



REQUEST FOR BIDS

DATE: **3/9/2010**
REFERENCE: **RFQ-CCTV2010**

Dear Sir / Madam:

UNDP Malaysia is requesting for bids for the supply and installation of a CCTV System in and around Wisma UN located at Block C, Kompleks Pejabat Damansara, Jalan Dungun, Damansara Heights, Kuala Lumpur, in accordance with the attached specifications.

All responses must be received by the UNDP contact person before **1200 hours on 25 September 2010** by email (preferably in PDF Format) (email address are indicated below), and labeled "**RFQ- CCTV2010**".

Generic Description [incl. Technical specifications, quality & safety standards, special features required]

Three categories of camera shall be used for the video monitoring of the exterior and specific internal locations.

1.0 Outdoor – Drive-Way 9 units

Ultra high resolution camera of no less than 570TVL with Day & Night function, wide dynamic range of 400: 1 and good quality aspherical Varifocal lens that can achieve a horizontal coverage variation from 33° - 90°
The camera is to be encased into an integral camera housing-cum-IR illuminator and mounted on camera poles or wall depending on site condition, built-in blower & heater, cable-managed bracket and IR radiant of up to 60m

Camera

Power Source	:	AC100~260V
Power Consumption	:	Max 5.5W
Image Device	:	1/3" Vertical Double-Density Interline CCD
Chip Size	:	6.00mm(H) x 5.00mm(V)
Effective Pixels	:	752(H) x 582(V) (PAL)
Horizontal / Vertical Sync. Frequency	:	15.625KHz / 50Hz
Menu Control	:	OSD Control
Resolution	:	Above 570TVL
Video Output CVBS	:	1.0Vp-p / 75Ω
Min. illumination	:	Color : 0.0002Lux / F1.2 (Sense-Up Auto)

	Mono : 0.0001Lux / F1.2 (Sense-Up Auto)
Wide Dynamic Range	: 4000 : 1
Back Light Compensation	: Low / Medium / High
Electronic Shutter Speed	: 1/60(1/50)S ~ 1/90,000S
Slow Shutter	: 2~16Fld / 24Fld / 32Fld / 64Fld / 128Fld / 256Fld / 512Fld
3D Digital Noise Reduction	: Low Middle / High / Off
Motion Detection	: 4 Zones, ON / OFF
Digital Zoom	: On (X10 Max.) / Off
Digital Effect	: V-flip / mirror / Rotate / OFF
Dimension	: 56mm(W) x 54mm(H) x 112mm(D)
Weight	: 500 - 530g

Lens

Type	: Auto Iris Varifocal
Focal Range	: 3.0~8.5mm F/1.0~360
Designed Format	: 4.8 x 3.6mm (1/3")
Field of View	: D 114.1° ~ 41.9° H 90.5° ~ 33.6° V 67.2° ~ 25.2°
Driving Coil / Supply Volt	: 190ohm
Damping Coil / Current	: 855 ohm
Back Focus	: 7.94 ~ 13.96mm
Operating Temperature	: - 10°C ~ + 50°C

Enclosure

Construction	: Aluminium casing with top opening
Mounting	: Cable-managed wall mount bracket
IP Rating	: IP66
Power Input Voltage	: 90~260VAC
IR Radiant	: 60m, sensor auto control, adjustable
Window	: ☒ 110 Heat resistant glass
Glass Thickness	: 3 - 3.5 mm
Power Consumption	: 22W
Operating Temperature	: - 20°C ~ + 60°C

2.0 Outdoor – Specific Location 4 units

Super high resolution Day & Night IR dome vandal resistant camera with high quality ED glass aspherical lens to achieve a horizontal coverage of 24° ~ 99°

The camera dome cover shall be of impact resistant polycarbonate and its metal casing secured with tamper proof fasteners shall be resistant to vandal attack.

