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DIG le 24/10

26 OCT 2015

No. IV-21011/16/2009-Prov-I- 2061

भारत सरकार/Government of India

गृह मंत्रालय/Ministry of Home Affairs

पुलिस आधुनिकीकरण प्रभाग /Police Modernization Division

संभरण-I डेस्क/Prov.I Desk

14(Prov)
DIG (Prov)

26, Man Singh Road, Jaisalmer House,
New Delhi, the 21st October, 2015.

To,

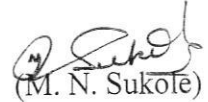
DsG : AR (through LOAR), BSF, CISF, CRPF, ITBP, SSB, NSG & BPR&D.

Subject : Revised QRs and Trial Directives for Under Multipurpose Knife.

The QRs and Trial Directives in respect of Multipurpose Knife as per the Annex-I and Annex-II respectively have been accepted by the Competent Authority in MHA.

2. Henceforth, all the CAPFs should procure the above item required by them strictly as per revised laid down Technical Specifications/QRs.
3. Concerned CAPF will be accountable for correctness of the QRs/Trial Directives.
4. MHA letter of even number dated 24-01-2008 is rescinded.

Yours faithfully,



(M. N. Sukote)

Under Secretary (Prov-I)

Encl.: As above.

Copy to : SO(IT), MHA : with the request to host the revised QRs and Trial Directives of Multipurpose Knife on the MHA website (under the page of Organizational Set up-Police Modernization Division-Qualitative Requirements-QRs-Equipment), and remove earlier QRs from website at page mha1.nic.in/QRs/Equipment.html, soft copy being sent through email.

न. नि. (संभरण) G (Prov)	
स. म. नि. (संभरण) DIG (Prov)	
मुप कर्म. (संभरण) G. C. (Prov)	
गुप कर्म. (संभरण) G. C. (Prov)	
स्वका. कर्म. Sen. Off.	
टीम कर्म. Team Off.	
मुख्य अधिकारी Head Clerk	

- Copy to Ops (WE).
- update.

Copy to : DDG(Procurement), MHA.

(R K Soni)

Section Officer (Prov.I)


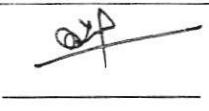
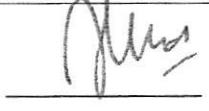
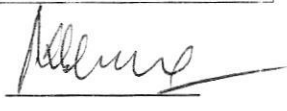
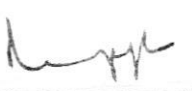

