

04
6/20

F.No. P/604/2014(389)/EDD/MHA 835
Bharat Sarkar/Government of India
Grihas Mantralaya/Ministry of Home Affairs
PM Division/Prov.II

DDG
14/1/15
D.S.G. (Prov.)
D.S.G. (Prov.)
8/1/15

26, Man Singh Road, Jaisalmer House,
New Delhi. Dated : 21 April 2015

To

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

Subject :- QRs and TDs of Electronic Disabling Device (EDD) (Multi shot wired and wireless)

The QRs and trial directives of Round Electronic Disabling Device (as per annexure) have been accepted by the competent authority in MHA subject to condition that no deviation will be made from the proposed QRs and Trial Directives without the permission of MHA.

2. Henceforth, all the CAPFs should procure the above item strictly as per the laid down Technical Specifications/QRs.

3. CAPFs concerned will be accountable for correctness of the QRs and TDs.

Encl: A/a

21/4/15
24/4/15

Yours Faithfully,

(Signature)

(P.K. Srivastava)

Under Secretary to the Govt. of India

Tele/Fax: 2338 1278

Copy forwarded for necessary action to:-

ols

The Section Officer (IT), MHA: it is requested to host the QRs (soft copy attached) on the MHA website (under the page of Organizational set up- Police Modernization Division- QRs under A & A items)

(Signature)
21/4/15

(Ritesh Kumar)

Section Officer (Prov.II)

Tel No: 2338 6034

Copy to :- DDG, (Procurement), MHA, Jaisalmer House

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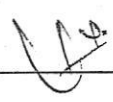
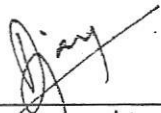


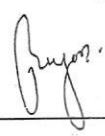



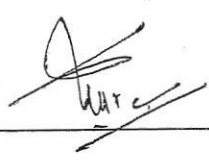


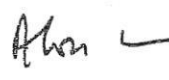
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IG (Prov. Secretariat)
Dy. No. 435
24/4/15



QRs OF ELECTRONIC DISABLING DEVICE (MULTI SHOT WIRED),
LESS LETHAL WEAPON SYSTEM

Ser No	Parameter	Requirement
1.	Lethality	Less lethal but capable to incapacitate instantaneously
2.	Range	Minimum 10m.
3.	Penetration	Minimum 2.5cm clothing.
4.	Housing	High impact polymer
5.	Design	Hand held
6.	Magazine capacity	Minimum two cartridges.
7.	Operating and storage temperature	-10 ⁰ C to 55 ⁰ C
8.	Weight	Maximum 500g with cartridge and battery
9.	Shelf life	Minimum 05 years for weapon as well as cartridges.(A certificate to be provided by OEM)
10.	Water resistant	IPX-2
11.	Human studies	A certificate to be provided by OEM regarding safety when used against Human being.
12.	Battery life	i) Rechargeable battery capable of firing 100 cartridges. ii) Non rechargeable battery capable of firing 400 cartridges. (user to specify which battery is required)
13.	Type of fire	Single and semi automatic.
14.	Safety	The weapon should have manual safety.
15.	Sighting system	The weapon should be provided with mechanical sight.

			
		Maj Ajay SC (fos) 	
			
			

**QRs OF ELECTRONIC DISABLING DEVICE (MULTI SHOT WIRED),
LESS LETHAL WEAPON SYSTEM (Contd....)**

Ser No	Parameter	Requirement
16.	Reloading time for cartridge	5 sec
17.	Ruggedness	It should be rugged enough to withstand fall from a height of 6 ft on a hard ground and still fire.
18.	Video and audio evidence	There must be a provision to record information of minimum one Hr duration as soon as the device is switched ON.
19.	Reflex shooting	A dual laser to be provided with flash light on the device.
20.	Electrical warning without firing	It should have provision of electrical warning arc without firing cartridges.
21.	Trilogy log system	It should record event log, pulse log and engineering log.
22.	Accessories	The following accessories must be provided (quantity to be specified by the user at the time of tendering) :- i) Simulation training suit ii) Holster iii) Conductive practice target iv) Cleaning kit v) Operating Manual, Training manual and user hand book in English. vi) Video and Audio Downloading kit compatible with PC (Bilingual).

