

# **ANNEX II + III: TECHNICAL SPECIFICATIONS + TECHNICAL OFFER**

**Contract title:** Capacity building to implement 'acquis' standards and conventions in nature protection - supplies for implementation of Natura 2000 and CITES - re-launch (ex-Lot 1)

**Publication reference:** EuropeAid/133834/DH/SUP/RS

Subject of this tender is the supply, delivery, installation, customization, putting into operation of ICT equipment and operator training. The tender comprises of two Lots, namely

## **Lot 1: NATURA 2000 ICT Equipment**

The lot comprises of software and hardware for the establishment of a NATURA 2000 information system as a functional update of the existing system for plants and animal species and the register for protected areas at INCS and INCV. The present system at INCS and INCV is based on Microsoft Server 2008R2, Microsoft SQL Server 2008 and Microsoft Small Business Server 2008 Premium. The new hardware and software will update the existing system and will provide seamless connectivity between INCS and INCV. The new hardware and software must ensure 100% compatibility with the existing system.

A derogation for the use of brand names has therefore been obtained for this tender in order to ensure 100% compatibility between the existing system and the software to be procured under this tender.

## **Lot 2: NATURA 2000 GPS**

The lot comprises of GPS units and operator training for the needs of Institute for Nature Conservation of Serbia (INCS) and the Institute for Nature Conservation of Vojvodina Province (INCV).

### **1. General Requirements**

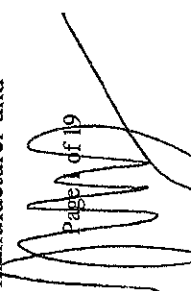
- 1.1. The Contractor will be required to provide at the latest with delivery, original documents or certificates including the test protocols, that prove conformity of all delivered equipment to the requirements as specified in Annex III. Preferably these documents are to be included with the tender offer.
- 1.2. The Contractor must be aware that no provisional acceptance can be given without the presence of the complete set of documents as described under 1.1. and in addition to other requirements conditioning provisional acceptance.

### **2. Minimum requirements and supporting documentation**

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

**Final 2014**

Page 1 of 19



2.2. Technical specifications described in column 2, Table Annex II and III: "Technical Specifications and the Contractor's technical offer" are minimum requirements. Tenderers may offer better specifications and newer models/versions, with improved, additional or new features, but must not provide offers that do not strictly comply with the minimum requirements or are incompatible with intended purpose of use.

2.3. The information provided by the tenderer in column 3 of Annex II and III must be sufficiently detailed to establish that the offered supply meets or exceeds minimum requirements.

The accompanying documentation to be provided for all items being offered must contain detailed technical specifications of technical characteristics, functionality, regulatory compliance, and conformity to standards as requested in specifications in Annex II and III.

The information provided in the accompanying literature must match the Tenderer's written specifications as shown in column 3 of Annex II and III. In case there are minor differences between for example the supplied manufacturers' technical literature and the Tenderer's written specification, the reasons must be detailed in the Tenderer's specifications.

2.4. Manufacturers' technical literature must be marked appropriately i.e. item model number and manufacturers' technical specification "line/s" where they correspond to the requested technical specifications. As cross-reference Column 4 "Notes, remarks, ref to documentation" must be used.

2.5. The Tenderer must preferably attach printed labels to the literature to identify correspondence with the item No offered, rather than handwritten identification.

2.6. Tenderer must provide technical documentation in English language.

### **3. Completeness of the supply**

3.1. Supply delivery, including installation, integration and final customization must include all needed parts, accessories, operating and maintenance manuals, and required for the supplies to be presented for provisional acceptance fully installed, operational and ready for use.

3.2. Training, accessories, parts and documentation used during delivery, installation, integration and customisation before provisional acceptance must therefore be anticipated and calculated into the offer.

3.3. 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.

### **4. Supply Delivery**

4.1. The Tenderer must provide the necessary measures to prevent any damage during delivery, installation, integration and customization stages. If any damage occurs during delivery, installation, integration and customization stages, it must be appropriately rectified by the Tenderer.

4.2. Installation, testing, demonstration and training must be completed within the time frame set out in the Special Conditions of Supply Contracts included in the Tender Dossier. At the end of this period, all items supplied, including hardware and software, must be fully operational and the staff chosen by the Beneficiary will have been given full training for safe and efficient use of the items.

