Tender Covering Form

Directorate of Procurement (Navy)
Through Bahria Gate, Near SNID Center,Naval Residential Complex, E-8, Islamabad

Contact: Reception 051-20062074, Bahria Gate 0331-5540649, Section 051-9262314

Tender No & Date 625038/R-2611/330424 dated 20 NOV 26

Tender Description DRESS KHAKI 100% COTTON WITH HAT KHAKI

IT Opening Date 10 DECEMBER 2026

Firm Name _____

Postal Address _____

Email Address for Correspondence _____

Contact Person Name _____

Contact Number (Landline _____) (Mobile _____)

Documents to be Attached with Quotation

Firm is to submit its proposal in a sealed envelope which shall contain 03 x Sealed Envelops as per details given below:

Sealed Envelop 1 – Technical Offer in Duplicate

This envelope must contain 02 x sets of Technical Offer (01 x Original + 01 x Copy). Each Set must contain following documents as per this order and Supplier is to mark tick ✓ against each to ensure that these documents have been attached:

S No	Document	Original Set	Copy Set
1.	Bank Challan		
2.	Principal Authorization Letter (where applicable)		
3.	Principal Invoice (Muted – without Price) (where applicable)		
4.	DP -1 Form of IT (with compliance remarks)		
5.	DP – 2 Form of IT with compliance remarks against each clause		
6.	Technical Offer / Specs		
7.	Annexes of IT		
8.	DP-3 form of IT (dully filled & signed)		
9.	DGDP Registration Letter (If firm is registered with DGDP)		
10.	Income Tax Filling Proof		
11.	Sales Tax Registration Proof		
12.	Affidavit/ Undertaking of Provisional registration on judicial stamp paper of value Rs. 100		

Sealed Envelop 2 – Earnest Money

This Envelop must contain Earnest Money only.

Sealed Envelop 3 – Commercial Offer

This Envelop must contain following documents:

1.	Firm's Commercial Offer	01 x Original
2.	Principal Invoice (where applicable)	01 x Original
3.	Dully filled DP-2 Form of IT	01 x Original

Firm's Declaration

It is certified that we have submitted tender in compliance with above instructions and we understand that our offer is liable to rejection if tender is not prepared / packed as per above instructions.

Firm's Authorized Signatures _____

DP-1

DIRECTORATE PROCUREMENT (NAVY)

Tender No. 625038/R2611/330424
Directorate of Procurement (Navy)
Through Bahria Gate
Near SNIDS Centre,
Naval Residential Complex, E-8,
Islamabad
Contact: Reception: 051-20062074
Bahria Gate: 0331-5540649
Section: 051-9262314
Email: dpn@paknavy.gov.pk
adpn33@paknavy.gov.pk

M/s_____
_____
_____
_____ Date _____

INVITATION TO TENDER AND GENERAL INSTRUCTIONS

Dear Sir / Madam,

1. DP (Navy) invites you to tender for the supply of stores/equipment/ services as per details given in attached Schedule to Tender (Form DP-2).

2. **Caution**: This tender and subsequent contract agreement awarded to the successful bidder is governed by the rules / conditions as laid down in PPRA Rules and DPP&I-35 covering general terms & conditions of contracts laid down by MoD / DGDP. As a potential bidder, it is incumbent upon you and your firm to first acquaint yourself with PPRA Rules (**www.ppra.org.pk**) and DPP&I-35 (print copy may be obtained from DGDP Registration Cell on Phone No. 051-9270967 before participating in the tender. If your firm / company possesses requisite technical as well financial capability, you must be registered or willing to register with DGDP to qualify for award of contract, which shall be made after security clearance and provision of required registration documents mentioned in Para 15 of this DP-1.

Understood agreed ☐ Understood not agreed ☐

3. Conditions Governing Contracts. The 'Contract' made as result of this I/T (Invitation to Tender) i.a.w PPRA Rules shall mean the agreement entered into between the parties i.e. the 'Purchaser' and the 'Seller' on Directorate General Defence Purchase (DGDP) contract Form "DP-19" in accordance with the law of contract Act, 1872 and those contained in Defence Purchase Procedure & Instructions and DPP&I-35 and other special conditions that may be added to given contract for the supply of Defence Stores / Services specified herein.

Understood agreed ☐ Understood not agreed ☐

4. **Delivery of Tender.** The tender documents covering technical and commercial offers are to be furnished as under:-

a. **Commercial Offer**. The offer will be in duplicate and indicate prices quoted in figures as well as in words in the currency mentioned in IT. It should be clearly marked in fact on a separate sealed envelope **"Commercial Offer"**, tender number and date of opening. Taxes, duties, freight/transportation, insurance charges FATs Local Training, Foreign Training, Installation Commissioning, Services Taxes etc are to be

Understood agreed ☐ Understood not agreed ☐

indicated separately. Total price of the items quoted against the tender is to be clearly mentioned. In case of more than one option offered by the firm, DP(N) reserves the right to accept lowest technically accepted option if more than one options were accepted in Technical Scrutiny Report.

b. **Technical Offer: (Where Applicable).** Should contain all relevant specifications in DUPLICATE (or as specified in IT) along with essential literature/brochure, drawings and compliance metrics in a separate sealed envelope and clearly marked "Technical Offer" without prices, with tender number and date of opening. Technical offer shall be opened first; half an hour after the date and time for receipt of tender mentioned in DP-2. Firms are to confirm/comply with IT technical specification in the following format:

Understood agreed ☐ Understood not agreed ☐

S.No	***Technical requirement as per IT***	***Firm's endorsement (Comply/ Partially Comply/ Non Comply***	***Basis of C, PC of NC i.e. Refer to page or brochure***	***In case of non availability of enclosed proof from brochure/ Literature, quote/ attach additional documents/ data/undertaking as proof of compliance***

(Legend: C = Fully Comply, PC = Partially Comply, NC = Not Comply)
(Firms must clearly identify where their offer does not meet or deviates from IT Specs)

c. **Special Instructions.** Tender documents and its conditions may please be read point by point and understood properly before quoting. All tender conditions should be responded clearly. In case of any deviation due to non-acceptance of tender conditions(s), **the same should be highlighted alongwith your offered conditions. Tender may however be liable to be rejected.**

Understood agreed ☐ Understood not agreed ☐

d. Firms shall submit their offers in two separate envelopes (i.e. two copies of commercial offer and two or more copies of the technical offer as asked in the IT) and envelops clearly marked "Technical proposal", "Commercial proposal" in bold. The commercial offer will include rates of items/services called for and the technical offer will not indicate the rates. Both types of offers are to be enclosed in separate covers and each envelope shall be properly sealed bearing the signature of the bidder. Each cover shall indicate type of offer, number and date of IT and IT opening date. Thereafter both the envelopes (technical and commercial offer) shall be placed in one envelope (second cover) duly sealed and signed. This cover should bear the address of the procurement agency indicating, issuance date of IT and No, with its opening date. This should be further placed in another cover (third cover), addressed and indicated in the tender documents, without any indication that there is a tender within it.

Understood agreed Understood not agreed

e. **FORM DP-1, DP-2, DP-3 and Questionnaires.** Form DP-1, DP-2 (alongwith annexes), DP-3 and Questionnaires duly filled in are to be submitted with the offer duly stamped/signed by the authorized signatory/ person. It is pertinent to mention that all these are essential requirement for participation in the tender.

f. The tender duly sealed will be addressed to the following:-

Directorate of Procurement (Navy)
Through Bahria Gate, Near SNIDS Centre,
Naval Residential Complex, E-8,
Islamabad
Contact: Reception: 051-20062074
Bahria Gate: 0331-5540649
Section: 051-9262314
Email: dpn@paknavy.gov.pk
adpn33@paknavy.gov.pk

5. **Date and Time For Receipt of Tender.** Tender must reach this office by the date and time specified in the Schedule to Tender (Form DP-2) attached. This Directorate will not accept any excuse of delay occurring in post. **Tenders received after the appointed/ fixed time will NOT be entertained.** The appointed time will, however, fall on next working day in case of closed/forced holiday. Only legitimate/registered representatives of firm will be allowed to attend tender opening. In case your firm has sent tender documents by registered post or courier service, you may confirm their receipt at DP (Navy) on Phone No 051-9262314 well before the opening date / time.

Understood agreed ☐ Understood not agreed ☐

6. **Tender Opening.** Tenders will be opened as mentioned in the schedule to tender. Commercial offers will be opened at later stage if Technical Offer is found acceptable on examination by technical authorities of Service HQ. Date and time for opening of Commercial offer shall be intimated later. Only legitimate / registered representative of firm will be allowed to attend tender opening. Tenders received after date & time specified in DP-2 would be rejected without exception and returned un-opened i.a.w PPRA Rules.

Understood agreed ☐ Understood not agreed ☐

7. **Validity of Offer.**

a. The validity period of quotations must be indicated and should invariably be 120 days from the date of opening of commercial offer or 30th June whichever is later. Firm undertakes to extend validity of offer if required by equal number of original bid period (i.e. 120 days as per original offer) i.a.w PPRA Rules.

Understood agreed ☐ Understood not agreed ☐

b. The quoting firm will certify that in case of an additional requirement of the contract items (s) in any qty(s) within a period of 12 months from the date of signing the contract, these will also be supplied at the ongoing contract rates with discount.

8. **Part Bid.** Firm may quote for the whole or any portion, or to state in the tender that the rate quoted, shall apply only if the entire quantity/ range of stores is taken from the firm. The Director Procurement reserves the right of accepting whole or any part of the tender or portion of the quantity offered, and firm shall supply these at the rate quoted.

9. **Quoting of Rates.** Only one rate will be quoted for entire quantity, item wise. In case quoted rates are deliberately kept hidden or lumped together to

Understood agreed ☐ Understood not agreed ☐

trick other competitors for winning contract as lowest bidder, DP(N) reserves the right to reject such offers on-spot besides confiscating firm's Earnest Money / Bid Security and take appropriate disciplinary action. Conversion rate of FE/LC components will be considered w.e.f. opening of commercial offer as per PPRA Rules.

10. **Return of IT** ITs are to be handled as per following guidelines:

Understood agreed ☐ Understood not agreed ☐

a. For registered firm(s), case will be referred to DGDP for necessary administrative action if firms registered / indexed for tendered items/stores do not quote / participate.

b. It is a standard practice to invite all firm(s) including those un-registered with DGDP who gave their preliminary budgetary/ technical proposals to end users / indentors. If your firm has been invited to participate in the tender, you must either participate in tender. In case of your inability to do so, you must inform DP (Navy) by a formal letter/email.

11. **Withdrawal of Offer** Firms shall not withdraw their commercial offers before signing of the contract and within validity period of their offers. In case the firm withdraws its offer within validity period and before signing of the contract, Earnest Money of the firm shall be confiscated and disciplinary action may also be initiated for embargo.

Understood agreed ☐ Understood not agreed ☐

12. **Provision of Documents in case of Contract**. In case any firı wins a contract, it will deposit following documents before award of contract:

Understood agreed ☐ Understood not agreed ☐

a. Proof of firm's financial capability.
b. Foreign Seller has to provide its Registration Number issued by respective Department of Commerce authorizing export of subject stores.
c. Principal/Agency Agreement.
d. Registration with DGDP (Provisional Registration is mandatory)

13. **Treasury Challan.**

Attached ☐ Not Attached ☐

a. Offers by registered firms must be accompanied with a Challan form of Rs.200/- (obtainable from State Bank of Pakistan/Government Treasury) and debit able to Major Head C02501-20, Main Head-12, Sub Head 'A' Miscellaneous (Code Head 1/845/30). Each offer will be covered by one Challan.

b. Firms, un-registered / un-indexed with DGDP (Registration Section) are to acquire prior approval from DP (Navy) to participate in the tender competition through formal application accompanied by Challan Form of Rs 300 in favour of CMA (DP).

14. **Earnest Money/Tender Bond:-** Your tender must be accompanied by a **Call Deposit Receipt (CDR) in favor of CMA (DP),** Rawalpindi for the following amounts:-

Attached ☐ Not Attached ☐

a. **Submitting improper Earnest Money**. Earnest Money/Bid Security furnished with tender is strictly in conformity of tender/IT conditions (Clause 14 of DP-1 and clause 10 of DP-2) on the subject. We have no objection on confiscation of Earnest Money/Bid security and rejection of our offer in case amount of Earnest Money/Bid Security is improper / insufficient in violation of IT condition.

b. **Rates for Contract**. The rate of earnest money and its maximum ceiling for different categories of firms would be as under:-

(i) **Registered/Indexed/Pre-Qualified Firms**. 2% of the quoted value subject to maximum ceiling of **Rs. 0.500 Million.**

(ii) **Registered/Pre-Qualified but Un-indexed Firms**. 3% of the quoted value subject to maximum ceiling of **Rs. 0.750 Million.**

(iii) **Unregistered/not Pre-Qualified/Un-indexed Firms**. 5% of the quoted value subject to maximum ceiling of **Rs. 1.000 Million.**

c. **Return of Earnest Money**

(i) Earnest money to the unsuccessful bidders will be returned on finalization of the contract.

(ii) Earnest money of the firm/firms with whom contract is concluded will be returned on submission of Bank Guarantee and its acceptance by CMA (DP).

d. Photocopy of EM must be attached with Technical Offer as proof after hiding the amount with black Bold Marker.