The IR radiant of this IP68 rated camera shall be up to 21m and comes with wall mount adaptor bracket

Power Supply	:	Dual Voltage 12VDC / 24VAC
Power Consumption	:	6.2W / 4.5W
Image Device	:	1/3" Super HAD CCD
Chip Size	:	5.59mm(H) x 4.68mm(V)
Effective Pixels	:	752(H) x 582(V) (PAL)
H/V Sync. Frequency	:	15.625KHz / 50Hz
Min. Resolution	:	540TVL
Min. illumination	:	0.03 Lux/F1.2, 0 Lux with IR On
Back Light Compensation	:	Auto
Infrared Cut Filter	:	Auto selectable / Automatic switch from color mode or monochrome
Operating Temperature	:	- 10°C ~ + 50°C
Weight	:	1 200 - 1450g

3.0 Indoor – Specific Location 4 units

Ultra high resolution dome camera of no less that 570TVL with Day & Night function, wide dynamic range of 400 : 1, 3D-DNR (3 dimension – digital noise reduction), electronic image stabilization, digital zoom, OSD menu control with the ability to achieve a horizontal coverage 99° ~ 24°

Power Source	:	Dual Voltage 12VDC / 24VAC
Power Consumption	:	3.0W / 2.5W
Image Device	:	1/3" Vertical Double-Density Interline CCD
Chip Size	:	6.00mm(H) x 5.00mm(V)
Effective Pixels	:	752(H) x 582(V) (PAL)
Horizontal / Vertical Sync. Frequency	:	15.625KHz / 50Hz
Menu Control	:	OSD Control
Resolution	:	Above 570TVL

Video Output CVBS	:	1.0Vp-p / 75 Ω
Min. illumination	:	Color : 0.0002Lux / F1.2 (Sense-Up Auto) Mono : 0.0001Lux / F1.2 (Sense-Up Auto)
Wide Dynamic Range	:	4000 : 1
Back Light Compensation	:	Low / Medium / High
Electronic Shutter Speed	:	1/60(1/50)S ~ 1/90,000S
Slow Shutter	:	2~16Fld / 24Fld / 32Fld / 64Fld / 128Fld / 256Fld / 512Fld
3D Digital Noise Reduction	:	Low Middle / High / Off
Motion Detection	:	4 Zones, ON / OFF
Digital Zoom	:	On (X10 Max.) / Off
Digital Effect	:	V-flip / mirror / Rotate / OFF
Dimension	:	ϕ 120 x 102mm
Weight	:	330 - 350g
IR illumination Radiant	:	Up to 60m, 30° angle
IR LED Power On	:	Sensor Auto Control, Adjustable Control Point
Cable-Managed Enclosure With Mount Bracket	:	IP 66 Rating
Construction	:	Aluminium

4.0 Digital Video Recorder

Digital Surveillance System

General Description

The digital surveillance system shall be installed on a Microsoft Windows 7 64-bit operating system for video surveillance (CCTV) purpose. It shall serve as a Digital Video Recorder (DVR), which shall provide a high-quality recorder capable of storage and retrieval solution for video and audio for maximum 32 CCTV camera (s) at a simultaneous refreshing recording rate from 6fps (Frame Per Second) to 25fps (NTSC/PAL) per camera. The DVR shall own a watchdog system, and be compatible to integrate with other peripherals for external input sensors, output alarms, multiple monitor (min 4) displays, POS/ATM transactions and Wiegand-based access controllers.

Functionality Description

1. The Digital Video Recorder (DVR) shall be based on a HDD recording structure and IP-networked.
2. Digital video management and storage capabilities in 1 system.
3. Ease of use, future expandability, system reliability and journaling file system.
4. Initially equipped with 16 Analogue Cameras inputs but system must be capable to upgrade to 32 channels or

Hybrid with IP cameras when necessary.

