

Title: QKD key delivery API and its applications

Abstract:

We develop an API to deliver keys to any applications where these keys are generated by QKD technology or shared over QKD networks, and the API specification has been standardized in ETSI ISG-QKD. The API uses REST architecture, the standard and popular technology in Web and IoT area, and is simple, lightweight, flexible, and scalable. Integrating the API with QKD technology could encourage new entrants/developers into QKD market and promote new applications of QKD. We show how the API works and its practical applications / field trials.