

ANNEX II + III: TECHNICAL SPECIFICATIONS + TECHNICAL OFFER

Contract title: Supply of video, audio and IT equipment for strengthening the capacity of the Internal Affairs Sector (IAS) of the Ministry of Interior

Publication reference: EuropeAid/138989/DH/SUP/RS

LOT 1 – Supply of special audio and video equipment

**Columns 1-2 should be completed by the Contracting Authority
Columns 3-4 should be completed by the tenderer
Column 5 is reserved for the evaluation committee**

Annex III - the Contractor's technical offer

The tenderers are requested to complete the template on the next pages:

- Column 2 is completed by the Contracting Authority shows the required specifications (not to be modified by the tenderer),
- Column 3 is to be filled in by the tenderer and must detail what is offered (for example the words “compliant” or “yes” are not sufficient)
- Column 4 allows the tenderer to make comments on its proposed supply and to make eventual references to the documentation

Tenderers are required to demonstrate that offered specifications are responsive to the Tender Dossier requirements identifying model and manufacturer of each individual item in their Technical Offer.

The eventual documentation supplied should clearly indicate (highlight, mark) the models offered and the options included, if any, so that the evaluators can see the exact configuration. Offers that do not permit to identify precisely the models and the specifications may be rejected by the evaluation committee.

The offer must be clear enough to allow the evaluators to make an easy comparison between the requested specifications and the offered specifications.

Unless otherwise specified, the requirements in these Technical Specifications are presented as a minimum standard which the offered goods must meet in order to be compliant. Tenderers may not submit a variant solution for the items required in these Technical Specifications. When brand names are used in the technical specifications, they are “used in descriptive purposes only” since there is no other comprehensive description possible.

The tenderer is expected to submit documentary evidence (brochures, technical data sheets etc.) of the technical compliance of his offer.



Provided documentation must be tidy organized, and all items in respective documentation must be clearly identified (highlighted and indicated by "Item Number").

The documentation's page numbers where the information could be found must be clearly stated in the "Notes, remarks, ref to documentation" column of the offer.

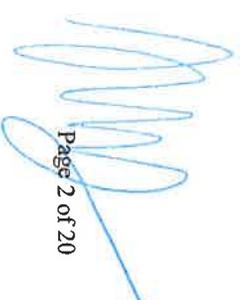
EU Visibility: All supplies shall comply with the visibility Manual for EU External Actions (https://ec.europa.eu/europeaid/communication-and-visibility-manual-eu-external-actions_en) as well as the EU Visibility Manual produced by the EU Delegation to Serbia.

Stickers should be placed on the supplies with a clearly visible EU flag and the phrase "Provided with the support of the EU" in the operational language of the EU programme and in the Serbian language.

A visibility event should be foreseen and financed by the contractor and organised in conjunction with the Contracting Authority.

Abbreviations

3G	Third Generation
AAC	Advanced Audio Coding
AV	Audio Video
AVCHD	Advanced Video Codec/Compression High Definition
AVI	Audio Video Interleave
CMOS	Complementary Metal-Oxide Semiconductor
DC	Direct Current
EU	European Union
HD	High Definition
HDMI	High Definition Multimedia Interface
IEC	International Electrotechnical Commission
JPEG	Joint Photographic Experts Group
LCD	Liquid Crystal Display
Li	Lithium
Po	Polymer
MP	Mega pixels
MP4	Moving Picture Expert Group-4
TVL	Television (TV) lines



Delivery summary

Supply of audio and video equipment		Quantity
No.	Item(s)	
1	Miniature digital audio/video recorder with 3G	4
2	Miniature digital audio recorder – Type I	3
3	Miniature digital audio recorder – Type II	7
4	Set for transitions audio via mains wires	1
5	Miniature digital video/audio recorder	1
6	Long range video observation set with 3G	1
7	Full HD Handycam camcorder with projector	8
8	4K Handycam camcorder	5

General requirements for hardware and system software:

Regarding safety requirements, equipment must have necessary operational warnings as well as mechanical interlocks on the equipment operating/generating more than 30 Volts AC or DC, in accordance with current IEC and EU standards.

