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## CUPAGIS regional coordination meeting 04–05 November 2019

Berlin, EXOLAUNCH (former ECM space technologies) GmbH and TU Berlin

Participants:

Technische Universität Berlin (TUB)

Mrs Elena Eyngorn

EXOLAUNCH

Mrs Alexandra Ivanova

Mr Arnold Sterenharz

Tallinn University of Technology (TUT)

Prof Tarmo Soomere

Agenda:

1. Short visit to TUB in the evening of 04 November

05 November, EXOLAUNCH:

2. Overview of progress towards purchase of equipment for Algerian partners.
3. Activities planned for 2020: location, content, internal division of time, possible professors and presenters

1. The TUB representatives mentioned that there is a remote possibility that their work contracts will not be prolonged after 2020. This possibility stems from a feature of the German higher education system where it is only allowed to stay on some positions for a certain number of years.

The coordinator took note of this and will be prepared to contact the administration of TUB if necessary.

2. The process of purchase of equipment develops as planned. The specific requests from Algerian universities have arrived. They have been taken into account in preparation of the technical requirements for the devices. See the attachment.

The procedures have been agreed and a public tender is being organised. It will be announced in a few weeks.

3. It was unfortunately not possible to organise training in Plovdiv this year. Instead, a massive training was organised in Berlin in August by TUB and EXOLAUNCH.

It was decided to organise the next training in Prague in June or July 2020. All European partners should contribute to this even.

A lecture course on scientific writing and communication would be highly desirable as this course was omitted in the Berlin training because of health conditions of the planned teacher.



Further training in generic mathematical, statistical and visualisation methods would be desirable.

Notes taken by Tarmo Soomere

09 November 2019

Appendix. Technical description of the equipment for Algerian partners

CUPAGIS 1	Required Technical Specifications and Standards	Conformity to Specifications
	<i>Personal Computer</i>	<i>3 pcs</i>
1	<b>Form-factor: Desktop</b>	
2	<b>CPU not less than Intel i5 8400</b>	
3	<b>RAM not less than 16GB DDR4 2666Mhz</b>	
4	<b>SSD not less than 240Gb</b>	
5	<b>HDD not less than 1000Gb 7200rpm SATA III</b>	
6	<b>Graphic Card not less than 6Gb GTX1660</b>	
7	<b>PSU not less than 500W 80 Plus Silver</b>	
8	<b>Keyboard USB with Numpad Eng/Rus</b>	
9	<b>Mouse USB optical</b>	
10	<b>I/O interfaces:</b> Front panel: <ul style="list-style-type: none"> <li>- USB 3.0 ports – not less than 2</li> <li>- Audio jacks: front-side Mic/Headset ports</li> </ul> Rear panel: <ul style="list-style-type: none"> <li>- USB 2.0/3.0 ports – not less than 4</li> <li>- Audio jack: Line-In - 1</li> <li>- Audio jack: Line-Out - 1</li> <li>- Video output VGA - 1</li> <li>- Video output DisplayPort – 1</li> <li>- LAN-port Gigabit Ethernet (RJ-45) - 1</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>Monitor not less than 23,5" IPS HDMI</b>	
14	<b>Operating System - Windows 10 Professional</b>	
15	<b>All interfaces cables and connectors must be included</b>	
CUPAGIS 2	Required Technical Specifications and Standards	Conformity to Specifications
	<i>Notebook</i>	<i>1 pcs</i>
1	<b>Screen Size not less than 15,6"</b>	
2	<b>CPU not less than Intel i3 7020U</b>	



3	RAM not less than 4GB DDR4	
4	HDD not less than 1000Gb	
5	Graphic Card not less than HD620	
6	Optical drive : DVDRW	
7	Keyboard USB Eng/Rus	
8	All interfaces cables and connectors must be included	
<b>CUPAGIS 3</b>		
	Required Technical Specifications and Standards	Conformity to Specifications
	<i>Workstation</i>	<i>1 pcs</i>
1	Form-factor: Desktop	
2	CPU not less than Intel i9 9900K	
3	RAM not less than 32GB DDR4 2666Mhz	
4	SSD not less than 512Gb	
5	HDD not less than 2x1Tb 7200RPM	
6	Graphic Card not less than 4Gb GTX1050Ti	
7	PSU not less than 700W 80 Plus Silver	
8	Keyboard USB with Numpad Eng/Rus	
9	Mouse USB optical	
10	Motherboard with support of SLI and Raid function	
11	Case with 2 additional coolers	
12	I/O interfaces: Front panel: - USB 3.0 ports – not less than 2 - Audio jacks: front-side Mic/Headset ports Rear panel: - USB 2.0/3.0 ports – not less than 4 - Audio jack: Line-In - 1 - Audio jack: Line-Out - 1 - Video output VGA - 1 - Video output DisplayPort – 1 - LAN-port Gigabit Ethernet (RJ-45) - 1	
13	Audio: not less than High Definition Audio	
14	Monitor not less than 2 x 27" IPS 1920x1080	
15	All interfaces cables and connectors must be included	
<b>CUPAGIS 4</b>		
	Required Technical Specifications and Standards	Conformity to Specifications
	<i>Data server</i>	<i>1 pcs</i>
1	Form-factor: Desktop	
2	CPU not less than Intel i5 8400	
3	RAM not less than 8GB DDR4 2666Mhz	
4	SSD not less than 256Gb	
5	HDD not less than 4x8Tb 7200RPM	