15. Documents for provisional registration: In case your firm wins a contract on Earnest Money (EM) , it will deposit following documents to DGDP (Registration Section) before the award of contract for provisional registration:-

Understood agreed ☐ Understood Not agreed ☐

S No	Local Supplier	Foreign Supplier
a.	Three filled copies of SVA-8121 of each member of management.	Three filled copies of SVA-8121-D of each member of management.
b.	Three filled copies of SVA-8121-A	Three filled copies of SVA-8121.
c.	Three photocopies of NIC for each member of management.	Three photocopy of Resident Card or equivalent identification Card for each member of management.
d.	Three PP size photographs for each member of management.	Three PP size Photographs for each member of management.
e.	Challan Form	Challan Form
f.	Bank Statement for last one year.	Financial standing/audit balance sheet
g.	Photocopy of NTN	Photocopy of passport
h.	Foreign Principal Agency Agreement in case of local agent.	Agency Agreement in case of Trading House/ Company/ Exporter /Stockiest etc.

16. **Inspection Authority.** Inspection will be carried out by relevant Inspecting Authority of PN, Consignee & Specialist User or a team nominated by Pakistan Navy in light of DPP&I 35.

Understood agreed ☐ Understood not agreed ☐

(Note: CINS shall not be held responsible or liable for any loss, damage or injury to the supplier/ firm's assets, items under inspection, equipment, infrastructure or personnel that may occur during or in connection with the inspection activities/ operations carried out by CINS inspectors. The supplier firm shall be responsible

for ensuring the safety and protection of tits facilities, equipment, materials and personnel during the inspection process.)

17. **Condition of Stores.** Brand new stores will be accepted on Firm's Warranty/Guarantee Form DPL-15 enclosed with contract. Understood agreed ☐ Understood not agreed ☐

18. **Documents Required.** Following documents are required to be submitted along with the quote: Understood agreed ☐ Understood not agreed ☐

a. The firm/supplier shall provide correct and valid e-mail and Fax No to PN Inspecting Authority and DP(N). Supplier/contracting firm shall either provide OEM Conformance Certificate to PN Inspecting Authority or is to be e-mailed to PN Inspecting Authority under intimation to DP (Navy). Hard copy of COC must follow in any case through courier. On receipt, PN Inspecting Authority shall approach the OEM for verification of Conformance Certificates issued by OEM. Companies/firms rendering false OEM Conforming Certificates will be blacklisted.

b. Original quotation/Principal/OEM proforma invoice.

c. In case of bulk proforma invoice, a certificate that prices indicated in the bulk proforma invoice have not been decreased since the date of bulk proforma invoice from the manufacturers/ suppliers.

d. Submit breakup of cost of stores/ services on the following lines:

(i) Imported material with break down item wise along-with import duties.
(ii) Variable business overheads like taxes and duties imposed by the federal/ provincial government as applicable:-
(1) General Sales Tax
(2) Income Tax
(3) Custom Duty. PCT code along with photocopy of the related page is to be attached where applicable.
(4) Any other tax/duty.
(iii) Fixed overhead charges like labour, electricity etc.
(iv) Agent commission/profit, if any.
(v) Any other expenditure/cost/service/remuneration as asked for in the tender.

19. **Rejection of Stores/Services.** The stores/services offered as a result of contract concluded against this tender may be rejected as follows: Understood agreed ☐ Understood agreed ☐

a. 1st rejection on Govt. expense
b. 2nd rejection on supplier expense
c. 3rd rejection then contract cancellation will be initiated on RE in light of DPP&I-35.

20. **Bank Guarantee .** To ensure timely and correct supply of stores the firm will furnish an unconditional Bank Guarantee (BG) from a schedule Bank of Pakistan for an amount upto 10 % of the contract value (excluding Taxes, duties/freight handling charges) on a Judicial Stamp Paper (All pages) of the value of (Rs 100.00) as per prescribed format or in shape of CDR/Bank Draft/Pay Order. The Bank Guarantee shall be endorsed in favour of CMA (DP) Rawalpindi Understood agreed ☐ Understood not agreed ☐

who is the Accounts Officer specified in the contract. The CMA (DP) Rawalpindi has the like power of seeking encashment of the Bank Guarantee as if the same has been demanded by the purchaser himself. The Bank Guarantee shall be produced by the supplier within 30 days from the date of issue of the contract and remain valid for upto 60 days after completion of warranty period and remain in force till one year ahead of the delivery date given in the contract. If delivery period is extended, the supplier shall arrange the extension of Bank Guarantee within 30 days after the original delivery period to keep its validity always one year ahead of the extended delivery period. The BG form can be obtained from DP(N) on e-mail address given on page 1. Format of BG is enclosed at Annex B.

21. **Integrity Pact.** There shall be "zero tolerance" against bribes, gifts, commission and inducement of any kind or their promises thereof by Supplier / Firm to any Government official / staff whether to solicit any undue benefit, favour or otherwise. Integrity Pact amended at Annex D shall be signed by Supplier. Moreover, following provisions must be clearly read & understood for strict compliance:

Understood agreed ☐ Understood not agreed ☐

a. Integrity Pact shall be applicable to all tenders / contracts irrespective of their financial value. However, a written Integrity Pact shall be signed for contracts exceeding Rs 10 Million between the procuring agency and the supplier / contractor i.a.w PPRA Rules. The form is available at www.ppra.org.pk or can be requested at adpn33@paknavy.gov.pk

b. If a Supplier / Contractor is found involved in any unbusiness-like / unethical activity, same would be considered a serious breach of the Integrity Pact. DP (Navy) shall take severe disciplinary action against that person(s) and the firm / company, which may include, but not limited to, **PERMANENT BLACKLISTING** of firm / company through DGDP and legal action against the individual (s) involved as per Pakistan's Code of Criminal Procedure.

c. It is strictly forbidden to socialize, call or meet any official / staff of DP (Navy) in private or during off hours. If any official / staff from Purchaser side asks for any undue favour or gratification directly or indirectly, the matter is to be immediately brought to the personal notice of Director Procurement (Navy) on Tel: 051-9271468 or through a personal meeting in office. Privacy of firms and their Reps sharing such information will be guaranteed without any prejudice to their normal business activities.

22. **Correspondence.** All correspondence will be addressed to the Purchaser i.e. DP (Navy). Correspondence with regard to payment or issue of delivery receipt may be addressed to CMA Rawalpindi & Consignee respectively with copy endorsed to the DP (Navy).

Understood agreed ☐ Understood not agreed ☐

23. **Pre-shipment Inspection**.PN may send a team of officers including DP(N) member for the inspection of major equipments and machinery items at OEM premises as per terms of contract. If not already provided for and mentioned in the I.T, firm(s) must clarify the place, number of persons, duration and whether expenses on such visits would be borne by the Purchaser or Contractor. In case contractor is responsible for bearing such expenses, detailed breakdown of the same should be given separately in the commercial offer.

Understood agreed ☐ Understood not agreed ☐

24. **Amendment to Contract.** Contract may be amended/ modified to include fresh clause (s) or modify the existing clauses with the mutual agreement by the supplier and the purchaser. Such modification shall form an integral part of the contract.

Understood agreed ☐ Understood not agreed ☐

25. **Discrepancy**. The consignee will render a discrepancy report to all concerned within 30 days after receipt of stores for discrepancies found in the consignment. The quantities found short are to be made good by the supplier, free of cost.

Understood agreed ☐ Understood not agreed ☐

26. **Price Variation.**

a. Prices offered against this tender are to be firm and final.

Understood agreed ☐ Understood not agreed ☐

27. **Force Majeure**

a. The Parties will not be held responsible for any non-fulfillment or delay in carrying out the contractual obligations due to an event of Force Majeure such as acts of God (earthquake, flood, fire, typhoon, hurricane, mass epidemic diseases), war (military actions, subversive activities or sabotages), riots, civil commotion, strike, lockouts, prohibitive measures of governments (prohibition of trade relations with certain countries as a result of UN sanctions etc) directly affecting the parties and any event or circumstances on which the parties has no control.

Understood agreed ☐ Understood not agreed ☐

b. To be deemed force-majeure, the said events should be of extraordinary, unpredictable and unavoidable nature, and occur after the contract comes into force and be beyond the control of the Parties.

c. Should be the force-majeure circumstance occur, the suffering party must notify in writing the other party within 30(thirty) days from occurrence thereof. The notice should contain information about the nature of the circumstance and, if possible, an evaluation or estimate of their probable impact upon performance of obligations under the contract, as well as the time required for such performance.

d. Upon termination of the above-mentioned circumstances, the suffered party should promptly give a relevant written notice to the other party. The notice should specify the time within which performance of obligations under the contract is being suggested.

e. Within reasonable time, the party exposed to force-majeure should transfer to other party a certificate issued by the legal authorities as evidence of occurrence of the force-majeure situation.

f. Should the force-majeure situation occur, the timing of performance by the parties of their respective obligations under the contract shall be extended adequately by adding on the duration of such circumstances and consequences thereof.

g. Should the force-majeure circumstances continue for more than consecutive 60 (sixty) days, the parties shall negotiate and coordinate appropriate measures needed to perform their respective obligations under the contract. If duration of such circumstances exceeds 6 (Six) months and the parties fail to agree on further coordinated measures to

perform their respective obligations, the Contracting Party (Purchaser) shall have the right to terminate the contract, whether partially or wholly, free of any subsequent claims, by sending a written termination notice to the other party (Seller).

h. The Purchaser may not claim LD in relation to delays in delivery, provided that such delays have been caused by occurrence of a force-majeure event.

j. Delay in obtaining the export licenses, permits, and/or third-party certificate may not be counted as force-majeure.

28. **Arbitration.** Parties shall make their attempt to settle all disputes arising under this contract through friendly discussions in good faith. In the event that either party shall perceive such friendly discussion to be marking insufficient progress towards settlement of dispute(s) at any time, then such party may be written notice to the other party to refer the dispute (s) to final and binding arbitration as provided below:

Understood agreed ☐ Understood not agreed ☐

a. The dispute shall be referred to Secy (MoD) for his discussion.

b. The venue of arbitration shall be the place as the Purchaser at his discretion may determine.

c. Decision of Secy (MoD) shall be final and binding on both the parties.

d. In course of arbitration, the contract shall be continuously be executed except that part which is under arbitrating.

e. All proceedings under this clause shall be conducted in English language and writing.

29. **Court of Jurisdiction**. In case of any dispute, the courts of Islamabad / Rawalpindi. Pakistan shall have the jurisdiction to decide the matter.

Understood agreed ☐ Understood not agreed ☐

30. **Liquidated Damages(LD).** Liquidated Damages upto 2% per month are liable to be imposed on the suppliers by the purchaser in accordance with DP-35, if the stores supplied after the expiry of the delivery date without any valid reasons. Total value of LD shall not exceed 10% of the contract value. Grace period of shall be 21 days.

Understood agreed ☐ Understood not agreed ☐

31. **Risk Purchase.** In the event of failure on the part of supplier to comply with the contractual obligations the contract will be cancelled at the Risk and Expense (RE) of the supplier in accordance with DPP&I-35. The purchaser shall be entitled to receive back all advance payment made by him and will have the right to purchase the store of similar or equivalent specification from elsewhere. In such a case the price difference (if any over and above the net LC value of this contract) will be paid by supplier as confiscation for RE amount.

Understood agreed ☐ Understood not agreed ☐

32. **Compensation Breach of Contract.** If the contractor fails to supply the contracted stores or contract is cancelled either on RE or without RE or contract become ineffective due to default of supplier / seller or stores / equipment declared defective and caused loss to the Government, contractor

Understood agreed ☐ Understood not agreed ☐

shall be liable to pay to the Government compensation for loss or inconvenience resulting for his default or from the rescission of his contract when such default or rescission take place such compensation will be in excess to the RE amount, if imposed by the competent authority. Compensation amount in terms of money will be decided by the purchase officer and will be deposited by contractor / seller in Government treasury in the currency of contract.

33. **Termination of Contract.**

Understood agreed ☐ Understood not agreed ☐

a. If at any time during the currency of the contract the Purchaser decides to terminate the contract for any reason whatsoever (other than for reasons of Non-Delivery) he shall have right to do so by giving the Supplier a registered notice to that effect. In that event the Purchaser will accept delivery at the contract price and terms of such stores/goods/services which are in the actual process of manufacture that is completed and ready for delivery within thirty days after receipt by the Supplier of such notice.

b. In the case of remainder of the undelivered stores/goods/services the Purchaser may elect either:

(i) To have any part thereof completed and take the delivery thereof at the contract price or.

(ii) To cancel the remaining quantity and pay to the Supplier for the articles or sub-components or raw materials purchased by the Supplier and are in the actual process of manufacture at the price to be determined by the Purchaser. In such a case materials in the process of manufacture shall be delivered by the Supplier to the Purchaser.

(iii) No payment shall however be made for any materials not yet in the actual process of manufacture on the date notice of cancellation is received.

c. Should the Supplier fail to deliver goods/services in time as per quality terms of contract or fail to render Bank Guarantee within the stipulated time period or any breach of the contract the Purchaser reserves the right to terminate/cancel the contract fully or any part thereof at the risk and expense (RE) of the Supplier.