Software must be licensed to the Beneficiary in order to allow trained personnel of the Beneficiary to perform software installation, update/upgrade, repair/debug and/or diagnosis/report activities without Tenderer assistance.

Equipment allowing capacity upgrading must be provided in a way that upgrades can be performed by installing additional capacity, without discarding the already installed capacities.



Equipment delivery, including final installation must include all miscellaneous but needed items for equipment delivery and installation in order that the supplies are left in place fully operational and ready for use. Consumables used during delivery, installation and during testing time before provisional acceptance, must be anticipated and calculated in the offer. It shall be the sole responsibility of the Tenderer to check all site dimensions for completeness of equipment delivery before the commencement of delivery.

The Tenderer must provide necessary measures to prevent any damage during any/all delivery and installation stage(s). If damage occurs it must be rectified in an appropriate way by the Tenderer, which must keep the work site clean and safe against fire and/or other hazards during any/all delivery and installation stage(s) until formal acceptance.

Equipment must conform and/or be compatible with any standards, or with the commonly accepted best production practices currently in force, including any ISO, IEC or other relevant standards that may apply to each specific category of equipment. The Tenderer must deliver a certificate of conformity (issued by a quality control independent regulatory agency of recognized competence) for each equipment item or group of items.

Equipment must conform to the relevant CE regulation; all equipment must be CE compliant and fully authorised for use in Europe.

Mains power supply should operate on 220V \pm 20V, 50Hz - 60Hz, and be suitable for direct connection to the standard power outlets in Beneficiary country

All equipment in this tender shall be capable of operating under following temperature, humidity and protection level (as defined in EN 60529): Operating temperature: 10° C- 40° C; Relative Humidity (non-condensing): 20% - 80%;

Completeness of the supply

Supply delivery, including installation must include all needed parts and accessories required for the supplies to be presented for provisional acceptance fully installed, operational and ready for use.

Accessories, fixing, fittings, connections, joints, links, extensions, modules, parts, software and legal licenses as well as documentation used during delivery, installation, integration and customization before provisional acceptance must therefore be anticipated and calculated into the offer.

It shall be the sole responsibility of the Tenderer to ensure that all pre-requisites for the completeness of the supply delivery are met before its commencement.

Technical documents to be delivered during implementation period

Each item set of equipment shall be provided with an original set of user's manuals (printed and/or on a CD/DVD or download from Internet) for all parts of the equipment. These manuals shall be supplied in Serbian and/or English languages.

The obligatory documents for the provisional acceptance:

- Original certificate of origin,

- Warranty document, signed and stamped by the Manufacturer,
- Conformity and quality control documents,

No provisional acceptance can be pronounced without the presence of the complete set of documents.

Warranty

Tenderers must provide local reliable warranty service agent providing maintenance and the rapid supply of equipment spare parts and consumables for the Warranty duration of one year.

Offer must include warranty service description including:

- Service organisation contact data including name, postal address, telephone number, fax number and e-mail address,
- Help Desk (phone) support, which must be available during working hours, 8AM – 5PM,
- Guaranteed maximum response time to submitted maintenance support request (fax or e-mail) of 1 (one) working day,
- Guaranteed that any requests for services will be attended to within 24 hours,
- Guarantee that all items can be repaired or alternatively replaced within a maximum of 72 hours,
- Guarantee that genuine spare parts and consumables will be available for a period of minimum 3 years from the date of final acceptance of the equipment.

Commercial warranty

In addition to the 12 months' warranty period, for each item the Tenderer will provide Beneficiaries with the commercial warranty usually issued by each Manufacturer. :

A description of the Manufacturer's commercial warranty shall be included in the offer.