6	Graphic Card not less than HD630	
7	PSU not less than 600W 80 Plus Silver	
8	Keyboard USB with Numpad Eng/Rus	
9	Mouse USB optical	
10	Motherboard with support of Raid function and 6 sata ports	
11	Case with 2 additional coolers	
12	<b>I/O interfaces:</b> Front panel: - USB 3.0 ports – not less than 2 - Audio jacks: front-side Mic/Headset ports Rear panel: - USB 2.0/3.0 ports – not less than 4 - Audio jack: Line-In - 1 - Audio jack: Line-Out - 1 - Video output VGA - 1 - Video output DisplayPort – 1 - LAN-port Gigabit Ethernet (RJ-45) - 1	
13	<b>Audio:</b> not less than High Definition Audio	
13	<b>All interfaces cables and connectors, memory Card 64Gb, optical lens and bag must be included</b>	
<b>CUPAGIS 5</b>		
	Required Technical Specifications and Standards	Conformity to Specifications
	<i>UPS</i>	<i>1 pcs</i>
1	<b>Type:</b> line interactive	
2	<b>Capacity</b> 1000VA/800W	
3	<b>Waveform</b> Pure sine wave	
4	<b>Inbuilt battery</b> 12V/7Ah x 2	
5	<b>Communications</b> USB and RJ-45	
6	<b>Frequency input range</b> 50/60 Hz auto-sense	
8	<b>All interfaces cables and connectors must be included</b>	
<b>CUPAGIS 6</b>		
	Required Technical Specifications and Standards	Conformity to Specifications
	<i>Personal Cloud Storage</i>	<i>1 pcs</i>
1	<b>CPU</b> not less than Marvell Armada 380 1,3Ghz	
2	<b>RAM</b> not less than 512Mb	
3	<b>Two 2.5" or 3.5" SATA II</b> hard disk interface	
4	<b>Not less than one Gigabit Ethernet</b> RJ-45 connector	
5	<b>Not less than two USB 3.0</b> ports	
6	<b>Not less than one USB 2.0</b> port	
7	<b>2x4 Tb HDD</b> must be included	
8	<b>All interfaces cables and connectors must be included</b>	



CUPAGIS 7	Required Technical Specifications and Standards	Conformity to Specifications
	<b>24 port Gigabit Switch</b>	<b>1 pcs</b>
<b>VCR1</b>	Required Technical Specifications and Standards	Conformity to Specifications
	<b>Personal Computer All in One</b>	<b>16 pcs</b>
1	Form-factor: AIO	
2	CPU not less than Intel i7 8700	
3	RAM not less than 8GB DDR4 2666Mhz	
4	SSD not less than 480Gb	
5	Graphic Card not less than 2Gb GTX1030	
6	PSU not less than 120W	
7	Keyboard USB with Numpad Eng/Rus	
8	Mouse USB optical	
9	Headset with microphone	
10	Webcam HD	
11	I/O interfaces: <ul style="list-style-type: none"> <li>- USB 3.0 ports – not less than 4, USB 2.0 ports not less than 1</li> <li>- Audio jacks: Mic/Headset ports</li> <li>- Wireless data transmission 802.11 b/g/n - 1</li> <li>- Video output HDMI - 1</li> <li>- LAN-port Gigabit Ethernet (RJ-45) - 1</li> </ul>	
12	Audio: not less than High Definition Audio	
13	Screen Size and Resolution not less than 24" IPS 1920x1080	
14	Operating System - Windows 10 Professional	
15	All interfaces cables and connectors must be included	
<b>VCR2</b>	Required Technical Specifications and Standards	Conformity to Specifications
	<b>MFD A4</b>	<b>1 pcs</b>
1	Print method: laser monochrome	
2	Available functions Print, Copy and Scan	
3	Duplex printing: yes	
4	Print speed not less than 38 p/m	
5	Connectivity: Ethernet, Wlan	
6	Extra cartridge and must be included	
7	Operating System compatibility - Windows 7, 8.1, 10	
8	All interfaces cables and connectors must be included	
<b>VCR3</b>	Required Technical Specifications and Standards	Conformity to Specifications
	<b>Projector</b>	<b>1 pcs</b>
1	Type: Ultra-short-throw	
2	Colour Light Output not less than 3,200 Lumen- 1,900 Lumen (economy)	