Mukul Pathania
Maj Mukul Pathania
QM, 52 SAG.

Satinder Singh
(Satinder Singh)
DC/DM: ITBP

Jay
(Maj Jay)
SCCFOS, TL

Jagan
(Jagan Prasad K)
TCS (NSG HQ NSG)
NSG CISP

Rahul

Prayansh
1750 (CON) (Prayansh)
BSR

Anil Singh
(Lt Col Anil Singh)
LOAR

Abhram
(Abhram Anand)
DC, CRPF

Sanjay Sharma
SANJAY SHARMA
BPR&D PSO(W) SE(Ord) HQ NSG.

Sumit Sachdeva
Maj Sumit Sachdeva
HQ NSG.

S.N. Lal
S.N. Lal
SC(Prov), HQ NSG


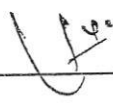
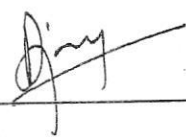

Alok Kumar
Alok Kumar
S19 (Prov) HQ NSG

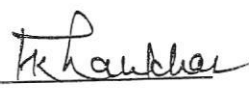

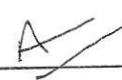

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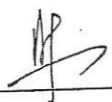
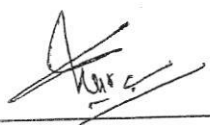

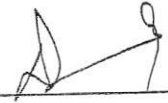
J N Choudhury
(J N Choudhury)
DG, NSG


TRIAL DIRECTIVES OF ELECTRONIC DISABLING DEVICE (MULTI SHOT WIRED),
LESS LETHAL WEAPON SYSTEM

Ser No	Parameter	Requirement	Trial Directives
1.	Lethality	Less lethal but capable to incapacitate instantaneously	After ensuring from medical studies report submitted by the OEM that these cartridges have no health hazards on humans, the same will be tested physically on volunteers by the BOO.
2.	Range	Minimum 10m.	To be physically checked by the BOO by firing on a conductive training target placed at a distance of 10 meters.
3.	Penetration	Minimum 2.5cm clothing.	A subject will be made to wear cloth of 2.5cm thickness and after firing, person should be incapacitated.
4.	Housing	High impact polymer	A certificate to the effect to be submitted by the OEM from a national/ International accredited lab.
5.	Design	Hand held	To be physically checked by the BOO.
6.	Magazine capacity	Minimum two cartridges.	To be physically checked by the BOO
7.	Operating and storage temperature	-10 ⁰ C to 55 ⁰ C	A certificate to the effect to be submitted by the OEM from a national/ International accredited lab.

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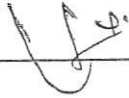
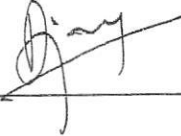

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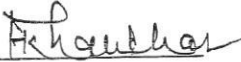

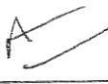
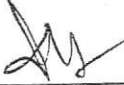
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TRIAL DIRECTIVES OF ELECTRONIC DISABLING DEVICE (MULTI SHOT WIRED),
LESS LETHAL WEAPON SYSTEM (Contd...)

Ser No	Parameter	Requirement	Trial Directives
8.	Weight	Maximum 500g with cartridge and battery	To be physically checked by the BOO.
9.	Shelf life	Minimum 05 years for weapon as well as cartridges.(A certificate to be provided by OEM)	A certificate to the effect to be submitted by the OEM from a national/ International accredited lab.
10.	Water resistant	IPX-2	A certificate to the effect to be submitted by the OEM from a national/ International accredited lab.
11.	Human studies	<p>Medical research reports on the use of the technology for the following subjects to be submitted :</p> <p>(i) Physiological effect of prolonged discharge on intoxicated adults.</p> <p>(ii) Echocardiography evaluation of probes deployed into the chests of human volunteers.</p> <p>(iii) Implanted Pacemaker.</p> <p>(iv) Repeated or long duration exposure : Academia and lack of respiration.</p> <p>(v) Cardiovascular effects.</p> <p>(vi) Physiological effects of exposure after exercise.</p> <p>(vii) Lactate and pH evaluation in exhausted humans.</p> <p>(viii) 15 Second device Application should not impair Basic Respiratory Parameters.</p>	The BOO will physically check all the medical research reports submitted by the OEM.


