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**ERASMUS +**

**HIGHER EDUCATION CAPACITY BUILDING**

**Erasmus+ Project**

**Crisis and Risks Engineering for Transport Services  
(CRENG)**

**Invitation to Tender for Equipment Procurement  
(Ukraine)**

**# CRENG/25.05/2020/UA**

Prepared by:

EXOLAUNCH GmbH

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<https://ecm-academy.de/index.php/en/>

Dear Sir/Madam,

We kindly invite you to submit your **tender for the supply of Equipment to the project partner universities in Ukraine** (see the technical specifications provided in the Part-III of this document) within the framework of the Project “*Crisis and Risks Engineering for Transport Services*”- (CRENG), co-funded by the **ERASMUS+ Programme of the European Union**.

When preparing your tender, please be guided by this invitation to tender.

Tenders should be submitted in English **by email** to [info@ecm-academy.de](mailto:info@ecm-academy.de) not later than **Monday, June 22, 2020, at 17:00** (Berlin local time).

We kindly ask you to ensure that the tender is **signed, stamped, and in the PDF format**. An acknowledgement of receipt will be sent to you accordingly.

In all cases, please add the below reference: # CRENG/25.05/2020/UA “Invitation to Tender for Equipment Procurement (Ukraine)”.

*For any additional information, please, contact us **only** by email.*

Sincerely yours,

EXOLAUNCH GmbH

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## **Part I - Project Description**

### **1.1. About CRENG**

The “Crisis and Risks Engineering for Transport Services” – CRENG (project reference number 598218-EPP-1-2018-1-PL-EPPKA2-CBHE-JP) is a three-year duration multi-country joint project co-funded by the Erasmus+ Capacity Building in the Field of Higher Education Programme of the European Union (EU) launched in 2018. The aim of the project is to support the development of Crisis and Risks Engineering for transport services (CRENG) to ensure sustainability of Ukraine (UA), Azerbaijan (AZ) and Turkmenistan (TM) transport systems for their integration into Global transportation network. The project will create the environment for education of high skilled specialists in line with labor market and according to EU best practices and Bologna process.

These goals will be achieved through fulfilment of the following specific objectives:

1. Development, implementation and accreditation of new practice oriented, student-focused MA program “CRENG” including innovative teaching and learning approaches and ECTS in UA, AZ and TM;
2. Provision of the Higher education institutions (HEIs) in UA, AZ and TM closer to labor market in CRENG area;
3. Increase of the collaboration between EU and UA, AZ and TM HEIs in CRENG area.

### **1.2. CRENG Partners – Project Consortium**

The following institutions (P) from Partner and European countries are involved in the project consortium:

- P1 Warsaw University of Technology (WTU), Warsaw/ Poland
- P2 Technische Universität Berlin (TUB), Berlin/Germany
- P3 Université polytechnique des Hauts-de-France (UPHF), Hauts-de-France/France
- P4 EXOLAUNCH GmbH (formerly known as ECM space technologies GmbH) (EXO), Berlin/Germany
- P5 Pryazovskyi State Technical University (PSTU), Mariupol/Ukraine
- P6 Dnipropetrovsk National University of Railway Transport named after Academician V. Lazaryan (DNURT), Dnipopetrovsk/ Ukraine
- P7 State University of Infrastructure and Technologies (SUIT), Kyiv/Ukraine
- P8 Baku Engineering University (BEU), Baku/Azerbaijan
- P9 Azerbaijan Technical University (AZTU), Baku/Azerbaijan
- P10 Azerbaijan Technological University (UTECA), Ganja/Azerbaijan
- P11 Turkmen State Institute of Transport and Communications (ITITT), Ashgabat/Turkmenistan
- P12 International University for the Humanities and Development (IUHD), Ashgabat/Turkmenistan
- P13 Turkmen State Architecture and Construction University (TSACI) Ashgabat/Turkmenistan

### **1.3. Disclaimer**

*"This project has been funded with support from the European Commission. This document reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein".*

## **Part II – Tender Specifications**

### **2.1. Object of the Tender**

EXOLAUNCH GmbH (Reuchlin Str. 10, 10553 Berlin, Germany) announces a tender for the procurement of the equipment to the project partners universities in Ukraine (UA) (see 2.8), within the technical specifications provided in the Part-III of this document.

This document represents an invitation to tender for the supply of computer, multimedia, audio & video and other equipment as part of CRENG Project co-funded by the ERASMUS+ Programme of the European Union.

This invitation to tender is in no way binding on the contracting authority. The contracting authority's contractual obligation commences only upon the signature of the contract with the successful tenderer.