3	Interfaces USB 2.0 Type B, HDMI in (2x), Stereo mini jack audio in (3x), VGA out, Wireless LAN IEEE 802.11b/g/n	
4	Resolution not less than XGA 1920x1080	
12	Projection System 3LCD Technology	
13	All interfaces cables and connectors and wallmount must be included	
<b>VCR4</b>	Required Technical Specifications and Standards	Conformity to Specifications
	<i>Smart Board</i>	<b>1 pcs</b>
1	Type: Interactive board wall mount or floor stand	
2	Screen size not less than 77 inches	
3	Touch: Enables you to write, erase and perform mouse functions by touching the interactive whiteboard with your finger or a pen	
4	SMART lesson activities must be included	
12	SMART collaborative learning software must be included	
13	All interfaces cables and connectors, usb pen, wallmount or floor stand must be included	
<b>VCR5</b>	Required Technical Specifications and Standards	Conformity to Specifications
	<i>Notebook</i>	<b>1 pcs</b>
1	Screen Size not less than 15,6"	
2	CPU not less than Intel i5 8250U	
3	RAM not less than 8GB DDR4	
4	HDD not less than 1000Gb	
5	Graphic Card not less than 2Gb MX110	
6	Optical drive : DVDRW	
7	Keyboard USB Eng/Rus	
8	All interfaces cables and connectors must be included	
<b>VCR6</b>	Required Technical Specifications and Standards	Conformity to Specifications
	<i>16 port Gigabit Switch</i>	<b>1 pcs</b>
<b>PASENSO1</b>	Required Technical Specifications and Standards	Conformity to Specifications
	<i>Personal Computer All in One</i>	<b>2 pcs</b>
1	Form-factor: AIO	
2	CPU not less than Intel i3 8100	
3	RAM not less than 4GB DDR4 2666Mhz	
4	SSD not less than 480Gb	
5	PSU not less than 90W	
6	Keyboard USB with Numpad Eng/Rus	
7	Mouse USB optical	
8	Headset with microphone	



9	Webcam HD	
10	<b>I/O interfaces:</b> <ul style="list-style-type: none"> <li>- USB 3.0 ports – not less than 4, USB 2.0 ports not less than 1</li> <li>- Audio jacks: Mic/Headset ports</li> <li>- Wireless data transmission 802.11 b/g/n - 1</li> <li>- Video output HDMI - 1</li> <li>- LAN-port Gigabit Ethernet (RJ-45) - 1</li> </ul>	
11	<b>Audio:</b> not less than High Definition Audio	
12	<b>Screen Size and Resolution</b> not less than 21,5" IPS 1920x1080	
13	<b>Operating System</b> -Windows 10 Professional, Office2019 Home and Business	
14	<b>All interfaces cables and connectors must be included</b>	
<b>PASENSO2</b>		
	Required Technical Specifications and Standards	Conformity to Specifications
	<i>MFD A4</i>	<i>1 pcs</i>
1	Print method: laser monochrome	
2	Available functions Print, Copy and Scan	
3	Print speed not less than 22 p/m	
4	Extra cartridge and drum cartridge must be included	
12	Operating System compatibility - Windows 7, 8.1, 10	
13	All interfaces cables and connectors must be included	
<b>PASENSO3</b>		
	Required Technical Specifications and Standards	Conformity to Specifications
	<i>Projector</i>	<i>1 pcs</i>
1	Type: 1 chip DLP	
2	Colour Light Output not less than 4,200 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 FullHD 1920x1080	
5	Speaker not less than 10W	
6	Tripod Screen not less than 245x245cm	
7	All interfaces cables and connectors and wallmount must be included	
<b>PASENSO4</b>		
	Required Technical Specifications and Standards	Conformity to Specifications
	<i>Digital Camera (Kit)</i>	<i>1 pcs</i>
1	Type: Pentamirror	
2	Effective pixels not less than 18Mp APS-C sensor	
3	Viewfinder 9-point AF optical	
4	Inbuilt Wifi	
5	LCD Screen not less than 2,7"	
6	All interfaces cables and connectors, memory Card 64Gb, optical lens 18-55mm and bag must be included	



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PASENSO5	Required Technical Specifications and Standards	Conformity to Specifications
	<i>Notebook</i>	<i>1 pcs</i>
1	Screen Size not less than 15,6"	
2	CPU not less than Intel i3 7020U	
3	RAM not less than 4GB DDR4	
4	HDD not less than 1000Gb	
5	Graphic Card not less than HD620	
6	Optical drive : DVDRW	
7	Keyboard USB Eng/Rus	
8	All interfaces cables and connectors must be included	
SOFT	Required Technical Specifications and Standards	Conformity to Specifications
	<i>Matlab, Python, Ubuntu</i>	<i>1 pcs</i>