

PURCHASE AGREEMENT

QKD DEVICES FOR BACKBONE NETWORK CZQCI

On the day, month and year specified below, the contractual parties:

CyberSecurity Hub, z. ú.

Registered office: Šumavská 416, 602 00 Brno

ID No.: 09705163 Tax ID No.: CZ09705163

Represented by: Roman Čermák, M.Sc., MBA – Director

entry in the Commercial Register: U 301 at the Regional Court in Brno

(hereinafter referred to as the "Purchaser")

and

Toshiba Europe Limited Company name:

Registered office: 1 Pine Trees, Chertsey Road, Staines Upon Thames,

TW18 3DU, United Kingdom of Great Britain and Northern

Ireland

registered in the Register: Companies House, England and Wales

ID No.: 02519556 Tax ID No.: GB711518366 Represented by: **XXXXX** Represented in technical matters by: **XXXXX**

Tel.: XXXXX e-mail: XXXXX

Account IBAN: GB96BARC200000063643247

(hereinafter referred to as the "Seller")

concluded, in accordance with Section 2079 et seq. of the Act No. 89/2012 Coll., Civil Code, as amended (hereinafter referred to as the "CC")

this

Purchase Agreement

(hereinafter referred to as the "Agreement")

PREAMBLE

- 1. The Seller is the economic operator selected to provide delivery under the public contract titled "QKD devices for backbone network CZQCI" (hereinafter referred to as the "Public Contract"), awarded by the Purchaser, in an Open Procedure, pursuant to Section 56 of the Act No. 134/2016 Coll., on Public Procurement, as amended (hereinafter referred to as the "PPA").
- 2. The public contract is financed by the European Union under the Digitální Evropa (Digital Europe). Project: Czech National Quantum Communication Infrastructure

Project number: 101091684

Call: DIGITAL-2021-QCI-01 (EU Secure Quantum Communication Infrastructure) Topic: DIGITAL-2021-

QCI-01-DEPLOY-NATIONAL







I. Subject-matter of the Agreement

- 1. The Seller undertakes to deliver to the Purchaser, under the terms of this Agreement, 14 pairs of QKD devices (hereinafter referred to as the "Equipment") and to transfer ownership of the Equipment to the Purchaser. The Equipment is specified in detail in the Procurement Documents, the Seller's submitted tender and the specification of the Equipment stated in Appendix No. 1 to this Agreement.
- 2. The Purchaser guarantees to take delivery of 10 pairs of QKD devices (in accordance with the parties' commitments in this Purchase Agreement), the remaining 4 pairs of QKD devices will be delivered by the Seller only upon request. The Purchaser is not obliged to take delivery of these 4 pairs of QKDs and pay the purchase price for them. The Purchaser is only entitled to take delivery of part of these 4 pairs of QKDs. The Seller's obligation to deliver these 4 pairs of QKDs on call shall be valid for 6 months from the effective date of this Purchase Agreement.
- 3. The Equipment must be new, unused, fully functional, unrenovated, complete, not lent, not leased, not having any other legal defects, and not infringing upon the rights of third parties under patent or other forms of intellectual property, and must comply with the specification presented in Appendix 1 to this Agreement, such that the it can be fully utilised.
- 4. Furthermore, the subject-matter of performance under this Agreement includes:
 - a) all components necessary for the operation and use of the Equipment;
 - b) licenses for the software supplied;
 - c) transport of the Equipment to the place of performance;
 - d) technical documentation for the Equipment;
 - e) user manuals and conditions for the operation and service of the Equipment, in Czech or English (manuals);
 - f) removal and liquidation of any waste or materials used in connection with the performance provided hereunder in line with Act No. 185/2001 Coll. on Waste, as amended.
- 5. The Seller undertakes to provide the Purchaser with a free consultation for the subsequent operation of the Equipment in the form of e.g. help desk, e-mail, or by telephone with a maximum response time of 2 working days, throughout the warranty period.
- 6. The Seller is obligated to meet during realization of the subject of this agreement all effective technical standards and ecologic requirements and it will use environment friendly packaging materials.

