TECHNICAL SPECIFICATION

MAINTENANCE OF THE IP-KVM SYSTEM AND SUPPORTING TECHNICAL SECURITY SYSTEMS

Specification No.:
SP-ES-1521

Non Safety Related

Rev.0

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1. Purpose, Scope and Performance Period

The supporting technical security (TS) systems comprise the IP-KVM system, automation system, multimedia equipment, video walls, and the associated devices, servers, workstations, communication links and software.

The scope of the service is to ensure reliable, secure and traceable operation of the TS systems through preventive, corrective and emergency maintenance, diagnostics, troubleshooting, approved updates and configuration changes, and replacement of defective parts.

The contract shall be concluded for a period of thirty-six (36) months from the service commencement date specified in the contract.

The systems are classified as Non-Nuclear Safety Related. This classification does not reduce the requirements relating to physical protection, cybersecurity, quality, access and safe performance of work at NEK.

2. Systems and Equipment within the Scope of Services

2.1 Weytec IP-KVM system

2.2 Delta video walls, video displays and systems

2.3 Automation system and multimedia equipment

2.4 Servers, workstations, controllers, and associated network and power-supply equipment

2.5 Software, configurations and licences

2.6 Geo-redundant equipment (duplicated equipment located in CAS and SAS) listed in Annex 1B.

2.7 The detailed list of equipment subject to maintenance is provided in Annexes 1A and 1B. Spare parts are listed separately in Annex 1C as the Client’s existing stock.

3. Scope of Maintenance

3.1 Remote Assistance, Consulting and Responsiveness

Remote assistance by telephone or other means of communication, such as MS Teams, for up to 10 hours per month during the 36-month contract period. Readiness for potential emergency maintenance. Planning of regular maintenance interventions and coordination with the Client.

3.2 Preventive Maintenance

During the 36-month contract period, the Contractor shall perform six (6) preventive inspections, generally at six-month intervals. Each inspection is expected to take two working days: one day for the CAS centre and one day for the SAS centre. No later than 30 days after the start of the contract, the Contractor shall prepare a plan for both inspections.

3.3 Corrective Maintenance

Corrective maintenance includes rectification of low-priority faults, replacement of defective components identified during an inspection, minor approved configuration changes, and other non-urgent additional work. It shall be performed based on an approved request or work order. The estimated volume of corrective maintenance is 240 hours during the contract period (approximately 80 hours per year).

3.4 Emergency Maintenance

Emergency maintenance covers incidents of medium, high and very high priority. Initial handling may be carried out by telephone or via Microsoft Teams. Subject to agreement with the Client, it shall be performed based on an emergency maintenance request. The estimated volume of emergency maintenance is 120 hours during the contract period (approximately 40 hours per year).

3.5 Spare Parts, Monitoring and Updates

The Contractor shall propose a list of critical spare parts specifying the type, quantity, delivery time, service life and compatibility. Supply and installation shall be performed following the Client’s prior approval. Spare parts shall be charged to the variable portion of the contract value, but shall not exceed 15% of the total value.

A replacement part must be identical to the original; an equivalent part is permitted only if the original is no longer available and the Client has approved it in advance. The existing stock is listed in Annex 1C.

The Client monitors the operation of the systems using the PRTG monitoring system (Paessler Router Traffic Grapher, an IT infrastructure monitoring system). The Contractor has no direct access to PRTG. As required, the Client shall provide the Contractor with approved data, alarms and reports, while the Contractor shall assist with diagnostics and propose measures.

No update, upgrade or configuration change shall be performed without the Client’s prior approval. Before the intervention, an impact assessment, backup, rollback plan, test procedure and acceptance criteria shall be defined. System updates shall be carried out as part of preventive maintenance.

4. Incident Handling and SLA

The Client shall report an incident to the agreed service contact point and assign the initial priority. The Contractor shall acknowledge receipt, begin technical handling, maintain records of diagnostics and communication, and prepare a service report after the intervention.

Incident description	Priority	Response time	Resolution time	Service hours
IP-KVM is not operational on any console in the VNC; basic tasks cannot be performed.	Very high	1 hour	8 service hours	Every day 07:00-17:00
IP-KVM is not operational on one console in the VNC; the operator cannot work.	High	2 hours	1 working day	Working days 07:00-17:00
An IP-KVM fault impedes non-critical tasks.	Medium	1 working day	5 working days	Working days 07:00-17:00
A video wall fault prevents the use of one display.	Medium	1 working day	5 working days	Working days 07:00-17:00
A fault in other equipment does not impede basic tasks.	Low	3 working days	20 working days	Working days 07:00-17:00

The response time is the period from a correctly submitted report until acknowledgement of receipt and the start of technical handling. The resolution time begins when the Client provides the required information, cooperation of an authorized person, physical access and permits. A maximum of 2.5 hours shall be allowed for travel to and access procedures at NEK; delays attributable to the Client shall not be included.