### **2.2. Special Conditions**

1. According to the agreements between EU and the mentioned above project partner countries, all equipment purchased and any provision of services within the framework of Erasmus+ projects is exempted from taxes (including Value Added Tax (VAT)), duties and charges. An appropriate Certificate for the VAT exemption will be provided by the project partners universities – recipients of the equipment (see 2.8).
2. VAT is not considered as an eligible project cost, the commercial offer and later an invoice must not include VAT (“Erasmus+ Programme Guide” of Grant Agreement).
3. In order to be eligible for exemption from the abovementioned taxes (including VAT), duties and charges the equipment procured within this tender should be delivered as CIP Incoterms, as well the seller clears the goods for export and is responsible for delivery of these goods at an agreed place of shipment. (e.g. customs warehouse).
4. The manufacturer brand of all PC items must be a company that is listed in the rating from Gartner or/and IDC.
5. Certification requirement: ISO 9001 certification of the manufacturer; CE Mark.
6. All participants of a tender procedure agree to provide after the tender MAF (manufacturer authorization form) on Workstation, AIO and Desktop PC with the name of the project and the competition number to confirm warranty service in the country of delivery. Equipment supplied must have service centers in the country of delivery.
7. It is necessary to provide together with commercial offer links to the sites or datasheets of the manufacturers of all items.

### **2.3. Currency and Language of the Tender**

The tenders shall be presented in EURO for both the unit prices and the overall amount of the commitment. The currency of payment will be also in EURO. The tenders shall be presented in English.

### **2.4. Submission of the Tenders: Means and Deadline**

Tenders should be submitted in English by email to [info@ecm-academy.de](mailto:info@ecm-academy.de) not later than **Monday, June 22, 2020, at 17:00** (Berlin local time). No offers may be submitted or modified after this date.

We kindly ask you to ensure that the tender is signed, stamped and in the PDF format. An acknowledgement of receipt will be sent to you accordingly.

In all cases, please add the below reference:

# CRENG/25.05/2020/UA “Invitation to Tender for Equipment Procurement (Ukraine)”.

### **2.5. Documents to Be Submitted by the Tenderer**

The tenderer must complete all annexes and provide all information.

Additional documents such as instructions and operating manuals shall be required with the delivery of equipment.

All necessary supporting documents and international certificates required in the country of destination for customs clearance must be provided.

### **2.6. Deadline for Engagement**

Tenderers shall remain bound by their tenders for a period of thirty (30) days from the closing date for submission on **Monday, June 22, 2020, at 17:00** (Berlin local time).

### **2.7. Subcontracting**

It is prohibited for the tenderers to subcontract parts of the tender to third parties.

### **2.8. Terms of delivery**

Term of delivery is customs control point airport in Kyiv (CIP), if possible by means of door to door transportation.

The full addresses and contact details of the responsible persons in partner universities will be provided after the signature of the contract with the selected supplier.

The following 3 (three) universities are involved in this call for tender as the recipients of goods:

No	Partner	Acronym	Location
P5	Pryazovskyi State Technical University	PSTU	UA/Mariupol
P6	Dnipropetrovsk National University of Railway Transport named after Academician V. Lazaryan	DNURT	UA/Dnipro
P7	State University of Infrastructure and Technologies	SUIT	UA/Kyiv

## 2.9. Goods Delivery Time

The delivery period may not exceed 60 days from the date of signature of the contract with the selected supplier.

## 2.10. Terms of payment

There is no prepayment. 100% payment should be made only after delivery of the equipment and a final inventory of the equipment at the partner university. Payment will be made within two weeks from the submission of a written confirmation from the partner university with the inventory number in the above-mentioned universities (see 2.8).

## 2.11. Evaluation and Award of the Contract

The key principles that shall govern the process of evaluation of tenders are listed as follows:

- Non-discrimination: Any discrimination with regard to tenderers on the basis of nationality is forbidden.
- Equal treatment: All tenders submitted within the set deadline are to be treated equally. They will be evaluated on the basis of the same terms, conditions and requirements set in the tender documents.
- Transparency: Detailed written records are being kept of all actions of the evaluation panel. All decisions taken will be sufficiently justified and documented. In this way, any discriminatory behaviour can be prevented and if not prevented, then monitored.
- Confidentiality: The process of evaluation of tenders is confidential. Information concerning the process of evaluation of tenders and the award recommendation is not to be disclosed to the tenderers or to any other person who is not officially concerned with the process until information on the award of the contract is communicated to all tenderers.

Exclusion criteria: Tenderers are excluded from participation in procurement procedures if:

- they have submitted a tender that does not meet all the requirements provided in this document, including the ones in clause 2.5.
- they are bankrupt or being wound up, are having their affairs administered by the courts, have entered into an arrangement with creditors, have suspended business activities, are the subject of proceedings concerning those matters, or are in any

analogous situation arising from a similar procedure provided for in national legislation or regulations,

- they have been convicted of an offence concerning their professional conduct by a judgment which has the force of res judicata,
- they have not fulfilled obligations relating to the payment of social security contributions or the payment of taxes in accordance with the national legal provisions,
- they have been the subject of a judgment which has the force of res judicata for fraud, corruption, involvement in a criminal organisation or any other illegal activity.

In the selection process only will be considered the suppliers who would provide delivery of the equipment to all of the above-mentioned universities (see 2.8).

Selection criteria: tenderers will be selected based on the following criteria:

1. Having submitted the tender that complies with all of the specifications, requirements and offers the lowest price, as well as all other evaluation criteria indicated, shall be selected;
2. Having the necessary economic, financial, technical and professional capacity to perform the contract.

Award criteria: the awarded tenderer will be the one who offered the best quality and price tender out of those submitted by tenderers which are not excluded and which meet the selection criteria.

The awarded tenderer should:

1. Be in full compliance of tender to the tender specifications, bill of quantities and technical specifications;
2. Provided technical information for all the equipment to be supplied.