4.3. There will be no partial provisional acceptance. Provisional acceptance may be requested only when all supplies of all the equipment have been delivered to site, have been installed, are fully compliant with all tender specifications and general requirements, have passed all required tests, are fully functional and after operator training has been completed.

## **5. Conformity to regulations and standards**

- 5.1. Items must conform to relevant regulations and standards and including domestic regulations and standards permitting their import into - and use in Serbia. .

## **6. Warranty**

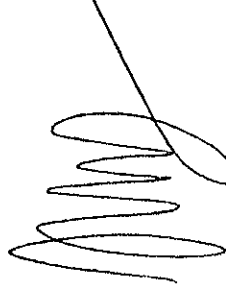
- 6.1 The Warranty period for all supplies must be at least 1 year from the date of the Contracting Authority having issued a certificate of provisional acceptance.
- 6.2 The tenderer must repair defects or damages at his own cost during the Warranty period. In case the defect or damage cannot be repaired within the solution time requested, the Tenderer must replace equipment for the period of time needed for repairs. In case the defect or damage cannot be repaired, the Tenderer must fully replace the item.
- 6.3 The Tenderer must provide or secure spare parts replenishment for specified Warranty period.
- 6.4 The Tenderer must provide Service organisation contact data including organisation name, e-mail, phone and fax number.
- 6.5 Max response time to officially submitted requests not later than the next working day and within 8 (eight) hours max response guaranteed time. (Lot 1 only). "Response Time" is the time elapsed between the contractor is notified (fax, phone, email) and it acknowledges a customer's issue. Max resolution time to officially submitted request not later than 30 calendar days. "Resolution Time" is the time it takes to fully resolve a customer's issue, either by fixing or replacing malfunction equipment with a new one, and It is measured from the moment when issue has been initially reported to the Contractor.

## **7. Visibility**

All supplies must comply with the Visibility guidelines in force within the scope of external aid contracts financed from the EU general budget; c.f.

[http://ec.europa.eu/europeaid/work/visibility/index\\_en.htm](http://ec.europa.eu/europeaid/work/visibility/index_en.htm). As part of the request for provisional acceptance, the Contractor must provide documentary evidence of compliance with the visibility rules.

For purposes of visibility and clarity of labelling, all hardware shall have a solidly fixed metallic type (pure aluminium foil, vinyl lacquer coated aluminium foil, or similar) or solid plastic labels (synthetic surface coated, PVC, or similar) specially formulated for offset printing the design of which should be submitted within four weeks of signature of the contract. Self-adhesive paper or film labels are not allowed. The Contractor shall produce a draft of the layout of any visibility labels and submit it for written approval by the Contracting Authority prior to production / delivery.



## LIST OF ACRONYMS (CHECK FOR COMPLETENESS)

AD – Active Directory

CE – “Conformité Européenne ” (“European Conformity”)

CIFS – Common Internet File System

CPU – Central Processing Unit

D – Dimensional

DMZ – Demilitarized zone

DNS – Domain Name System

FE – Fast Ethernet

FSB – Front-Side Bus

GB –Gigabyte

GbE – Gigabit Ethernet

GHz – Gigahertz

GIS – Geographic Information System

GPS – Global Positioning System

HDD – Hard Disk Drive

HDMI – High-Definition Multimedia Interface

HTTP – Hypertext Transfer Protocol

HTTPS – Hypertext Transfer Protocol (Secure)

ICMP – Internet Control Message Protocol

ICT – Information and Communications Technology

IEC – International Electrotechnical Commission

Final 2014.