If the Contractor exceeds the SLA for reasons attributable to the Contractor, the Client shall be entitled to a contractual penalty of 2% of the monthly contract value for each breach, up to a maximum of 20% of the monthly value in any month. The final provision shall be confirmed by the Legal and Commercial Departments.

5. Performance of Interventions and Change Management

Work on NEK systems shall be carried out at the Client's site under a valid work order and under the supervision of the responsible NEK personnel. Only professional communication by telephone or via Microsoft Teams is permitted remotely.

Before the intervention, the Contractor shall provide a description, impact, time estimate, required personnel and equipment, and plans for backup, rollback and functional testing. Any change in scope requires the Client's written approval.

6. Obligations of the Client and the Contractor

The Client shall monitor the systems using PRTG, report incidents, provide data, physical access, permits and work orders, and approve results and justified invoices.

The Contractor shall perform two preventive inspections per year, ensure the agreed responsiveness and qualified personnel, maintain records, prepare reports, and comply with access, quality, confidentiality and cybersecurity requirements.

7. Organization, Qualifications and Reference Requirements

7.1 Technical Capability

The Contractor must hold a valid license and/or proof of qualification issued by the manufacturer Weytec for the configuration and maintenance of IP-KVM solutions and DELTA video wall systems. The Contractor must demonstrate this by providing supporting documentation and certificates issued by Weytec and DELTA.

7.2 Personnel Capability

The Contractor must have at least two qualified specialists for Weytec IP-KVM solutions and DELTA video wall systems. All proposed personnel must be permanently employed by the Contractor or by a subcontractor. The personnel must be available to the Client and capable of professional communication in the Slovenian, Croatian or English language. As evidence, the bidder shall submit the required number of relevant certificates for its personnel or the personnel of its subcontractor.

Any other personnel cooperating with the Client must also communicate directly in the Slovenian, Croatian or English language. The contractor must have at least two trained specialists for the maintenance and troubleshooting of the installed equipment, which shall be demonstrated by training certificates issued by Weytec and DELTA.

7.3 Reference Requirements:

The Contractor must demonstrate in its bid that, within the last five years prior to the publication date of this public procurement procedure, it has successfully, timely, and professionally provided maintenance services for Weytec IP-KVM equipment comprising at least two redundant IP switches and four operator workstations, each equipped with four displays, as well as DELTA video wall systems with a minimum configuration of 4x2.

The Contractor must demonstrate that it has provided such maintenance services for at least three years during the last five-year period. The maintenance experience must be comparable in complexity, scope, and technical requirements to the services covered by this public procurement procedure. The value of each individual reference project must not be less than EUR 25,000.00 excluding VAT per year.

As evidence, the Contractor shall submit customer references duly confirmed by its clients. The Client reserves the right to verify the submitted references by directly contacting the reference clients.

8. Quality, Cybersecurity and Confidentiality

The Contractor must have a quality assurance system appropriate to the scope of services. The Client may conduct audits and require corrective actions.

All activities shall be performed in accordance with SP-3 NEK Cyber Security. Connection of unapproved equipment or media, and use of unapproved software, are prohibited. The Contractor is not permitted direct remote access. Cybersecurity incidents and critical vulnerabilities must be reported immediately, and no later than within 24 hours.

All data, configurations, reports, logs and test results are confidential. The confidentiality obligation shall remain in force for at least five years after termination of the contract, or longer if required by regulations or the contract.

9. Documentation, Records and Reporting

After each preventive inspection, the Contractor shall prepare a report stating the scope, inspected components, tests, findings, risk assessment, measures, recommendations, spare-parts status, changes and open items.

After a corrective or emergency intervention, the Contractor shall prepare a service report describing the problem, cause, work performed, time, materials, tests and system status. Records shall be retained in accordance with the contract, NEK procedures and applicable legislation.

10. Liability and Termination

The Contractor shall be responsible for professional, diligent, safe and high-quality performance and for damage caused through its fault. The Contractor shall not be liable

for a proven disruption outside the scope, unauthorized interventions by third parties, circumstances attributable to the Client, or force majeure.

The contract may be terminated with 90 days' notice if this is consistent with the contract and procurement rules. Upon termination, the Contractor shall hand over the documentation, open requests, configuration records and reports.