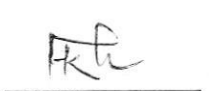


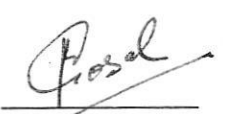
NGO Div 3206
DATE 26/10/15

IG, Prov. Secretariat
Dy. No. 1368
Date 26/10/15

**REVISED QUALITATIVE REQUIREMENT FOR
MULTIPURPOSE KNIFE**

133
Annexure F

Ser No	SPECIFICATIONS
1.	The multipurpose knife is a compact, robust, hand-held, multipurpose personal kit item intended for use by a soldier in the performance of broad range of daily field activities.
2.	<p>Operational & Physical Characteristics. The multipurpose tool should have the following minimum components with their specified functional capability :-</p> <p>(a) Drop Point Blade. (Hardness 54-60 RCS). It should be minimum 55mm long with a Single or Double bevel edge. It should be usable as a dagger.</p> <p>(b) Serrated Sheep Foot Blade. (Hardness 54-60 RCS). It should be minimum 55mm long.</p> <p>(c) Flat Blade Screw Driver. (Hardness 47-57 RCS). It should be able to drive and remove slotted screws with slot length 4.76mm.</p> <p>(d) Cross Tip Screw Driver. (Hardness 47-57 RCS). Drive and remove cross screws of No. 2 Industrial Designation ISO 7045 tips with precision screws.</p> <p>(e) Wire Cutter. (Hardness 49-57 RCS). It should be able to cut :-</p> <p>(i) Binding wire up to 12 gauge.</p> <p>(ii) 15 Amp Electric Copper Wires.</p> <p>(iii) JWD Cable (dimensions as under)</p> <p>(aa) Overall diameter of cable – 4.74mm.</p> <p>(ab) Conductor Strands :-</p> <p>(aaa) 4 Annealed tinned copper - 0.285mm diameter each strand.</p> <p>(aab) 3 Galvanised Steel Strands- 0.30mm, diameter each strand.</p> <p>(iv) Conductor Insulation :- HDPE up to 2.37mm outer diameter.</p> <p>(f) Needle/Long Nose Plier with Universal / Special Detonator Crimper. It should be capable of screwing and removing maximum 14mm (9/16 inch) nuts/bolts and crimping universal size detonators. Its nose and handle should have hardness of 49-57 and 41-50 Rockwell C Scale (RCS) respectively.</p> <p>(g) Combination File. (Hardness minimum 60 RCS)/Filing of wood (3mm), plastic (2mm) and light metal (0.5mm). It should be double faced with one face single (smooth or second cut) and the other face double (smooth or second cut) with file area of each face as minimum 500 Sq.mm. It should have a toothed edge of minimum 38mm with 30-48 teeth per inch.</p>


**REVISED QUALITATIVE REQUIREMENT FOR
MULTIPURPOSE KNIFE (Contd....)**


Ser No	SPECIFICATIONS
	<p>(h) Saw. (Hardness 47-57 RCS). It should permit controlled sawing of material as under :-</p> <p>(i) Wood – Minimum 25mm dia.</p> <p>(ii) Plastic – Minimum 10mm dia.</p> <p>It should have a saw tooth edge of minimum 55mm and tooth edge must have 10-18 teeth per inch.</p>
	<p>(j) Can Opener. (Hardness 47-57 RCS). It should permit Opening of commercially available canned goods.</p>
	<p>(k) Bottle Opener. (Hardness 47-57 RCS). Controlled opening of compressed bottle top (e.g. soda bottle).</p>
	<p>(l) Linear Measurement Scale. It should have scales for measurement in centimeters (9 cm with 0.2 cm resolution and 3 inches with 1/8 inch resolution). The incremental calibrations must be identified by numerals indicating total distance from zero point.</p>
	<p>(m) Electric Wire Stripper. (Hardness 47-57 RCS). Strip electric wire ranging from 24 to 12 gauges.</p>
3.	<p>Proficiency. It should provide independent and automatic locking of components in operational and closed position. It should not pinch or cut soldier's hand when used with bare hands, as per the Instruction Manual.</p>
4.	<p>Dimensions. Maximum 150mm (Closed position)</p>
5.	<p>Weight. Maximum 350 Gms (without sheath)</p>
6.	<p>Colour. The furniture should be olive green/ desert brown/black (to be specified by the user at the time of tendering).</p>
7.	<p>Material. The minimum series of stainless steel (as designated by American Iron and Steel Institute (AISI) or equivalent) of components, handles and securing hardware should be 400 and for low load bearing parts should be 300. It should not rust. The required material composition should be certified by the manufacturer.</p>

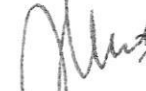
			
			
			


**REVISED QUALITATIVE REQUIREMENT FOR
MULTIPURPOSE KNIFE (Contd....)**


Ser No	SPECIFICATIONS
8.	Carriage. It should have a durable sheath with loop to fit on standard issue belts of Military / Para Military Forces.
9.	Maintenance. It should require minimal user maintenance, lubricating and tightening of assemble screw(s). It should be capable of maintaining its performance in Sand and Dust.
10.	Environmental Tolerance. It should be capable of trouble free performance in following conditions :- (a) Operating & Storage Temperature. Minus 20 to plus 45 degree Celsius. (b) Humidity. 95% at 25 degree Celsius.
11.	Miscellaneous. Firms/OEM to provide a detailed drawing indicating the high and low load bearing parts of their product offered.
12.	Optional Clause - Additional Tools - as per user's requirement :- (a) Crate opener with Screw Driver of 7.5mm. (b) Screw Driver of 2mm. (c) Reamer & Punch.