IEEE – Institute of Electrical and Electronics Engineer  
IMAP – Internet Message Access Protocol  
IMG – Image  
INCS – Institute for Nature Conservation of Serbia  
INCV – Institute for Nature Conservation of Vojvodina Province  
IP – Internet Protocol  
IPS – Intrusion Prevention System  
IPSec – Internet Protocol Security  
iSCSI – Internet Small Computer System Interface  
ISO – International Standards Organization  
IT – Information Technologies  
JPEG – Joint Photographic Experts Group – compression technique and image file format  
L3 – Level 3  
LAN – Local Area Network  
LDAP – Lightweight Directory Access Protocol  
LED – Light-Emitting Diode  
MAC – Media Access Control  
Mbps – Megabits Per Second  
MAEP – Ministry of Agriculture and Environment Protection in Serbia  
MP – Megapixel  
MS – Microsoft  
NFS – Network File System  
OS – Operating System  
PDF – Portable Document Format

POP – Post Office Protocol  
PPTP – Point-to-Point Tunneling Protocol  
RAID – Redundant Array of Independent Disk  
RAM – Random Access Memory  
RDBMS – Relational Database Management System  
RFC – Request for Comments  
RIA – Rich Internet Applications  
SAS – Serial Attached SCSI (Small Computer System Interface)  
SATA – Serial Advance Technology Attachment  
SMB – Server Message Block  
SMTP – Simple Mail Transfer Protocol  
SNMP – Simple Network Management Protocol  
SOAP – Simple Object Access Protocol  
SQL – Structured Query Language  
SSH – Secure Shell  
TB – Terabyte  
TCP – Transmission Control Protocol  
TCP/IP – Transmission Control Protocol / Internet Protocol  
THC - Total Hydrocarbon  
UDP – User Datagram Protocol  
UPS – Uninterruptable Power Supply  
USB – Universal Serial Bus  
VGA – Video Graphics Array  
VPN – Virtual Private Network

A handwritten signature in black ink, consisting of a series of loops and a long horizontal stroke at the end.

## ANNEX III - THE CONTRACTOR'S TECHNICAL OFFER

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

- **Column 1 and 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,
- **Column 5 is reserved for the Evaluation Committee.**

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.

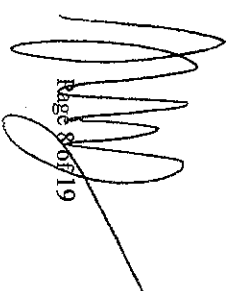
The offer must be clear enough to allow the evaluators to make an easy comparison between the requested specifications and the offered specifications.



The equipment shall be delivered, installed and put into operation as presented in the following table:

No.	Item	INCS	INCV	MAEP	Total
<b>Lot 1: NATURA 2000 ICT Equipment</b>					
1.	Network security appliance	1	1	-	2
2.	ENCLOSURE FOR SERVER and other network equipments	1	1	-	2
3.	Server	1	1	-	2
3.a.	Server operating system	1	1	-	2
4.	UPS	1	1	-	2
5.	Switch	1	1	-	2
6.	Storage System	1	1	-	2
7.	RDBMS Server Software – Microsoft SQL Server 2012 Standard Edition or equivalent	1	1	-	2
8.	GIS Laptop Workstation	13	13	5 <sup>1</sup>	31
<b>Lot 2: NATURA 2000 GPS</b>					
No.	Item	INCS	INCV	MAEP	Total
1.	GPS	16	10		26
1. (I)	Training	13	13	3	29

<sup>1</sup>Total quantity of laptops for MAEP is 5. 2 for the NATURA 2000 Department and 3 for the CITES department





**Location of the beneficiaries' institutions Lot 1:**

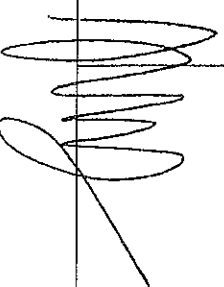
INCS: 11070Novi Beograd (Belgrade)	INCV: 21000 Novi Sad	MAEP:11070 Novi Beograd (Belgrad)
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**Location of the beneficiaries' institutions Lot 2:**

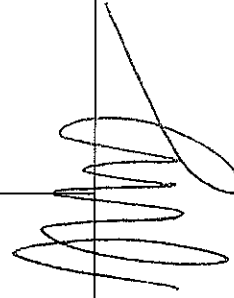
INCS: 11070Novi Beograd (Belgrade)	INCV: 21000 Novi Sad	MAEP:11070 Novi Beograd (Belgrad)
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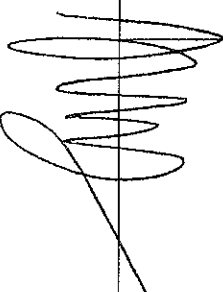
The above institutions are government institutions, non-profit (profit does not go to any private shareholders), no corporate tax is applicable and their budget is financed with more than 50% by the government.