34. **Rights Reserved.** Directorate of Procurement (Navy), Islamabad reserves full rights to accept or reject any or all offers including the lowest. Grounds for such rejections may be communicated to the bidder upon written request, but justification for grounds is not required as per PPRA Rules.

Understood agreed ☐ Understood not agreed ☐

35. **SECRECY/ NON DISCLOSURE AGREEMENT (NDA).**

Understood agreed ☐ Understood not agreed ☐

a. The Purchaser and the Contractor undertake and agree to exercise their best efforts to prevent any unauthorized person(s) from gaining access to drawing offices or workshops or other premises where the supplies are being designed, manufactured, constructed, stored and/ or outfitted.

b. As the contractor and is Sub-Contractor(s) are the exclusive owners of the intellectual property right/ copy right and industrial rights of any and all contractual designs, data, software, TDP, drawings etc., and since they possess all relevant rights therein, the Purchaser and the

Contractor undertake and agree to prevent such designs, data, software, drawings, TDP, etc. as well as copies thereof from falling into the hands of representatives of any other foreign power of competitor of the Contractor or its Sub-Contractor(s) and Purchaser or any other unauthorized Party or person.

c. The above provisions shall, however, not be constructed as any restriction whatsoever of the Purchaser's/ Shipyard's application and use of such drawings and TDP for any purpose in accordance with this Contract.

d. The secrecy obligations above are supplementary to those contained in any agreement between the Pakistan Navy on behalf of the Purchaser, whereby the obligations pursuant to above shall be subject to the Pakistan law regarding the custody and protection of classified matter.

e. It is the Contractor's responsibility to ensure that all such information is protected in accordance with the protective markings assigned by the Purchaser. If in any case this become essential with regards to this Contract to disclose the information classified as Confidential or above to Sub-Contractors (OEMs), approval must be sought from the Purchaser.

f. The Contractor undertakes to prevent any unauthorized visits to the platform(s) being constructed / upgraded, and / or systems / equipment being manufactured /developed for the Purchaser to ensure confidentiality of the information concerning this project. No unauthorized Part or person may be allowed onboard during its construction/ upgrade and qualification tests.

g. The terms of this Contract are 'CONFIDENTIAL' and each Party agrees not to disclose them to any Third party except as may be necessary for the performance of this Contract which includes its professional advisors and as else may be required.

h. The Contractor undertakes that any information about the sale/purchase of the goods/stores under this contract shall not be communicated to any person/organization/agency, other than the manufacturer of the stores/ equipment/material, or to any press or agency not authorized by the Purchaser to receive it. Any breach on this account will be punishable under Official Secrets Act-1923 of Pakistan and may lead to legal action against the Contractor in addition to termination of the contract at the risk and expense of the Contractor.

j. Undertaking as per format at Annex E be signed by the supplier.

36. **Acknowledgment.** Firms will send acknowledgement slips within 07 days from the date of downloading of IT from the PPRA Website i.e. **WWW.PPRA.ORG.PK**

Understood agreed ☐ Understood not agreed ☐

37. **Disqualification.** Offers are liable to be rejected if:-

a. Received later than appointed/fixed date and time.
b. Offers are found conditional or incomplete in any respect.

Understood agreed ☐ Understood not agreed ☐

c. There is any deviation from the General /Special/Technical Instructions contained in this tender.

d. Forms DP-1, DP-2 (along with Annexes), and DP-3 duly signed, are NOT received with the offers.

d. Taxes and duties, freight/transportation and insurance charges NOT indicated separately.

e. Treasury challan is NOT attached with the offer.

f. Multiple rates are quoted against one item.

g. Manufacturer's relevant brochures and technical details on major equipment assemblies are not attached in support of specifications.

j. Subject to restriction of export license.

k. Offers (commercial/technical) containing non-initialed/ unauthenticated amendments/corrections/overwriting.

l. If the validity of the agency agreement is expired.

m. The commercial offer against FOB/CIF/C&F tender is quoted in local currency and vice versa.

n. Principals invoice in duplicate clearly indicating whether prices quoted are inclusive or exclusive of the agent commission is not enclosed.

p. Earnest money is not provided.

q. Earnest Money is not provided with the technical offer (or as specified).

r. If validity of offer is not quoted as required in IT or made subject to confirmation later.

s. Offer made through Fax/E-mail/Cable/Telex.

t. If offer is found to be based on cartel action in connivance with other sources/ participants of the tender.

u. If OEM and principal name and complete address is not mentioned.

v. Original Principal Invoice is not attached with offer.

38. **Appeals by Supplier/Firm.** Any aggrieved Supplier/Firm against the decision of DP (N) or PN Inspecting Authority or any other problematic area towards the execution of the contract may prefer an Appeal to Standing Appeal Committee (SAC) comprising PN Officers and military finance rep at Naval headquarters, Islamabad. The detail and timeline for preferring appeals is given below:

Understood agreed ☐ Understood not agreed ☐

S.No.	Category of Appeal	Limitation Period
a.	Appeals for liquidated damages	Within 180 days of decision
b.	Appeals for reinstatement of contracts	Within 60 days of decision
c.	Appeals for risk & expense amount	Within 180 days of decision
d.	Appeals for rejection of stores	Within 21 days of decision
e.	Appeals in all other Cases	Within 60 days of decision

39. **Limitation.** Any appeal received after the lapse of timelines given in para 38 above shall not be entertained.

Understood agreed ☐ Understood not agreed ☐

40. **For Firms not Registered with DGDP**. Firms not registered with DGDP undertake to apply for registration with DGDP prior signing of Contract. Details can be found on DGDP website www.dgdp.gov.pk.These firms can participate in tender iaw relevant paras and provision of documentary proof regarding financial status of the firm alongwith NTN and GST registration copies.

Understood agreed ☐ Understood not agreed ☐

41. Firms which are not registered with DGDP should initiate provisional registration in accordance with Para 41. Besides, ground check by Field Security (FS) Team will be made for security clearance related to participation in the tender after technical opening. Firms undertake to provide following documents for ground check by FS Team:

Understood agreed ☐ Understood not agreed ☐

a. NTN
b. Income Tax Return
c. Sales Tax Return
d. Sales Tax Certificate
e. Chamber of Commerce Industry Certificate
f. Professional Tax Certificate (Excise & Taxation)
g. Office/Home/Ware House Property documents
h. Utility Bills (Phone/Electricity)
j. Firm Vehicle/Personal Vehicle
k. CEO Visiting Card/NIC Copy, 03Xspecimen signature of CEO
l. DGDP Registration letter
m. Firm Bank Statement
n. Non Black List Certificate
p. 2 X Witness + CNIC and Mobile Numbers
q. Police Verification
r. Agency Agreement
s. OEM Certificate
t. ISO Certificate
u. Stock List with value
v. Company Profile/Broachers
w. Employees List
x. Firm Categories
y. Sole Proprietor Certificate
z. Partnership Deed
aa. Pvt Limited
ab. Memorandum of Articles
ac. Form 29 and Form A
ad. Incorporation Certificate

42. We solemnly undertake that all IT clauses marked as “Understood & Agreed" shall not be changed / withdrawn after tender opening. The IT provisions accepted shall form the baseline for subsequent contract negotiations.

Understood agreed ☐ Understood not agreed ☐

43. The above terms and conditions are confirmed in total for acceptance.

Understood agreed ☐ Understood not agreed ☐

44. Format of all forms and their relevant details are mentioned under:

Understood agreed ☐ Understood not agreed ☐

S No.	Annex	Detail
a.	Annex A to DP-1	DPL-15 (Warranty/ Guarantee Format)
b.	Annex B to DP-1	BG Format on Judicial paper
c.	Annex C to DP-1	Integrity Pact
d.	Annex D to DP-1	Undertaking for registration with DGDP
e.	Annex E to DP-1	Data for Issuance of Contracts on Bid Security/ Earnest Money
f.	Annex F to DP-1	Undertaking/ Non-Disclosure Agreement

Sincerely yours,

_____
(To be Signed by Officer Concerned)
Rank:_____
NAME:_____

ANNEX 'A'
To DP-1

DPL-15 (WARRANTY)

FIRM'S NAME: M/s_____
_____
_____
_____

1. We hereby guarantee that the articles supplied under the terms of this contract are produced new in accordance with approved drawings/specification and in all respect in accordance with the terms of the contract, and the materials used whether or not of our manufacture are in accordance with the latest appropriate standard specifications, as also in accordance with the terms of complete of good workmanship throughout and that we shall replace FOR/DDP Karachi free of cost every article or part thereof use or in use shall be found defective or not within the limits and tolerance of specifications requirement or in any way not in accordance with the terms of the contract.

2. In case of our failure to replace the defective stores free of cost within a reasonable period, we shall refund the relevant cost FOR/DPP Karachi (As the case may be in currency in with received).

3. This warranty shall remain valid for **01 Year** after the acceptance of stores by the end user

The signature must be the same as that on the tender/contract, or if otherwise must be shown to be the signature of a person capable of giving a guarantee on behalf of the contractor

SIGNATURE_____

DATE_____

PLACE_____

ANNEX 'B'
To DP-1

BANK GUARANTEE FOR PERFORMANCE ON JUDICIAL STAMP PAPER OF RS. 100/- OR AS SUITABLE TO THE AMOUNT OF BG

(i) Contract No._____ dated _____
(ii) Name of Firm/Contractor_____
(iii) Address of Firm/Contractor _____
(iv) Name of Guarantor _____
(v) Address of Guarantor _____
(vi) Amount of Guarantee Rs. _____
(_____)
(in words)
(vii) Date of expiry of Guarantee_____

To: The President of Islamic Republic of Pakistan through the Controller of Military Accounts (Defence Purchase) Rawalpindi.

Sir,

1. Whereas your good self have entered into Contract No. _____ _____ dated _____ with Messer's_____
_____
(Full Name and Address)
hereinafter referred to as our customer and that one of the conditions of the Contract is the submission of unconditional Bank Guarantee by our customer to your good self for a sum of Rs. _____ Rupees/FE (as applicable)_____
_____

2. In compliance with this stipulation of the contract, we hereby agree and undertake as under: -

a. To pay to you unconditionally on demand and/or without any reference to our Customer and amount not exceeding the sum or Rs. _____Rupees or FE (as applicable) _____ as would be mentioned in your written Demand Notice.

b. To keep this Guarantee in force till _____.

c. That the validity of this Bank Guarantee shall be kept one clear year ahead of the original/extended delivery period or the warrantee of the stores which so ever is later in duration on receipt of information from our Customer i.e. M/s_____ or from your office. Claim, if any must be duly received by us on or before this day. Our liability under this Bank Guarantee shall cease on the closing of banking hours on the last date of the validity of this Bank Guarantee. Claim received thereafter shall not be entertained by whether you suffer a loss or not. On receipt of payment under this guarantee, this document i.e. Bank Guarantee must be clearly cancelled, discharged and returned to us.

d. That we shall inform your office regarding termination of the validity of this Bank Guarantee one clear month before the actual expiry date of this Guarantee.

e. That with the consent of our customer you may amend/alter any term/clause of the contract or add/delete any term/clause to/from this contract without making any reference to us. We do not reserve any right to receive any such amendment/alternation or addition/deletion provided such like actions do not increase our monetary liability under this Bank Guarantee which shall be limited only to Rs. _____ (Rupees _____).

f. That the Bank Guarantee herein before given shall not be affected by any change in the constitution of the Bank or Customer/Seller or Vendor.

g. That this an unconditional Bank Guarantee, which shall be enchased on sight on presentation without any reference to our Customer/Seller or Vendor.

Guarantor

Dated: _____

_____

(Bank Seal and Signatures)

ANNEX 'C'
To DP-1

INTEGRITY PACT

DECLARATION OF FEES, COMMISSION AND BROKERAGE ETC PAYABALE BY THE SUPPLIER OF GOODS, SERVICES & WORKS IN

Contract No.
Contract Value:
Contract Title:

a. M/s _____ hereby declares that it has not obtained or induced the procurement of any contract, right, interest, privilege or other obligation or benefit from Government of Pakistan or any administrative subdivision or agency thereof or any other entity owned or controlled by it (GoP) through any corrupt business practice.

b. Without limiting the generality of the foregoing, M/s _____represents and warrant that it has fully declared the brokerage, commission, fees etc. paid or payable to anyone and not given or agreed to give and shall not give or agree to give to anyone within or outside Pakistan either directly or indirectly through any natural or juridical person, including its affiliate, agent, associate, broker, consultant, director, promoter, shareholder, sponsor or subsidiary, any commission, gratification, bribe, finder's fee or kickback, whether described as consultation fee or otherwise, with the object of obtaining or inducing the procurement of a contract, right, interest, interest, privilege or other obligation or benefit in whatsoever from Government of Pakistan(GoP), except that which has been expressly declared pursuant hereto.

c. M/s _____ that it has made and shall make full disclosure of all agreements and arrangements with all persons in respect of or related to the transaction with GoP as referred to above and has not taken any action or shall not take any action or shall not take any action to circumvent the above declaration, representation or warranty.

d. M/s _____ accepts full responsibility and strict liability for making any false declaration, not making full disclosure, misrepresenting facts or taking any action likely to defeat the purpose of this declaration, representation and warranty. It agrees that any contract, right, privilege or other obligation or benefit obtained or procured as aforesaid shall, without prejudice to any other right and remedies available to GoP under any law, contract or other instrument, be avoidable at the option of GoP.

e. Notwithstanding any rights and remedies exercised by GoP in this regard, agrees to indemnify GoP for any loss or damage incurred by GoP on account of the corrupt business practices of M/s _____ and further pay compensation to GoP in an amount equivalent to ten time the sum of any commission, gratification, bribe, finder's fee or kickback given by M/s _____as aforesaid for the purpose of obtaining or inducing the

f. Procurement of any contract, right, interest, privilege or other obligation or benefit in whatsoever from GoP.