LOT 1 – Supply of special audio and video equipment

1. Item Number	2. Specifications Required	3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
1.	MINIATURE DIGITAL AUDIO/VIDEO RECORDER WITH 3 G			
	Quantity: 4			
	Manufacturer's name:			
	Product type, model:			
1.1.	Audio video recorder with integrated 3G modem, camera and microphone for covert operations			
1.1.1.	Dimensions: max. 78x78x18mm without battery			
1.1.2.	Supports Evidence proof recording, encrypted data transfer			
1.1.3.	Selectable frame rate (min up to 5 fps) and audio sampling rate (min up to 16 kHz)			
1.1.4.	Internal storage for min 8 hours AV recordings			
1.1.5.	Supports Video resolution up to 800x600			
1.1.6.	Supports No file damage at power disruption			
1.1.7.	Supports Download via 3G Network (on demand			

1. Item Number	2. Specifications Required	3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
	or scheduled)			
1.1.8	Rechargeable battery with charger for min 4 hours of recording.			
1.1.9.	Supports external power supply:-			
1.2.	Pinhole colour video camera with min 1 m cable. Resolution min 800x600. Dimensions max 10x10x8 mm.			
1.3.	Subminiature microphone, with min 1m cable			
1.4.	Dedicated control and management software to be supplied			
1.5.	12 V DC power supply			
1.6.	220 V AC power supply			
1.7.	Carry case			
1.8.	User interface language should be at least English			
1.9.	User manual language should be at least Serbian and English			
1.10.	Warranty: The warranty must remain valid for 1 year after provisional acceptance			
2.	MINIATURE DIGITAL AUDIO RECORDER – Type I			
	Quantity: 3			

1. Item Number	2. Specifications Required	3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
	Manufacturer's name:			
	Product type, model:			
2.1.	Miniature digital audio recorder concealed in a credit card			
2.1.1.	Dimension: Credit card size/outlook, thickness max 1.6 mm			
2.1.2.	Supports Audio resolution: min. 16 bit			
2.1.3.	Sampling frequency: supports up to 22 KHz			
2.1.4.	Supports Data encryption			
2.1.5.	Built-in rechargeable battery			
2.1.6.	Integrated memory for min. 10 hours of recording			
2.1.7.	Integrated microphone			
2.1.8.	Recording activation: supports magnet or other wireless remote means			
2.1.9.	Outlook: customised credit card design			
2.2.	Docking station for charging and download			
2.3.	Dedicated control and management software to be supplied			
2.4.	Carry case			

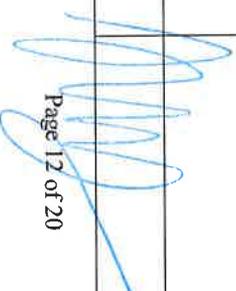
1. Item Number	2. Specifications Required	3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
2.5.	User interface language should be at least English			
2.6.	User manual language should be at least Serbian and English			
2.7.	Warranty: The warranty must remain valid for 1 year after provisional acceptance			
3.	MINIATURE DIGITAL AUDIO RECORDER - Type II Quantity: 7 Manufacturer's name: Product type, model:			
3.1.	Miniature digital audio recorder with external power supply for concealed operations/applications			
3.1.1.	Dimension: max. 20x30x8 mm			
3.1.2.	Sampling frequency: up to 44 KHz			
3.1.3.	Built-in high sensitive microphone			
3.1.4.	Supports Time stamp, records encryption			
3.1.5.	External power supply			
3.1.6.	Integrated memory for min. 10 hours of recording			

1. Item Number	2. Specifications Required	3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
3.1.7.	Recording activation: supports on/off button, voice activation			
3.2.	Control and management software to be supplied			
3.3.	Rechargeable Li-Po battery min. 130 mAh with 220 V AC charger			
3.4.	Rechargeable Li-Po battery min. 350 mAh with 220 V AC charger			
3.5.	12 V DC power supply			
3.6.	220 V AC power supply			
3.7.	Carry case			
3.8.	User interface language should be at least English			
3.9.	User manual language should be at least Serbian and English			
3.10.	Warranty: The warranty must remain valid for 1 year after provisional acceptance			
4.	SET FOR TRANSMISSION AUDIO VIA MAINS WIRES			
	Manufacturer's name:			
	Quantity: 1			
	Product type, model:			