The contract will be awarded to the tenderer whose tender has been found to be in conformity with the invitation to tender. The award method will be the "best value for money" meaning that the winning tender is the one offering the best quality/price ratio, taking into account the criteria announced in the specifications.

## **2.12. Evaluation Committee**

Tenders will be evaluated by the CRENG Project Tender Evaluation Committee comprising at least 5 (five) members appointed for the purpose.

## **2.13. Questions, Notification of Results**

Participants' questions should be sent no later than 10 days before the deadline for submitting tender proposals by email to [info@ecm-academy.de](mailto:info@ecm-academy.de) with the reference # CRENG/25.05/2020/UA "Invitation to Tender for Equipment Procurement (Ukraine)". Clarifications will be sent within 3 days.

Tenderers will be notified of the results within 10 days from the closing date for submission by email. Thus, it is important to provide the email of the main contact person.



### Part III – Bill of Quantities and Technical Specifications

The following base set (for 1 University) is planned for procurement within this tender (total 3 sets):

<b>The table of equipment required</b>		
<b>#</b>	<b>Required Technical Specifications and Standards</b>	<b>Quantity</b>
<b>#1C</b>	<b>Workstation</b>	<b>1 pcs</b>
1	<b>Form-factor: Desktop tower</b>	
2	<b>CPU not less than Intel i9 9900 (Base Frequency 3.1Ghz, 16Mb Smart Cache)</b>	
3	<b>Motherboard chipset not less than Intel C246</b>	
4	<b>RAM not less than 32GB DDR4 2666Mhz</b>	
5	<b>SSD not less than 512Gb NVMe</b>	
6	<b>HDD not less than 2000Gb SATA</b>	
7	<b>Graphics Card not less than 8Gb Quadro RTX4000</b>	
8	<b>PSU according to configuration, 80 Plus</b>	
9	<b>Keyboard USB with Numpad Eng/Ukrainian (Qwerty)</b>	
10	<b>Mouse USB optical</b>	
11	<b>I/O interfaces:</b> Front panel: - USB 3.1 ports/Type C – not less than 2 - USB 2.0 ports – note less than 2 - Audio jacks: front-side Mic/Headset ports -1 Rear panel: - USB 2.0/3.1 ports – not less than 6 - Audio jacks: Headset port – 1 - Serial port -1 - Video output HDMI/DisplayPort – 3 - LAN-port Gigabit Ethernet (RJ-45) - 1	
12	<b>Internal slots: PCI Express x16 x1, PCI Express x4 x2</b>	
13	<b>Audio: not less than High Definition Audio</b>	
14	<b>Operating System - Windows 10 Professional Ukrainian</b>	
15	<b>All interface cables and connectors must be included</b>	

#2C	<i>Monitor Type-1</i>	<i>1 pcs</i>
1	<b>Diagonal: not less than 27 inches</b>	
2	<b>Panel Type: IPS</b>	
3	<b>Resolution: not less than 2560 x 1140 at 60 Hz</b>	
4	<b>Brightness: not less than 300cd/m2</b>	
5	<b>Connectivity: not less than HDMI x1, Display port x1</b>	
6	<b>Tilt, rotate, swivel, height adjustment capabilities</b>	
7	<b>All interface cables and connectors must be included</b>	
#3C	<i>Personal Computer Type-1</i>	<i>2 pcs</i>
1	<b>Form-factor: Desktop</b>	
2	<b>CPU not less than Intel i7 9700 (Base Frequency 3.0Ghz, 12Mb Smart Cache)</b>	
3	<b>Motherboard chipset not less than Q370/Z370</b>	
4	<b>RAM not less than 16GB DDR4 2666Mhz</b>	
5	<b>SSD not less than 512Gb NVME</b>	
6	<b>HDD not less than 1000Gb SATA</b>	
7	<b>Graphic Card not less than 6Gb GTX1660</b>	
8	<b>PSU according to configuration, 80 Plus</b>	
9	<b>Keyboard USB with Numpad Eng/Ukrainian (Qwerty)</b>	
10	<b>Mouse USB optical</b>	
11	<b>I/O interfaces:</b> Front panel: <ul style="list-style-type: none"> <li>- USB 3.1 ports/Type C – not less than 2</li> <li>- USB 2.0 ports – note less than 2</li> <li>- Audio jacks: front-side Mic/Headset ports -1</li> </ul> Rear panel: <ul style="list-style-type: none"> <li>- USB 2.0/3.1 ports – not less than 6</li> <li>- Audio jacks: Headset port – 1</li> <li>- Serial port -1</li> <li>- Video output HDMI/DisplayPort – 3</li> <li>- LAN-port Gigabit Ethernet (RJ-45) - 1</li> </ul>	

