

GOVERNMENT OF INDIA
(Ministry of Home Affairs)
COMMUNICATION & IT DIRECTORATE
CENTRAL RESERVE POLICE FORCE
EAST BLOCK-7, SEC-1, R.K. PURAM, NEW DELHI-110066
(Email:- comncell@crpf.gov.in Tele/Fax:011-26109038)

No. B.V-7/2024-25-C(LBTY)

Dated, the Sept'2024

To

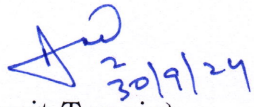
1. The DsG: AR, BSF, CISF, ITBP, NSG, SSB and BPR&D
2. Director, DCPW

Subject: Regarding Revision of QRs/TDs of "Lithium Battery for use with Radio set in Mobile role".

I am directed to refer on the subject mentioned above and to say that the revised QRs/TDs of "**Lithium Battery for use with Radio set in Mobile role**" has been approved by the DG CRPF after deliberation and recommended by CAPF's sub-group and experts from DCPW.

2. QRs/TDs of "**Lithium Battery for use with Radio sets in Mobile role**" has forwarded earlier vide letter No.B.V-7/2013-14-C(QRs)-13 dated 05/11/2014 is rescinded.

Encl:-As above


{Amit Taneja}

DIG (Equipment)
Communication & IT Branch
Directorate General C R P F

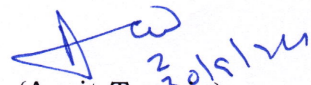
No. B.V-7/2024-25-C(LBTY)

Dated, the 30 Sept2024

Copy to:-

3. Mrs. Sugandhi, Technical Director, and North block, MHA with request to upload the revised QRs/TDs of "**Lithium Battery for use with Radio sets in Mobile role**" on MHA website (e-mail ID: mpsugandhi@nic.in).

Encl:-As above


{Amit Taneja}

DIG (Equipment)
Communication & IT Branch
Directorate General C R P F

QRs/TDS "Lithium battery for use with Radio set in Mobile role".

Sl No	Specification	Parameters	Trial Procedure
1	Application	For use with HF-20/25W /VHF/UHF 20/25W Radio Set in Mobile role (User organization will decide during procurement for which set battery is required).	Board will check it practically by fitting it in desired Radio set and will ensure that it work properly.
2	Type of Battery/ Chemistry	Lithium-Ion/polymer (user organization will decide type of chemistry required during procurement)	Board will check it physically and will ensure that chemistry of battery is as per tender specification and certificate required from OEM.
3	Rated Capacity	8/10/12/14/18/23AH or higher capacity @ C5 rating (user organization will decide capacity of chemistry required during procurement)	Board will check it practically with the help of standard testing instruments and will ensure that it is as per tender specifications.
4	Voltage	14.4/14.8 V (Nominal), 16.8V (peak) , 10.0V (cut-off)	Board will check practically by measuring battery voltage with the help of multi meter.
5	Packing	The power pack casing should make of PC/ PC+ABS/ABS blend (Acrylonitrile Butadiene Styrene) or newly developed better material.	Board will check it physically as well as firm will provide Govt. or NABL accredited lab certificate about used material in power pack casing. Lab report should not be more than 2 years old.
6	Weight	Max. Weight for 8AH & 10AH- 1100 gram +10%, 12AH & 14AH -1400 gram +10%, 18AH-1600 gram+10%, 23AH-1800 gram +10% or less	Board will measure weight of battery with weighing machine.
7	Size	International Size Matches dimension of any international equipment according to the capacity of battery. Battery should be compatible with radio set in the same manner as per OEM supplied rated capacity battery where ever applicable.	Board will practically checked the battery after fitted in the radio set for which these batteries are being procured where ever applicable and ensure that it does not affecting function of the radio set .