_____ [The Buyer]

_____ [The Supplier]

ANNEX 'D'
To DP-1

AFFIDAVIT/ UNDERTAKING
(FOR PROVISION REGISTRATION)
(ON JUDICAL OR E/STAMP PAPER WORTH RS 100/-)

1. I, Mr_____ having CINC No/ Passport No. _____ Authorized signatory/ Partner/MD /. Proprietor of M/s_____, do hereby solemnly affirm to DGDP, MoD, Rawalpindi that our firm M/s_____ will apply/ has applied for registration with Director General Defence Purchase (DGDP), MoD by submitting all the documents required for the registration on _____ (Insert date).

2. In case we do not apply for registration by the date mentioned above or it is found at any stage that our firm has not applied for registration with the DGDP, MoD as stated above, our firm shall be liable to disciplinary and legal action by the DGDP/ MoD or any of the organization of the MoD.

3. I also accept that any disciplinary and legal action taken by the MoD or any of its organization against my firm in this regard will not be challenged in any court of law.

Signature _____
Station: _____ Name: _____
Date: _____ Appointment in Firm _____

Note. Give complete address with telephone/fax numbers and email address.

ATTESTED BY OATH COMMISSIONER WITH STAMP

Annex'E'
To DP-1

NECESSARY DATA FOR ISSUANCE OF CONTRACTS ON BID SECURITY/ EARNEST MONEY

IMPORTANT

Each column must be filled in with BLOCK CAPITAL LETTERS, incompletion shall render disqualification.

1. Name : _____

2. Father's Name : _____

3. Address (Residential) : _____

_____

_____

4. Designation in Firm : _____

5. CNIC : _____
(Attach Copy of CNIC)

6. NTN : _____
(Attach Copy of NTN)

7. Firm's Address _____

_____

_____

8. Date of Establishment of Firm : _____

9. Firm's Registration Certificate with FBR/Chamber of Commerce/Registrar of Companies. (Attach Copy of relevant CERTIFICATE)

10. In case PARTNERSHIP (Attach particulars at serial 1,2,3,4,5 and 6 of each partner).

(Kindly fill in the above form and forward it under your own letter head with contact details)

Annex F
To DP-1

UNDERTAKING/ NON DISCLOSURE AGREEMENT

(To be given on affidavit dully attested by Oath Commissioner/Magistrate)

1. I _____
(Name & Appointment)

on behalf of _____
(Name for Firm / Contractor)

_____
(With address and Telephone Number)

2. Do hereby solemnly affirm to abide by the provision of Official Secrets Act 1923 and the conditions contained therein. Breach of these provisions on my part or any employee of the firm, in addition to any penalty under law, will render immediate cancellation of the contract and may lead to legal action beside completion of the reminder work by any other business concern considered suitable by the accepting office at our own risk.

3. M/s……. accepts full responsibility and strict liability to protect classified information contained in the contract however in any case this become essential to disclose the information classified as confidential or above to sub contractor (OEM), approval from the purchaser shall be sought. Infringement of aforesaid will render contract termination apart from legal action before the court of competent jurisdiction as per contract.

Sig _____
Status/Appointment _____
Place _____
Date _____

1. Signature of Witness _____
Name (in Block capital) _____
CNIC No _____ Seal & Date
(Please attach photocopy)
Address _____
_____

2. Signature of Witness _____
Name (in Block capital) _____
CNIC No _____ Seal & Date
(Please attach photocopy)
Address _____
_____

DP2

INVITATION TO TENDER FORM

1. Schedule to **Tender No 625038/R-2611/330424** dated 20 Nov 26**.** This tender will be closed for acceptance at 1030 Hours and **will be opened at 1100 Hours** on **10-12-2026**. Please drop tender in the Tender Box No 203.

2. You are requested to please use this Performa for price quotation, fill in the prices, affix your stamp on the same, sign it and forward it in original as your Commercial offer along with the covering letter of your firm. If you do not use this form as price quotations your offer might be rejected.

3. You are requested to please attach DP-1 and DP-3 alongwith your quotation duly signed & stamped. Same are available at www.ppra.org.pk.

S NO	DETAIL OF STORES	QTY/ UNIT	UNIT PRICE	GST (___%)	TOTAL PRICE
1.	**Part No: 8405-50-900-1694** Dress Khaki 100% Cotton Collar 16" Waist 34" **Detailed Technical Specifications:** As per Annex "A" **Genral Requirements/ Instructions:** As per Annex "B"	**1,000 Pairs**			
2.	**Part No: 8405-50-900-1695** Dress Khaki 100% Cotton Collar 16" Waist 36" **Detailed Technical Specifications:** As per Annex "A" **Genral Requirements/ Instructions:** As per Annex "B"	**1,500 Pairs**			
3.	**Part No: 8405-50-900-1696** Dress Khaki 100% Cotton Collar 16.5" Waist 38" **Detailed Technical Specifications:** As per Annex "A" **Genral Requirements/ Instructions:** As per Annex "B"	**1,200 Pairs**			
4.	**Part No: 8405-50-900-1697** Dress Khaki 100% Cotton Collar 16.5" Waist 40" **Detailed Technical Specifications:** As per Annex "A" **Genral Requirements/ Instructions:** As per Annex "B"	**700 Pairs**			
5.	**Part No: 8405-50-900-1698** Dress Khaki 100% Cotton Collar 17" Waist 42" **Detailed Technical Specifications:** As per Annex "A" **Genral Requirements/ Instructions:** As per Annex "B"	**500 Pairs**			

6.	**Part No: 8405-50-900-1699** Dress Khaki 100% Cotton Collar 17.5" Waist 44" **Detailed Technical Specifications:** As per Annex "A" **Genral Requirements/ Instructions:** As per Annex "B"	**100 Pairs**			
7.	**Part No: 8440-50-400-1900** Hat Khaki for PNP Size 6.50 Inch **Detailed Technical Specifications:** As per Annex "A" **Genral Requirements/ Instructions:** As per Annex "B"	**500 NOs**			
8.	**Part No: 8440-50-400-1901** Hat Khaki for PNP Size 6.75 Inch **Detailed Technical Specifications:** As per Annex "A" **Genral Requirements/ Instructions:** As per Annex "B"	**500 NOs**			
9.	**Part No: 8440-50-400-1902** Hat Khaki for PNP Size 7 Inch **Detailed Technical Specifications:** As per Annex "A" **Genral Requirements/ Instructions:** As per Annex "B"	**1,000 NOs**			
10.	**Part No: 8440-50-400-1903** Hat Khaki for PNP Size 7.25 Inch **Detailed Technical Specifications:** As per Annex "A" **Genral Requirements/ Instructions:** As per Annex "B"	**500 NOs**			
11.	**Part No: 8440-50-400-1904** Hat Khaki for PNP Size 7.50 Inch **Detailed Technical Specifications:** As per Annex "A" **Genral Requirements/ Instructions:** As per Annex "B"	**200 NOs**			
Total Amount		(Without GST)		(With GST)	

Amount in words: _____

_____

Terms & Conditions

1. **Terms of Payment.** 100% Payment of after delivery of stores and issuance of CRV (certified receipt voucher)

2. **Origin of Stores.** INDIGENOUS/ LOCAL

3. **Origin of OEM.** INDIGENOUS/ LOCAL

4. **Technical Scrutiny Report** Required

5. **Delivery Period.** (i). 50% by 30 September 2027
(ii). 50% by 31 December 2027

6. Trade Link between firm and OEM

7. **Currency.** Pak Rupees.

8. **Basis for acceptance.** FOR/ DDP Karachi Basis

9. **Bid validity** The validity period of quotations must be indicated **and should invariably be 120 days from the date of opening of commercial offer or 30th June whichever is later**. Firm undertakes to extend validity of offer if required by equal number of original bid period (i.e. 120 days as per original offer) i.a.w PPRA Rules.

10. **Tendering procedure** Single Stage - Two Envelopes bidding procedure will be followed as per PPRA Rules.

11. **Earnest Money/Tender Bond**:- Your tender must be accompanied by a **Call Deposit Receipt (CDR)** in favor of CMA (DP) in separate envelope, Rawalpindi for the following amounts:-

a. **Rates for Contract**. The rate of earnest money and its maximum ceil for different categories OF FIRMS would be as under:-

(i) **Registered/Indexed/Pre-Qualified Firms**. 2% of the quoted value subject to maximum ceiling of **Rs. 0.500 Million.**

(ii) **Registered/Pre-Qualified but Un-indexed Firms**. 3% of the quoted value subject to maximum ceiling of **Rs. 0.750 Million.**

(iii) **Unregistered/not Pre-Qualified/Un-indexed Firms**. 5% of the quoted value subject to maximum ceiling of **Rs. 1.000 Million.**

b. Photocopy of EM must be attached with Technical Offer as proof after hiding the amount with black Bold Marker.

c. **Return of Earnest Money**

(i) Earnest money to the unsuccessful bidders will be returned on finalization of the contract.

(ii) Earnest money of the firm/firms with whom contract is concluded will be returned on submission of Bank Guarantee and its acceptance by CMA (DP).

12. **Special Note**.

All Participating firms must submit technical offers in duplicate (one for TSR committee and one for DP (Navy) record).

a. Unregistered (Not registered with Directorate General Defense Purchase) firms must provide the documentary evidence of their financial capability to undertake the project.

b. Unregistered firms are to submit a certificate along with their Technical offer stating that the firm is not black listed by any government organization and not under disciplinary trial or embargo.

c. Only registered suppliers on Active Taxpayers List (ATL) of FBR are eligible to participate in the Tender and submit quote.

d. Release of payments is subject to mandatory submission of Filer Certificate duly issued by FBR showing the name of supplier on active Taxpayers List (ATL). No payment will be released by CMA (DP) unless latest Filer Certificate duly issued by FBR showing the name of supplier on its Active Taxpayers list is submitted alongwith payment documents.

e. In case of Pakistani firms, sales tax, NTN and income tax registration certificates are to be attached with the offer. These certificates are mandatory with the BID, otherwise offer shall be REJECTED.

f. Company registration certificates are to be attached with offer.

g. Requisite amount of earnest money (in shape of CDR/Demand Draft/Pay Order in the favour of CMA (DP)) is to be attached **in separate envelop in sealed condition with the Technical offer**. Photocopy of the same shall also be attached with DP-2 as a testimony. **Cheques/ crossed cheques shall not be accepted. Technical offers received without earnest money shall not be accepted and will be rejected on spot. Tender Opening Board is authorized to check earnest money. AUTHORIZATION LETTER IS MANDATORY FORM YOUR PRINCIPAL FIRM AT THE TIME OF PARTICIPATION IN TENDER.**

h. **UNDER TAKING ON STAMP PAPER W.R.T ADEQUACY OF SUBMITTED EARNEST MONEY IS ALSO BE ENCLOSED.**

j. Duly completed Form DP-1 and DP-3 are to be attached with Technical Offer.

k. DP-2 Form shall also be submitted with Technical Offer without mentioning of prices. Moreover, compliance or otherwise against each para/ requirement of Annex A & B duly signed & stamped by firm authorized rep is to provided for technical scrutiny.

l. Price preference is admissible to local manufacturers over foreign vendors as per PPRA Rules.

m. Tender having single item with different sizes will be dealt as a package depending on overall cost/ lowest bid.

m. In case of multiple options quoted by firm, offer will be rejected.

NOTE: IN CASE OF FAILURE TO COMPLY ABOVE INSTRUCTIONS, TERMS AND CONDITIONS, OFFER WILL LIABLE FOR REJECTION.

BARCODE AND SPECIFICATIONS

RESTRICTED

MOST IMMEDIATE

DID
OFFICE OF NRDI (ITD WING)

PN/DID/03/13618370

58455

See Distribution

22 June 2022

AMENDEMENT IN PN SPECIFICATION NO 11/2021 : KHAKI CLOTH

Reference:

A. PN/NS Dte/03/3795126 dated: 21 Jun 2022

It is intimated that proposed amendments in PN Specifications 11/2021 of Khaki Cloth have been approved by NHQ (NS Dte) vide Reference above. Same are enclosed and hereby promulgated for further necessary action, please.

