

**Reconstruction and modernisation of I.P.
"Emil Nicula" Theoretical High School, land
no. cad. 1034320.065, with the addition of
auxiliary buildings, located in Mereni village,
104 Stefan cel Mare si Sfint Street. Form No. 7**

(name of the project)

**LOCAL ESTIMATE № 2-3-9
Telecommunications system. Block D (2506-TS)**

Estimate value lei

Prepared in current prices: 20.10.2025

№ No	Symbol standards and Code resources	Works and expenses	U.M.	Quantity according to project data	Estimated value, lei	
					Per unit of measurement incl. salary	Total incl. salary
1	2	3	4	5	6	7
		1. Construction works				
1	RpCU05F1	Execution of penetrations for pipes or tie rods in stone or reinforced concrete walls 16-25 cm thick, for the execution of mechanised penetrations	pc	50.00		
2	RpCU05I1	Execution of holes for pipes or tie rods in stone or reinforced concrete walls 26-50 cm thick, for mechanised hole execution.	pc	50.00		
3	RpEJ09A	Filling holes in walls with plaster mortar	pc	100.00		
4	RpEJ08C	Making grooves up to 5 cm deep in stone or reinforced concrete walls measuring 5x50 cm	m	90.00		
5	RpEJ09D	Filling trenches in walls up to 50 cm ²	m	90.00		
		<i>Total</i>	lei			
		<i>Social insurance</i>	24%			
		<i>Transport expenses</i>	%			
		<i>Supply and storage expenses</i>	%			
		<i>Total</i>				
		<i>Overhead expenses</i>	%			
		<i>Total</i>				
		<i>Benefit of estimate</i>	%			
		Total Construction works Including salary				
		2. Installation works				
		2.1. Dismantling works				
6	RpEE23B	Dismantling of telecommunications cabinet with existing components	pcs	1.00		

1	2	3	4	5	6	7
7	RpEE24A	Dismantling of telecommunications socket for disposal	pc	20.00		
8	RpEA11A	Dismantling of exposed PVC (IP or IP-PVC) pipes or protective elements with a diameter of up to 20 mm, including removal of conductors	m	20.00		
9	RpEB14A	Removal of conductors for low currents, grounding or antenna connection, surface installations.	m	58.00		
		<i>Total</i>	lei			
		Total Demolition works Including salary				
		2.2. Cabling and accessories				
10	08-02-409-1	Vinyl plastic pipe on installed structures, on walls and columns, fastened with clamps, diameter up to 25 mm	100 m	59.00		
11	supplier price	Corrugated PVC pipe with probe, crush resistance 750N, d=20 mm	m.l.	5.00		
12	08-02-390-1	Plastic ducts with cover, section 25x16 mm, including all necessary accessories (elbows, plugs, tees, crosses, etc.)	100 m	1.60		
13	08-02-396-6	Metal duct on walls and ceilings, length 3 m	100 m	3.72		
14	supplier price	Galvanised metal gutter, unperforated, with cover, section 200x50(h) mm	m.l.	186.00		
15	supplier price	90° horizontal elbow with cover for galvanised metal gutter, perforated, section 200x50(h) mm	pc	10.00		
16	supplier price	T-type horizontal joint accessory with cover for galvanised metal gutter 200x50(h) mm	pc	6.00		
17	supplier price	Galvanised metal gutter, unperforated, with cover, section 50x50(h) mm	m.l.	186.00		
18	supplier price	90° horizontal elbow with cover for galvanised metal gutter 50x50(h) mm	pc	10.00		
19	supplier price	T-type horizontal joint accessory with cover for 50x50(h) mm galvanised metal gutter	pc	6.00		
20	supplier price	Connector for metal gutter h=50 mm	pc	248.00		
21	supplier price	Horizontal support for galvanised metal gutter fixed to the ceiling, B=300 mm	pc	186.00		
22	supplier price	Threaded rod, strength class 5.8, M8, L=1.0 m	pc	372.00		
23	08-02-398-1	Conductor in conduits, cross-section up to 6 mm ²	100 m	74.40		