1. Item Num ber	2.  Specifications Required	3.  Specifications Offered	4.  Notes, remarks, ref to documentation	5.  Evaluation Committee's notes
Lot 1: NATURA 2000 ICT Equipment				
1	Network security appliance	Quantity: 2		
	Manufacturer's name:			
	Product type, model:			
	<ul style="list-style-type: none"> <li>a. Must support installation between the Internet and Intranet;</li> <li>b. Minimum 40 user licenses;</li> <li>c. Proactive and reactive unified threat protection for complete security;</li> <li>d. Performance for network protection without affecting network speed;</li> <li>e. Modular design or architecture;</li> <li>f. Must support automatic continual updates without manual administrative intervention;</li> <li>g. Min 3 (three) FE ports must be installed;</li> <li>h. Must support min 50 Mbps firewall, 15 Mbps antivirus and 15 Mbps IPS throughput ; L.V: I would increase the throughput Min configurable min Internal, DMZ and WAN ports;</li> <li>i. Min 1 (one) console port must be installed;</li> <li>j. Firewall protection;</li> <li>k. Anti-malware protection for detection and blocking of malware (viruses, worms, Trojans, spyware, phishing, hacking tools, security risks etc.);</li> <li>l. Content protection (filtering) for customization of various content filtering parameters;</li> <li>m. Anti-spam protection for customization of scan intensity;</li> <li>n. Web access protection for restricting user web access;</li> <li>o. Local and secure administration by using user-friendly web based interface;</li> </ul>			

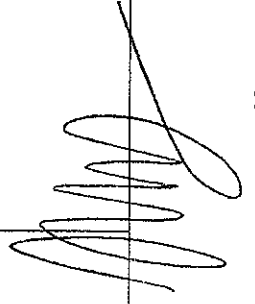



1. Item #	2. Specifications Required	3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
1	<p>p. Display current device activity at all levels (e.g. IPS, VPN, etc.);</p> <p>q. Display detailed and user-friendly reporting at all levels (e.g. IPS, etc.);</p> <p>r. Display alerts (notifications);</p> <p>s. Min 1-year upgrade and update license must be installed;</p> <p>t. Tenderer must create Intranet VPN network with following features:</p> <p>i. Use device for creating network-to-network VPN connections between INCS and INCV and MAEP;</p> <p>u. All accessories needed for installation and operation with items 2, 3, 4, 5 and 6 must be included;</p> <p>v. Must be compatible with items 2, 3, 4, 5 and 6;</p> <p><b>ENCLOSURE FOR SERVER and other network equipments (Server rack)</b></p> <p><b>Manufacturer's name:</b></p> <p><b>Product type, model:</b></p>			
2	<p>a. 19" rack enclosure, min 42 U (42 HE);</p> <p>b. Free standing, transparent front door or perforated metal door with mechanical lock/key, side opening, with side/top perforations that allow airflow through the rack</p> <p>c. Cable routing elements must be installed (integrated electrical grounding);</p> <p>d. Min 1 (one) power bar with min 6 (six) output connections must be installed;</p> <p>e. Must be delivered with all accessories needed for installation, operation and maintenance of items 6,5, 4, 3 and 1;</p> <p>f. All accessories needed for installation and operation with items 1, 3, 4, 5 and 6 must be included;</p> <p>g. Must be compatible (width, depth, cooling, placement, cable routing etc.) with items 1, 3, 4, 5 and 6;</p>			