MUHAMMAD AFSAR
Capt PN
DID

Encl(s):

1. Amendments in PN Specification No 11 2021

Distribution:

External:

Action:

NS Dte
Attn: DDNS II

DP Navy
Attn: ADP 33 PRE AND

RESTRICTED

ANNEX B TO
PN SPECIFICATION NO 11/2021
PROMULGATION DATE 31 AUG 2021

AMENDMENT IN PN SPECIFICATION NO 11/2021
TECHNICAL DETAILS OF KHAKI CLOTH

S NO	ITEM	REQUIREMENT	
		SHIRT	TROUSER
		FOR:	
1.	**Base Fabric Performance Testing**		
e.	Water absorbency (Drop Test)	10 Sec ± 01 Sec	10 Sec ± 01 Sec
		READ:	
		20 Sec ± 01 Sec	20 Sec ± 01 Sec

Lt PN Sajjad Umer (ADP 33 PRE AND POST) 19 Nov 20, 1438 hrs

PAKISTAN NAVY SPECIFICATION 11/2021
PROMULGATION DATE: 31 AUGUST 2021

KHAKI CLOTH FOR DRESS KHAKI (FOR PNP, FIRE BRIGADE AND BOAT POOL PERSONNEL)

This document is the property of the Pakistan Navy and its use is authorized for personnel in the course of their Inspection, Quality Assurance, Stowage, Issuance and on need to know basis. The unofficial retention or destruction of this document is an offence.

Prepared by:

Directorate of Indigenous Technical Development
Naval Headquarters, NSSD,
West Wharf Road
KARACHI

Tel: 021 48508410
Fax: 021 99214765

PROMULGATION ORDER

1. This specification is hereby approved and promulgated for information, guidance and compliance by the relevant person.

2. The details contained in the specification are to be studied, interpreted and implemented with due regards to the interest of the Service.

SUGGESTIONS FOR AMENDMENT

1. The specification has been prepared to bring the test methods and procedures in line with up-to-date PN requirements and facilities held in Pakistan. CINS may request to amend any test requirement/ test procedure in light of the experience emanating from its inspection history, through the feedback form placed at Annex E. However, such an alteration will be effective when the amendment is promulgated by this Directorate, and will be effective on the contracts which materialize after the promulgation date of respective amendment.

Lt PN Sajjad Umer (ADP 33 PRE(AND POST)

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PN SPECIFICATION 11/2021
(KHAKI CLOTH)

0101 DESIGNATION

1. Khaki Cloth for Dress Khaki.

0102 USAGE

1. Khaki Cloth is used for Khaki Dress of PNP Fire Brigade and Boat pool Personnel.

0103 INTRODUCTION

1. This specification is prepared by Directorate of Indigenous Technical Development, Karachi, to provide necessary guidance to the potential manufacturers/ suppliers of the items mentioned herein. This specification is to be used for testing and deciding upon acceptance, or otherwise, of the items mentioned. Any alteration or addition in this specification can be suggested to ITD wing (NRDI). However, it cannot be implemented without prior approval from DNS. This specification supersedes and replace PN Specification No PN/UNIFORM/07/2000 dated 13 Jul 00 and PN UNIFORM.SPECIFICATION 32 A & 32B/ 2004 dated 12 Aug 2004 and all other specifications promulgated earlier in relation to the item mentioned herein.

2. This specification booklet includes 05 Annexes and consists 22 pages, including the cover.

0104 SCOPE

1. This specification covers the technical/ manufacturing requirements of Khaki Cloth for Dress Khaki of PNP Fire Brigade and Boat Pool Personnel. It defines and lays down the quality standards, details of materials, workmanship and finish. It also defines briefly requirement and process of sampling, testing, inspection acceptance/ rejection, marking, preservation, packing and delivery etc.

2. The supplier/ manufacturer shall comply in every respect with the terms of this specification and ensure that the stores conform to it, in all respects.

0105 RELATED DOCUMENTS

1. The latest standards documents that have been referred to in this specification are:

a.	AATCC-20 A	Fiber Analysis –Qualitative.
b.	AATCC-79:2007	Water absorbency (Drop test)
c.	AATCC 128-2009	Method for calculating Wrinkle recovery
d.	ISO 7211/2	Number of treads per unit length
e.	ISO 7211/5	Determination of linear density of yarn removed from fabric.
f.	ISO 3801	Determination of Mass per unit Length
g.	ISO 13934-1	Determination of Tensile strength

h.	ISO 13937-1	Determination of Tear strength
j.	ISO 9237	Determination of Air permeability
k.	ISO 3071	Determination of PH level
l.	ISO 105-E01	Colour fastness to water.
m.	ISO 105 E02	Colour fastness to sea water
n.	ISO 105 C-03	Colour fastness to washing
o.	ISO 105 X 12	Colur fastness to Rubbing
p.	ISO 105 E04	Colour Fastness To Perspiration
q.	ISO 105-B02/BS 1006	Colour Fastness To Light
r.	ISO 7211/1	Identification of Weave
s.	ISO 6330	Dimensional stability
t.	BS EN ISO-12945-2	Determination of fabric propensity to surface fuzzing and to pilling
u.	BS EN ISO-12947-2	Determination of the abrasion resistance of fabrics
v.	BS EN 22313-1992	Determination of Crease recovery
w.	BS ISO-16322-1	Determination of Skewness

0106 **TERMS & DEFINITIONS**

1. Definitions for the terms used in this standard are given at Annex A of this specification.

0107 **TECHNICAL DETAILS OF KHAKI CLOTH FOR DRESS KHAKI**

1. The Technical Details of Khaki Cloth for Dress Khaki are mentioned at Annex B of this specification.

0108 **MANUFACTURING GUIDE LINES OF KHAKI CLOTH FOR DRESS KHAKI**

1. The Cloth of Dress Khaki shall be twill woven from 59 inch width, under uniform tension with firm and regular selvedges.

2. Yarn of Khaki Cloth for Dress Khaki should be manufactured from combed fibers.

3. Khaki Cloth of Dress Khaki shall be free from weaving defects.

4. The amount of size shall be minimum possible and no weighting material shall be used.

5. The cloth of Dress Khaki shall be properly singed, desized, scoured and bleached before dyeing and said process should have no deleterious effect on cloth.

6. Fastness properties of Khaki Cloth for Dress Khaki is as per Annex B.

7. Scouring loss should not be more than 02%.

8. Khaki cloth for Dress Khaki should be mercerized and sanforised.

9. Fabric should be dyed with vat dyes and should comply OEKO Tex standards which are not harmful for human body having good fastness properties.

Note: Dyeing of the fabric should be done with the dyes having high fastness properties. Good quality of dyes from good manufacturer CIBA, Clariant, SDC or equivalent are to be used for dyeing of fabric.

0109. QUALITY OF WORKMANSHIP AND FINISHING

1. The Workmanship and finish of Khaki cloth for Dress Khaki shall be best in quality and to the entire satisfaction of the Inspector.

0110. TESTING

1. The stores/ material during manufacturing and after delivery shall be tested and examined as the Inspector may consider necessary in order to determine whether they conform to Annex B of this specification. Inspecting authority reserves the right to get any B/R samples tested from any reputable Laboratory other than PN. However, any test considered important by inspecting Authority.

0111 BULK REPRESENTATIVE SAMPLES OF KHAKI CLOTH FOR DRESS KHAKI

1. No of samples drawn from bulk quantity/ offered store are as per instruction of Inspecting Officer or according to following table for the Inspection/ testing:

Lot Size[(yards (0.91m)]	No. Sample x 02 meters each
300 ≥800	02
801≥22000	03
22001and over	05

0112 ADVANCE SAMPLE OR PRE-PRODUCTION SAMPLE OR TENDER SAMPLE

1. Advance sample or pre-production or tender sample, when required, shall be submitted in accordance with terms of the contract for inspection, as per Annex B, C and D and approved by CINS.

2. Whenever Tender, Advance or pre-production sample is not required, the suppliers/ manufacturer are advised in their own interest to submit to the Inspecting Officer or his representative an initial delivery of One % of the contract or 10 meters for inspection and testing.

3. The approval of advance or pre-production sample, authorizes the commencement of bulk production but does not relieve the suppliers/ manufactures from compliance with all the provisions of this specification. One approved sample shall be properly sealed by INS and returned to the firm for guidance; rest of the approved sample shall be retained by INS for future use in bulk Inspection (if deemed necessary).

4. The Pre-production sample shall be manufactured by the manufacturer with the same facilities which will be used for manufacturing of the bulk items.

5. Firm shall provide advance sample along with quality verification reports from an accredited laboratory, whenever asked/ required by Inspecting authority to ensure compliance of quality assurance parameters during production/ final internal inspection.

0113. **INSPECTION**

1. Bulk representative sample (B/R) random sampling will be carried out as per rules in vogue.

2. Khaki Cloth for Dress Khaki shall be tested and examined during manufacturing/ stage inspection as Inspector may consider necessary, to determine whether they conform to PN specification or not.

3. **Inspection of Dress Khaki for PNP Fire Brigade and Boat Personnel.** The guidelines for Inspector w.r.t general defects are defined at Annex C. and Inspection Criteria is defined at Annex D. The Khaki Cloth for Dress Khaki shall be examined to ensure correctness of material, shade width evenness of dyes and other constructional details.

4. **Inspection/ Acceptance and Rejection of Stores.** Inspection/ acceptance is to be carried out to the entire satisfaction of Chief Inspector of Naval Stores or as per instruction/ procedure laid down in unit/ department Order.

a. Stamping of accepted stores: Each acceptable store shall be stamped with Inspectors individually acceptance mark close to contactor marking.

b. Stamping of rejected stores: The rejected stores shall be marked with inspectors rejection mark close to contractor marking to avoid resubmission by the supplier.

5. If on examination of 5% of any delivery, 20% of those examined from bulk supply are found NOT CONFORMING to this specification in respect of the pattern, dimensions, workmanship and finish, the whole consignment may be rejected without any compromise.

6. All stores and packing NOT fully in accordance with this specification shall be rejected.

7. **Responsibility for Inspection.** The supplier is responsible for the performance of all inspection requirements (examinations and tests) as specified herein. PN reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to ensure supplies and services conform to prescribed requirements.

8. **Responsibility for Compliance.** The inspection set forth in this specification shall become a part of the supplier's overall inspection system or

quality program. The absence of any inspection requirements in the specification shall not relieve the contractor of the responsibility of ensuring that all products or supplies submitted to PN for acceptance comply with all requirements of the contract. Sampling inspection, as part of manufacturing operations, is an acceptable practice to ascertain conformance to requirements. However, this does not authorize submission of known defective material, either indicated or actual, nor does it commit PN to acceptance of defective stores (material).

9. **Replacement by the Contractor.** The supplier is responsible for replacement of the consignment or any part thereof, whenever it is found to be not conforming to this specification. The supplies so tendered in replacement, shall be subjected to testing/ Inspection and acceptance by the Inspecting Officer.

10. **Responsibility for Safety.** The supplier/ manufacturer is fully responsible for the safety of supplies during inspection, storage at firm's premises, proper packing, dispatch and delivery up to consignee.

11. The CINS is the authority in all matters pertaining to Inspection.

0114. SPECIAL INSTRUCTIONS

1. **Care Label Instructions.** Following care instructions in the form of leaflet OR attached with Khaki Cloth for Dress Khaki shall be provided in English and Urdu:

a. Washing procedure i.e. gentle cycle machine wash
b. Ironing procedure i.e. Warm iron
c. Drying procedure i.e. Air dry
d. Any prohibition i.e. Do not bleach and dry clean etc.

0115. PACKING AND PRESERVATION DETAILS

1. Quality of packing shall be examined/ tested as the Inspector may consider necessary in order to determine whether they conform to this specification.

a. **Packing** The store when ordered to be delivered 'PACKED' shall be distributed evenly in each bolt.

(1) Khaki Cloth for dress Khaki shall be delivered in the form of bolt.

(2) Cloth for Dress Khaki shall be packed in a neat, dry and clean condition in polyethylene bag of 0.005 (0.127 mm) prior delivery to Depo/ consignee.

(3) The Polythene shall be of sufficient size to ensure cloth of Dress Khaki are protected.

(4) Packing, marking and preservation will be done by the supplier as per specification and with adhesive tape of 10cm width of the best quality.

b. **Packing Slip.** A Packing Slip shall be enclosed in each package giving full details about the store packed i.e. Cat No. designation, quantity packed, contract No, Challan No and date I/Note No or Voucher No. and date, consignee, consignor, date of packing and packer's signature, Package No and weight of the individual Package.

0116. **IDENTIFICATION LABEL**

1. Khaki Cloth for Dress Khaki shall bear following clear and indelible information on both ends :

a. Item name/ item description with size and NSN/ patt no.
b. Contract number and Date.
c. Year of manufacture.
d. Firm's name, initials, or trade mark.
e. Batch no.

Note: The portion of Khaki Cloth for Dress Khaki, marked as per Identification Label will not be taken in to account while measuring length. Manufacturer should, therefore, mark all pieces weft way and nearest to the end.

0117. **PACKING LIST**

1. Firm is bound to provide a packing list of store offered for inspection along with the challan, which include complete details about the store i.e. Pattern No., Description of stores, size, quantity, contract No., and Date, Challan No. date and I/ Note No. or voucher no. and date, consignee, Manufacturer/ firm's name, date of packing and packer's signature, QA certificate/ Lab test report from any accredited lab.

0118. **MARKING OF STORES**

1. Each bolt of Khaki Cloth for Dress Khaki will stenciled with quick drying Black indelible ink/ print in clearly define characters as per followings:

a. On Front and Top:

(1) Consignee Address.
(2) Contract No and date.
(3) Description of Stores Packed and NSN/Patt No.
(4) Stowage / Stacking Instructions.
(5) Quantity of the Item packed.
(6) Signature along with stamp of Packaging Manager/ rep of firm.

b. On Back:

(1) Manufacturers name / Firm's name.
(2) Voucher No. or Inspection note no. and date.
(3) The No. of individual Package and the total No of Packages in the consignment joined by the word 'of 'e.g. 2 of 300.
(4) Weight of the package.
(5) Month and year of packing.
(6) Destination i.e. Railway station/ (Navy).

