

F.No63013/03/2015-Ord/BSF /MHA-Prov-I 779
Bharat Sarkar/Government of India
Griha Mantralaya/Ministry of Home Affairs
PM Division



26, Man Singh Road, Jaisalmer House
New Delhi, Dated 10 April, 2015

To,

DsG: AR (through LOAR), BSF, CISF, CRPF, ITBP, SSB, NSG & BPR&D.

Subject: QRs and Trial Directive for Micro Digital Recorder.

Sir,

The QRs and Trial Directives in respect of Micro Digital Recorder as per Annexure have been accepted by the Competent Authority in MHA.

2. The CAPFs concerned will be accountable for correctness of the QRs/Trial Directives
3. Henceforth, all the CAPFs should procure the above item required by them strictly as per the laid down Technical Specifications/QRs.
4. Item being sensitive in nature and to be used for secret operations, putting detail QRs of such item on web site may not be in the interest of nation keeping in view its security. However, while floating tenders/RFP, utmost care needs to be taken to have effective transparency in the procedure, keeping in view the guidelines issued by the CVC on the subject.

Yours faithfully,

Encl: As above


(M.K. Chahar)

Under Secretary to the Govt of India
Tel: 23381278

Copy to: DDG (Procurement), MHA.

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**DIRECTOR GENERAL BORDER SECURITY FORCE
(GENERAL DIRECTORATE)**

The Sub-group of Technical Experts on surveillance equipment constituted by MHA vide their letter No. IV-24011/12/2011-Prov-I dated 13th June 2012 held its meeting at BSF Headquarters on 23 Dec 2013, 10 March 2014, 28 July 2014, 25 Aug 2014, 3 Nov 2014, 5 Jan 2015 and 23rd Feb 2015 to finalized the QRs of Micro Digital Recorder.

After detailed deliberation the referred Sub-group has finalized the QRs of " Micro Digital Recorder which are as under:-

QUALITATIVE REQUIREMENT FOR MICRO DIGITAL RECORDER

| Srl No | SPECIFICATIONS |
|--------|--|
| 1 | Tiny Nano Size less than 46x10x20 mm |
| 2 | Weight: less than 30 g with Battery |
| 3 | Data should be Password Protected |
| 4 | Fast USB Port |
| 5 | Low Power Consumption : Battery should support 40hrs or above in recording mode |
| 6 | Recording mode: Button, Schedule and VOX mode |
| 7 | Voice Activation System (VAS) |
| 8 | Programmable Timer For Automatic Scheduled Recording |
| 9 | It should have timed recording, Start /stop manually or automatically on signal level or timer. |
| 10 | Sampling rate : 44 Khz and above |
| 11 | High Sensitivity Microphone |
| 12 | Voice play |
| 13 | Recording Time : 40 Hours or better |
| 14 | Signal/ noise ratio: > 64 dB |
| 15 | Operating Temperature: -5° C to 50° C |
| 16 | Bandwidth : 20 Hz to 20 kHz |
| 17 | Built-in microphone range : 7-9 mtrs |
| 18 | PC interface : USB 2.0 or better |
| 19 | Data transfer rate: 5.5 Mb or better |
| 20 | Data transfer rate to PC : > 480 Mbits/ Sec |
| 21 | Power supply: rechargeable Li - ion battery, charged from USB port. |
| 22 | Battery life: Up to 60 Hrs or higher. |
| 23 | Audio Recording Formats: Audio Format(s) Supported: Recording- MP3 files: Bit Rate: 8 kbps - 192 kbps, VBR Sampling Frequencies: 16/22.05/24/32/44.1/48 kHz File Extension: mp3 PCM files: Bit Rate: 16 bit Sampling Frequencies: 44.1 kHz File Extension: WAV Playback - MP3/AAC/WMA/WAV. |

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| 24 | Firmware Upgradable |
| 25 | KIT INCLUDES <ul style="list-style-type: none"> • Digital Voice Recorder, • USB cable, • External microphone • One spare Battery, Battery charger • CD with software • Operation and Technical manual for DVR |

[Signature]
 23/2/15
 (A. K. TRAGI) COMDT, BSF

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 (Hem Pusp) OC, CRPF

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 (Hasjinder Kumar) OC, BSF, JLU

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 (A. K. Shukla) AC, CISF

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 JMSRIT MANISH RAS

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 (A.C. Manoj PV)
 NSG

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 23/02/15
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 SSAC(E), BPR&D