II. Purchase price and payment conditions

- 1. The total purchase price of the Equipment (for 14 pairs of QKD devices) is: EUR 2.582.738,-.
 - The purchase price of 1 pair of QKD device is: EUR 184.481,30 excluding VAT.
- 2. The price stated in Article II (1) of this Agreement, represents the maximum acceptable and non-negotiable price. VAT will be added to his price pursuant to the currently valid legal regulations (in case of Czech Seller). If the Seller is a foreign entity, VAT will be paid directly by the Purchaser.
- 3. The Seller guarantees that the price agreed includes all of its costs entailed by the performance of duties stipulated by this Agreement (e.g., the cost of customs clearance of the Equipment for the export from the country of the manufacturer or the Seller, the costs of packaging, storage, transport, and insurance of the Equipment for the transport to the place of performance, unloading of the Equipment in the place of performance, handling equipment, approval process, required testing, supplying the declaration of qualities, certificates, attestations, transfer of ownership, on-site staff training, etc.).

- 4. The Purchaser will pay the purchase price by means of a bank transfer to the bank account of the Seller, based on a tax document (invoice) issued by the Seller after proper handover and acceptance of the fully functional Equipment, on the basis of an acceptance protocol. The Seller will deliver the tax document to the Purchaser within 5 days after the acceptance of the Equipment.
- 5. The invoices must be issued in EUR and at a value corresponding to the purchase price stated in Article II (1) of this Agreement. The invoice shall be due within 30 calendar days. The Purchaser's obligation to pay the purchase price agreed shall be fulfilled on the date that the invoiced amount is deducted from the Purchaser's bank account.
- 6. In addition to the particulars stated in Section 29 of the Act No. 235/2004 Coll., on Value Added Tax, as amended, the invoice must contain:
 - a) ID No. of the Purchaser and the Seller;
 - b) due date:
 - c) designation of the Seller's bank and number of the account to which the payment is to be made, constant and variable symbols;
 - d) indication of the accounting document and its serial number;
 - e) reference to this Agreement:
 - f) name and registration number of the project;
 - g) stamp and signature of the persons authorized to issue final accounting documents.
- 7. Should the invoice contain any incorrect or incomplete data or lack the required appended documents as stated above, the Purchaser is entitled to return it to the Seller before its due date without risk of being in default. The Seller must correct the returned invoice or issue a new, faultless one. In such cases, a new payment period will run for the Purchaser, in accordance with paragraph 5 of this Article, starting from the delivery date of the corrected or newly issued invoice.

III. Place and period of the performance

- 1. The Seller is obliged to deliver the Equipment this way:
 - 7 QKD pairs shall be delivered no later than 4 months after the effective date of this Agreement;
 - 3 QKD pairs shall be delivered no later than 6 months after the effective date of this Agreement and
 - the rest of QKD pairs as stated in article I./2. shall be delivered no later than 6 months after the call
- 2. The Seller is obliged to come to an agreement with the Purchaser, at least 5 business days in advance in writing (by e-mail) about the date for delivery of the Equipment to the place of performance.
- 3. The place of performance (hand-over and acceptance of the Equipment): Registered office of the Seller: Šumavská 416, 602 00 Brno.
- 4. The Equipment is deemed to have been delivered after the approval of the acceptance protocol between the Seller and the Purchaser.
 - The person authorized to approval the acceptance protocol shall be the person representing the Purchaser and Seller in technical matters or his/her authorized representative.
- 5. The Purchaser shall not be obliged to accept the delivery of the Equipment if there are defects or unfinished work, regardless of the fact that these may not, in and of themselves or in connection with others, prevent due use of the Equipment. If the Purchaser fails to exercise its right to not accept the Equipment with minor defects or unfinished work, the Purchaser and the Seller shall draw up a list of such defects or unfinished work in the acceptance protocol, including the manner and timeline for their remedy. Should the Purchaser and the Seller fail to agree in the acceptance protocol on a timeline for the removal of defect or completion of unfinished work, all such defects or unfinished work shall be removed / remedied within 30 days from the handover date.