1	2	3	4	5	6	7
24	08-02-412-1	Insertion of conductors into metal pipes and hoses: first single-core or multi-core conductor in common braiding, cross-section up to 2.5 mm ²	100 m	1.50		
25	supplier price	Alarm cable, with copper conductors with a cross-section of 2x0.8 mm ² , according to STAS 31565-2012, with a fire resistance limit of at least 30 minutes, type JE-H(St)H FE180 / E30 1x2x0.8 mm ²	m.l.	150.00		
26	08-02-412-2	Insertion of conductors into metal pipes and hoses: first single-core or multi-core conductor in common braiding, total cross-section up to 6 mm ²	100	57.70		
27	supplier price	8-fibre optical fibre cable, SM, OS2, single-mode 9/125 ITU-T G.652.D LCS OS2 LSZH	m.l.	400.00		
28	supplier price	Shielded cable, with solid copper conductors, type FTP cat. 5e 4x2x24AWG (0.51 mm ²), halogen-free, according to STAS 31565-2012	m.l.	10.00		
29	supplier price	UTP Cat.5e cable 2x2x4, 24AWG	m.l.	2,135.00		
30	10-04-100-04	Shaping and connecting cables (conductors) in wired broadcasting equipment, cable section: up to 6 mm ² - RJ-45 FTP connector cat. 5e	10 pcs	16.00		
31	10-04-066-07	Wall equipment: RJ-45 socket with mounting box	pc	94.00		
		<i>Total</i>	lei			
		Total Cabling and accessories Including salary				
		2.3. Telecommunications system				
32	10-06-037-04	Telecommunications cabinet and 19" RACK floor network	pc	3.00		
33	10-04-030-04	Additional installation of parts in panels: Blank panels	pc	18.00		
34	10-04-030-04	Additional installation of parts in panels: 42U vertical cable management	pc	6.00		
35	10-04-066-06	Block of 4 fans on top with environment monitoring (temperature and humidity detectors)	pc	3.00		
36	10-04-030-04	Additional installation of parts in panels: Shelf for 19" telecommunications cabinet, 800 mm	pc	5.00		
37	10-04-030-04	Additional installation of parts in panels: Cable organiser - perforated with cover, horizontal	pc	21.00		

1	2	3	4	5	6	7
38	08-03-591-9	Flush-mounted socket, for enclosed installation, including device mounting box	100 pc	0.03		
39	supplier price	Socket for enclosed installation with earth connection, IP20, 16A, 230V, compatible with UPS or PDU	pc	3.00		
40	10-04-030-04	Additional installation of parts in panels: PDU (Power distribution unit)	pc	3.00		
41	10-08-003-03	Power supply and control unit - UPS 19"	pc	3.00		
42	10-04-066-04	Modular patch panel 19" 1U	pc	12.00		
43	10-04-066-04	Transceiver	pc	8.00		
44	10-04-066-04	ODF Panel (Cross FO)	pc	3.00		
45	10-04-100-04	Shaping and connecting cables (conductors) in wired broadcasting equipment, cable section: up to 6 mm2 - LC duplex adapter	10 pcs	3.60		
46	10-04-100-04	Shaping and connecting cables (conductors) in wired broadcasting equipment, cable section: up to 6 mm2 - Fiber Optic Pigtail LC / SM duplex	10 pcs	3.60		
47	10-02-051-01	Cable connection bridges, length: up to 6 m	100 pcs	4.60		
48	10-02-016-04	Access switch	pc	8.00		
49	10-08-003-04	Ultrasound devices: Wi-Fi access point	pc	10.00		
		<i>Total</i>	lei			
		Total Telecommunications system Including salary				
		2.4. Video surveillance				
50	10-04-067-23 applied	Video control device - Video camera	pc	26.00		
51	10-08-002-06 applied	Structure for installing a video camera	pc	26.00		
52	10-04-100-04	Shaping and connecting cables (conductors) in wired broadcasting equipment, cable section: up to 6 mm2 - RJ-45 FTP connector cat. 5e	10	5.00		
53	10-04-030-02 applied	Installation of memory card	pc	26.00		
54	10-04-101-07	Subscriber equipment - External microphone	pc	6.00		
		<i>Total</i>	lei			
		Total Video surveillance Including salary				