Vim

Caran Ramesh Seshanna

[Handwritten signature]

[Handwritten signature]

25/07

8	<p>Accessories:-</p> <ol style="list-style-type: none"> i. 2 long trail-tech female co-axis connector (optional) ii. 2 long trail-tech male plug and other end shall have two pin plug for connecting with Motorola 25W set (optional) iii. Carry pouch with belt loop for safe and secure carrying (optional) 	Board will check it physically/ practically.
9	<p>Protection : - Battery pack should be equipped with protection circuit to protect from :- Over Charge, Over Discharge, Over Temperature, Over Current, Short Circuit & Reverse Polarity etc.</p>	Board will check practically that battery is provided with safety circuit for all parameters. Firm will also submit certificate in this regard.
10	<p>The label of the battery should be self descriptive type and specified the following:- a) Battery voltage/Capacity, Month & Year of Manufacturer & trade mark "Logo" of the firms to be embossed / heat stamped/Chemistry of cells, Serial Number of & part of battery.</p>	Board will check physically that description mentioned in Para is available on battery.
11	<p>The battery should pass the Environmental Tests mentioned as under, as per IS:9000 or any equivalent standard followed by Capacity Test @ C/5 rate.</p> <ol style="list-style-type: none"> 1. Equipment shall be suitable for operation in the following environmental conditions. <ol style="list-style-type: none"> a. Operating Temp. Range : - 10 °C to + 55 °C b. Storage Temp. Range : - 40 °C to + 70 °C c. Relative Humidity : 95% Max at + 40 °C non-condensing. 2. Tests to be conducted and Conditions of tests as per IS: 9000; <ol style="list-style-type: none"> a) Dry Heat: Part III/SEC.5/1977 55 degree C ± 2 degree C, RH < 50%, Duration 16 hrs. b) Damp Heat (Cyclic) Test : Part V/SEC. 2/variant-1/1981 40 degree C (+/-) 2 degree C, RH 95%, Two cycles of 24 (12+12) hrs each. c) Cold Test: Part II/ SEC. 4/1977 (-) 10 degree C +/- 3 degree C, Duration 16 hrs. d) Drop Test(in packed) : Part VII/SEC.3/1979 Six drops one on each condition face, Height of fall 1000mm in case of hand held items and 500mm in case of other items. e) Vibration Test : Part VIII/1981 12 hours, 4 hours along with each axis at 15-150Hz and with amplitude of 0.15mm/2g f) Storage Test: Part III/ SEC. 5/1977 & -40 degree C for 5 hours. <p>Part II/SEC. 4/1977 Then raises the temperature</p>	The BOOs will check the Environmental Test certificate submitted by the firm is conducted in Government or NABL accredited lab. Lab report should not be more than 2 years old

Kim

Cor. Mr. Sharma


[Signature]

[Signature]

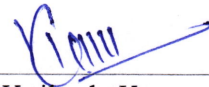
[Signature]


[Signature] 25/09


<p>to 70 degree C for 16 hrs.</p> <p>g) Bump test: Part VII/SEC.2/1979 4000 bumps at peak acceleration of 400m/s sq.</p> <p>3. Environmental test Report with equivalent or superior conditions would be acceptable.</p> <p>4. The functional tests and permissible degradation shall be as under:</p> <p>No degradation in battery capacity when measured at C/5 rate.</p>	
---	--



 (Nb/Sub M.P.Tyagi)
 Assam Rifles



 (SI/Exe T.G.Naidu)
 CISF



 (SI/RM Kailash Kumar Chandel)
 BSF

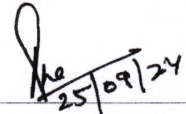

 (Sibu Prasad Bhowmick)
 AC/T) ITBP

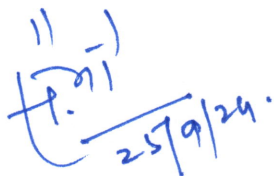

 (P.N.Chourasia, DC(Comn))
 SSB

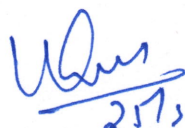

 (Major Abhijeet Singh)
 NSG



 (Sunil Kumar Singh)
 DC(Comn), CRPF

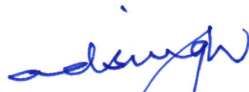

 Vivek Kumar Gupta,
 Asstt. Director), DCPW


 (P.C.Jha)
 DIG(Comn/Eqpt), CRPF


 (Syed Mohammad Hasnain)
 IG (Comn& IT), CRPF


 (Vitul Kumar, IPS)
 SDG (OPS), CRPF

Approved/Not Approved 


 (Sh.Anish Dayal Singh, IPS)
 DG, CRPF