0119. **DELIVERY**

1. The consignment of store will be delivered in accordance with the terms of contract.

2. The store shall be delivered in Brand new, clean and dry condition.

3. The contractor/ manufacturer is fully responsible for the safety of the supplies during inspection, stage inspection, storage at firm's and consignee premises, proper packing, dispatch and delivery up to consignee.

XXXXXSDXXXXX

MUHAMMAD AFSAR
Captain Pakistan Navy
DID

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ANNEX A TO
PN SPECIFICATION NO.11/2021
PROMULGATION DATE 31 AUG 21

TERMS & DEFINITIONS

a. **CINS:** Chief Inspector of Naval Stores

b. **DITD:** Directorate of Indigenous Technical Development

c. **DNS:** Directorate of Naval Store.

d. **PNCSD:** Pakistan Navy Clothing Store Depot

e. **PNCTA:** Pakistan Navy Central Testing Authority

f. **PNP:** Pakistan Naval police

g. **Inspector:** The term inspector shall include the "inspection Authority", inspecting officer and their representatives, duly authorized for the purpose of discharging inspection duties involved.

h. **Inspection Authority:** Chief Inspector of Naval Stores (CINS). His verdict in respect of Sealed Inspection matters is to be taken as final.

j. **Inspecting Officer:** An officer nominated by the CINS for carrying out inspection of stores supplied by the supplier, against a specified contract or order, in accordance with the particulars stipulated therein.

ANNEX B TO
PN SPECIFICATION NO 11/2021
PROMULGATION DATE 31 AUG 21

TECHNICAL DETAILS OF KHAKI CLOTH

S NO	ITEM	TEST METHODS	REQUIREMENTS	
1.	**Base Fabric**		**Shirt**	**Trouser**
a.	Material	AATCC 20A	100% Combed cotton	100% Combed cotton
b.	Shade/ Colour	Visual analysis	TCX: 16-0726	TCX: 16-0726
c.	Weave	ISO 7211/1	2x1 Twill	3x1 Twill
d.	Nature of Dyes	Chemical analysis	Vat dye	Vat dye
e.	Weight (gm/sq.mtr)	ISO-3801	185 gm ± 10 gm	245 gm ± 10 gm
f.	Finish	Chemical analysis	Mercerized & Sanforised	Mercerized & Sanforised
g.	Finish width	Physical analysis	59" ± 1"	59" ± 1"
h.	No of Thread/ 2.54 cm (1) Warp (2) Weft	ISO 7211/2	 84 ± 5 54 ± 5	 108 ± 5 60 ± 5
j.	Linear Density (Ne) (1) Warp (2) Weft	ISO 7211/5	 20s ± 2 20s ± 2	 20s ± 2 16s ± 2
2.	**Base Fabric Performance Testing**		**Shirt**	**Trouser**
a.	Pilling resistance after 5,000 cycles	BS EN ISO-12945-2	4 or better	4 or better
b.	Abrasion resistance after 6,000 cycles	BS EN ISO-12947-2	No thread breakage	No thread breakage
c.	Air permeability (mm/sec @ 100pa)	ISO 9237	Minimum 250	Minimum 100
d.	PH level	ISO 3071	5-8	5-8
e.	Water absorbency (Drop test)	AATCC-79:2007	10 sec ± 01 sec	10 sec ± 01 sec
f.	Appearance after 5-10 washes (3A) with tumble dry	ISO 6330	GS: 4 or Satisfactory	GS: 4 or Satisfactory
g.	Tensile strength (N) (1) Warp (2) Weft	ISO 13934-1-1999	 1000 ± 100 N 550 ± 50 N	 1200 ± 100 N 850 ± 50 N

	h.	Tear strength (N) (1) Warp (2) Weft	ISO 13937-1	 30 ± 5 N 30 ± 5 N	 35 ± 5 N 35 ± 5 N
	j.	Skewness	BS ISO-16322-1	±2%	±2%
	k.	Dimensional stability after 3N (1) Warp (2) Weft	ISO 6330	 ± 2% ± 2%	 ± 2% ± 2%
	l.	Wrinkle recovery	AATCC 128-2009	Minimum 2	Minimum 2
	m.	Crease recovery (1) Warp (2) Weft	BSEN 22313-1992	 60% ± 5% 60% ± 5%	 60% ± 5% 60% ± 5%
	n.	Color Fastness (1) To Water (a) Change in shade (b) Staining i. Wool ii. Acrylic iii. Polyester iv. Nylon v. Cotton vi. Acetate	ISO-105-E01	 4 or better 4 or better 4 or better 4 or better 4 or better 4 or better 4 or better	 4 or better 4 or better 4 or better 4 or better 4 or better 4 or better 4 or better
		(2) To Sea Water (a) Change in shade (b) Staining i. Wool ii. Acrylic iii. Polyester iv. Nylon v. Cotton vi. Acetate	ISO-105-E02	 4 or better 4 or better 4 or better 4 or better 4 or better 4 or better 4 or better	 4 or better 4 or better 4 or better 4 or better 4 or better 4 or better 4 or better
		(3) To Washing (a) Change in shade (b) Staining i. Wool ii. Acrylic iii. Polyester iv. Nylon v. Cotton vi. Acetate	ISO 105 C10 C(3)	 4 or better 4 or better 4 or better 4 or better 4 or better 4 or better 4 or better	 4 or better 4 or better 4 or better 4 or better 4 or better 4 or better 4 or better
		(4) To Perspiration (a) Change in shade	ISO 105-E04	 4 or better	 4 or better

		(b) Staining i. Wool ii. Acrylic iii. Polyester iv. Nylon v. Cotton vi. Acetate		 4 or better 4 or better 4 or better 4 or better 4 or better 4 or better	 4 or better 4 or better 4 or better 4 or better 4 or better 4 or better
		(5) To Light	BS 1006-1990	4 or better	4 or better
		(6) To Rubbing (a) Dry (b) Wet	ISO-105-X12	 4 or better 4 or better	 4 or better 4 or better

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ANNEX C TO
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GENERAL DEFECTS
(ASTM D-3990)

S. No	Defects	Definition
FABRIC		
a.	**Abrasion Mark (bruise, Chafe Mark or rub)**	An area of fabric damaged by friction Damaged due to abraded or uneven surface in a machine
b.	**Baggy or wavy cloth**	Cloth that will not lie flat on a Cutting Table Tight or loose yarn either in warp or filling (weft)
c.	**Barré Mark**	An unintentional, repetitive visual pattern of continuous bars and stripes usually parallel to the filling of woven fabric. Barré can be caused by physical, optical, or dye differences in the yarns, geometric differences in the fabric structure, or by any combination of these differences.
d.	**Blotch,**	An off colored area of any shape caused by grease or Oil. (Syn. oil spot). Cause due to leakage/slippage .from machine.
e.	**Bow**	A fabric condition resulting when filling yarns are displaced from a line perpendicular to the selvages and form one or more arcs across the width of fabric.
f.	**Broken filament**	In multifilament yarn, breaks in one or more filaments.
g.	**Clip mark**	An open place causing a streak of variable length approximately parallel of the length of width.
h.	**Decanting Mark**	A crease marks or impression extending across the cloth near the beginning or end of a piece Due to the thickness of the fabric leader seam.
j.	**Double Pick**	In woven fabrics, two picks wrongly place in the same shade.
k.	**Draw Back**	A weave distortion characterized by tight and stack places in the same warp yarn.
l.	**End out**	A void caused by a missing warp yarn.
m.	**Float**	In woven fabrics, the portion of a warp or filling yarn that extend unbound over two or more warp or filling yarns.

n.	**Filling Band**	In woven fabrics, visual defect across the width due to a change occurring in the yarn for a large number of picks.
p.	**Frosting**	A change in color in a limited area of fabric cause by abrasive wear.
q.	**Hole**	In fabric, imperfection, wear one or more yarn or sufficiently damaged to create an aperture.
r.	**Fuzzy**	Characterized by a hair appearance due to protruding broken fibers or filaments.
s.	**Let-off Mark**	In woven fabrics, a corrugated defect pattern distributed across the fabric width.
t.	**Loom fly**	Waste fibers create during weaving that are woven into a fabric.
u.	**Loop Salvage**	An improperly woven salvage of uneven width or a salvage containing irregular filling loops extending beyond the outside edges.
v.	**Messiness**	Surface distortion in a fabric characterized by objectionable unevenness due to many minor deformations.
w.	**Pin Hole**	In fabric, a very small hole, approximately the size of the across section of the pin.
x.	**Pin Mark**	A series of holes near the edge parallel with the lengthwise direction of a fabric caused by the holding devise on the pin tender frame.
y.	**Read Mark**	In woven fabric, a creak between groups of warn ends, either continues or at intervals.
z.	**Scalloped Salvage**	An abrupt, narrow indentation in the salvage.
aa.	**Salvage Mark**	In finished cloth, a lengthwise crease mark along the salvage caused by an edge being folded or doubled.
ab.	**Shiner**	A streak, usually short caused of a lustrous section of filament yarn.
ac.	**Smash**	In woven fabrics, relatively large hole characterized by broken warn ends and floating picks.
ad.	**Skew**	A fabric condition resulting when filling yarns are angularly displace from a line perpendicular to the edge or side of the fabric.
ae.	**Snag**	In fabrics, a yarn or part of a yarn pulled or plucked from the surface.
af.	**Thin Place**	In fabric, an intentionally in a fabric appearance characterized by a small area of loosely placed yarn or by a congregation of thin yarn as compared to the adjacent construction.
ag.	**Tight Salvage**	In woven fabrics, salvage yarn shorter than warp yarn in the body of the fabric.
ah.	**Streak**	An extended unintentionally strips narrow width, often a single yarn.

aj.	**Tram Mage**	In woven crepes, a puckered area in which a filling yarn has twist running in the same direction for several picks instead of alternating S and Z twist.
ak.	**Temple Mark**	In woven fabrics, small holes or distortions adjacent to the salvage.
al.	**Tender Mark**	A visible deformation on the side edge or body of a fabric due to pressure for clips or pins.

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ANNEX D TO
PN SPECIFICATION NO 11/2021
PROMULGATION DATE 31 AUG 21

INSPECTION CRITERIA TEXTILES

1- The contracts will almost invariable stipulates a specification against which the store is to be inspected. Textiles and allied products not normally be accepted against DPL-15.

2- The following tests must be carried out before accepting a store:

a. Visual examination.
b. Full inspection
c. Physical tests.
d. Dye fastness tests
e. Other tests as specified
f. Bulk inspection (either 100% or part percentage of the supplies)

3. As textiles cannot be made flawless, tolerances are given for which allowances are claimed. These are listed below:

a. **Marking Allowance:** The manufacturer usually marks his cloth on both ends. This marked length will not be accounted for. Nevertheless the specification will stipulate the marking allowance the length of the piece/ bolt is immaterial).

b. **Short Piece Allowance:** Standard lengths of piece goods i.e, bolts of cloth are given below:

(1) Cotton- 40, 60, 80 yards $\pm$ 5%.

c. In case the offered bolts of cloth are below standard length, a short piece allowance will be claimed as under:

(1) For Cotton:
  (a) For 30 to 39 yards, 1% allowance
  (b) For 20 to 29 yards 2% allowance
(2) Lengths less than 12 yards will not be accepted

d. The above allowances are applicable to only 5% of the total quantity on order: i.e 95% of the offered supplies must be of standard length or above. In exceptional short piece allowance claimed will be doubled.

e. **Flag Allowance:** Manufacturing defects i.e. weaving and spinning flaws, handling flaws etc are almost invariably present. These flaws are marked with red thread during the course of bulk inspection. The red thread makers are called "flags"

A limited number of these "flags" are tolerated but allowance is claimed against each one major defect entails one flag.

f. Single, minor defects, which affect appearance only but are barely discernable, are:

(1) Broken ends and pick: loose, stack, light, missing ends and pick: coarse ends and pick; knots, slubs, snorts, floats, light stains due to direct, oil grease, rust, etc. temple marks, shade bars.

(2) TWO MINOR DEFECTS = ONE MAJOR DEFECT

g. Major defects which affect appearance and serviceability durability are;

(1) A multiple (i.e. 2 or more) combination of minor defects as listed **or** those that are prominent and readily apparent. To this list is added: Thick/ thin place, smash marks, damaged selvedge, cracks, and weak spots.

h. A maximum of eight flags per piece of 40 yards will be permitted for 70% of the material offered, a maximum of 12 flags per piece 40 yards for the remaining 30% of the offered quantity. The number of flags permissible will be in direct proportion to the length of each piece e.g. for an 80 yard bolt 16 flags will be permissible.

j. An allowance of 4 ½ inches per flag will be claimed for the first eight flags, and 9 inches or flag for the next flags up to a maximum of 12 flags- dependent upto the actual length of the piece.

k. On completion of bulk inspection the stores is to be packed and marked in accordance with specifications and relevant rules.

l. Complete details of the inspection results are to be recorded on examiners slip/ inspection report. This will include a list of bolts inspected their serial numbers, defects noted and allowance claimed.

m. B/R samples are invariably to be retained fully documented and securely sealed.