5. It shall have at least TWO computer monitor output for multiplexed / SPOT viewing on GUI and expandable to 6 monitors or above.
6. It shall ready with I/O expansion capability for different types of sensors, such as smoke detector, vibration, magnetic contact and with possibility to control relay peripherals, such as acoustic alarm, fire alarm, door locks, etc. The I/O expansion module must be TCP/IP based communication interface with 16x Digital Input and 16x Digital Output and must be expandable. It shall support IP-based Digital I/O from camera or video server as well.
7. It shall support email, SMS and Hotline (PSTN), or pager alert upon Motion/Alarm Event/Digital Input happens, for example Video Loss, Recording Error, Disk Full, I/O Error, Object Management, Sabotage on Camera...etc.
8. The DVR shall facilitate with built in Pan/Tilt/Zoom operation to control PTZ cameras. It shall support IP-based PTZ cameras or video servers. During operation inactivity the PTZ-camera shall be able to return to home position or conduct with user-defined tasks (Tour). Upon alarm event, VMD or I/O triggers, PTZ camera should focus to a predefined preset point immediately.
9. It shall be controllable by professional surveillance keyboard controller and capable to control up to 16 DVR systems (via RS485) by single keyboard. PTZ camera shall be controllable by joystick.
10. It shall capable to receive unaltered transaction data from banking ATM/Teller or retail Point-of-Sale (POS) through RS232/485 or TCP/IP communication interface.
11. POS/ATM Optional Expansion Set: Receive POS/ATM transaction data without altering content.
 - Send and receive using RS232/485 or LPT port.
 - Send and receive using TCP/IP or RS232.
 - Forward transaction data to DVR and predetermine peripheral, such as printer.
12. It shall receive/forward unaltered information from/to Wiegand-based access control system and retrieve/display user-defined field(s) from database.
13. Wiegand Optional Expansion Set: Receive 26-bit through 40-bit Wiegand-coded format information.
 - Send through Wiegand Port, receive using RS232
 - Forward Wiegand-coded information to NVR and predetermine system, like Access Control.
 - Retrieve/display user-defined field(s) from database.
14. It shall support storage expansion without stopping recording. System should built-in Schedule Backup or SYNC Backup functions to remote storage devices via direct attached storage, such as SAS, e-SATA or network attached storage.
15. The remote backup storage functions shall capable to trigger SMS alert upon the communication breakdown between DVR and remote backup storage devices.
16. The DVR shall be provided with external UPS for further stability and functionality even by power disruption.
17. It shall have hardware and software watchdogs to monitor system operations.
18. The DVR shall have manufacturer support on revision control on the hardware and software for 5 years from the

date of manufacturing. Vendors must provide Authorized Agent Certificate from product Principal.

Live Monitoring

1. The main GUI shall be compatible to wide screen format such as 1920x1200, 1440 x 900.
2. It shall contain multiple view configurations like single, four, six, eight, nine, ten, twelve, sixteen or 32 camera displays.
3. The aspect ratio shall be customizable between 3:2 / 4:3 / 5:4 or automatically fit.
4. VMD (Video Motion Detection) /Alarm Event/Digital Input triggered camera shall be highlighted without human intervention instantly.
 - Popup Screen.
 - Centralize viewing method.
 - Triggered related digital output relay(s).
5. Camera can be hidden from public viewing through privilege control on normal user.
6. Video attributes like sharpness, saturation, brightness and contrast can be modified to match the environment, providing the best optimal recording quality.
7. OSD shall be recorded and overlay over video with camera identification, date and time. OSD font and position attribute shall be configurable.
8. System date/time, remaining hard disk space and active server instances shall be shown.
9. Multi-tasking support.
 - Recording instances.
 - Playback procedures.
 - Network Server services.
 - Integrity Management.
 - Remote Operation.
 - Video Output display Control
10. Instant playback of the specific camera shall be available.
 - Time interval of 10, 30, 60 and 300 seconds.
 - Recording operation must not be stopped.
11. It shall have the ability to take snapshot of live scene.
12. Enhance live viewing with DirectX and De-Interlace techniques, to provide a sharper, crisp clear quality.
13. It shall support touch panel, virtual keyboard, surveillance keyboard, IR remote control and joystick without the need of conventional keyboard or mouse.
14. It shall support live digital zooming on multiple Region Of Interests (ROI) within a video channel view to enhance

area of interest for detail surveillance purpose.