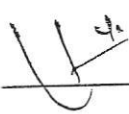







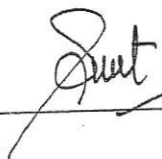











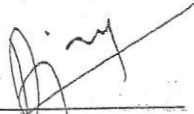

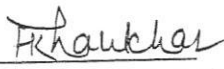
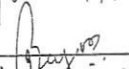


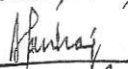



**TRIAL DIRECTIVES OF ELECTRONIC DISABLING DEVICE (MULTI SHOT WIRED),
LESS LETHAL WEAPON SYSTEM (Contd...)**

Ser No	Parameter	Requirement	Trial Directives
12.	Battery life	i) Rechargeable battery capable of firing 100 cartridges. ii) Non rechargeable battery capable of firing 400 cartridges. (user to specify which battery is required)	A certificate to the effect to be submitted by the OEM from a national/ International accredited lab.
13.	Type of fire	Single and semi automatic.	To be physically checked by the BOO.
14.	Safety	The weapon should have manual safety.	To be physically checked by the BOO.
15.	Sighting system	The weapon should be provided with mechanical sight.	To be physically checked by the BOO.
16.	Reloading time for cartridge	5 sec	To be physically checked by the BOO.
17.	Ruggedness	It should be rugged enough to withstand fall from a height of 6 ft on a hard ground and still fire.	To be physically checked by the BOO.
18.	Video and audio evidence	There must be a provision to record information of minimum one Hr duration as soon as the device is switched ON.	To be physically checked by the BOO.
19.	Reflex shooting	A dual laser to be provided with flash light on the device.	To be physically checked by the BOO.
20.	Electrical warning without firing	It should have provision of electrical warning arc without firing cartridges.	To be physically checked by the BOO.
21.	Trilogy log system	It should record event log, pulse log and engineering log.	To be physically checked by the BOO.

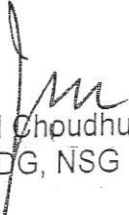




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**TRIAL DIRECTIVES OF ELECTRONIC DISABLING DEVICE (MULTI SHOT WIRED),
LESS LETHAL WEAPON SYSTEM (Contd...)**

Ser No	Parameter	Requirement	Trial Directives
22.	Accessories	The following accessories must be provided (quantity to be specified by the user at the time of tendering) :- i) Simulation training suit ii) Holster iii) Conductive practice target iv) Cleaning kit v) Operating Manual, Training manual and user hand book in English. vi) Video and Audio Downloading kit compatible with PC (Bilingual).	

 Maj Mukul Pathania BM, 52 SAG.	 (Satinder Singh) AEPD, ITAQ.	 (Maj Ajay) SCFOs, TC	 (JAI RAJAN. K) TCLM, ME, H&NS
 HARKUMAR DY COMDT, SIW, BSA	 INS P (Com) G. Rajan BSB	 (Lt Col Anil Singhania) LOAR	 D N LAL. GC (Com) HD, NSG
 (Anshu) DC, CRPF	 ANJAY SHARMA BPRD	 Maj Sunit Sachdeva SO (Brd), HQ NSG.	
 Alok Kumar DIG (Prov), H&NSG			

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(J N Choudhury)
DG, NSG


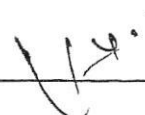
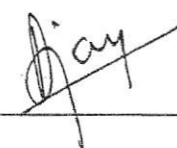