ANNEX E TO
PN SPECIFICATION No 11/2021
PROMULGATION DATE 31 AUG 21

FEED BACK FORM

Unit Name: _____

Item Description#: _____

Issue/Problem occurred: _____

PN SPEC #: _____

Possibility to resolve Issue: _____

_____

_____

Any Other Remarks: _____

_____

Note:

- It's good to give feedback for improvement in any clothing Item.
- Recurring problem will also be intimated through this form.

Name Stamp

COUNTERSIGNED By CO/Admin Authority

Name Stamp

PAKISTAN NAVY SPECIFICATION No.20/ 2021
PROMULGATION DATE: FEB 22

KHAKI UNIFORM (PNP, FIRE BRIGADE, BOAT POOL PERSONNEL)

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Prepared by:

Directorate Indigenous Technical Development
Naval Headquarters NSSD,
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PROMULGATION ORDER

1. This specification is hereby approved and promulgated for information, guidance and compliance by the relevant person.

2. The details contained in the specification are to be studied, interpreted and implemented with due regards to the interest of the Service.

SUGGESTIONS FOR AMENDMENT

1. The specification has been prepared to bring the test methods and procedures in line with up-to-date PN requirements and facilities held in Pakistan. CINS may request to amend any test requirement/ test procedure in light of the experience emanating from its inspection history, through the feedback form placed at Annex H. However, such an alteration will be effective when the amendment is promulgated by this Directorate, and will be effective on the contracts which materialize after the promulgation date of respective amendment.

PN SPECIFICATION 20/2021 Lt PN Sajjad Umer (ADP-3) 26 Nov 2021 1432 hrs

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PN SPECIFICATION 20/ 2021
(KHAKI UNIFORM)

0101. DESIGNATION

1. Stitched Khaki Uniform (For PNP, Fire Brigade & Boat Pool Personnel).

0102. USAGE

1. Stitched Khaki Uniform will be used by PNP, Fire Brigade & Boat Pool Personnel.

0103. INTRODUCTION

1. This specification is promulgated by Directorate of Indigenous Technical Development. Naval Headquarters Karachi to provide necessary guidance to the potential manufacturers/ suppliers of the items mentioned herein. This specification is to be used for testing and deciding upon acceptance, or otherwise, of the items mentioned. Any alteration/ addition in this specification can be suggested to ITD Wing. However, it cannot be implemented/ amended without prior approval from NHQ (NS Dte). This specification supersedes/ replace PN/UNIFORM/07/2000, and PN/FB UNIFORM/07A & 07B/2019 & PN Police Uniform Specifications TD/L & T/32 A & B /2004 Dated 12 Aug 2004, respectively and all other specifications / Technical details promulgated earlier in relation to the items mentioned herein.

2. This specification includes **08** Annexes and consists **27** pages, including the cover.

0104. SCOPE

1. This specification covers the requirements of stitching of Khaki uniform from approved Khaki Clot and Manufacturing, Inspection, Stowage & Packaging details of stitched khaki uniform of PNP, Fire Brigade & Boat Pool Personnel. This specification lays down the standards to which the store shown under designation above should conform to. It defines and lays down the quality, standards and details of materials, manufacturing, workmanship and finish. It also lays down the details of testing, inspection (acceptance & rejection), marking, packing and delivery, etc. of stitched Khaki uniform.

2. The supplier/ manufacturer shall comply in every respect with the terms of this specification and ensure that the stores conform to it, in all respects.

0105. RELATED DOCUMENTS

1. The latest standards and documents that have been referred and relevant to in this specification are:

a.	Khaki Fabric	PN Specifications 11/2021 Dated 31 Aug 21 (Khaki Cloth for Dress Khaki)
b.	AATCC 20 A	Analysis of fiber
c.	AATCC 133	Color fastness to hot pressing
d.	ASTM D 2061	Strength of zippers
e.	ASTM D 2062	Operability of Zippers
f.	ASTM D 5171	Plastic sew through Flange impact resistance
g.	ASTM D 2060	Zippers dimensions
h.	ASTM D 2057	Durability of finished zippers to laundering

j.	ASTM D 6322	Test Method associated with Textile Care Procedures
k.	ASTM D-3990	Standard terminology related to fabric defects.
l.	ASTM D 5430	Method for Visually inspecting and grading of fabric
m.	ASTM D 4846	Operability (open /close) of Hook and Eye.
n.	ASTM D 1683	Failure in Sewn Seams of Woven fabrics.
p.	BS 3320	Seam Slippage
q.	BS EN ISO 6330	Domestic Washing and Drying procedure
r.	BS EN ISO 25077	Dimensional Change in washing and drying
s.	ISO 2859-1	Sampling Procedure for Inspection by attributes
t.	ISO 3801	Weight per Sq. mtr
u.	ISO 7768	Smooth Appearance
v.	ISO 7211/2	Threads per inch
w.	ISO 7770	Appearance of seam
x.	ISO 11469	Generic identification of plastic

0106. **TERMS & DEFINITIONS**

1. Definitions for the terms used in this standard are given at Annex A.

0107. **TECHNICAL DETAILS OF STITCHED KHAKI UNIFORM**

1. The technical details of stitched Khaki uniform are enclosed at Annex B.

0108. **SCHEDULE OF MEASUREMENT**

1. All measurement schedule of stitched Khaki uniform are given at Annex C.

0109. **TECHNICAL DRAWINGS**

1. Technical drawing of stitched Khaki uniform is given at Annex D and E.

0110. **MANUFACTURING GUIDE LINES OF STITCHED KHAKI UNIFORM**

1. Khaki Uniform is to be developed with Khaki Cloth manufactured i.a.w PN Specifications 11/2021 Dated 31 Aug 21 (Khaki Cloth for Dress Khaki).

2. Khaki Uniforms is to be manufactured as per measurement schedule and drawing at Annex C, D and E, respectively.

3. The shoulder and pocket flaps shall be made of same fabric (Khaki fabric of uniform) with fused buckram in it.

4. The shoulder flaps shall be attached/ stitched at crown of sleeve such that center of the flaps shall be secured with buttons on the other end near neck.

5. Shoulder straps button shall be stitched 01 inches distance from the collar tack.

6. Size of shoulder strap may vary according to the size of the dress.

7. Buttonholes are to have at least 22 stitches per 2 cm and to be bar-tacked or taper barred.

8. All uniforms are to be made to a high standards and sound tailoring production techniques are to be applied in their construction.

9. Stitches per inch for sewing and over locking thread is 7/8 stitches.

10. All joints at trouser and shirts have single needle stitching with overlock.

11. The sewing thread should match with the main fabric.

12. Unsaturated Polyester Buttons used should be Mat finished, 4 holes, 12.5 mm (outer dia) with 2.5 mm thickness for shirts, and 15 mm (outer dia) with 4 mm thickness for trousers, and should be Khaki in color (match with base fabric).

13. 08 buttons shall be used at distance of 3.25 -3.75 inches w.r.t sizes in shirts. Distance between first two buttons is 3.25 inches

14. The button is to be fastened with same matching color thread with cross sewing neatly.

15. Reinforcement stitching (less No of stitch per inch) will be applied at collar end, button placket, flaps and cuff.

16. On trouser side pockets end, back pockets and waist loops are to be reinforced with suitable mean of stitching (less No. of stitch per inch).

17. Good quality of buckram/ fusing shall be used in collar, pocket flaps and also in cuff.

18. All joints of shirts and trousers will be secured through single needle stitching and over locked.

19. The collar is to be free from distortion.

20. Two spare buttons each for shirt and trouser be provided/ stitched on the garment at suitable place.

21. Zippers is made of polymeric coil chain of YKK or equal brand.

22. Care label instruction shall be attached with shirts and trousers.

23. Strict compliance of Quality Control and Quality Assurance parameters will be implemented through Internal/ External audit teams, before commencement of PN Inspection.

0111. **QUALITY OF WORKMANSHIP AND FINISH**

1. Workmanship and finish of the uniform shall be equal to the reference/ approved sample/ sealed pattern. It shall be the best of its class and to entire satisfaction of the INS.

2. The stitched Khaki uniform shall confirm the parameters define at Annex B of this specification.

3. All properties and qualities which may not be defined in this specification i.e. feel/ finish etc. should be as per reference/ sealed/ approved sample. Reference/ sealed/ approved sample is to be obtained from DNS/ PNCSD and held with DNS/ PNCSD/ CINS, for future reference/ inspection/ stock sample etc.

0112. **TESTING:**

1. The material shall be subjected to tests laid down at Annex B of this specification and related documents. Accessories used for manufacturing of stitched Khaki uniform will be required to complete all the tests mentioned at Annex B of this specification. The material may also be subjected to such tests which are deemed necessary by the Inspection Authority in order to determine their suitability. Inspecting authority reserves the right to get any B/R samples tested from any reputable Laboratory other than PN. However, any test considered important by Inspecting Authority other than Annex B. e.g. seam strength, zipper strength, buttons strength, etc. or the test laid down in Annex B may also be conducted in order to check its suitability/ quality. Firm is liable to pay all the testing charges.

0113. **BATCH/ LOT SIZE AND NO OF SAMPLE**

1. Samples of stitched Khaki uniform drawn from bulk quantity/ offered store are as per instruction of Inspecting Officer or according to Annex G.

0114. **ADVANCE / PRE-PRODUCTION /TENDER SAMPLES**

1. Advance sample or pre-production sample, when required, shall be submitted in accordance with terms of the contract for inspection and testing as per Annex B and approved by CINS.

2. Whenever Tender, Advance or pre-production sample is not required, the suppliers/ manufacturer are advised in their own interest to submit to the Inspecting Officer or his representative an initial delivery of 01 % of the contract.

3. For each contract following material shall be supplied by the manufacturer at the time of advance samples/ preproduction / tendering:

a.	Finished Uniform	05x Nos
b.	Zippers	10x Nos
c.	Stitching Thread and over locking	50x Grams/ 01 reel
d.	Care Label/ Washing Instruction	10x Pieces
e.	Buttons	10x pieces
f.	Hook & Retainers	10 x samples each
g.	Buckram/ fusing	05 x meters

4. The approval of the sample, authorizes the commencement of bulk production but does not relieve the suppliers/ manufacturers from compliance with all the provisions of this specification.

5. One approved sample after rectification of all observations highlighted by Inspecting Officer/ end user shall be properly sealed by INS and returned to the firm for guidance; rest of the approved sample shall be retained by INS for future use in bulk Inspection.(If deemed necessary).

6. The Pre-production sample shall be manufactured by the manufacturer with the same facilities which will be used for manufacturing of the bulk items.

7. Firm shall provide advance sample along with quality verification reports from an accredited laboratory, whenever asked/ required by Inspecting authority to ensure compliance of quality assurance parameters during production/ final internal inspection.

0115. **INSPECTION**

1. **Bulk representative sample.** B/R random sampling will be carried out as per rules in vogue.

2. **Bulk Inspection.** Bulk inspection will be carried out after satisfactory completion of Visual Examination and Testing of B/R Sample.

3. **Inspection of Stitched Khaki Uniform.** 100% of the offered store shall be inspected as per procedure in vogue **OR** predefine Stage inspection OR as per Annex G (AQL).

4. **Inspection/ Acceptance and Rejection of Stores.** Inspection/ acceptance is to be carried out to the entire satisfaction of Chief Inspector of Naval Stores and also as per instruction/ procedure laid down in Official unit order instruction.

5. Common defects in garments is enclosed as Annex F for consultation/ guideline. However these guide lines may be considered by Inspecting officer in addition to Unit Instruction Order or as per order of Inspecting Authority.

6. The Stitched Khaki uniform shall be examined for the correctness of material, shape, design, dimension, size, workmanship and finish.

7. CINS reserves the right to reject the whole supply in case, upon examination, material or packing of any sample or portion of the consignment is found NOT CONFORMING the parameters laid down in this specification or the quality of product does not seems up to the mark.

8. If on examination of 5% of any delivery, 20% of those examined from bulk supply are found NOT CONFORMING to this specification in respect of the pattern, dimensions, workmanship and finish, the whole consignment may be rejected without any compromise.

9. All stores and packing NOT fully in accordance with this specification shall be rejected.

10. **Responsibility for Compliance.** The inspection set forth in this specification shall become a part of the supplier's overall inspection system or quality program. The absence of any inspection requirements in the specification shall not relieve the contractor of the

responsibility of ensuring that all products or supplies submitted to PN for acceptance comply with all requirements of the contract. Sampling inspection, as part of manufacturing operations, is an acceptable practice to ascertain conformance to requirements. However, this does not authorize submission of known defective material, either indicated or actual, nor does it commit PN to acceptance of defective stores (material).

11. **Responsibility of Contractor.** The contractor is responsible for the performance of all inspection requirements (inspection/ examination and test) as specified here in. except as otherwise specified in the contract or purchase order, the contractor may use his own or any other facilities suitable for performance of the inspection requirements

12. **Replacement by the Contractor.** The supplier/ manufacture is responsible for replacement of the consignment or any part there of whenever it is found to be not conforming to this specification or does not curtain its quality till the useful life of an item. The supplies so tendered in replacement, shall be subjected to testing/ Inspection and acceptance by the Inspecting Officer.