1	2	3	4	5	6	7
		2.5. Call system for staff in toilets for persons with disabilities				
55	10-04-101-13	Subscriber equipment and miscellaneous equipment: Relay control unit and dry contact status transmission via local Ethernet network	pc	3.00		
56	10-08-003-03	Devices - power supply and control unit	pc	3.00		
57	08-03-591-1	Call button	100 pcs	0.03		
58	08-03-591-2	Reset button	100 pcs	0.03		
59	08-03-593-10	Wall lighting indicators	100 pcs	0.03		
		<i>Total</i>	lei			
		Total Staff call system in toilets for persons with disabilities Including salary				
		<i>Total</i>	lei			
		<i>Social insurance</i>	24%			
		<i>Transport expenses</i>	%			
		<i>Supply and storage expenses</i>	%			
		<i>Total</i>				
		<i>Overhead expenses</i>	%			
		<i>Total</i>				
		<i>Estimated profit</i>	%			
		Total Installation work Including salary				
		3. Equipment				
		3.1. Cabling and accessories				
60	Supplier price	RJ45 Cat.5e module, for RJ45 sockets	pc	160.00		
61	supplier price	RJ-45 socket with mounting box for 1 RJ45 Cat.5e module	pc	28.00		
62	supplier price	RJ-45 socket with mounting box for 2 RJ45 Cat.5e modules	pc	66.00		
		<i>Total</i>	lei			
		Total Cabling and accessories Including salary				
		3.2. Telecommunications system				
63	Supplier price	Telecommunications cabinet and floor network RACK 19" 32U, 600x600 mm, perforated front door, perforated metal rear door, perforated side panels, with 6 blank panels, with 2 vertical 32U cable management systems, equipped with 4 fans on top with environmental monitoring (temperature and humidity detectors)	pcs	1.00		

1	2	3	4	5	6	7
64	supplier price	19" 22U RACK telecommunications and floor network cabinet, 600x600 mm, perforated front door, perforated metal rear door, perforated side panels, with 6 blank panels, with 2 vertical 22U cable management systems, equipped with 4 fans on top with environmental monitoring (temperature and humidity detectors)	pcs	2.00		
65	supplier price	Shelf for 19" telecommunications cabinet	pc	5.00		
66	supplier price	Cable organiser - perforated with cover, horizontal, 19", 1U	pc	21.00		
67	supplier price	PDU (Power distribution unit), 1U, 16A, 200-240V, 50/60Hz, Out-min. 6xCEE 7/3, In-UPS plug 1xIEC C19/C20, horizontal mounting for 19" rack, with safety button	pc	3.00		
68	supplier price	Modular Cat5e FTP patch panel, fully equipped with 24xRJ45 modules, 19", 1U	pc	12.00		
69	supplier price	UPS with battery units, 19", 2U, 2200 VA/1980 W, Length/Depth max. 530 mm, output: min. 6 x IEC C13 (10 A), min. 1 IEC C19 (16 A), input: min. 1 x IEC C20 (16 A) sockets, 220V/230V/240V	pcs	1.00		
70	supplier price	UPS with battery units, 19", 1U, 1550 VA/1100 W, Length/Depth max. 560 mm, output: min. 6 x IEC C13 (10 A), input: min. 1 x IEC C20 (16 A) sockets, 220V/230V/240V	pc	1.00		
71	supplier price	UPS with battery units, 19", 1U, 850 VA/600 W, Length/Depth max. 510 mm, output: min. 6 x IEC C13 (10 A) sockets, input: min. 1 x IEC C20 (16 A) sockets, 220V/230V/240V	pcs	1.00		
72	supplier price	Transceiver SFP+ 10 Gbps 1310nm 10km, compatible with Access Switch and Aggregation Switch	pc	8.00		
73	supplier price	ODF Panel (Cross FO), 19", 1U	pc	3.00		
74	supplier price	LC duplex adapter	pc	36.00		
75	supplier price	Fibre Optic Pigtail LC / SM duplex	pc	36.00		
76	supplier price	Fibre Patch Cord LC / SM duplex, L=1.0 m	pc	2.00		
77	supplier price	Direct Attach Cable 1m, SFP+ 10G, compatible with access switches	pc	5.00		
78	supplier price	Patch Cord L=0.5 m, copper, UTP cat. 5e	pc	288.00		