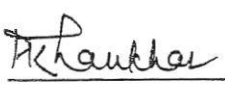




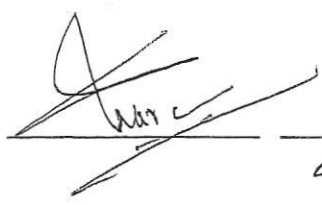

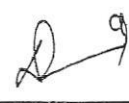
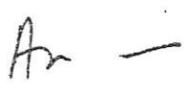
**QRs OF ELECTRONIC DISABLING DEVICE (MULTI SHOT WIRELESS),
LESS LETHAL WEAPON SYSTEM**

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<u>Ser No</u>	<u>Parameter</u>	<u>Specification</u>
1.	Launcher	Pump action 12 bore.
2.	Barrel length	Less than 50 cm, high twist rifled barrel
3.	Launcher length	Less than 1 meter
4.	Ruggedness	Should be able to withstand rugged usage and harsh weather condition.
5.	Weight	Less than 3.5 kg.
6.	Butt	Rubber butt pad
7.	EDD wireless Round capacity	4 + 1
8.	Safety	Manual
9.	Shelf life	Minimum 2500 cartridges (OEM to provide certificate)
10.	Picatinny rail	Picatinny rail at forearm to be provided
11.	Operating and storage temperature	-10 ⁰ C to 55 ⁰ C

EDD wireless (Cartridge)

<u>Ser No</u>	<u>Parameter</u>	<u>Specification</u>
1.	Less lethal wireless EDD	Able to incapacitate target
2.	Range	Minimum 25 meters
3.	Length of the round	Maximum 7 cm
4.	Weight of the Cartridge	Less than 30 gm.
5.	Penetration	Minimum 2.5cm clothing.
6.	Electrical signal Output (OEM to certify)	
	i) Waveform	DC Pulse
	ii) Duration of incapacitation	20 ± 2 seconds
7.	Muzzle velocity (OEM to certify)	Not more than 250 fps

QRs OF ELECTRONIC DISABLING DEVICE (MULTI SHOT WIRELESS),
LESS LETHAL WEAPON SYSTEM (Contd....)

Ser No	Parameter	Specification
8.	Human studies	A certificate to be provided by OEM regarding safety when used against Human being.
9.	Operating and storage temperature	-10 ⁰ C to 55 ⁰ C
10.	Shelf life	05 year (OEM to provide certificate)
11.	Water resistant	IPX-2
12.	Type of Cartridge	Live fire and training (User to specify the numbers as per their requirement)
13.	Accessories	The following accessories must be provided (quantity to be specified by the user at the time of tendering) -: i) Simulation training suit ii) Carry case iii) Conductive practice target iv) Cleaning kit v) Operating Manual, Training manual and user hand book (Bilingual).

Pathania
Maj Mukul Pathania
QM, 52 SAG.

H Chaukhal
HARINDER KUMAR
Sgt Const, SIW, BSA

Pathoj
(Abhiram Pathoj)
DC, CRPF

An
Atok Kumar
DIG (Prov) HQ NSG

Singh
(Satinder Singh)
ACIPM ITBP.

Buyro
1008 (Comp)
Gy Rajan, SS B

Sanjay
SANJAY SHARMA
BPR&D

Ding
(Maj Ding)
SCCFOS, TC)

A
Lt Col Anil Singh
LOAR

Sant
Maj Sant Sachdeva
PSO(W) Secord, HQ NSG.