11. Input Documents, Regulations and Procedures

The current revisions of NEK procedures and required quality programmes shall apply to the performance of the services, in particular:

- ADP-1.2.116 Document Control Programme at NEK;
- ADP-1.2.009 Process Computer Software Configuration Control;
- ADP-1.2.800 Maintenance Approach and Responsibilities for Process Computer Systems;
- ADP-1.2.801 Accounting and Security Administration on Process Computers;
- ADP-1.2.802 Data Backup and Recovery on Process Computer Servers;
- ADP-1.2.804 Adding a Server or User's Workstation to the Process Computer Network in NEK;
- ESP-2.924 Digital device inspection;
- NEK procedures for the work order process;
- ADP-1.0.020 Use of the Corrective Action Programme;
- ADP-1.1.125 Work Order Execution;
- SP-3 NEK Cyber Security.

If the designation, title or revision of a procedure changes, the current successor version shall apply unless otherwise specified by the Client.

12. Price and Billing

Description	Unit	Estimated quantity
Remote assistance, consulting and responsiveness	month	36
Preventive maintenance	inspection	6 (twice per year)
Corrective maintenance	hour	240 (80 hours per year)
Emergency maintenance	hour	120 (40 hours per year)
Spare parts and additional equipment	item/set	Variable, 15% of the contract value

The quantities represent the maximum planned scope under this contract. Only approved and actually performed hours shall be invoiced. Spare parts are a variable cost, up to 15% of the contract value. Additional work shall be performed subject to the Client's prior approval.

13. Contact Persons

Role	Full name	Telephone	Email
NEK ING PI, Head of Department	Dragotin Vehovar	+386 7 4802 274	dragotin.vehovar@nek.si
NEK ING PI, Engineer	Matej Babič	+386 7 4802 838	matej.babic@nek.si
NEK ING PI, Specialist	Aleš Rožman	+386 7 4802 368	ales.rozman@nek.si
Contractor's responsible person			
Service contact point			

14. Annexes

Annex 1A: Installed equipment subject to maintenance

Annex 1B: Geo-redundant equipment subject to maintenance

Annex 1C: Existing stock of spare parts

Annex 2: Minimum scope of preventive maintenance

Annex 3: Maintenance intervention request

ANNEX 1A: INSTALLED EQUIPMENT SUBJECT TO MAINTENANCE

No.	Product	Quantity
1	Meinberg Lantime M300/GPS	1
2	WEYTEC 16 Slot Chassis (23175)	7
3	WEYTEC PSU GLOBTEK 12VDC/5A 60W (23563V12GT6)	35
4	WEYTEC IP Redundancy / Converter (22955)	9

5	WEYTEC WDP SFP Standard (22970)	52
6	WEYTEC WDP SFP Optical (22971)	13
7	WEYTEC IP-Remote II 24872T TX	1
8	WEYTEC IP-Remote IV 4K 24874T	31
9	WEYTEC WDP Server 2019 UltraFlex Mini PC V3	3
10	WEYTEC WDP activation for 1-10 Positions (25221)	1
11	WEYTEC PRTG Network Monitor up to 500 sensors (25231)	1
12	WEYTEC WDP SNMP Proxy Agent Service (25313)	1
13	WEYTEC SMARTtouch keyboard	7
14	WEYTEC Inlay Keyboard (22022B_SL_BK)	7
15	WEYTEC Console Drawer (23413_24)	1
16	WEYTEC Shelf Board (23413_24E)	1
17	S5731-H48T4XC	2
18	WEYTEC IP-Remote IV 4K 24874R	16
19	JL815A HPE Aruba Instant On 1830 Smart 48G 4SFP PoE+ 370W Switch	1
20	EIZO EV2456 monitor	24
21	WEYTEC IP-I/O Input-Card, 4x Optocoupler Inputs (22340)	8
22	WEYTEC IP-I/O Relais-Card, 4x Relais (22341)	8
23	WEYTEC IP-I/O RS232-Card (22342)	1
24	WEYTEC IP-Remote Audio Mixer (21100)	2
25	HP Z2 MINI G9 i7-12700 16GB	6
26	Crestron PRO4 processor	2
27	Crestron C3RY-8 relay card	3
28	Crestron CGEIB-IP KNX/IP Gateway	2
29	Crestron C2N-VEQ4 sound matrix mixer	2
30	Crestron CNPWSI-75 power supply	1
31	Bose FreeSpace IZA 2120-LZ zone amplifier	2
32	Bose tip 251 speaker (pair)	2
33	NEC MultiSync M491	5
34	Sipronika VP100/20 NET date/time display	7