 (D.P. Hedgkore)
 DSSH Dir

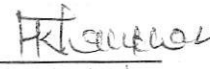

 (YOGESH SINGH)
 DC SSB

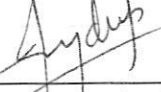

 Manish
 DC-CPPF


 (A.C. Chakrabarti)
 DC-CISF

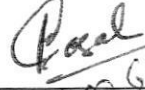

 (MAJ RAJESH SINGH)
 Addl SC FOS


 (Satinder Singh)
 AC-ITISD



 (Harjinder Kumar)
 DC BPF


 (Capt Joydeep Choudhury)
 SISAG NSG


 Major R. K. Bhatia
 DC (CAF)


 Dr. M. M. Gosh
 SSA, BPRFD

✓ APPROVED / NOT APPROVED

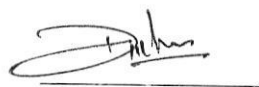

 (RC Tayal)
 DG, NSG
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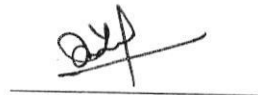
TRIAL DIRECTIVES FOR MULTIPURPOSE KNIFE

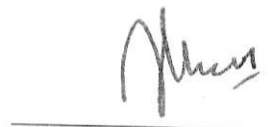
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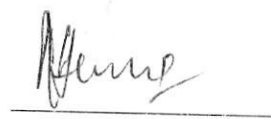
Annexure-II

Ser No	SPECIFICATIONS	TRIAL DIRECTIVES
1.	The multipurpose knife is a compact, robust, hand held, multipurpose personal kit item intended for use by a soldier in the performance of broad range of daily field activities.	To be physically checked by the BOO.
2.	<p>Operational & Physical Characteristics. The multipurpose tool should have the following minimum components with their specified functional capability :-</p> <p>(a) Drop Point Blade. (Hardness 54-60 RCS). It should be minimum 55mm long with a Single or Double bevel edge. It should be usable as a dagger.</p> <p>(b) Serrated Sheep Foot Blade. (Hardness 54-60 RCS). It should be minimum 55mm long.</p> <p>(c) Flat Blade Screw Driver. (Hardness 47-57 RCS). It should be able to drive and remove slotted screws with slot length 4.76mm.</p> <p>(d) Cross Tip Screw Driver. (Hardness 47-57 RCS). Drive and remove cross screws of No 2 Industrial Designation ISO 7045 with precision screws.</p>	<p>OEM/Firm to provide laboratory certificate from a laboratory accredited in terms of ISO/IEC 17025 for the relevant service by an Accreditation Body which is a member of International Laboratory Accreditation Cooperation (ILAC) Arrangement. Certificate to be checked & verified by the BOO.</p> <p>To be checked for hardness at a laboratory accredited in terms of ISO/IEC 17025 for the relevant service by an Accreditation Body which is a member of International Laboratory Accreditation Cooperation (ILAC) Arrangement, specified by the user at the cost of vendor. Other physical parameter/(s) to be checked by the BOO.</p> <p align="center">-do-</p> <p align="center">-do-</p> <p align="center">-do-</p>

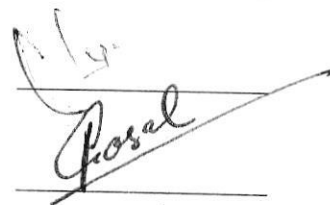


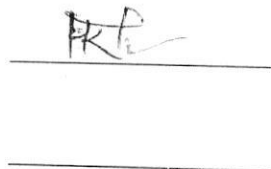


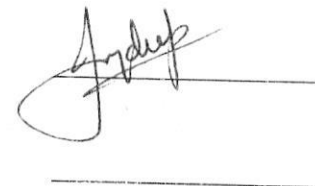












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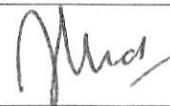
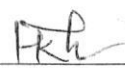

TRIAL DIRECTIVES FOR MULTIPURPOSE KNIFE (Contd....)