APPROVED / NOT APPROVED

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 (D K PATHAK) IPS (67)
 DIRECTOR GENERAL
 BORDER SECURITY FORCE

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TRIAL DIRECTIVE FOR MICRO DIGITAL RECORDER

| S No. | | Procedure suggested for trial for Board of Officers | Result expected / desired | Complied / Not Complied |
|-------|--|---|---|-------------------------|
| 1. | Tiny Nano Size less than 46 x10x20 mm | Measure the external dimensions of the system with the help of measuring tape. | Must be less than 46 x10x20 mm. | |
| 2. | Weight : less than 30 g with Battery | Weight the system without accessories on weighing machine. | Must be less than 30 g with battery. | |
| 3. | Data should be Password Protected | Check the system for the password. | Must be password protected | |
| 4. | Fast USB Port | Connect the system with the PC via USB port for retrieving the data from the recorder. | Must have fast USB port. | |
| 5. | Low Power Consumption: Battery should support 40 hrs or above in recording mode. | To be physically checked by BOO | Must last for 40 Hrs or more. | |
| 6. | Recording mode: Button, Schedule and VOX mode | To be physically checked by BOO | Must have recording mode: Button, Schedule and VOX mode | |
| 7. | Voice Activation System (VAS) | Switch ON the system and put it in the VAS mode. Check the activation of recording as the system receives voice in proximity. | Must have VAS | |
| 8. | Programmable Timer For Automatic Scheduled Recording | Switch ON the system and programme a time schedule for | Must have programmable timer for automatic scheduled | |



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| 9. | It should have timed recording, Start /stop manually or automatically on signal level or timer. | activation of automatic recording. Check the system for the facility of manual start & stop the recording, time schedule programme and timer facility to start the recording. | recording Must have time recording. |
| 10. | Sampling rate : 44 KHz and above | Check the National/International Accredited lab certificate/report submitted by the firm. | Sampling rate must have 44 KHz |
| 11. | High Sensitivity Microphone | To be physically checked by BOO | Must have high sensitive micro phone. |
| 12. | Voice play | check the system for replay the stored voice data | Must have voice play facility. |
| 13. | Recording Time : 40 Hours or better | Check the total capacity of memory available in the system. Record the voice up-to 1 hour and then note down the space taken by the recording data. Calculate the total space required to record the voice up to 40 hrs on the basis of 1 hour recording. | Must have recording time 40 Hrs or better. |
| 14. | Signal/ noise ratio : > 64 dB | Check the National/International Accredited lab certificate/report submitted by the firm. | Check the authenticity of National / International accredited lab test certificate / report for the same. In case of any doubt in the test report, the veracity of the same may be checked from the concerned lab. |
| 15. | Operating Temperature : -5° C to 50° C | Check the National/International Accredited lab certificate/report submitted by the firm in respect of | Must have the National/International Accredited lab |

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| | | <p>the firm in respect of type of battery provided i.e. Rechargeable Li-ion. b) Check the charger to charge the battery of the system for the facility of USB lead.</p> | <p>any doubt in the test report, the veracity of the same may be checked from the concerned lab. b) The battery of the system must be charged through USB charging lead via charger on mains supply as well as through PC USB Port.</p> | |
| 22. | <p>Battery life in record mode : up to 60 Hrs</p> | <p>Check the system operation on full charged battery (provided with the system) continuously in operation mode and note down the time of endurance of the battery.</p> | <p>Must be run upto 60 hrs or higher.</p> | |
| 23. | <p>Audio Recording Formats : Audio Format(s) Supported : Recording - MP3 files: Bit Rate: 8 kbps - 192 kbps, VBR Sampling Frequencies: 16/ 22.05 /24/32/44.1/48 kHz File Extension: mp3 PCM files: Bit Rate: 16 bit Sampling Frequencies: 44.1 kHz File Extension: WAV Playback - MP3/AAC/WMA/WAV</p> | <p>Check the National/International Accredited lab certificate/report submitted by the firm in respect of QRs.</p> | <p>Must have the National/International Accredited lab certificate/report submitted by the firm in respect of QRs.</p> | |
| 24. | <p>Firmware Upgradable</p> | <p>Check the assurance certificate provided by the firm that the firmware of the system is upgradable.</p> | <p>Supplier must provide assurance certificate.</p> | |

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| KIT INCLUDE | To be physically checked by BOO | Must provide |
|---|---------------------------------|---|
| <ul style="list-style-type: none"> • Digital Voice Recorder. • USB cable, • External microphone • Batteries, • CD with software • Operation and Technical manual for DVR. | | <ul style="list-style-type: none"> • Digital Voice Recorder, • USB cable, • External microphone • Batteries, • CD with software • Operation and Technical manual for DVR. |

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INSPT MANISH RAJ

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