1. Item Number	2. Specifications Required	3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
4.1.	Transmitter for transmitting audio via mains Type I	Quantity: 2		
4.1.1.	Dimensions max. 23x35x15 mm			
4.1.2.	Subminiature microphone			
4.1.3.	Audio bandwidth min 300 – 7000 Hz			
4.1.4.	Supports Automatic gain control			
4.1.5.	Remote switch on/off			
4.1.6.	Mains voltage 220 ± 20V, 50Hz - 60Hz			
4.2.	Transmitter for transmitting audio via mains Type II	Quantity: 1		
4.2.1.	Dimensions: built-in a IEC EU plug			
4.2.2.	Subminiature microphone			
4.2.3.	Audio bandwidth min 300 – 7000 Hz			
4.2.4.	Supports Automatic gain control			
4.2.5.	Remote switch on/off			
4.2.6.	Mains voltage 220 ± 20V, 50Hz - 60Hz			
4.3.	Receiver	Quantity: 1		

1. Item Number	2. Specifications Required	3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
4.3.1.	External power supply			
4.3.2.	Analog line out			
4.4.	Carry case			
4.5.	User interface language should be at least English			
4.6.	User manual language should be at least Serbian and English			
4.7.	Warranty: The warranty must remain valid for 1 year after provisional acceptance			
5.	MINIATURE DIGITAL VIDEO/AUDIO RECORDER			
	Quantity: 1			
	Manufacturer's name:			
	Product type, model:			
5.1.	Miniature digital video/audio recorder with two cameras and a stereo microphone and external power supply			
5.1.1.	Dimensions: max. 70x60x20mm			
5.1.2.	Supports Evidence proof recording with Watermark			
5.1.3.	Supports Video input for two video cameras (up			



1. Item Number	2. Specifications Required	3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
	to HD resolution) – dual camera recording			
5.1.4.	Supports Stereo audio recording			
5.1.5.	Internal storage for min 4 hours HD AV recordings			
5.1.6.	Supports AVI video format			
5.1.7.	Supports No file damage at power disruption			
5.1.8.	Selectable frame rate (up to 25 fps) and audio sampling rate (up to 24 kHz)			
5.1.9.	External power supply			
5.1.10.	Supports Data encryption			
5.2.	Two pinhole video cameras with min 1m cable, resolution min 640x480/25fps			
5.3.	Subminiature stereo microphone with min 1m cable			
5.4	Rechargeable Li-Ion battery min 2.500 mAh			
5.5.	Rechargeable Li-Ion battery min 4.500 mAh			
5.6.	Charger for rechargeable Li-Ion batteries capacity min 4.500 mAh			
5.7.	12 V DC power supply			
5.8.	220 V AC power supply			

1. Item Number	2. Specifications Required	3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
5.9.	All connection cables, connectors for that device to be supplied			
5.10.	Dedicated control management software to be supplied			
5.11.	Carry case			
5.12.	User interface language should be at least English			
5.13.	User manual language should be at least Serbian and English			
5.14.	Warranty: The warranty must remain valid for 1 year after provisional acceptance			
6.	LONG RANGE VIDEO OBSERVATION SET WITH 3G			
	Quantity: 1			
	Manufacturer's name:			
	Product type, model:			
	Long range video observation set for covert operations consist of a miniature video recorder with 3G modem and a miniature video camera with long range lens			
6.1.	Video recorder with integrated 3G modem,			