35	WEYTEC 2 Slot Box (23662)	13
36	Delta DVS-60ARS rear projection cube	10
37	Assy base for Delta laser DVS-60AR	5
38	Samsung Flip 2 (WM65R) smart board	1
39	Barco ClickShare CSE-800	1
40	Crestron TSR-310 handheld touch remote	1
41	Icron USB 2.0 Ranger 2311 extender	2
42	LINDY 38238	1
43	TP-Link EAP 115 access point	1
44	Crestron FlipTop FT2 with associated modules	1
45	WEYTEC S5732 24 Port Switch	2
46	WEYTEC KVM Usb Deskswitch III	2
47	Illuminated Keyboard K740	2
48	Crestron RMC4	1
49	Crestron PW-2407RU	1

ANNEX 1B: GEO-REDUNDANT EQUIPMENT SUBJECT TO MAINTENANCE

No.	Product	Quantity
1	WEYTEC 16 Slot Chassis (23175)	1
2	WEYTEC IP Redundancy / Converter (22955)	1
3	WEYTEC WDP SFP Standard (22970)	107
4	S5731 48 Port Switch	2
5	WEYTEC IP-Remote IV 4K 24874R (receiver)	2
6	WEYTEC IP-I/O Input-Card, 4x Optocoupler Inputs (22340)	7
7	WEYTEC IP-I/O Relais-Card, 4x Relais (22341)	4
8	WEYTEC IP-I/O RS232-Card (22342)	1
9	WEYTEC 2 Slot Box (23662)	7
10	Customizable IP KVM STK buttons for required specification	6

11	Lindy 38131 4x4 HDMI Matrix Switch with Video Wall Scaling	1
12	Aruba Instant On 1830 24G 12p Class4 PoE 2SFP 195W Switch (JL813A)	1

ANNEX 1C: EXISTING STOCK OF SPARE PARTS

This list represents the Client's stock of spare parts and not installed equipment. The Contractor shall review it and recommend additional replacement parts to be held in the Client's stock.

No.	Spare part	Quantity
1	WEYTEC SMARTtouch keyboard	1
2	Delta Spare projector for DVS-60ARS	1
3	VuWall graphic controller spare parts (proposed replacement: WEYTEC 22780 WDP Server incl. OS)	1
4	NEC LCD MultiSync M491, 49"	1
5	WEYTEC IP-Remote IV 4K 24874T (transmitter)	1
6	WEYTEC IP-Remote IV 4K 24874R (receiver)	1
7	WEYTEC PSU Switchmode +12V/400W 3U (23537_12400)	2
8	WEYTEC PSU GlobTek 12VDC/5A 60W (23563V12GT6)	2
9	WEYTEC IP-I/O Relais-Card, 4x Relais with changeover contacts (22341)	1

ANNEX 2: MINIMUM SCOPE OF PREVENTIVE MAINTENANCE

The preventive inspection shall be carried out twice per year, generally at six-month intervals.

Preventive inspection for the year:_____						
No.	Activity	1st inspection	2nd inspection	Note	Contractor	Client
1	Visual inspection of components, cables, connectors, markings and damage					
2	Inspection of IP-KVM servers, transmitters, receivers and consoles					
3	Inspection of video walls, displays and controllers					
4	Inspection of automation and multimedia equipment					
5	Review of alarms, logs, capacities and system events					
6	Inspection of communication links and redundancy					
7	Verification of software versions and approved patches					
8	Verification of backups and the					

	recovery procedure					
9	Functional test of key functions					
10	Review of open incidents and recurring faults					
11	Review of the stock of critical spare parts					
12	Update of documentation and change records					

ANNEX 3: MAINTENANCE INTERVENTION REQUEST

Request number: _____

A. CLIENT REQUEST

Device or system:

_____

Description of the problem and anticipated scope of work:

_____

Request prepared by / signature / date:

_____

Request approved by / signature / date:

_____

B. CONTRACTOR'S PROPOSAL

Proposed description of work:

_____

Estimated time required:

_____

Anticipated materials:

_____

Intervention to be performed by / signature / date:

_____

C. APPROVAL FOR PERFORMANCE

☐ Approved ☐ Rejected

Comment:

_____

Approved by / signature / date:

_____

D. INTERVENTION REPORT

Date and time of performance:

_____

Description of the intervention performed:

_____

Materials used:

_____

Intervention performed by / signature / date:

_____

E. FUNCTIONAL TEST

☐ Successful ☐ Unsuccessful ☐ Successful with open items

Comment:

_____

Confirmed by / signature / date:

_____