- 6. In the acceptance protocol, the Seller shall state the following information:
 - a) designation of the contractual parties;
 - b) designation of the Equipment (serial number, model) and its quantity;
 - c) the start and end dates of the warranty period;
 - d) the Purchaser's declaration of acceptance or non-acceptance;
 - e) a description of possible defects or unfinished work and agreement on the date and method of their removal:
 - f) list of documentation submitted;
 - g) legible names of persons representing the Seller and the Purchaser.

IV. Cooperation between the parties

- The contractual parties shall make every effort to create the necessary conditions for the implementation of the subject matter of this Agreement, in correspondence to their contractual status. This shall also apply in cases where this is not expressly laid down in the individual provisions of this Agreement.
- 2. If any of the contractual parties is aware of circumstances preventing it from complying with its contractual obligations, it shall immediately inform the other contractual party thereof in writing. The contractual parties undertake to, without delay and insofar as possible, remove the circumstances preventing them from fulfilling their contractual obligations. If the circumstances are not remedied, the other contractual party shall be entitled to request the fulfilment of the obligation by a substitute date, which shall be determined taking into account the nature of the matter.
- 3. The Seller will be a person obliged to cooperate in the performance of financial control, in accordance with Section 2 (e) of the Act No. 320/2001 Coll., on Financial Control and on Amending Certain Acts. At the same time, the Seller undertakes to the archive all written documents relating to the fulfilment of the subject of the purchase under this Agreement. The Purchaser is further obliged to provide all information required, document its activity, provide all documentation related to the project, and allow authorized persons to enter their premises and land to verify the conditions of performance of the subject of purchase under this Agreement. The above cooperation will also be provided by the Seller in the case of a check by the provider of institutional support.
- 4. The Seller is obliged to meet all the qualification requirements directly related to the implementation of this Agreement, throughout the entire duration of the Agreement, which were documented in the procurement procedure specified in the Preamble of this Agreement. The Seller is required to present proof of compliance with the above qualification requirements within 15 calendar days of the date of delivery of a written invitation of the Purchaser.
- 5. The Seller is obliged to ensure that the performance of the purchase contract does not violate the legal regulations and decisions governing international sanctions by which the Czech Republic or the buyer is bound. The Seller is obliged to immediately inform the buyer of the facts relevant for the assessment of the fulfilment of the duties referred to in the first sentence of this paragraph of the contract. The buyer is entitled to withdraw from this contract if it finds out that in the course of its implementation the Seller or the Seller's controlling entities are subject, directly or indirectly, to international sanctions under the relevant legal regulations and decisions by which the Czech Republic or the buyer is bound. If such sanctions affect any person used by the Seller to perform the contract, including its subcontractors, the Seller shall notify the Buyer of such fact no later than the next business day after becoming aware of it and shall remedy and replace such person within fourteen days of the Buyer's notice, failing which the buyer shall be entitled to withdraw from the contract.
- 6. The Seller must enable and ensure the identification of the final beneficiaries of the funds paid from the aid (including subcontractors) together with the amount of payment and supporting documentation, to the extent provided for in Article 22(d) of Regulation (EU) 2021/241, by the grant provider and for subsequent additional other controls. The Seller will allow the grant provider the same rights of control over its participation in the project as the grant provider has regarding a purchaser, guaranteeing compliance with

the terms and conditions for the provision of the aid. In addition, all documents and contract documents must be secured against loss, theft and impairment