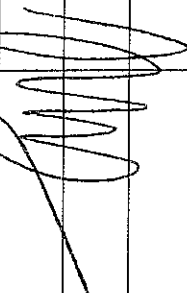
1. Item #	2. Specifications Required	3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
3	Server (RDBMS and Application hardware Server)	Quantity: 2		
	Manufacturer's name:			
	Product type, model:			
	<p>a. Rack server type, max 4U (4HE), must be delivered min with 19" rack sliding rails;</p> <p>b. Min 2 (two) 64-bit processors must be installed, with min 4 (four) cores per processor, min 2.4GHz per processor;</p> <p>c. Min 64GB RAM must be installed with support for future upgrade to min 128GB;</p> <p>d. Min 4 (four) internal hot-plug SAS HDDs, capacity min 300GB, RAID 1 mirrored, storage RAID controller on the board with 500MB cache;</p> <p>e. Min 2 (two) 10Gbps LAN network card must be installed and support for 10GbE managed L3 switch, with min support for TCP/IP and iSCSI Offload engines;</p> <p>f. Server form must be rack mountable;</p> <p>g. Must be compatible with items 2,5 and 6;</p> <p>h. Must support min MS Windows 2008R2 and later and server virtualization;</p> <p>i. Must support min 2 (two) power supplies with sufficient power for all components in redundant configuration;</p> <p>j. All accessories needed for installation and operation with items 1,2, 4, 5 and 6 must be included;</p> <p>k. Must be compatible (width, depth, cooling, placement, cable routing etc.) with items 1, 2, 4, 5 and 6;</p>			

1. Item #	2. Specifications Required		3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
3a	Server operating system	Quantity: 2			
	Manufacturer's name:				
	Product type, model:				
	<ul style="list-style-type: none"> <li>a. Microsoft Windows Server 2012 Standard or equivalent.</li> <li>b. Must be compatible with item 3.</li> <li>c. Must be installed, completed of all eventual service packs and patches and configured on item 3.</li> <li>d. Must provide license for physical and virtual environments, for each server (Item #3),</li> <li>e. Each license must support 2 virtual machines</li> <li>f. License type: per CPU without license time limitation and minimum 100 concurrent users;</li> <li>g. All physical media needed for installation and repairing;</li> </ul>				



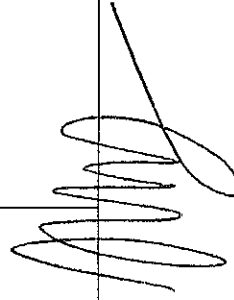
1. Item #	2. Specifications Required	3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
4	UPS  Manufacturer's name:  Product type, model:	Quantity: 2		
	a. Must support 19" rack, max 5U; b. Min 5000VA capacity; c. Input/output voltage 220V/50Hz; d. Maintenance-free leak-proof sealed type of battery; e. Automatic self-test; f. Temperature-compensated battery charging; g. Power conditioning (a.k.a. surge, spike, lightning and other protection); h. Min 1 (one) input connection and min 6 (six) output connections; i. Min 20 minutes of backup time at half load; j. Supplied with built in module and software for remote TCP/IP network monitoring and management k. Min front LED status indicators for status information display; l. All accessories needed for installation and operation with items 1, 2, 3, 5 and 6 must be included; m. Must be compatible with items 1, 2, 3, 5 and 6;			
				


1. Item #	2. Specifications Required		3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
		Quantity: 2			
5	Switch				
	Manufacturer's name:				
	Product type, model:				
	a. Must support 19" rack, max 1U (1HE); b. Layer 3 switch, support for Layer3 trace route (load balancing and routing between different VLANs as minimum); c. Gigabit Ethernet; d. Min 24 ports 10/100/1000 Mbit; e. Support for IEEE 802.1d, 802.1w and 802.1s protocols; f. Platform must support 8000 MAC addresses; g. Must be web managed; h. All accessories needed for installation and operation with items 1,2, 3, 4 and 6 must be included; i. Must be compatible with items 1,2,3, 4 and 6;				
6	Storage System	Quantity: 2			
	Manufacturer's name:				
	Product type, model:				
	a. Must min support CIFS and NFS protocols; b. Must support 19" rack, min 1U (1HE), min 4 HDDs single storage enclosure capacity; c. Must support min hot swappable SATA type of HDDs with various single HDD capacities (e.g. 500GB, 750GB, 1TB, etc.); Min redundant power supplies and fans must be installed;				