	- USB 2.0/3.1 ports – not less than 6	
12	<b>Internal slots: PCI Express x16, PCI Express x1</b>	
13	<b>Audio: not less than High Definition Audio</b>	
14	<b>Operating System - Windows 10 Professional Ukrainian</b>	
15	<b>All interface cables and connectors must be included</b>	
<b>#4C</b>		
	<i>Personal Computer Type-2</i>	<i>2 pcs</i>
1	<b>Form-factor: Desktop</b>	
2	<b>CPU not less than Intel i5 9500 (Base Frequency 3.0Ghz, 9Mb Smart Cache)</b>	
3	<b>Motherboard chipset not less than Q370/Z370</b>	
4	<b>RAM not less than 8GB DDR4 2666Mhz</b>	
5	<b>SSD not less than 512Gb NVME</b>	
6	<b>Graphic Card not less than 6Gb GTX1660</b>	
7	<b>PSU according to configuration, 80 Plus</b>	
8	<b>Keyboard USB with Numpad Eng/Ukrainian (Qwerty)</b>	
9	<b>Mouse USB optical</b>	
10	<b>I/O interfaces:</b> Front panel: <ul style="list-style-type: none"> <li>- USB 3.1 ports/Type C – not less than 2</li> <li>- USB 2.0 ports – not less than 2</li> <li>- Audio jacks: front-side Mic/Headset ports -1</li> </ul> Rear panel: <ul style="list-style-type: none"> <li>- USB 2.0/3.1 ports – not less than 6</li> <li>- Audio jacks: Headset port – 1</li> <li>- Serial port -1</li> <li>- Video output HDMI/DisplayPort – 3</li> <li>- LAN-port Gigabit Ethernet (RJ-45) - 1</li> <li>- USB 2.0/3.1 ports – not less than 6</li> </ul>	
11	<b>Internal slots: PCI Express x16, PCI Express x1</b>	
12	<b>Audio: not less than High Definition Audio</b>	
13	<b>Operating System - Windows 10 Professional Ukrainian</b>	

14	<b>All interface cables and connectors must be included</b>	
<b>#5C</b>	<b><i>Monitor Type-2</i></b>	<b><i>2 pcs</i></b>
1	<b>Diagonal: not less than 23.8 inches</b>	
2	<b>Panel Type: IPS</b>	
3	<b>Resolution: not less than 2560 x 1140 at 60 Hz</b>	
4	<b>Brightness: not less than 300cd/m2</b>	
5	<b>Connectivity: not less than HDMI x1, Display port x1</b>	
6	<b>Tilt, rotate, swivel, height adjustment capabilities</b>	
7	<b>All interface cables and connectors must be included</b>	
<b>#6C</b>	<b><i>Personal Computer All in One</i></b>	<b><i>12 pcs</i></b>
1	<b>Form-factor: AIO</b>	
2	<b>CPU not less than Intel i5 9500 (Base frequency 3,0Ghz/ 6 Cores/ 9Mb Smart Cache)</b>	
3	<b>RAM not less than 4GB DDR4 2666Mhz</b>	
4	<b>HDD not less than 500Gb</b>	
6	<b>Keyboard USB with Numpad Eng/Ukrainian (Qwerty)</b>	
7	<b>Mouse USB optical</b>	
9	<b>I/O interfaces:</b> <ul style="list-style-type: none"> <li>- USB 3.1 ports – not less than 4, USB 2.0 ports not less than 2</li> <li>- Audio jacks: Mic/Headset ports</li> <li>- Wireless data transmission 802.11ac</li> <li>- Video output Display port - 1</li> <li>- LAN-port Gigabit Ethernet (RJ-45) - 1</li> </ul>	
10	<b>Audio: not less than High Definition Audio</b>	
11	<b>Screen Size and Resolution not less than 21,5" IPS 1920x1080</b>	
12	<b>Operating System - Windows 10 Professional Ukrainian</b>	
13	<b>All interface cables and connectors must be included</b>	

<b>#7C</b>	<b>Notebook</b>	<b>3 pcs</b>
1	Screen Size not less than 15,6" 1920x1080 FullHD	
2	CPU not less than Intel i5 Gen 10	
3	RAM not less than 8GB DDR4	
4	HDD not less than 1000Gb	
5	Keyboard USB with Numpad Eng/Ukrainian (Qwerty)	
6	Webcam not less than HD720	
7	OS Windows 10 Pro	
8	All interface cables and connectors must be included	
<b>#8C</b>	<b>Projector</b>	<b>4 pcs</b>
1	Type: DLP or LCD	
2	Colour Light Output not less than 3200 Lumens	
3	Interfaces USB 2.0 Type B, HDMI (1x), Stereo mini jack audio in (1x), VGA in, RJ-45	
4	Resolution not less than WXGA 1280x800 p	
5	Speaker not less than 10W	
6	Optical zoom not less than 1.1x	
7	All interfaces cables and connectors and wall mount must be included	
<b>#9C</b>	<b>MFD A4</b>	<b>4 pcs</b>
1	Print method: laser monochrome	
2	Functions: Print/scan/copy	
3	Print speed: single sided not less than 30 p/m (A4), double sided not less than 50 p/m (A4 both sides)	
4	Paper input (Standard) not less than 250 sheets	
5	Paper output not less than 150 sheets	
6	Standard cartridge capacity (ISO/IEC 19752) not less than 3000 pages	
7	Connectivity: USB 2.0/Gigabit Ethernet/ Wireless	
8	All interface cables and connectors must be included	
<b>#10C</b>	<b>Digital Camera (Kit)</b>	<b>1 pcs</b>