V. Contractual warranty

- 1. The Seller is responsible for defects found in the Equipment at the time of delivery, any defects found between the delivery of the Equipment to the Purchaser and the beginning of the warranty period, and the defects found during the warranty period. The warranty period does not run for as long as the Purchaser cannot use the equipment due to defects for which the Seller is responsible. The Seller provides the Purchaser with a guarantee of quality and parameters of the Equipment that correspond to the subject matter and purpose of this Agreement for a period from the effective date of this Agreement until August 31 2027.
- 2. The warranty period begins to run on the day of signing of the acceptance protocol concerning the acceptance of fully functional, flawless Equipment, by the Purchaser. If the Equipment is accepted by the Purchaser with at least one defect or incompletion, the warranty period begins to run when the last defect has been removed out or outstanding work completed.
- 3. The Purchaser is obliged to lodge its claims concerning defects detected in the Equipment ("Claim" or "Notification of Claim") in writing (by e-mail) with the Seller, without undue delay after they are detected. The Purchaser shall describe the defects in the claim and also state its requirements, including the term for the removal of the defects by the Seller; provided that the claim is legitimate, it is entitled to:
 - a) if the defects are immaterial (Section 2107 CC), the Purchaser is entitled to the delivery of the missing Equipment, the removal of other defects in the Equipment, or a discount from the purchase price;
 - b) if the defects are material (Section 2106 CC), the Purchaser is entitled to demand the removal of the defects by supplying a new flawless item or by supplying the missing item, to request the removal of defects by repairs of the Equipment, if the defects are repairable, to demand a reasonable discount from the purchase price, or to withdraw from the Agreement.
- 4. The Seller is obliged to confirm to the Purchaser the receipt of the claim, within 5 working days after receiving it, in writing (by e-mail) and then initiate a "fault diagnosis". Each defect has to be always solved by 60 calendar days. If the defect is not solved in 30 calendar days the Seller must lend and deliver temporary replacement equipment free of charge.
 - 4.1. The Seller is required to assign to the Purchaser a qualified service technician authorized to carry out repairs to the delivered Equipment.
 - 4.2. If the service technician fails to remove the claimed defect, the Seller undertakes to investigate the claim, notify the Purchaser whether it acknowledges the claim, and agree on the deadline for remedying the defect, only in writing.
 - 4.3. If, during this period, the Seller fails to deliver a written statement to the Purchaser about the claimed defect, the Seller is deemed to have acknowledged the claim in its entirety. Even claims submitted by the Purchaser on the last day of the warranty period are deemed to have been lodged in time.
- 5. The manner by which the claim is resolved shall be determined by the Purchaser.
- 6. The warranty period is automatically extended by the number of days elapsed from the report of the defect to the signature of the defect removal protocol.
- 7. The Seller undertakes not to charge travel or other costs associated with the claim during the warranty period.
- 8. In addition, the Seller undertakes to provide technical support and/or basic diagnoses of failures by telephone or e-mail, and any verification of solutions with the Purchaser by phone or e-mail will be

provided free of charge (the price is included in the Purchase price) from the delivery of the Equipment until August 31, 2027. The demand shall be addressed always within 2 working days after receipt of the demand. The technical support provided to the Purchaser by phone or email will also be provided free of charge.

- 9. If the Seller fails to remedy the defects claimed within the period referred to in this Article, or if it notifies before the expiry of the period that it shall not remove the defects, the Purchaser shall be entitled to assign the repair to a third party. In this case, the Purchaser may claim from the Seller payment of the amount the Purchaser pays to the third party as a result of proceeding thus. The Purchaser's claim to a contractual penalty from the Seller shall not be extinguished in this case.
- 10. The rights and obligations arising from the warranty do not expire, either in respect of the Purchaser of Equipment subject to transfer or in the case of the withdrawal of one of the parties from the Agreement. Claims for liability for defects do not prejudice claims for damages or contractual penalties.

VI. Acquisition of Ownership, transfer of risk

1. Ownership of the Equipment shall pass from the Seller to the Purchaser upon the acceptance of fully functional, faultless Equipment. The risk of damage to the Equipment will pass to the Purchaser at the time of the acquisition of ownership of the Equipment.