15. It shall support desktop lockup. Prevent unauthorized application other than DVR launches.
16. It shall support multiple monitors with predefine divisions for live viewing, playback, alarm events or other operations without obstructing surveillance scene.
17. Alert like Video Loss or Connection Loss shall be displayed on inactive camera and an acoustic tone shall be played.
18. It shall automatically start recording and other server services and/or switch to the user-defined account when system is in idle.
19. It shall support defog function to obtain better image quality (option).
20. It shall support anti-vibration feature to obtain better image from vibrating cameras (option).
21. It shall support Jigsaw function that the user can get one bigger image from 4 specified cameras (option).

Recording

1. The DVR must be capable in grouping different cameras and record in different record location.
2. Recorded video recording resolution can be either CIF, 2CIF, VGA, D1, 1.3MP, 2MP, 3MP, 5MP...etc. Megapixel resolution applied upon the implementation of IP camera into the system.
3. Users shall be able to select from 1 to 25 frames for different cameras.
4. Each recording files shall contain no more than five minutes to reduce maintenance efforts and prevent data corruption.
5. Recording shall use H.264 or H.264V2 to extend recording time and be smaller enough to be transmitted through TCP/IP.
6. Recording methods shall be set as continuous, schedule, alarm event or I/O triggered and VMD recording.
7. Each VMD grid(s) shall be defined by users with different sensitivity levels for each camera to minimize false alarm(s).
8. Pre-/post-recording on event or alarm set by camera shall be available.
 - Pre-recording buffer shall use DRAM or non-volatile storage to extend pre-recording time up to 45 minutes and post-recording time shall be max. 10 minutes.
 - Extend Pre-Recording time using HDD.
9. Important Recorded clips can be protected from being overwritten.
10. Recorded video archives shall contain digital signature or stenographic to avoid data manipulation and be useable as evidence material in court of law. Tool for verification shall be present at no charge.
11. It shall be provided with audio recording together with video simultaneously.
12. The DVR shall equip with sufficient build in hard disk slot at least for 30 Days recording. System should upgradable to RAID6 protection for all recorded data and redundancy power supply should be included to ensure no interruption on video recording.

13. When available free disk space reaches the user-defined limit or after a certain period of time overwrite older archives must be present, preventing interruption and keeping continuous recording operation, with the exception for those which are flagged with non-overwrite protection.
14. Recycle threshold function shall available with DVR system to ease user on determine the capacity of older recording log file to be deleted.
15. All VMD, alarm event, I/O triggered recording shall be protocol in log database.
 - Notification shall be sent either per email, SMS, Hotline (PSTN), or pager.
 - Related digital output relay(s), like alarm, shall be triggered.
16. It shall mask certain sensible region permanently or password-protected for later retrieve.
17. It shall send alert and flagged against overwritten when.
 - The camera is being tampered.
 - The camera view is being altered.
 - The camera is obstructed with object.
 - Notification shall be sent either per email, SMS, Hotline (PSTN), or pager.
 - Related digital output relay(s), like alarm, shall be triggered.

Video Analysis & Object Management

1. It shall support counting from objects or persons crossing user-defined borderline to define entry and/or exit direction.
 - At least 4 sensitivity levels and object sizes shall be user-defined.
 - Recorded and/or Live camera shall contain bounding boxes or other visual effects to attract security personal attention.
 - Wrong direction flow will alert operators either via email, SMS, Hotline (PSTN), computer speaker or related digital output relay(s), like alarm, shall be triggered.
2. It shall support alert when a crowd of people gathers in a specified area and exceeds the defined threshold (option).
3. It shall support continuous and static snapshots from VMD triggered cameras, which work as bookmark in a separate window for later retrieve process.
 - Extraction of human face.
 - Clicking on the snapshot shall playback the specific scenario without entering date/time/camera.
4. It shall support asset protection by defining object size.
5. It shall send alert when an unidentified object is placed.
6. Recorded clips shall be protected against overwritten, playing acoustic tone and triggering corresponding digital output relay.