1	<b>Type: Pentamirror</b>	
2	<b>Effective pixels not less than 18Mp APS-C sensor</b>	
3	<b>Viewfinder 9-point AF optical</b>	
4	<b>Inbuilt Wifi</b>	
5	<b>LCD Screen not less than 2,7"</b>	
6	<b>All interfaces cables and connectors, optical lens 18-55mm must be included</b>	
<b>#11C</b>	<b><i>Stereo Headphone</i></b>	<b><i>15 pcs</i></b>
1	<b>Headphones Form Factor : on-ear (adjustable)</b>	
2	<b>Microphone function: noise-cancelling</b>	
3	<b>Frequency response (Headset): 20 Hz to 20 kHz</b>	
4	<b>Frequency response (Microphone): 100 Hz –16 kHz</b>	
5	<b>Cable length: not less than 1.8m</b>	
6	<b>Connection type: USB or 3.5mm PC jack</b>	
<b>#12C</b>	<b><i>16 port Gigabit Switch</i></b>	<b><i>1 pcs</i></b>
1	<b><i>10/100/1000 Mb/s Ethernet unmanaged switch</i></b>	

## Annex 1: Company Information Sheet

# CRENG/25.05/2020/UA “Invitation to Tender for Equipment Procurement (Ukraine)”

*Please, fill in all fields.*

<b>Bidder's Information</b>	
<b>Company legal name</b>	
<b>Company legal address</b>	
<b>Company authorized representative</b> (name, address, telephone number(s), fax number(s) and e-mail address)	
<b>Attached are copies of the following documents:</b>	
<input type="checkbox"/> A photocopy of the trade name registration papers	

## Annex 2: Equipment Description

# CRENG/25.05/2020/UA “Invitation to Tender for Equipment Procurement (Ukraine)”

*Please, fill in all fields.*

The table of equipment required		
#1C	Workstation	1 pcs
	<b>Model (full name):</b>	
	<b>Manufacturer (full name):</b>	
	<b>Provided technical documentation name or reference link:</b>	
#	Required Technical Specifications and Standards	Conformity to Specifications and Reference to the technical literature (data sheets, links, manuals, etc.)
	Offered computers have to be from the producer which brand is included in the list of reports of world analytical agencies like Gartner or IDC report <b>(please provide a link to report)</b>	
	Certification requirement: ISO 9001 certification of the manufacturer; CE Mark <b>(please provide as a separate document)</b>	
	The participant agrees to provide MAF (manufacturer authorization form) with the name of the tender procedure, the tender number, confirmation of warranty service in the country of delivery, name of the equipment with software supplied. Equipment supplied must have service centers in the country of delivery. <b>(please confirm)</b>	
1	Form-factor: Desktop tower	
2	CPU not less than Intel i9 9900 (Base Frequency 3.1Ghz, 16Mb Smart Cache)	
3	Motherboard chipset not less than Intel C246	
4	RAM not less than 32GB DDR4 2666Mhz	
5	SSD not less than 512Gb NVMe	
6	HDD not less than 2000Gb SATA	



7	<b>Graphics Card not less than 8Gb Quadro RTX4000</b>	
8	<b>PSU according to configuration, 80 Plus</b>	
9	<b>Keyboard USB with Numpad Eng/Ukrainian (Qwerty)</b>	
10	<b>Mouse USB optical</b>	
11	<b>I/O interfaces:</b> <b>Front panel:</b> <ul style="list-style-type: none"> <li>- USB 3.1 ports/Type C – not less than 2</li> <li>- USB 2.0 ports – not less than 2</li> <li>- Audio jacks: front-side Mic/Headset ports -1</li> </ul> <b>Rear panel:</b> <ul style="list-style-type: none"> <li>- USB 2.0/3.1 ports – not less than 6</li> <li>- Audio jacks: Headset port – 1</li> <li>- Serial port -1</li> <li>- Video output HDMI/DisplayPort – 3</li> <li>- LAN-port Gigabit Ethernet (RJ-45) - 1</li> </ul>	
12	<b>Internal slots: PCI Express x16 x1, PCI Express x4 x2</b>	
13	<b>Audio: not less than High Definition Audio</b>	
14	<b>Operating System - Windows 10 Professional Ukrainian</b>	
15	<b>All interface cables and connectors must be included</b>	
#2C	<i>Monitor Type-1</i>	<i>1 pcs</i>
	<b>Model (full name):</b>	
	<b>Manufacturer (full name):</b>	
	<b>Provided technical documentation name or reference link:</b>	
#	Required Technical Specifications and Standards	Conformity to Specifications and Reference to the technical literature (data sheets, links, manuals, etc.)
	<b>Certification requirement: ISO 9001 certification of the manufacturer; CE Mark</b> <b>(please provide as a separate document)</b>	
	<b>The participant agrees to provide MAF (manufacturer authorization form) with the name of the bid, the bid number, confirmation of warranty service in the country of delivery, name of the equipment with software supplied.</b>	