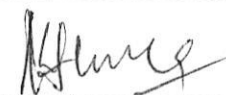


<u>Ser No</u>	<u>SPECIFICATIONS</u>	<u>TRIAL DIRECTIVES</u>
	<p>(e) Wire Cutter. (Hardness 49-57 RCS). It should be able to cut :-</p> <ul style="list-style-type: none"> (i) Binding wire up to 12 gauge. (ii) 15 Amp Electric Copper Wires. (iii) JWD Cable (dimensions as under) :- <ul style="list-style-type: none"> (aa) Overall diameter of cable – 4.74mm. (ab) Conductor Strands :- <ul style="list-style-type: none"> (aaa) 4 Annealed tinned copper – 0.285mm diameter each strand. (aab) 3 Galvanised Steel Strands – 0.30mm, diameter each strand. (iv) Conductor Insulation :- HDPE up to 2.37mm outer diameter. 	<p>To be checked for hardness at a laboratory accredited in terms of ISO/IEC 17025 for the relevant service by an Accreditation Body which is a member of International Laboratory Accreditation Cooperation (ILAC) Arrangement, specified by the user at the cost of vendor. Other physical parameter/(s) to be checked by the BOO.</p>
	<p>(f) Needle/Long Nose Plier with Universal/Special Detonator Crimper. It should be capable of screwing and removing maximum 14mm (9/16 inch) nuts/bolts and crimping universal size detonators. Its nose and handle should have hardness of 49-57 and 41-50 Rockwell C Scale (RCS) respectively.</p>	<p>-do-</p>







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TRIAL DIRECTIVES FOR MULTIPURPOSE KNIFE (Contd....)

<u>Ser No</u>	<u>SPECIFICATIONS</u>	<u>TRIAL DIRECTIVES</u>
	<p>(g) Combination File. (Hardness minimum 60 RCS)/Filing of wood (3mm), plastic (2mm) and light metal (0.5mm). It should be double faced with one face single (smooth or second cut) and the other face double (smooth or second cut) with file area of each face as minimum 500 Sq.mm. It should have a toothed edge of minimum 38mm with 30-48 teeth per inch.</p>	<p>To be checked for hardness at a laboratory accredited in terms of ISO/IEC 17025 for the relevant service by an Accreditation Body which is a member of International Laboratory Accreditation Cooperation (ILAC) Arrangement, specified by the user at the cost of vendor. Other physical parameter/(s) to be checked by the BOO.</p>
	<p>(h) Saw. (Hardness 47-57 RCS). It should permit controlled sawing of material as under :-</p> <ul style="list-style-type: none"> (i) Wood – Minimum 25mm dia. (ii) Plastic – Minimum 10mm dia. <p>It should have a saw tooth edge of minimum 55mm and tooth edge must have 10-18 teeth per inch.</p>	<p>-do-</p>
	<p>(j) Can Opener. (Hardness 47-57 RCS). It should permit Opening of commercially available canned goods.</p>	<p>-do-</p>
	<p>(k) Bottle Opener. (Hardness 47-57 RCS). Controlled opening of compressed bottle top (e.g. soda bottle).</p>	<p>-do-</p>

