Financováno Evropskou unií
NextGenerationEU

NÁRODNÍ PLÁN OBNOVY

Annex No. 6 to the Procurement Documents

Technical parameters and evaluation for public contract "A DISCRETE VARIABLE QUANTUM KEY DISTRIBUTION SYSTEM"

A) MINIMUM TECHNICAL REQUIREMENTS OF THE CONTRACTING AUTHORITY

		Participants will supplement the specific values offered for the technical parameters or if no specific values are requested, indicate YES/NO	Control of technical parameters by the evaluation committee
The subject of delivery must work with encoding into discrete variables and must meet the following basic technical requirements:			
1.	Prepare & measure with BB84 protocol	**YES**	
2.	quantum channel for fiber communication in the C band region (near 1550 nm);	**YES**	
3.	the following information must be submitted as part of the offer:		
	- repetition frequency of the laser;	**80MHz**	
	- typical/guaranteed efficiency of detectors;	**20%**	

	- number of detector dark counts	**DCR<500 per detector**	
	- dead time of detectors;	**15-40 Micro sec – it is configurable**	
	- what RNG is used:	**QRNG Integrated Circuit**	
	- typical error rate (QBER)	**1.5%**	
	- the extent of compatibility with other cryptographic devices (e.g. ETSI QKD 014), which standards the device meets;	**YES ETSI 014, Cisco SKIP**	
	- used connectors for optical and electrical interfaces;	**YES LC/PC, RJ45**	

B) The quality of the performance offered for evaluation purposes

Č.	**Parameter**	**Criterion type**	**Parameter offered by Participant**	the number of points assigned by the evaluation committee
1.	Possibility to preview the optical part	c	**YES**	
2.	The possibility of connecting external detectors	c	**NO**	
3.	Software Libraries: software libraries for system control, coincidence measurements, error rate estimation, and key sifting with well well-described API interface	c	**YES**	

Č.	**Parameter**	**Criterion type**	**Parameter offered by Participant**	the number of points assigned by the evaluation committee
4.	Data Accessibility: Raw outputs of detectors and sifted key fully accessible to users.	c	**YES**	
5.	Software for monitoring and controlling the entire system	c	**YES**	
6.	Communication Interfaces: Ethernet or USB or other industry standards	c	**YES**	
7.	Compatibility with other cryptographic devices, i.e. support for at least the ETSI QKD 014 standard	c	**YES**	
8.	Error correction and privacy amplification	c	**YES**	
9.	Maximum allowable losses for a secure key rate higher than 10 kbit/s	a	**10dB**	
10.	Faster delivery (min 1 month – max 4 months)	b	**1 month**	
11.	Extended warranty (min 2 years - max 5 years)	a	**2 years**	

* *Column highlighted in green will be filled in by Participant*