	Equipment supplied must have service centers in the country of delivery <b>(please confirm)</b>	
1	Diagonal: not less than 27 inches	
2	Panel Type: IPS	
3	Resolution: not less than 2560 x 1140 at 60 Hz	
4	Brightness: not less than 300cd/m2	
5	Connectivity: not less than HDMI x1, Display port x1	
6	Tilt, rotate, swivel, height adjustment capabilities	
7	All interface cables and connectors must be included	
#3C	<i>Personal Computer Type-1</i>	2 pcs
	<b>Model (full name):</b>	
	<b>Manufacturer (full name):</b>	
	<b>Provided technical documentation name or reference link:</b>	
#	Required Technical Specifications and Standards	Conformity to Specifications and Reference to the technical literature (data sheets, links, manuals, etc.)
	Offered computers have to be from the producer which brand is included in the list of reports of world analytical agencies like Gartner or IDC report <b>(please provide a link to report)</b>	
	Certification requirement: ISO 9001 certification of the manufacturer; CE Mark <b>(please provide as a separate document)</b>	
	The participant agrees to provide MAF (manufacturer authorization form) with the name of the bid, the bid number, confirmation of warranty service in the country of delivery, name of the equipment with software supplied. Equipment supplied must have service centers in the country of delivery <b>(please confirm)</b>	
1	Form-factor: Desktop	
2	CPU not less than Intel i7 9700 (Base Frequency 3.0Ghz, 12Mb Smart Cache)	
3	Motherboard chipset not less than Q370/Z370	

4	<b>RAM not less than 16GB DDR4 2666Mhz</b>	
5	<b>SSD not less than 512Gb NVME</b>	
6	<b>HDD not less than 1000Gb SATA</b>	
7	<b>Graphic Card not less than 6Gb GTX1660</b>	
8	<b>PSU according to configuration, 80 Plus</b>	
9	<b>Keyboard USB with Numpad Eng/Ukrainian (Qwerty)</b>	
10	<b>Mouse USB optical</b>	
11	<b>I/O interfaces:</b> Front panel: <ul style="list-style-type: none"> <li>- USB 3.1 ports/Type C – not less than 2</li> <li>- USB 2.0 ports – not less than 2</li> <li>- Audio jacks: front-side Mic/Headset ports -1</li> </ul> Rear panel: <ul style="list-style-type: none"> <li>- USB 2.0/3.1 ports – not less than 6</li> <li>- Audio jacks: Headset port – 1</li> <li>- Serial port -1</li> <li>- Video output HDMI/DisplayPort – 3</li> <li>- LAN-port Gigabit Ethernet (RJ-45) - 1</li> <li>- USB 2.0/3.1 ports – not less than 6</li> </ul>	
12	<b>Internal slots: PCI Express x16, PCI Express x1</b>	
13	<b>Audio: not less than High Definition Audio</b>	
14	<b>Operating System - Windows 10 Professional Ukrainian</b>	
15	<b>All interface cables and connectors must be included</b>	
<b>#4C</b>	<b><i>Personal Computer Type-2</i></b>	<b><i>2 pcs</i></b>
	<b>Model (full name):</b>	
	<b>Manufacturer (full name):</b>	
	<b>Provided technical documentation name or reference link:</b>	
#	Required Technical Specifications and Standards	Conformity to Specifications and Reference to the technical literature (data sheets, links, manuals, etc.)
	<b>Offered computers have to be from the producer which brand is included in the list of reports of world analytical agencies like Gartner or IDC report</b> <b>(please provide a link to report)</b>	

	<b>Certification requirement: ISO 9001 certification of the manufacturer; CE Mark</b> <b>(please provide as a separate document)</b>	
	<b>The participant agrees to provide MAF (manufacturer authorization form) with the name of the bid, the bid number, confirmation of warranty service in the country of delivery, name of the equipment with software supplied.</b> <b>Equipment supplied must have service centers in the country of delivery</b> <b>(please confirm)</b>	
1	<b>Form-factor: Desktop</b>	
2	<b>CPU not less than Intel i5 9500 (Base Frequency 3.0Ghz, 9Mb Smart Cache)</b>	
3	<b>Motherboard chipset not less than Q370/Z370</b>	
4	<b>RAM not less than 8GB DDR4 2666Mhz</b>	
5	<b>SSD not less than 512Gb NVME</b>	
6	<b>Graphic Card not less than 6Gb GTX1660</b>	
7	<b>PSU according to configuration, 80 Plus</b>	
8	<b>Keyboard USB with Numpad Eng/Ukrainian (Qwerty)</b>	
9	<b>Mouse USB optical</b>	
10	<b>I/O interfaces:</b> Front panel: <ul style="list-style-type: none"> <li>- USB 3.1 ports/Type C – not less than 2</li> <li>- USB 2.0 ports – not less than 2</li> <li>- Audio jacks: front-side Mic/Headset ports -1</li> </ul> Rear panel: <ul style="list-style-type: none"> <li>- USB 2.0/3.1 ports – not less than 6</li> <li>- Audio jacks: Headset port – 1</li> <li>- Serial port -1</li> <li>- Video output HDMI/DisplayPort – 3</li> <li>- LAN-port Gigabit Ethernet (RJ-45) - 1</li> <li>- USB 2.0/3.1 ports – not less than 6</li> </ul>	
11	<b>Internal slots: PCI Express x16, PCI Express x1</b>	
12	<b>Audio: not less than High Definition Audio</b>	
13	<b>Operating System - Windows 10 Professional Ukrainian</b>	