VII. Contractual penalties and default interest

- If the Seller is in default on the delivery of Equipment at the agreed time, under Article III (1) of this
 Agreement, the Purchaser is entitled to require that the Seller pay a contractual penalty of 0.05 %
 of the total purchase price of the Equipment, exclusive of VAT, for each day of default or part
 thereof, until full performance of the obligation.
- 2. If the Seller is in default on compliance with the time limit for the commencement of the removal of defects set in this Agreement, it shall pay to the Seller a contractual penalty of CZK 800 for each day of default or part thereof, until full performance of the obligation.
- If the Seller fails to adhere to the time limit for the removal of defects set in this Agreement, it shall
 pay to the Seller a contractual penalty of CZK 800 for each day of default or part thereof, until full
 performance of the obligation.
- 4. In the event of non-compliance with the due date of invoices issued by the Seller, the Seller is entitled to claim default interest from the Purchaser, in the amount of 0.01 % of the outstanding amount (exclusive of VAT) for each day of default, or part thereof, on the payment of the invoice.
- 5. The right to invoice and collect a contractual penalty and default interest arises for the Purchaser on the first day after the expiry of the period specified for performance, and for the Seller on the first day following the expiry of the invoice maturity.
- 6. Contractual penalties and default interest are payable within 14 calendar days from the date of the delivery of the written notice by which they are claimed.
- 7. The contractual parties have agreed that the payment of a contractual penalty shall be without prejudice to the right to compensation for the full amount of financial or non-financial damage incurred, i.e., including the amount in excess of the contractual penalty invoiced or paid, and it is also without prejudice to the proper performance of the obligations under this Agreement.
- 8. The Purchaser is entitled to set off the contractual penalty against the amount invoiced by the Seller, and the contact person of the Purchaser shall inform the contact person of the Seller electronically (by e-mail) about the amount of the contractual penalty. By signing this Agreement, the Seller consents to such a procedure.

VIII. Termination of obligations

The contractual obligations of the contractual parties shall expire by:

- 1. Performance
- 2. Written agreement of the contractual parties in the form of an addendum

3. Withdrawal from the Agreement

Either contractual party may withdraw from the Agreement if the other party materially breaches its contractual obligations despite having been notified of this in a demonstrable manner (by registered letter).

If the entitled contractual party sets a substitute (additional) period for the other party to fulfil its obligation, the right to withdraw from the Agreement shall arise only after the expiry of that period in vain. This does not apply if the other party states within this period that it will not fulfil its obligation. In that case, the entitled contractual party may withdraw from the Agreement even before the expiry of the additional performance period, upon receipt of the declaration of the other contractual party.

The Purchaser is also entitled to withdraw from the Agreement without prior written notice:

- a) if the Seller is in default on the delivery of the Equipment for more than 30 calendar days; and/or
- b) if it is determined that the parameters of the Equipment do not correspond to the requirements of the Purchaser specified in the Procurement Documents or the Seller's tender; and/or
- c) if it is determined that the Equipment that is the subject of performance is not new, is used, pledged, borrowed, leased or otherwise legally defective, and infringes on the rights of third parties under a patent or other form of intellectual property; and/or
- d) where the Seller indicated in its tender submitted for the Public Contract specified in the Preamble of this Agreement information or documents which do not correspond to the facts and if this had or could have had an effect on the outcome of the procurement procedure; and
- e) if insolvency proceedings are commenced pursuant to the Act No. 182/2006 Coll., on Bankruptcy and Methods of Its Resolution, as amended, the subject of which will be the bankruptcy or impending bankruptcy of the Seller, the Seller is obliged to inform the Purchaser of this fact without delay, no later than 7 calendar days from the day of initiation of the proceedings; and/or
- f) in the event that the origin of the Equipment and Equipment technology is proven to be from manufacturers from People's Republic of China, Russian Federation, Islamic Republic of Iran or Democratic People's Republic of Korea. The Purchaser will also be entitled to withdraw from this Agreement if the Equipment manufacturer is under the decisive influence (decisive control) of entities from the above mentioned countries.

Withdrawal from this Agreement shall be in writing and shall take effect on the date of the delivery of this written notice to the other party.

In the event of withdrawal from of this Agreement, the contractual parties shall settle their mutual obligations and receivables set out by law or in this Agreement, within 30 calendar days of the legal effects of the withdrawal or within an agreed period.

Termination of this Agreement by withdrawal from the Agreement or by another manner shall be without prejudice to the right to contractual penalties and compensation for damages and to other obligations, which by their nature survive the termination of this Agreement.