1	2	3	4	5	6	7
79	supplier price	Patch Cord Cable L=1.0 m, copper, UTP cat. 5e	pc	15.00		
80	supplier price	Patch Cord Cable L=3.0 m, copper, UTP cat. 5e	pc	150.00		
81	supplier price	Type 1 access switch, with 48 RJ-45 auto-negotiating 1 Gbps + min. 2 SFP+ 10 Gbps; min. 1GB DDR3; 512MB NAND flash; Throughput min. 130 Mpps; Switching capacity 176 Gbps; MAC address table size min. 16k; VLAN table min. 4K; QoS, SSL, RSTP, BPDU, LLDP, LACP, CLI, ACL, SNMP, DHCP-Snooping, IPv4 and IPv6 Management, Telnet/SSH; 19", 1U; P.el. = max. 120 W type HPE Networking Instant On Switch 48p Gigabit 2p 10GBT 2p SFP+ 1960 (JL808A) or similar according to specifications	set	4.00		
82	supplier price	Type 2 access switch, with 24 RJ-45 auto-negotiating 1 Gbps + min. 2 SFP+ 10 Gbps; min. 1GB DDR3; 512MB NAND flash; Throughput min. 95 Mpps; Switching capacity 128 Gbps; MAC address table size min. 16k; VLAN table min. 4K; QoS, SSL, RSTP, BPDU, LLDP, LACP, CLI, ACL, SNMP, DHCP-Snooping, IPv4 and IPv6 Management, Telnet/SSH; 19", 1U; P.el. = max. 80 W type HPE Networking Instant On Switch 24p Gigabit 2p 10GBT 2p SFP+ 1960 (JL806A) or similar according to specifications	set	1.00		
83	supplier price	Type 3 access switch, with 24 RJ-45 POE+ auto-negotiating 1 Gbps + min. 2 SFP+ 10 Gbps; min. 1GB DDR3; 512MB NAND flash; Throughput min. 95 Mpps; Switching capacity 128 Gbps; MAC address table size min. 32k; VLAN table min. 4K; QoS, SSL, RSTP, BPDU, LLDP, LACP, CLI, ACL, SNMP, DHCP-Snooping, IPv4 and IPv6 Management, Telnet/SSH; PoE budget: 370 W; 19", 1U; P.el. = max. 480 W type HPE Networking Instant On Switch 24p Gigabit CL4 PoE 2p SFP+ 370W 1960 (JL807A) or similar according to specifications	set	3.00		

1	2	3	4	5	6	7
84	supplier price	Wi-Fi access point; with the following basic characteristics (to determine a similar device, take into account all the characteristics of this type of equipment), wall and ceiling mount indoor; min. 1 x RJ-45 1/2.5 Gbps POE (802.3at/af); integrated number of radios - min. 3, 2.4/5.0/6.0 GHz; aggregate wireless speed - min 10.0 Gbps; channel width 20/40/80/160/320 MHz; integrated omni antennas 4 dBi for 2.4 GHz, 5.5 dBi for 5 GHz, 5.5 dBi for 6GHz; SSID up to 8; 802.11 n/ac/ax/be standards, WIFI 4/5/6/6E/7; DL/UL MU-MIMO, OFDMA, BSS colouring, TWT, WPA3 features; can be managed by network and wireless controllers. Ubiquiti Unifi U7 Pro or similar Wi-Fi access point based on features	set	10.00		
85	supplier price	IP telephone device with the following basic features: 2 SIP lines, HD voice, LCD min 128x48 screen, Auto-Provisioning via FTP / TFTP / HTTP / HTTPS / DHCP OPT66 / SIP PNP / TR-069, Web management interface, Protocol: SIP2.0 over UDP / TCP / TLS, RTP / RTCP / SRTP, STUN, LLDP, 802.1x, SNTP; Power Input: PoE 802.3.af type X1SP or similar according to features	pc	11.00		
		<i>Total</i>	lei			
		Total Telecommunications system Including salary				
		3.3. Video surveillance				
86	Supplier price	Network recorder - NVR (Network Video Recorder) with 32 channels for IP surveillance cameras with the following features: * Network: - TCP/IP, DHCP, IPv4, IPv6, DNS, DDNS, NTP, RTSP, SADP, SMTP, SNMP, NFS, iSCSI, ISUP, UPnP, HTTP, HTTPS protocols; - interface: 2x RJ-45 port (10/100/1000M); - input bandwidth: 320Mbps; - output bandwidth: 256Mbps; - users: 128; * Video recording - video compression: H.265+ / H.265 / H.264+ / H.264 / MPEG4;	pc	3.00		