14	<b>All interface cables and connectors must be included</b>	
<b>#5C</b>	<b><i>Monitor Type-2</i></b>	<b><i>2 pcs</i></b>
	<b>Model (full name):</b>	
	<b>Manufacturer (full name):</b>	
	<b>Provided technical documentation name or reference link:</b>	
#	Required Technical Specifications and Standards	Conformity to Specifications and Reference to the technical literature (data sheets, links, manuals, etc.)
	<b>Certification requirement: ISO 9001 certification of the manufacturer; CE Mark</b> <b>(please provide as a separate document)</b>	
	<b>The participant agrees to provide MAF (manufacturer authorization form) with the name of the bid, the bid number, confirmation of warranty service in the country of delivery, name of the equipment with software supplied.</b> <b>Equipment supplied must have service centers in the country of delivery</b> <b>(please confirm)</b>	
1	<b>Diagonal: not less than 23.8 inches</b>	
2	<b>Panel Type: IPS</b>	
3	<b>Resolution: not less than 2560 x 1140 at 60 Hz</b>	
4	<b>Brightness: not less than 300cd/m2</b>	
5	<b>Connectivity: not less than HDMI x1, Display port x1</b>	
6	<b>Tilt, rotate, swivel, height adjustment capabilities</b>	
7	<b>All interface cables and connectors must be included</b>	
<b>#6C</b>	<b><i>Personal Computer All in One</i></b>	<b><i>12 pcs</i></b>
	<b>Model (full name):</b>	
	<b>Manufacturer (full name):</b>	
	<b>Provided technical documentation name or reference link:</b>	
#	Required Technical Specifications and Standards	Conformity to Specifications and Reference to the technical literature (data sheets, links, manuals, etc.)

	<p>Offered computers have to be from the producer which brand is included in the list of reports of world analytical agencies like Gartner or IDC report</p> <p><b>(please provide a link to report)</b></p>	
	<p>Certification requirement: ISO 9001 certification of the manufacturer; CE Mark</p> <p><b>(please provide as a separate document)</b></p>	
	<p>The participant agrees to provide MAF (manufacturer authorization form) with the name of the bid, the bid number, confirmation of warranty service in the country of delivery, name of the equipment with software supplied.</p> <p>Equipment supplied must have service centers in the country of delivery</p> <p><b>(please confirm)</b></p>	
1	Form-factor: AIO	
2	CPU not less than Intel i5 9500 (Base frequency 3,0Ghz/ 6 Cores/ 9Mb Smart Cache)	
3	RAM not less than 4GB DDR4 2666Mhz	
4	HDD not less than 500Gb	
6	Keyboard USB with Numpad Eng/Ukrainian (Qwerty)	
7	Mouse USB optical	
9	<p><b>I/O interfaces:</b></p> <ul style="list-style-type: none"> <li>- USB 3.1 ports – not less than 4, USB 2.0 ports not less than 2</li> <li>- Audio jacks: Mic/Headset ports</li> <li>- Wireless data transmission 802.11ac</li> <li>- Video output Display port - 1</li> <li>- LAN-port Gigabit Ethernet (RJ-45) - 1</li> </ul>	
10	<b>Audio:</b> not less than High Definition Audio	
11	<b>Screen Size and Resolution not less than 21,5" IPS 1920x1080</b>	
12	<b>Operating System - Windows 10 Professional Ukrainian</b>	
13	<b>All interface cables and connectors must be included</b>	
<b>#7C</b>	<b>Notebook</b>	<b>3 pcs</b>
	<b>Model (full name):</b>	

	<b>Manufacturer (full name):</b>	
	<b>Provided technical documentation name or reference link:</b>	
#	Required Technical Specifications and Standards	Conformity to Specifications and Reference to the technical literature (data sheets, links, manuals, etc.)
	<b>Certification requirement: ISO 9001 certification of the manufacturer; CE Mark</b> <b>(please provide as a separate document)</b>	
	<b>The participant agrees to provide MAF (manufacturer authorization form) with the name of the bid, the bid number, confirmation of warranty service in the country of delivery, name of the equipment with software supplied.</b> <b>Equipment supplied must have service centers in the country of delivery</b> <b>(please confirm)</b>	
1	<b>Screen Size not less than 15,6" 1920x1080 FullHD</b>	
2	<b>CPU not less than Intel i5 Gen 10</b>	
3	<b>RAM not less than 8GB DDR4</b>	
4	<b>HDD not less than 1000Gb</b>	
5	<b>Keyboard USB with Numpad Eng/Ukrainian (Qwerty)</b>	
6	<b>Webcam not less than HD720</b>	
7	<b>OS Windows 10 Pro</b>	
8	<b>All interface cables and connectors must be included</b>	
<b>#8C</b>	<b><i>Projector</i></b>	<b><i>4 pcs</i></b>
	<b>Model (full name):</b>	
	<b>Manufacturer (full name):</b>	
	<b>Provided technical documentation name or reference link:</b>	
#	Required Technical Specifications and Standards	Conformity to Specifications and Reference to the technical literature (data sheets, links, manuals, etc.)
1	<b>Type: DLP or LCD</b>	
2	<b>Colour Light Output not less than 3200 Lumens</b>	
3	<b>Interfaces USB 2.0 Type B, HDMI (1x), Stereo mini jack audio in (1x), VGA in, RJ-45</b>	

