in four main parts. Firstly, in chapter 2 general assumption, script and principles for project video are presented. Chapter 3 presents the process and tools used for creating the video material. The chapter 4 presents the created initial material. The final chapter 5 draws conclusions and presents summary for the dissemination and video activities and its overall strategy.

## 2. General assumptions for the project video.

The project video is intended to target general public and provide basic information regarding the project and QKD technologies. Due to large scope of the project and numerous partners and use-cases it was decided to produce a series of videos. Each video will target specific area of the project and partners. First video will focus on general project introduction and performed by the project coordinator. The next videos will focus on QKD vendors, telecommunication operators, testbed operators, end users and research and development partners. This approach will allow to present all project aspects and provide an opportunity for all partners to contribute and achieve synergy. Single video will target maximum around 5 minutes duration. Each video will undergo approval from the project TMT and copyrights analysis.

Based on the project overall progress the scope of each video will be adjusted.

The aim of the first video is to present basic assumptions, goals and partners of the OPENQKD project and with the following goals:

- video not longer than 5 minutes.
- introduction in the form of a presentation of the subject of the project - quantum communication, in particular the Quantum Key Distribution technology. Indicating the key and strategic importance of these technologies and quantum technologies in general. Research advancement and breakthrough solutions
- explanation of basic concepts and physical phenomena
- presentation of project partners (statements) as global leaders in the development of this technology
- showing the project tasks, expected results and what they will bring for the EU, technology and general public.
- introduction to next project video.



### 3. Process and tools prepared for the project videos.

In order to cover large scope and consortium of the project PSNC set up team of PR staff and editors who will stay in contact with the individual project partners and select, prepare suitable material for the project videos. This approach allows for efficient contact between the technical and project promotional teams.

PSNC as the owner and operator of the Polish National Research and Education Network has at its disposal large PR team with TV production studio (used for creating video, TV auditions and live transmissions). The studio has full set of software and hardware tools required to prepare professional audio-video material along with special effects and animations. PSNC participates in number of projects related to new media technologies and services. This new solutions are planned to be used in the project videos and overall dissemination activities and further highlight importance of new quantum technologies.

PSNC has developed and plans to use in the OPENQKD project the Interactive scientific HD TV platform – deployed in PIONIER network (Polish national Research and Education Network). It includes the following infrastructure:

- 6x Production Studios, 15x Recording Studios, 1x OB-VAN – equipped with HD broadcast quality production infrastructure
- Live / VoD production supported
- Platform deployed in PIONIER network to support content production, broadcast, storage, delivery and presentation
- More than 4500 assets (1700h / 28 TB) in repository and still growing
- 145 servers deployed
- Platform developed by PSNC
- In-house TV production teams

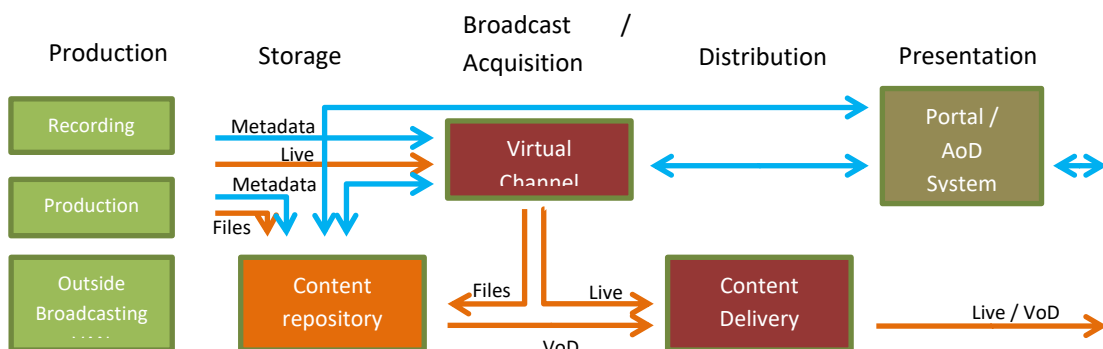


Figure 1 PSNC PLATON TV diagram.