1. Item Number	2. Specifications Required	3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
6.1.1.	Dimensions: max. 78x78x18mm			
6.1.2.	Supports Evidence proof recording, encrypted data transfer			
6.1.3.	Analog video input/output			
6.1.4.	Internal storage for min 4 hours recordings			
6.1.5	Video resolution supports up to 720x576, 25 fps			
6.1.6.	Supports No file damage at power disruption			
6.1.7.	Supports Download via 3G Network			
6.1.8	Rechargeable battery			
6.1.9.	External power supply			
6.1.10.	Carry case			
6.2.	Colour video camera with 250mm long range lens			
6.2.1	Camera dimensions: max 27x27x30 mm			
6.2.2.	Resolution: min 720x576, 25 fps			
6.2.3.	Min 700 TVL			
6.2.4	Power: 12 V DC			
6.2.5.	250 mm lens with fine tune focus			



1. Item Number	2. Specifications Required	3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
6.2.6.	Carry case			
6.3.	User interface language should be at least English			
6.4.	User manual language should be at least Serbian and English			
6.5.	Warranty: The warranty must remain valid for 1 year after provisional acceptance			
7.	FULL HD HANDYCAM CAMRECORDER			
	Quantity: 8			
	Manufacturer's name:			
	Product type, model:			
7.1.	CMOS or equivalent sensor			
7.2.	Resolution: min. 2.2 MP			
7.3.	Optical zoom: min 30x, Digital zoom: min. 50x			
7.4.	Backside Illumination			
7.5.	LCD screen: min 2.7", min 400.000			
7.6.	Shutter speed: min range 1/30 – 1/8000s			
7.7.	Focus: auto/manual			

1. Item Number	2. Specifications Required	3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
7.8.	Image stabilisation: optical			
7.9.	Video resolution: up to Full HD 1080p (50P)			
7.10.	Video output format: min MP4, AVCHD			
7.11.	Still image output format: min JPEG			
7.12.	Still image resolution: up to 9M			
7.13.	Built-in mic and speaker			
7.14.	Audio output format: min AAC			
7.15.	Built-in WiFi			
7.16.	Storage: replaceable storage card			
7.17.	Output interfaces: min HDMI, A/V			
7.18.	Rechargeable battery.			
7.19.	Accessories: Spare battery, storage card min. 32GB and camera bag should be included			
7.20.	User interface language should be at least English			
7.21.	User manual language should be at least Serbian and English			
7.22.	Warranty: The warranty must remain valid for 1 year after provisional acceptance			

1. Item Number	2. Specifications Required	3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
8.	4K HANDYCAM CAMRECORDER Quantity: 5			
	Manufacturer's name:			
	Product type, model:			
8.1.	CMOS Sensor			
8.2.	Resolution: min. 8 MP			
8.3.	Optical zoom: min 20x, Digital zoom: min. 50x			
8.4.	Backside Illumination			
8.5.	LCD touchscreen display, min 3"			
8.6.	Viewfinder			
8.7.	Shutter speed: min range 1/8 – 1/8000s			
8.8.	Exposure modes: auto/manual			
8.9.	Preset scene modes			
8.10.	Image stabilisation: optical			
8.11.	Video resolution: up to 4K (3840x2160p)			
8.12.	Video output format: min MP4, AVCHD			

1. Item Number	2. Specifications Required	3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
8.13.	Still image output format: min JPEG			
8.14.	Still image resolution: up to 16M			
8.15.	Built-in mic and speaker			
8.16.	Audio output format: min AAC			
8.17.	Built-in Wifi			
8.18.	Storage: replaceable storage card			
8.19.	Output interfaces: min HDMI			
8.20.	Rechargeable battery			
8.21.	Accessories: Battery charger, spare battery, storage card min. 64GB and camera bag should be included			
8.21.	User interface language should be at least English			
8.22.	User manual language should be at least Serbian and English			
8.23	Warranty: The warranty must remain valid for 1 year after provisional acceptance			

Delivery Location

No.	Location	Address	Notice
1	Ministry of Interior of Serbia, MoI	Bulevar Mihajla Pupina 2, 11070 Novi Beograd	
1.1	MoI – Internal affairs sector, IAS	Bulevar Zorana Džindića 104, 11070 Novi Beograd	