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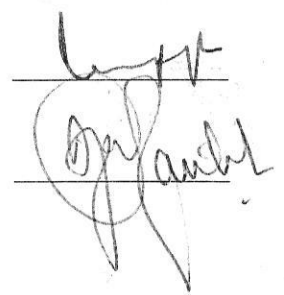
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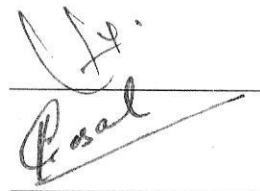
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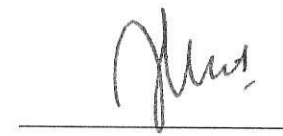
<u>Ser No</u>	<u>SPECIFICATIONS</u>	<u>TRIAL DIRECTIVES</u>
	<p>(l) Linear Measurement Scale. It should have scales for measurement in centimeters (9 cm with 0.2 cm resolution and 3 inches with 1/8 inch resolution). The incremental calibrations must be identified by numerals indicating total distance from zero point.</p> <p>(m) Electric Wire Stripper. (Hardness 47-57 RCS). Strip electric wire ranging from 24 to 12 gauges.</p>	<p>To be checked for hardness at a laboratory accredited in terms of ISO/IEC 17025 for the relevant service by an Accreditation Body which is a member of International Laboratory Accreditation Cooperation (ILAC) Arrangement, specified by the user at the cost of vendor. Other physical parameter/(s) to be checked by the BOO.</p> <p>-do-</p>
3.	Proficiency. It should provide independent and automatic locking of components in operational and closed position. It should not pinch or cut soldier's hand when used with bare hands when used as per the Instruction Manual.	To be physically checked by the BOO.
4.	Dimensions. Maximum 150mm (Closed position)	-do-
5.	Weight. Maximum 350 Gms (without sheath)	-do-
6.	Colour. The furniture should be olive green/desert brown/black (to be specified by the user at the time of tendering).	-do-
7.	Material. The minimum series of stainless steel (as designated by American Iron and Steel Institute (AISI) or equivalent) of components, handles and securing hardware should be 400 and for low load bearing parts should be 300. It should not rust. The required material composition should be certified by the manufacturer.	OEM/Firm to provide laboratory certificate from a laboratory accredited in terms of ISO/IEC 17025 for the relevant service by an Accreditation Body which is a member of International Laboratory Accreditation Cooperation (ILAC) Arrangement, specified by the user at the cost of vendor. Other physical parameter/(s) to be checked by the BOO.

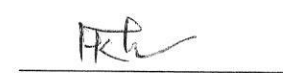


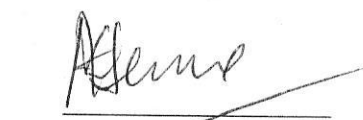


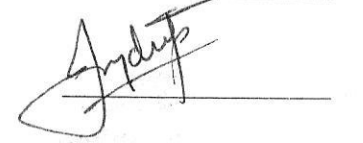












TRIAL DIRECTIVES FOR MULTIPURPOSE KNIFE (Contd....)

Ser No	SPECIFICATIONS	TRIAL DIRECTIVES
8.	Carriage. It should have a durable sheath with loop to fit on standard issue belts of NSG Commandos or the particular force.	To be physically checked by the BOO.
9.	Maintenance. It should require minimal user maintenance, lubricating and tightening of assemble screw(s). It should be capable of maintaining its performance in Sand and Dust.	-do-
10.	Environmental Tolerance. It should be capable of trouble free performance in following conditions :- (a) Operating & Storage Temperature. Minus 20 to plus 45 degree Celsius. (b) Humidity. 95% at 25 degree Celsius.	To be checked for hardness at a laboratory accredited in terms of ISO/IEC 17025 for the relevant service by an Accreditation Body which is a member of International Laboratory Accreditation Cooperation (ILAC) Arrangement, specified by the user at the cost of vendor.
11.	Miscellaneous.	Firms/OEM to provide a detailed drawing indicating the high and low load bearing parts of their product offered.
12.	Optional Clause – Additional Tools - as per user's requirement :- (a) Crate opener with Screw Driver of 7.5mm. (b) Screw Driver of 2mm. (c) Reamer & Punch.	To be physically checked by the BOO.

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(C.D.R. Hedcrow)
1755H. Dir

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(YOGESH SINGH)
DC SSB

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Manish Bamola
DC - CPPF

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(A.K. Shukla Access)

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(MAJ RAJESH SINGH)
ADD SC ROS

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(Jeyinder Singh)
ACITM

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(Harjinder Kumar)
DC BSI

[Signature]
(Capt Joydeep Choudhary)
SISAG NSG

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HGNSG
SC (w/f)

[Signature]
Dr. M.M. Gosal
SSA, B.P.R.D.

APPROVED / NOT APPROVED

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(RC Tayal)
DG, NSG 187 9.