7. It shall support intuitive I/O triggering.
 - Clicking on object from camera view to trigger an associated digital output relay.
 - Set as button or area. Colorize for easier differentiation
8. It shall be schedule into specific time frame to perform video analytic tasks.
9. It shall support indoor and outdoor advanced operations using special USB dongle (option).
10. All Video Analysis shall respond to trigger for alert sending via email, SMS, Hotline (PSTN), computer speaker or related digital output relay(s), such as siren.

User Right Management

1. The system shall support up to 1000 accounts.
2. It shall have four predetermined user levels, like administrative, power user, normal user and guest accounts.
3. Each account level must be flexible enough for customization in order to meet different security levels or scenarios.
4. Delegation of privilege, password expiration, de-/activation account, local and remote password changes and user restriction shall be present.
5. Password shall be retrieval through Email.
6. It shall prevent unauthorized system shut down process to specific user(s) or group(s).

Playback

1. It shall be able to use frame by frame playback method or continuously in real-time method.
2. 1/8x, 1/4x, 1/2x, 1x, 2x, 4x, 8x, 16x, 32x playback speed.
3. Forward or reverse playback.
4. It shall be able to adjust brightness, contrast, saturation, equalization, invert, grey, sharpness or softness to improve image quality.
5. Display in single, quad-channel, multi-channel, and thumbnail (25 consecutive preview images), which time frame can be determined by users.
6. Recorded clips shall be easily displayed in timeline or time-tree basis.
 - In time timeline basis the interval shall be in hour or 24-hrs mode.
 - In time tree basis it shall be able to show time, total captured frames and total file size.
7. On playback it shall support live digital zooming on multiple Region Of Interests (ROI) within a video channel view to enhance area of interest for detail surveillance purpose
8. It shall overlay camera, recorded time, and transaction data as OSD.
9. It shall have Smart Search facility to find objects using user-defined conditions in the search grid. Conditions like counting, asset protection, unidentified object and alarm events shall be supported. Search result shall be played

and exported to user-defined image format.

10. It shall support point to point loop playback.
11. It shall support playback, remote management and backup of other DVR using TCP/IP connection.

Video Export

1. Exported images shall contain date, time, DVR, camera, transparency and digital watermark.
2. It shall be exported in multiple formats like JPEG/BMP/GIF/PNG/TIF.
3. It shall be exported as AVI or EXE format with built-in player.
4. It shall be able to add or remove masking areas for sensible contents. The mask area can be integrated as permanently in video or recoverable using password protection.
5. It shall have an inbuilt digital signature (watermark) authentication application.
6. The DVR shall have internal DVD-RW for one-step burning method. That means after selecting time frames it shall backup immediately without launching additional burning application.
7. It shall support printing of recorded images for report purpose using system built-in printer.
 - It shall list with following items DVR, camera, time, date and note with custom font art and size; along with custom image position.
 - It shall be able to print thumbnails as sequential images.
8. It shall have the capability to burn a single large file on more than one DVD in sequence.
9. It shall support video merging from several single video clips become a longer time length video clip.
10. It shall support export part of video footage from a single video clips as new AVI video backup file.

Remote Monitoring

1. Access using either MS Internet Explorer or Remote Client Software.
2. No software required to be installed in Remote Clients by using MS Internet Explorer. All necessary applications shall be downloaded automatically using ActiveX techniques from the Internet.
3. It shall support secure socket layer (SSL), IP filter and RSA encryption.
4. It shall support custom digital certificate and private key with encryption strength up to SSL v2/v3 1024 bit
5. TCP/IP connection port(s) shall be user-defined.
6. It shall support Dynamic Domain Name Server (DDNS) which allows DVR to use Dynamic IP address for Internet connection.
 - Dynamic Domain name shall be provided freely.
 - Login name and password determined by users.
7. Each DVR system shall support up to 200 concurrent connections.