4. Termination of the Agreement

With the termination or expiration of the Agreement, all obligations of the contractual parties arising from the Agreement shall cease to exist. Termination or expiration of the Agreement shall not extinguish claims to compensation of damages, the payment of contractual penalties agreed in the case of breach of contractual obligations, and those obligations of the contractual parties which survive by virtue of the Agreement, their nature, or statutory provision.

IX. Concluding provisions

- In matters not explicitly addressed in this Agreement, the rights and obligations of the contractual
 parties shall be governed by the relevant provisions of generally binding legal regulations in force in
 the Czech Republic, in particular the CC and other legal provisions related to the subject matter of
 this Agreement.
- 2. Changes or amendments to this Agreement can only be made in the form of written amendments which are agreed by both parties, are numbered in an ascending order, and which shall become integral parts of the Agreement.
- 3. All text documents submitted by the Seller to the Purchaser in the performance of this Agreement must be submitted in Czech or English.
- 4. The Seller is not entitled to assign a claim arising from this Agreement to a third party without the prior written consent of the Purchaser.
- 5. Any disputes which the contractual parties are unable to resolve through amicable settlement will be settled by the court having subject-matter and local jurisdiction in relation to the Purchaser.
- 6. This Agreement is made out in one counterpart in electronic form.
- 7. If, for any reason, any provision of this Agreement is found to be invalid, that fact will not invalidate the entire Agreement. In such a case, the contractual parties are obliged to replace the invalid clause with a new valid one that will accord with the meaning and purpose of this Agreement.
- 8. This Agreement shall enter into force on the date of its signature by the last contractual party and take effect on the date of its publication in the Register of Contracts.
- 9. The contractual parties explicitly agree to the publication of this Agreement in the profile of the Contracting Authority (The Purchaser) according to PPA and in the Contract Repository in accordance with the Act No. 340/2015 Coll., on Special Conditions for the Effectiveness of Certain Contracts, the Public Disclosure of These Contracts.
- 10. The Purchaser undertakes to ensure the publication of the Agreement through a Contract Repository in accordance with the Act on a Contract Repository.
- 11. The contractual parties declare that they have read this Agreement, and that it has been negotiated after mutual deliberation, according to their free will, certainly, seriously, and comprehensibly, in witness whereof the authorized representatives of the contractual parties affix their signatures.
- 12. The following appendices form an integral part of this Agreement:

Annex No. 1: Technical Specification

(signed electronically) for the Purchaser Roman Čermák, M.Sc., MBA Director (signed electronically)
for the Seller
XXXXX
XXXXX

Annex No. 1 to the Agreement - Technical Specification

QKD device specifications			
Parameters	Required values	Offered values (to be completed by the participant)	
Maximum optical fiber attenuation in dB at which the device can generate 1kbit of key per second	minimum 20dB	33dB	
Supported standards	ETSI 014 for communication with KMS	meets	
Dimensions (rack)	can be mounted in a 19 inch rack, rack depth max. 80 cm	meets	
Power	220V or -48V ¹	meets	
Requirements for the surrounding environment	Working temperature 10-35 °C	meets	
Maximum number of positions in the rack	Maximum 3	meets	
QKD protocol	BB84 or DV entanglement-based protocol with safety demonstrated, for example, by documented safety analyses published in scientifically impacted journals	Toshiba T12 protocol (efficient BB84 protocol with decoy states and phase encoding) Full technical details explaining the theoretical security proof and calculation of key lengths from physical measurements etc can be found at: https://arxiv.org/abs/1310.0240	
Remote network configuration	The device allows remote network configuration	meets	
Number of dark fibers	1 to 2	2	
DWDM channels	If the device requires 2 dark fibers, it will not require DWDM channels; with 1 dark fiber, the device may require DWDM channels	meets	

¹ Note: The contracting authority prefers -48V without affecting the evaluation of the tender







Wavelength of quantum	Quantum communication takes	meets
communication	place in the C-band	

The economic operator is obliged to attach his own technical specification or his own description of the equipment to the technical specification given in this table.

In case the contracting authority is unclear as to whether the required technical parameters of the device are met, it will require the participant to provide technical data sheets etc., i.e. documents proving that the technical requirements are met.