1	2	3	4	5	6	7
		<p>* Audio/Video: - IP video input: 32 channels, up to 12 MP resolution; - input bandwidth: 320 Mbps; - output bandwidth: 256 Mbps; - video output mode: HDMI/VGA; - two-way audio: 1-channel, RCA (2.0 Vp-p, 1 kOhm);</p> <p>* Playback resolution: - HDMI - 4K (3840 x 2160)/60Hz, 4K (3840 x 2160)/30Hz, 2K (2560 x 1440)/60Hz, 1920 x 1080/60Hz, 1600 x 1200/60Hz, 1280 x 1024/60Hz, 1280 x 720/60Hz, 1024 x 768/60Hz; - VGA 1-ch, 1920 x 1080/60Hz, 1280 x 1024/60Hz, 1280 x 720/60Hz, 1024 x 768/60Hz;</p> <p>* Storage: - HDD: 8 x SATA ports, up to 10TB for each hard drive;</p> <p>* Auxiliary interfaces: - USB: 2 x USB 2.0 (front), 1 x USB 3.0 (rear); - RS485: 1x Port, for PTZ Control; - RS232: 1x Port; - alarm inputs/outputs: 16/8;</p> <p>* Rack format: 2U; dimensions: 442 x 459 x 92 mm; power supply: 100 - 240 VAC, 50 - 60 Hz.</p>				
87	supplier price	3.5" hard drive, 4 TB, 256 MB, SATA III, 6 Gbps, RV Sensor	pc	12.00		
88	supplier price	Video camera, indoor, min. 2688 x 1520, 1/1.8" CMOS, IR = 30 m, 2.8/4.0 mm, 802.3 af Class 3, max. 9 W, with built-in microphone, with the possibility of data storage on NAS, with micro SD slot type DS-2CD2147G3-LI(S2U)Y or similar according to characteristics	pc	44.00		
89	supplier price	Video camera, outdoor, min. 2688 x 1520, 1/1.8" CMOS, IR = 40 m, 2.8/4.0/6.0 mm, 802.3 af Class 3, max. 7.5 W, with built-in microphone, with the possibility of data storage on NAS, with micro SD slot type DS-2CD2047G2-L(U) or similar according to characteristics	pc	30.00		
90	supplier price	64 GB Micro SD memory card, Class 10 UHS-I, R/W 100/20 MB/s	pc	74.00		
91	supplier price	RJ-45 FTP connector cat. 5e	pc	100.00		
92	supplier price	External microphone for installation in the bathroom, POE 2.4 W, 16 kHz, omnidirectional type DS-UAC-M1P or similar according to characteristics	pc	20.00		
		<i>Total</i>	lei			

1	2	3	4	5	6	7
		Total Video surveillance Including salary				
		3.4. Call system for staff in toilets for persons with disabilities				
93	Supplier price	Relay control unit and dry contact status transmission via local Ethernet network, supply voltage - 12 V, IP40, dimensions 162 x 103 x 35 mm, operating humidity - up to 80% type MP-040W1 or similar in terms of characteristics	pc	3.00		
94	supplier price	Uninterruptible power supply 12V, 2A in plastic housing with battery	pc	3.00		
95	supplier price	Call button for wired systems in IP44 plastic housing, 12V, dimensions 82 x 82 x 18 mm, operating humidity - up to 80%, equipped with a second call miner with a call cable length of 1.0 m, type GC-0423W1 + MP- 010B1 or similar according to characteristics	pc	3.00		
96	supplier price	Call reset button for wired systems in IP44 plastic housing, 12 V, dimensions 82 x 82 x 45 mm, with mounting box in set, operating humidity - up to 80% type GC- 0421W1 or similar according to characteristics	pc	3.00		
97	supplier price	Three-colour LED lamp (red, blue and green) for corridor (signal light and sound) IP44, 12 V, dimensions 82 x 82 x 64 mm, brightness >= 2000 mCd, sound level >=55 dB, operating humidity - up to 80% type MP- 611W1 or similar in terms of characteristics	pc	3.00		
		<i>Total</i>	lei			
		Total Call system for staff in toilets for persons with disabilities Including salary				
		<i>Total</i>	lei			
		<i>Supply and storage expenses</i>	%			
		Total Equipment Including salary				
		4. Adjustment and start-up work 4.1. Telecommunications system				
98	10-06-068- 16	Adjustment of synchronous digital transmission systems. Adjustment of the control and management system: Programming of the network element and adjustment of its operation (Access switch)	pcs	7.00		

1	2	3	4	5	6	7
99	10-06-068-11	Adjustment of synchronous digital transmission systems: Adjustment of Wi-Fi access point	pcs	10.00		
		<i>Total</i>	lei			
		Total Telecommunications system Including salary				
		4.2. Video surveillance				
100	1-10-001-1	Collection and processing of information signals from protection devices, automatic electrical and technological systems	signal	32.00		
		<i>Total</i>	lei			
		Total Video surveillance Including salary				
		4.3. Call system for staff in toilets for persons with disabilities				
101	1-10-002-1	Signalling sector formation circuit (central, technological, local, emergency, warning, etc.)	1 sector	3.00		
102	1-10-001-1	Collection and generation of information signals from protection devices, electrical and technological automation systems	signal	9.00		
		<i>Total</i>	lei			
		Total Call system for staff in toilets for persons with disabilities Including salary				
		<i>Total</i>	lei			
		<i>Social insurance</i>	24%			
		<i>Total</i>				
		<i>Overhead costs</i>	%			
		<i>Total</i>				
		<i>Estimated profit</i>	%			
		Total Adjustment and start-up works Including salary				
		Total	lei			
		Total estimate: Including salary				