8. It shall support Guest account with time limitation.
9. It shall support File Transfer Protocol with alternative Port and Interval.
10. It shall support bandwidth control.
11. It shall support UPnP capable router.
12. It shall support electronic map for an intuitive camera and digital I/O status overview.
 - Multi-Layer support.
 - Concurrent up to 500 DVR/NVRs connections.
13. Client using MS Internet Explorer® shall be able to
 - Connect and switch to multiple DVR/NVR(s)
 - a. Real-time bandwidth adjustment.
 - b. User-defined control levels, camera, video attributes.
 - c. Start/Stop normal, schedule, I/O recording
 - d. Pop-up when VMD, alarm event, I/O triggered.
 - e. Save snapshot from instance.
 - f. Remote PTZ control.
 - g. Two-way audio communication.
 - h. Object Counting data.
 - Playback recorded video(s).
 - Monitor camera(s) and Digital I/O live using electronic map.
 - Monitor POS/ATM live transaction data(s).
 - Monitor mobile operation through GPS coordinate on 3rd party map system.
14. It shall support live monitoring and playback from handheld devices like PDA, Smartphone, Blackberry® or Iphone®.

System Requirements

The target platform shall meet or exceed the following design and specifications:

- Intel Corei3 CPU or greater, 4GB DDR III RAM,
- ATI 1GB HD Display card, DVD-RW, Gigabit Ethernet,
- Dedicated HDD for Microsoft® Windows7-64bit Operating System,
- Min 30 Days Recording and upgradable to,
- 19" Rack mount with Redundant Power Supplier

5.0 Installation, Testing and Commissioning

- 14ft galvanized pole 3 units
- RG59 Coaxial Cable (Belden or Belden Equivalent)
- RG6 Coaxial Cable (Belden or Belden Equivalent)
- RS485 Cable (Belden or Belden Equivalent)
- GI Conduit Surface Run
- Power Supply to Be Provided By Customer. Vendor has to pull and ensure that power to the cameras is sufficient.
- Power Supply Tapped From Nearest Point
- 1 Pair of Power Cable to Each Camera
- Install Cameras and CCTV Equipment Include BNC
- Software Programming and Complete System Setup
- Testing and Commissioning of Complete System
- One Time at Site System Training To End User

CONDITIONS	
Deliver bids to	United Nations Development Programme (UNDP) Wisma UN, Kompleks Pejabat Damansara, Jalan Dungun, Damansara Heights 50490 Kuala Lumpur Attention : ARR (Operations) Email: rfq-cctv2010@undp.my
Time of submission	All responses will be time-stamped showing the date and time received. LATE RESPONSES WILL NOT BE CONSIDERED
Award	The award will be made to the lowest priced responsible vendor meeting all of the terms and conditions and specifications.
Price	A unit price and a total for the quantity must be stated for each item quoted. In case of an error in the total price, the unit price will prevail
Specifications	Responses will be held to strict compliance with the specifications. If a response deviates from the specifications, the deviation must be clearly noted. MnSCU reserves the right to reject any or all responses that are not an approved equal.
Clarification meeting	For any clarification, interested bidders are required to attend a meeting which will be held at Wisma UN on 15th Sept 2010 . Kindly email the following to pre- register your company for the meeting: Email ID: registry.my@undp.org Attn To: Maggie Lee (Contact person) Reference: RFQ-CCTV2010 Tender Meeting
Contract awarded will be subject to the UN General Terms and Conditions of Contracts. Please refer to UNDP Malaysia website www.undp.org.my	
Payment Terms: UNDP shall make payment within 30 days of delivery	