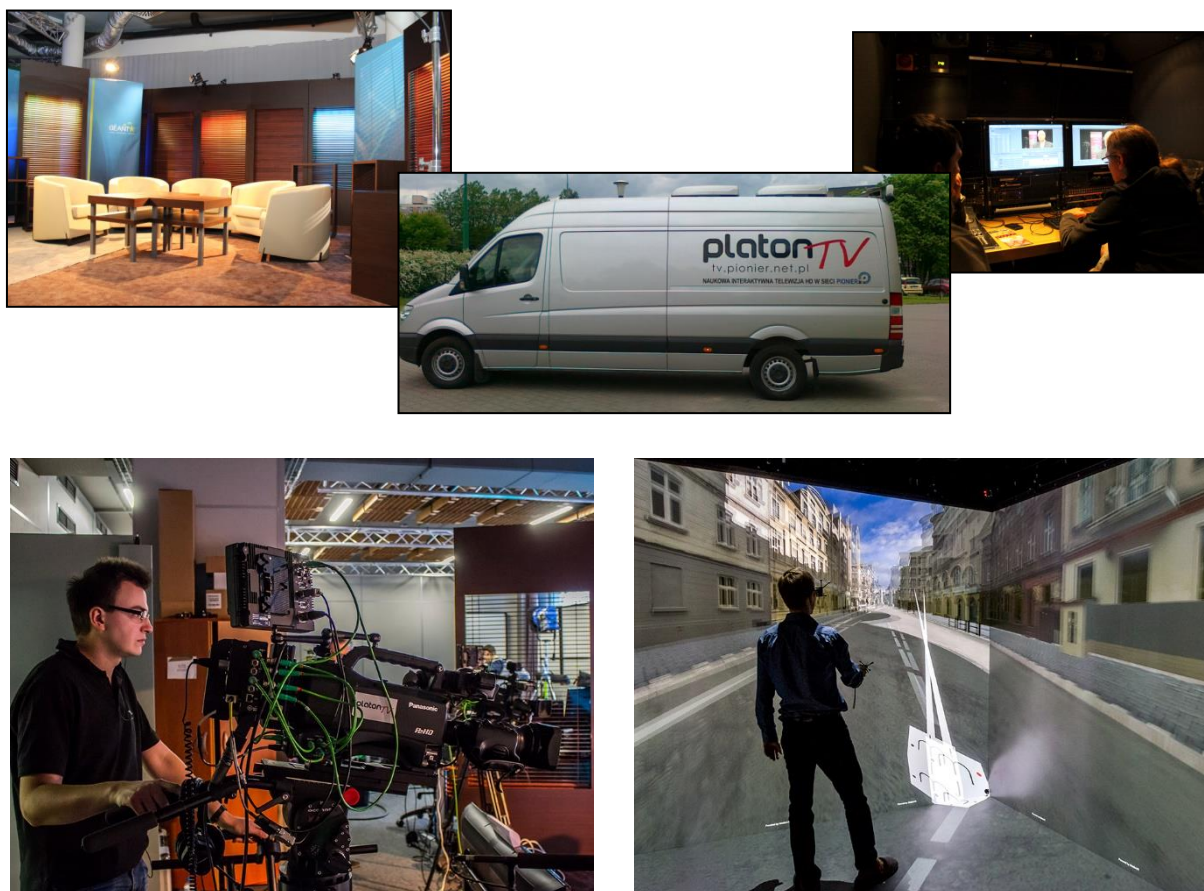


Figure 2 PSNC PLATON TV infrastructure.

## 4. Initial project video.

The introductory OPENQKD project video presents the basic project information and will be distributed using the project social media channels and promotional events. The video was prepared and edited by PSNC with support from the project partners.

Permanent hyperlink to the source file: <https://box.psnc.pl/f/9ea873fac0/>

The script for the voiceover in the video:

*“Quantum communication has the potential to protect the EU's sensitive data and digital infrastructure for years to come. A test quantum communication infrastructure will be set up in several European countries. Launched by the EU-funded OPENQKD project, its activities will take place in Austria, Czech Republic, France, Germany, Greece Italy, Netherlands, Poland, Spain, Switzerland and the UK. It will boost the security of critical applications in various fields – from telecommunications to electricity supply and healthcare.*

*OPENQKD brings together a multidisciplinary team of the leading European telecommunication equipment manufacturers, end-users and critical infrastructure providers, network operators, QKD equipment providers, digital security professionals and scientists from 13 countries to reinforce Europe's position at the forefront of quantum communication capabilities globally. The project will create an open QKD testbed to promote network functionality and use-cases to potential end-users and relevant stakeholders from research and industry. Over 40 use-case trials have already been determined and will be complimented by open calls for funding third parties.*

*OPENQKD will develop an innovation ecosystem and training ground as well as helping to grow the technology and solution supply chains for quantum communication technologies and services. In preparation for not only managing a central QKD testbed in Vienna but as precursor to managing a pan-European network, we will incorporate testbeds in Cambridge, Madrid and Poznan, along with specific use-case-driven test sites, and develop a virtual network of these islands of security as an interim substitute for a QKD backbone, bringing these distant networks together. OPENQKD will deploy over 40 QKD systems current and next generation with standardized hardware and software interfaces for network devices and protocols on over 1000kms of fiber links, as well as testing compatibility with satellite-based schemes.*

*The OPENQKD network will be used to demonstrate the transparent integration of quantum-safe technologies and solutions broadly across the European digital landscape as well as advancing initiatives for the standardization and certification of QKD-enabled technologies. The work in the OPENQKD testbed should lay the foundations for rolling out a pan-European quantum-safe digital infrastructure, with a solid basis to educate and lead a quantum-aware workforce and with European industry leaders already engaged.”*

## 5. Summary.

The document described the assumptions and process used for preparing the project videos. This material will play important role in the overall dissemination and exploitation activities and complement these activities. Project consortium will prepare series of videos targeted at different aspect of the projects and engages all partners and use cases planned under the project. Due to the COVID-19 situation all dissemination and exploitation activities have been severely impacted and especially the opportunity to record events and engage number of participants. However a number of remote collaboration tools have been used to limit this disadvantage.