Jain
(JAYARAJAN. K)
TCL(S) HQ NSG


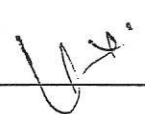
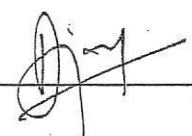

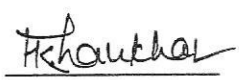


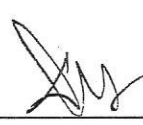

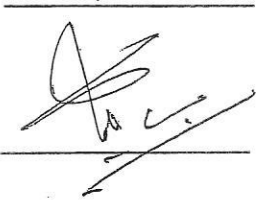
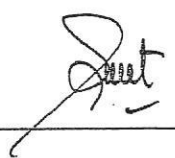

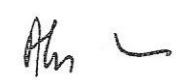
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D.N. LAL GC (Prov)
HQ NSG

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~~APPROVED / NOT APPROVED~~

(J N Choudhury)
DG, NSG

**TRIAL DIRECTIVES OF ELECTRONIC DISABLING DEVICE
(MULTI SHOT WIRELESS), LESS LETHAL WEAPON SYSTEM**


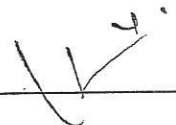
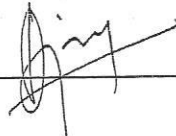

Ser No	Parameter	Specification	Trial Directives
1.	Launcher	Pump action 12 bore.	To be physically checked by the BOO.
2.	Barrel length	Less than 50 cm, high twist rifled barrel	To be physically checked by the BOO. A certificate to the effect to be submitted by the OEM from a national/ International accredited lab.
3.	Launcher length	Less than 1 meter	To be physically checked by the BOO.
4.	Ruggedness	Should be able to withstand rugged usage and harsh weather condition.	To be physically checked by the BOO. A certificate to the effect to be submitted by the OEM from a national/ International accredited lab.
5.	Weight	Less than 3.5 kg.	To be physically checked by the BOO.
6.	Butt	Rubber butt pad	A certificate to the effect to be submitted by the OEM from a national/ International accredited lab.
7.	EDD wireless Round capacity	4 + 1	To be physically checked by the BOO.
8.	Safety	Manual	To be physically checked by the BOO.
9.	Shelf life	Minimum 2500 cartridges (OEM to provide certificate)	A certificate to the effect to be submitted by the OEM from a national/ International accredited lab.
10.	Picatinny rail	Picatinny rail at forearm to be provided	To be physically checked by the BOO.
11.	Operating and storage temperature	-10 ⁰ C to 55 ⁰ C	A certificate to the effect to be submitted by the OEM from a national/ International accredited lab.

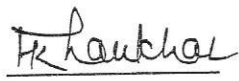


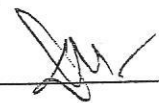
			
			
			
			


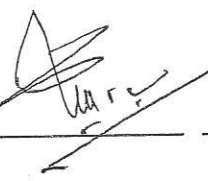

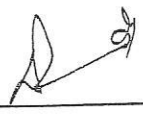
**TRIAL DIRECTIVES OF ELECTRONIC DISABLING DEVICE
(MULTI SHOT WIRELESS), LESS LETHAL WEAPON SYSTEM (Contd....)**

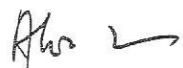
EDD wireless (Cartridge)

<u>Ser No</u>	<u>Parameter</u>	<u>Specification</u>	<u>Trial Directives</u>
1.	Less lethal wireless EDD	Able to incapacitate target	After ensuring from medical studies report submitted by the OEM that these cartridges have no health hazards on humans, the same will be tested physically on volunteers by the BOO.
2.	Range	Minimum 25 meters	To be physically checked by the BOO by firing on a conductive training target placed at a distance of 25 meters.
3.	Length of the round	Maximum 7 cm	To be physically checked by the BOO.
4.	Weight of the Cartridge	Less than 30 gm	To be physically checked by the BOO.
5.	Penetration	Minimum 2.5cm clothing.	A subject will be made to wear cloth of 2.5cm thickness and after firing, person should be incapacitated.
6.	Electrical signal Output (OEM to certify)		
	i) Waveform	DC Pulse	A certificate to the effect to be submitted by the OEM from a national/ International accredited lab.
	ii) Duration of incapacitation	20 ± 2 seconds	A certificate to the effect to be submitted by the OEM from a national/ International accredited lab.









