4.7 Equipment purchased and installed – Report

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Abstract	This is the report about the necessary equipment for pilot testing purchased and installed at four faculties at University of Montenegro.

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Work package:	WP4 - Pilot testing of the generic DUALMON model
Activity:	4.4 - Purchase of equipment
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VERSIONING AND CONTRIBUTION HISTORY

Version	Date	Revision description	Partner responsible
v. 1	15.05.2022.	First version	UOM (Boban Melović)

DISCLAIMER

Purchase of equipment

The University of Montenegro (UOM) as the holder of the DUALMOM project was in charge of the equipment procurement process. After the initial meeting, all four faculty units that participated in the project submitted their proposals for equipment. On February 18th, 2021. the list of equipment was sent for EACEA approval. The initial approval for the equipment was received by the project officer on February 25th, 2021. and after several changes the final list of equipment was approved on March 10th, 2021. After examining the market and distributing the equipment according to the UCG chart of accounts, the competent services from the University of Montenegro have defined the technical specifications and started the process of public procurement of equipment. The procurement, with the approval of the competent persons, and in accordance with positive legislation in Montenegro, was carried out in two iterations.

Namely, in the first iteration, simple procurement worth 14,750.00 euros for the procurement of office equipment, other equipment, inventory of small value and laboratory equipment was launched on July 06th, 2021. The contracts were also signed successively in July 2021, when the goods were delivered along with the accompanying documentation (records of receipt of goods), except for laboratory equipment where, due to specifics, the deadline was slightly longer, so the goods arrived in September 2021.

During second iteration, the open procedure with an estimated value of 105,250.00 euros for the purchase of equipment from 300-1000 euros, equipment over 1000 euros and the purchase of membership fees and subscriptions to databases was launched on June 09th, 2021. The decision on the selection of the most favourable offer was announced on July 22nd, 2021. The contracts were signed at the end of July 2021. Due to the global shortage of chips caused by the COVID-19 pandemic, on September 30th, 2021. the supplier for Parties I and II informed University of Montenegro that there will be a delay in the delivery of the equipment and that the new deadline will be mid-January 2022 instead of October 2021. Bearing in mind the situation on the global market and a positive business policy, the competent services for public procurement of the University of Montenegro and the project management, with the consent of the project coordinator from Novi Sad, accepted the change in the delivery deadline. The equipment, along with accompanying documentation, arrived at all four faculties of the University at the end of January 2022, while the payment was made in February 2022.

More detailed overview of the equipment purchase is given in the following table (table 1).

DUALMON
Strengthening capacities for the
implementation of dual education
in Montenegro Higher Education

Co-funded by the
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Table 1: An overview of purchased equipment

Partner	WP	Partner No	Nature, type	Amount Excl. VAT
UOM	Preparation	P2	Laser printer with scanner, 5 pcs	1,750.00
UOM	Preparation	P2	ALL IN ONE -HP All in One Pavilion 27-d0004ny 236V3EA	1,300.00
UOM	Preparation	P2	Laser color MPF printer	1,050.00
UOM	Preparation	P3	Photo equipment - 3 drones Mavic mini fly more combo or equivalent, 2 dslr cameras	4,500.00
UOM	Preparation	P2	HP ProOne 440 G5 AiO 23.8" i5-9500T/8GB/1TB/ x25 pcs	26,750.00
UOM	Preparation	P2	Office equipment - Office equipment Video conference system, 2 55 inch Led Tvs, Video conference ambient microphone, interactive projector	4,500.00
UOM	Preparation	P2	Small office devices - 5 laser presenters, 10 laser printers, 15 heaphone earsets , 5 external hard drives	2,650.00
UOM	Preparation	P3	STATA (or alternative program for research) 2 licence	3,000.00
UOM	Preparation	P2	Laptop Equivalent toHP EliteBook 840 G4 x 8 pcs	12,000.00
UOM	Preparation	P2	AMOS EMS Configuration & Setup, AMOS EMS Software	18,900.00
UOM	Preparation	P2	All-in-One workstation with OS Equivalent to HP 24-e005ny 8GB 256GB SSD x 3 pcs	2,000.00
UOM	Preparation	P2	Marine Engineering and electrotechnic laboratory equipement	3,100.00
UOM	Preparation	P2	Desktop Compute "All in one" (Operating system ProcessorIntel® Core™ i3-8130U, Memory8 GB DDR4-2400 SDRAM (1 x 8 GB), AudioDTS Studio Sound™, dual 2 W speakers; Display60.45 cm (23.8") diagonal FHD IPS ZBD anti-glare WLED-backlit three-sided borderless (1920x 1080) Power65 W external AC power adapter; Network interface Integrated 10/100/1000 GbE LAN; Wireless connectivity802.11a/b/g/n/ac (1x1) and Bluetooth® 4.2 combo PortsRear: 2 USB 2.0; 2 USB 3.0; 1 headphone/microphone Combo, 3-in-1 memory card reader, Video connectors1 HDMI-out 1.4 Webcam HD Camera with integrated digital microphone) 30pcs	20,000.00
UOM	Preparation	P2	4 desktops for deep learning (Motherboard: Supports at least 2 GPU RTX 2080 Ti 11GB Drivers for Fedora 28, open suse leap 15 and Ubuntu 18.04; Processor: Intel Core i7-8700 (or better); RAM: 32GB (or higher) 3000MHz (or faster) DDR4 SSD Drive: 960GB (or higher) SSD HD Drive: 3TB or more; GPU: RTX 2080 Ti 11GB equivalent to NVIDIA GEFORCE RTX 2080 Ti Founders Edition; Power supply: 1000W (or more); Housing: Miditower; Monitor: 24 "diagonal or higher, 1920x1080 resolution or better, HDMI, DVI, Speakers; Peripherals: mouse, keyboard	15,200.00
UOM	Preparation	P2	1 desktop for deep learning (Motherboard: Interface: PCI-Express 3.0 x16, Support for dual-slot GPU RTX 2080 cards, GPU: RTX 2080 Ti 11GB equivalent to NVIDIA GEFORCE RTX 2080 Ti Founders Edition, charging: Minimum 750 W power supply, Enough PCIe 8-pin and 6-pin connectors for two GPUs, Processor Type: minimum i7 or i9, Number of cores: Minimum 6, clock frequency (speed): Minimum 3.2 GHz, RAM: Minimum 16GB, memory Type: DDR4, Hard drive: Memory Type: NVMe SSD, size: 500 GB, Operating system: Windows 10 Pro)	3,300.00
SUM				**120,000.00**