4	<b>Resolution not less than WXGA 1280x800 p</b>	
5	<b>Speaker not less than 10W</b>	
6	<b>Optical zoom not less than 1.1x</b>	
7	<b>All interfaces cables and connectors and wall mount must be included</b>	
<b>#9C</b>	<b><i>MFD A4</i></b>	<b><i>4 pcs</i></b>
	<b>Model (full name):</b>	
	<b>Manufacturer (full name):</b>	
	<b>Provided technical documentation name or reference link:</b>	
#	Required Technical Specifications and Standards	Conformity to Specifications and Reference to the technical literature (data sheets, links, manuals, etc.)
1	<b>Print method: laser monochrome</b>	
2	<b>Functions: Print/scan/copy</b>	
3	<b>Print speed: single sided not less than 30 p/m (A4), double sided not less than 50 p/m (A4 both sides)</b>	
4	<b>Paper input (Standard) not less than 250 sheets</b>	
5	<b>Paper output not less than 150 sheets</b>	
6	<b>Standard cartridge capacity (ISO/IEC 19752) not less than 3000 pages</b>	
7	<b>Connectivity: USB 2.0/Gigabit Ethernet/ Wireless</b>	
8	<b>All interface cables and connectors must be included</b>	
<b>#10C</b>	<b><i>Digital Camera (Kit)</i></b>	<b><i>1 pcs</i></b>
	<b>Model (full name):</b>	
	<b>Manufacturer (full name):</b>	
	<b>Provided technical documentation name or reference link:</b>	
#	Required Technical Specifications and Standards	Conformity to Specifications and Reference to the technical literature (data sheets, links, manuals, etc.)
1	<b>Type: Pentamirror</b>	
2	<b>Effective pixels not less than 18Mp APS-C sensor</b>	



3	<b>Viewfinder 9-point AF optical</b>	
4	<b>Inbuilt Wifi</b>	
5	<b>LCD Screen not less than 2,7"</b>	
6	<b>All interfaces cables and connectors, optical lens 18-55mm must be included</b>	
<b>#11C</b>	<b><i>Stereo Headphone</i></b>	<b><i>15 pcs</i></b>
	<b>Model (full name):</b>	
	<b>Manufacturer (full name):</b>	
	<b>Provided technical documentation name or reference link:</b>	
#	Required Technical Specifications and Standards	Conformity to Specifications and Reference to the technical literature (data sheets, links, manuals, etc.)
1	<b>Headphones Form Factor : on-ear (adjustable)</b>	
2	<b>Microphone function: noise-cancelling</b>	
3	<b>Frequency response (Headset): 20 Hz to 20 kHz</b>	
4	<b>Frequency response (Microphone): 100 Hz –16 kHz</b>	
5	<b>Cable length: not less than 1.8m</b>	
6	<b>Connection type: USB or 3.5mm PC jack</b>	
<b>#12C</b>	<b><i>16 port Gigabit Switch</i></b>	<b><i>1 pcs</i></b>
1	<b><i>10/100/1000 Mb/s Ethernet unmanaged switch</i></b>	

### Annex 3: Commercial Offer

**Note –**

*The Company must accomplish the commercial offer for equipment on its letterhead clearly showing the companies complete name and address.*

To: EXOLAUNCH GmbH, address: Reuchlin Str. 10, 10553 Berlin, Germany

*Commercial offer for the equipment supply within the framework of the project*

*Crisis and Risks Engineering for Transport Services*

*(CRENG)*

# CRENG/25.05/2020/UA “Invitation to Tender for Equipment Procurement (Ukraine)”

Name of Company \_\_\_\_\_

<b>Item</b>	<b>Description</b>	<b>Quantity (pcs) for 1 University</b>	<b>Unit Price (EUR)</b>	<b>Total Price per item (EUR) for 1 University</b>	<b>Grand Total Price per item (EUR) for 3 Universities</b>
<b>1</b>	<b>2</b>	<b>4</b>	<b>5</b>	<b>6=4 x 5</b>	<b>7</b>
#1C	Workstation	1			
#2C	Monitor Type-1	1			
#3C	Personal Computer Type-1	2			
#4C	Personal Computer Type-2	2			
#5C	Monitor Type-2	2			
#6C	Personal Computer All in One	12			
#7C	Notebook	3			
#8C	Projector	4			
#9C	MFD A4	4			
#10C	Digital Camera (Kit)	1			

#11C	Stereo Headphone	15			
#12C	16 port Gigabit Switch	1			
<b>Total Amount (Euro) excluding VAT</b>					

Total amount in words (for 1 University):

\_\_\_\_\_

Grand total amount in words (for 3 University):

\_\_\_\_\_

If there is a discrepancy between words and figures, the amount in words shall prevail

Warranty conditions:

\_\_\_\_\_

Delivery conditions:

\_\_\_\_\_

Delivery period:

\_\_\_\_\_ days from the date of signature of the contract

Name \_\_\_\_\_

In the capacity of \_\_\_\_\_

Signed \_\_\_\_\_

Duly authorized to sign the company for and on behalf of \_\_\_\_\_

Date \_\_\_\_\_

Stamp