**TRIAL DIRECTIVES OF ELECTRONIC DISABLING DEVICE
(MULTI SHOT WIRELESS), LESS LETHAL WEAPON SYSTEM (Contd....)**

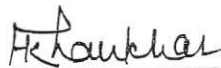
<u>Ser No</u>	<u>Parameter</u>	<u>Specification</u>	<u>Trial Directives</u>
7.	Muzzle velocity (OEM to certify)	Not more than 250 fps	A certificate to the effect to be submitted by the OEM from a national/ International accredited lab.
8.	Human studies	Medical research reports on the use of the technology for the following subjects to be submitted : (i) Physiological effect of prolonged discharge on intoxicated adults. (ii) Echocardiography evaluation of probes deployed into the chests of human volunteers. (iii) Implanted Pacemaker. (iv) Repeated or long duration exposure : Academia and lack of respiration. (v) Cardiovascular effects. (vi) Physiological effects of exposure after exercise. (vii) Lactate and pH evaluation in exhausted humans. (viii) 15 Second device Application should not impair Basic Respiratory Parameters.	The BOO will physically check all the medical research reports submitted by the OEM.
9.	Operating and storage temperature	-10 ^o C to 55 ^o C	A certificate to the effect to be submitted by the OEM from a national/ International accredited lab.









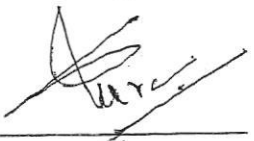




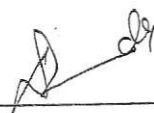












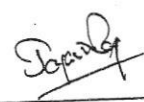
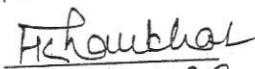
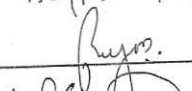

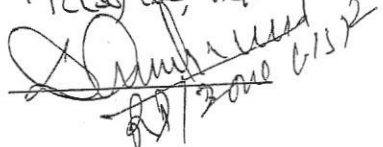
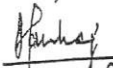
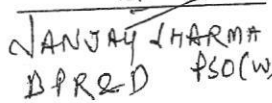
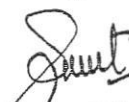

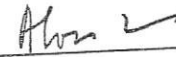






TRIAL DIRECTIVES OF ELECTRONIC DISABLING DEVICE (MULTI SHOT WIRELESS), LESS LETHAL WEAPON SYSTEM (Contd....)

Ser No	Parameter	Specification	Trial Directives
10.	Shelf life	05 year (OEM to provide certificate)	A certificate to the effect to be submitted by the OEM from a national/ International accredited lab.
11.	Water resistant	IPX-2	A certificate to the effect to be submitted by the OEM from a national/ International accredited lab.
12.	Type of Cartridge	Live fire and training (User to specify the numbers as per their requirement)	To be physically checked by the BOO. A certificate to the effect to be submitted by the OEM from a national/ International accredited lab.
13.	Accessories	The following accessories must be provided (quantity to be specified by the user at the time of tendering) -: i) Simulation training suit ii) Carry case iii) Conductive practice target iv) Cleaning kit v) Operating Manual, Training manual and user hand book (Bilingual).	

 Maj Mukul Pathania QM, S2 SAG.	 Gurbinder Singh AC, Dm, 1TRSD.	 Maj Ajay SCCFOS, TC.	 Jayarajan - K TC (CC) LAC, HQ NSG
 HARCHAND KUMAR BY Const, SIW, BSF	 Gurbinder Singh AC, Dm, 1TRSD.	 Maj Ajay SCCFOS, TC.	 Jayarajan - K TC (CC) LAC, HQ NSG
 Abhiram Bhatnagar DC, CRPF	 ANJAY LHARNA DPRD PSO(W)	 Maj Sumit Saehdwa SC(Ord), HQ NSG.	 S.N. Lal GC (Proc) HQ NSG
 Alex Kumar DIG (Proc) HQ NSG			

~~APPROVED / NOT APPROVED~~

(J N Choudhury)
DG, NSG