1. Item #	2. Specifications Required	3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
6	d. Must support min RAID 0, 1, 5, 6 and 10; e. Min 4TB of installed raw capacity (e.g. 8x500GB or 4x1TB, etc.) must be installed; f. Min 2 (two) copper FE or 2 (two) copper GbE ports must be installed; g. Must support SNMP, SSH, HTTP or HTTPS as device management protocol; h. Must support secure user device access; i. Must support min MS Windows 2008 and later, and Linux-based operating systems; j. Must be compatible with items 2, 3 and 4; k. Storage System form must be rack mountable; l. All accessories needed for installation and operation with items 1, 2, 3, 4 and 5 must be included; m. Must be compatible with items 1, 2, 3, 4 and 5;			
7	<b>RDBMS Server Software</b> (2 or more license, based on licence policy) <b>Manufacturer's name:</b> <b>Product type, model:</b>	<b>Quantity: 2</b>		
	a. Microsoft SQL Server 2012 Standard Edition with license for minimum 4 core (in virtual environment), for each server (Item #3), without license time limitation and minimum 50 concurrent users or equivalent; b. Must be installed and configured on item 3; c. All physical media needed for installation and repairing;			
8	<b>GIS Laptop Workstation</b>	<b>Quantity: 31</b>		
	<b>Manufacturer's name:</b>			
	<b>Product type, model:</b>			



1. Item #	2. Specifications Required	3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
8	<ul style="list-style-type: none"> <li>a. CPU: 2.5 GHz minimum or higher with 6MB cache; Hyper-threading (HHT), min 2-core, 64-bit ;</li> <li>b. FSB min 1333 MHz;</li> <li>c. RAM: Min 8GB of physical memory;</li> <li>d. HDD capacity at least 500 Gb SATA III;</li> <li>e. Not less than 15.6" screen (recommended LED with backlighting);</li> <li>f. Graphics card: 2D GPU video card with at least 1 GB dedicate memory and OpenGL compatible graphics card;</li> <li>g. Optical Media;</li> <li>h. Connectors and additions available: at least 3 USB ports, min 1 eSATA or USB3 port, Ethernet LAN 10/100 Mbps, 802.11 b/g/n , Bluetooth , VGA; Card Reader (desirable: HDMI) Desktop Antivirus software installed with minimum:               <ul style="list-style-type: none"> <li>i. Online updates;</li> <li>i. Single management console;</li> <li>i. Compressed files inspection;</li> <li>ii. Removable media scanning;</li> <li>iii. Desktop email clients scanning;</li> <li>iv. 1 year update licence;</li> </ul> </li> <li>j. 64-bit enterprise level Desktop OS must be installed with min support for easy and secure connection to enterprise networks, GIS Server and Desktop GIS Software;</li> </ul>			



1. Item #	2. Specifications Required	3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
8	<p>k. Office automation software package(s) with following functions must be installed</p> <ul style="list-style-type: none"> <li>i. Word processor client;</li> <li>ii. Spread sheet client;</li> <li>iii. Presentation client;</li> <li>iv. Email client (with min support for IMAP/POP3);</li> <li>v. PDF (read/create) client;</li> <li>vi. Address book client;</li> <li>vii. Calendar client;</li> <li>viii. Internet access client;</li> <li>ix. Graphics image editor;</li> </ul>			

1. Item #	2. Specifications Required	3. Specifications Offered	4. Notes, remarks, ref to documentation	5. Evaluation Committee's notes
<b>Lot 2: NATURA GPS</b>				
1	<p><b>Handheld GPS receivers With built-in navigation software and maps</b></p> <p><b>Manufacturer's name:</b></p> <p><b>Product type, model:</b></p> <p>a. High-sensitivity receiver;</p> <p>b. Waypoints non less then 2000;</p> <p>c. Color display with backlighting;</p> <p>d. Electronic compass, barometer;</p> <p>e. Slot for MicroSD memory card,</p> <p>f. Mapping functionality;</p> <p>g. Autofocus camera, min 3MP, with automatic geotagging location;</p> <p>h. Basic world map with shaded relief;</p> <p>i. Ability to measure distance travelled and area, with option to save the measurements;</p> <p>j. Support for raster (e.g. georeferenced *.tiff, *.jpg or equivalent) and vector maps (e.g. ESRI shapefile or equivalent) created by the users;</p> <p>k. Configurable Map Datum and User Grid;</p> <p>l. 2 x 0.5 day structured training on all functionalities of GPS and camera and interfaces for up to 29 users in premises of INCS and INCV respectively. All relevant training materials to be provided by tenderer. Training language Serbian.</p>	Quantity: 26		
				