13. **Responsibility for Safety.** The supplier/ manufacture is wholly responsible for the safety of supplies during inspection, storage at firm's premises, proper packing, dispatch and delivery up to consignee.

14. The CINS is the authority in all matters pertaining to Inspection.

15. **Stamping of Accepted/ Rejected Stores by the Inspector.** Following instructions are to be followed:

a **Stamping of Accepted Stores.** Each acceptable uniform shall be stamped with Inspector's Individual Acceptance mark or as per Instructing of Inspecting Authority. The stamping shall be legible.

b **Stamping of Rejected Stores.** The rejected uniform shall be marked with Inspector's Rejection marked at the back/ visible place of uniform to avoid re-submission by the supplier.

0116. SPECIAL INSTRUCTIONS

1. **Care Instructions.** Care instructions in English and Urdu shall be attached with each Uniform as indicated in the drawing and have minimum requirement as follows:

a. Ironing Procedure.
b. Washing/ Dry cleaning procedures.
c. Any Prohibition i.e. do not use bleach/ chlorinated water.

0117. PACKING DETAILS

1. The store when ordered to be delivered 'PACKED' shall be packed as per following instructions:

a. Each Stitched Khaki uniform shall be properly folded length wise.

b. The Stitched Khaki uniform shall be packed in a neat, dry and clean condition in polyethylene bag of thickness of 0.06mm (± 0.01mm) and suitable size.

c. 10 trouser and shirts shall be further packed, separately in a thick Carton Boxboard/ Corrugated Carton / Flouring.

d. Each Carton shall be securely and properly packed.

e. Carton consist of following parameters:

(1) Carton of 05 ply is used for packing.
(2) Weight of outer ply is 180± 5 gm.
(3) Inner paper ply weight /m^2 180± 5 gm.
(4) Corrugated paper weight/m^2 120± 5 gm.
(5) Paper pasted with corrugated sheet 120± 5 gm.

f. Each Carton shall consist of same size.

0118. IDENTIFICATION LABEL

1. Each Stitched Khaki uniform shall bear following minimum information attached with Stitched uniform:

a. Item name/ item description with NSN/Pattern No.
b. Material Composition.
c. Contract number and Date.
d. Year of manufacture.
e. Contractor's name, initials, or trade mark.
f. Batch No/ Bar code
g. Identification of face at suitable places
h. Size sticker

0119. PACKING LIST

1. Firm is bound to provide a packing list of store offered for inspection along with the challan and each packed box giving full, which include complete details about the store i.e. Pattern No., Description of Store, size, quantity, Contract No, & date, challan No & date, I/Note No. or Voucher No. with date, Consignee, Firm's Name, Date of packing, Packer's Signature and Stowage/ Stacking Instruction.

0120. MARKING OF STORES

1. In addition to any special marking required by contract or order, the marking of packages shall be stenciled with quick drying Black ink/ Paint in accordance with Specification No. NS/MISC/002/80 with clearly defined characters as described below:

a. On Front and Top:

(1) Consignee Address.
(2) Contract No and date.
(3) Description of Stores Packed and NSN/Patt no.
(4) Stowage / Stacking Instruction.
(5) Quantity of the Item/ Stitched Khaki uniform packed.

(6) Weight of the Carton

b. On Back:

(1) Manufacturers name / Firm's name.
(2) Voucher No. or Inspection Note No. and date.
(3) The No. of individual Package and the total No of Packages in the consignment joined by the word 'of 'e.g. 2 of 300.
(4) Weight of the package.
(5) Month and year of packing.

0121. **DELIVERY**

1. The consignment of store will be delivered in accordance with the terms of contract.

2. The store shall be delivered in brand new, clean and dry condition.

3. The contractor / manufacturer is fully responsible for the safety of the supplies during inspection, storage at firms and consignee premises proper packing, dispatch and delivery up to consignee.

MUHAMMAD AFSAR
Captain Pakistan Navy
DID

Annexes:

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ANNEX A TO
PN SPECIFICATION NO 20/2021
PROMULGATION DATE FEB 22

TERMS & DEFINITIONS

1. **CINS:** Chief Inspector of Naval Stores

2. **PNCTA:** Pakistan Navy Central Testing Authority

3. **PNCSD:** Pakistan Navy Clothing Store Depot

4. **DNS:** Directorate of Naval Store.

5. **INSPECTOR:** The term inspector shall include the "Inspection Authority", inspecting officer and their representatives, duly authorized for the purpose of discharging inspection duties involved.

6. **INSPECTION AUTHORITY:** Chief Inspector of Naval Stores (CINS). His verdict in respect of Sealed Inspection matters is to be taken as final.

7. **INSPECTING OFFICER:** An officer nominated by the CINS for carrying out inspection of stores supplied by the supplier, against a specified contract or order, in accordance with the particulars stipulated therein.

8. **SEAT SEAM:** Width of trouser, 20 cm below the waist.

PN SPECIFICATION NO 20/2021 (ADESIGNATED) 9 Nov 26, 1432 hrs
Lt PN Sajjad Umer

ANNEX B TO
PNSPECIFICATION NO 20/2021
PROMULGATION DATE FEB 22

TECHNICAL DETAIL OF STITCHED KHAKI UNIFORM

S. No	Item	Standards	Requirement
1.	**Khaki Fabric**	PN Specifications 11/2021 Dated 31 Aug 21 (Khaki Cloth for Dress Khaki)	
2.	**Khaki Uniform** (Appearance after 05/10 cycles at 60/40 °C of laundering)	BS EN ISO 6330	
	a. Color	Visual Analysis	TCX: 16-0726 GS 4 or better
	b. Wrinkles/ smooth appearance	ISO 7770	SA 4 or better
	c. Seam	Visual Analysis	No pucker
	d. Buckram/ fussing		No detachment of bond, bubbles and cracking observed
	e. Buttons		No detachment and discoloration observed
	f. Zippers		No discoloration, distortion, corrosion observed and no removal of any protecting coating observed
	g. Hook/ retainers		No corrosion observed
	h. Seam Strength	ASTM D 1683	240-260 lbs.
3.	**Sewing Thread** (For stitching/ Over locking)		
	a. Material	AATCC 20 A	100 % Polyester
	b. No of stitches per inch(SPI)	Visual/ Manual	7/8
	c. Shade		TCX: 16-0726/ Match with base fabric
	d. Construction		Spun Thread
4.	**Zippers (YKK or Equivalent)**		
	a. Tape Material	AATCC 20 A	Polyester
	b. Color	Visual	TCX: 16-0726/ Match with base fabric
	c. Elements/ coil zippers	ISO 11469	Polymeric material
	d. Zipper parts (1) Top stop (2) Open parts (3) Zipper slider	Chemical analysis	 Brass Aluminum Zinc Alloy
	e. Operating force (N)	ASTM D 2061 & 2062	3.9 N
	f. Cross wise (N)		350N

	g. Top Stop Strength		60N
	h. Bottom stop strength		50N
	j. Slider Lock Strength		15 N
	k. Slider Mouth and pull holding strength		80N
	l. Puncture (N)		200N
	m. Durability		500 cycles
5.	**Retainer Hook**		
	a. Material	Chemical analysis	Stainless steel
	b. Resistance to corrosion	ISO 16151	No corrosion / removal of coating
6.	**Buckram/ Fussing**		
	a. Material	AATCC 20 A	Cotton
	b. Wt./ Sq. mtr	ISO 3801	162 g/m^2 ± 5
	c. Threads / 2.5cm (1) Warp (2) Weft	ISO 7211/2	 66 ± 3 53 ± 3
7.	**Buttons**		
	a. Material	ISO 11469	Unsaturated polyester resin
	b. Color	Visual Analysis	Match with base fabric
	c. Impact test (67mm)	ASTM D 5171	No cracks, chips or breakage
	d. Size (Outer dia) (1) For shirt (2) For trouser	Visual/ Manual analysis	 12.5 mm 15 mm
	e. Thickness (1) For Shirt (2) For trousers	Visual/ Manual analysis	 2.5 mm 4 mm

ANNEX C TO
PN SPECIFICATION NO 20/2021
PROMULGATION DATE FEB 22

MEASUREMENT SCHEDULE

1. KHAKI UNIFORM (SHIRT) IN INCHES (CPO's AND SAILORS)														
S. No	**Description**	**32**	**34**	**36**	**38**	**40**	**42**	**44**	**46**	**48**	**50**	**52**	**54**	**TOL**
	Sizes	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	
a.	Length from center back.	30	30	30	30	32	32	32	34	34	34	34	34	1
b.	Chest .full	38	40	42	44	46	48	50	52	54	56	58	60	1
c.	Waist.	37	39	41	43	45	47	49	51	53	55	57	59	1
d.	Bottom.	38	40	42	44	46	48	50	52	54	56	58	60	1
e.	Shoulder.	16.5	17	18	18.5	19	19.5	20	21	21	21	21.5	21.5	0.5
f.	Sleeve Length.	24	24	24	25	25	25	26	26	26	26	26	26	0.5
g.	Sleeve opening.	N/A												
h.	Arm hole.	8	2.5	8.5	8.75	9	9.25	9.5	9.75	10	10.25	10.5	10.75	0.25
j.	Cuff height.	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	0.15
k.	Front flap width.	4.375	4.375	4.75	4.75	4.75	4.75	4.75	4.75	4.75	4.75	4.75	4.75	0.15
l.	Front flap height.	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	0.25
m.	Front pocket length including flap.	5.25	5.25	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	0.15
n.	Front pocket width	4.35	4.35	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	0.15
p.	Front pocket placement from shoulder seam	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	0.25
q.	Front pocket hem.	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.15
r.	Collar.	14.5	15	15.5	16	16	16.5	16.5	17	17.5	17.5	18	18.5	0.25
s.	Collar height from center back.	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.15
t.	Collar corner width	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
u.	Shoulder loop width	2	2	2	2	2	2	2	2	2	2	2	2	0.15
v.	Shoulder loop length	5.75	6	6.25	6.5	6.5	6.5	6.5	6.5	6.5	7	7	7	0.25
w.	cuff width/ length	9	9.5	9.5	10	10	10.5	10.5	10.5	11	11	11	11	0.25
x.	Front Button Distance	3.25	3.25	3.25	3.25	3.5	3.5	3.5	3.75	3.75	3.75	3.75	3.75	0.5
y.	First Button Distance	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	0.5

2. TROUSER KHAKI UNIFORM IN INCHES (CPO's AND SAILORS)

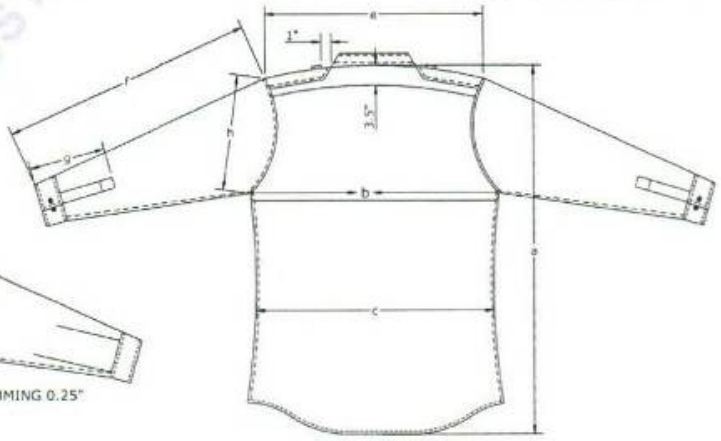
S. No	Description	XXS	XSL	SL	ML	LL	XLF	XLL	XXL	XXL1	XXL2	XXL3	XXL4	TOL
	Sizes	1	2	3	4	5	6	7	8	9	10	11	12	
		28	**30**	**32**	**34**	**36**	**38**	**40**	**42**	**44**	**46**	**48**	**50**	
a.	Waist.(full)	28	30	32	34	36	38	40	42	44	46	48	50	1
b.	Hip (8in from belt) (full)	35	37	39	41	43	45	47	49	51	53	55	57	1
c.	Thigh	24	25	26	27	28	29	30	31	32	33	34	35	1
d.	Knee on 13" from crouch.(full)	18	18	18.5	18.5	19	19	20	20	20.5	20.5	21	21	0.5
e.	Bottom (full)	16	16	16.5	16.5	17	17	17.5	17.5	18	18	18.5	18.5	0.5
f.	Inseam	35.5	35.5	35	35	34.5	34.5	34.5	34.5	34	34	34	33.5	1
g.	Front rise including belt	11	11.25	11.5	11.75	12	12.25	12.5	12.75	13	13.25	13.5	13.5	0.5
h.	Back rise	16	16.25	16.5	16.75	17	17.25	17.5	17.75	18	18.25	18.5	18.5	0.5
j.	Side pocket opening	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	0.25
k.	Side pocket outer length	11	11	11	11	11	11	11	11	11	11	11	11	0.5
l.	Side pocket depth(inner)	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	0.25
m.	Side pocket width (inner)	6.75	6.75	6.75	6.75	6.75	6.75	6.75	6.75	6.75	6.75	6.75	6.75	0.25
n.	Back pocket width	5	5	5	5	5	5	5	5	5	5	5	5	0.25
p.	Back pocket depth (inner)	6	6	6	6	6	6	6	6	6	6	6	6	0.25
q.	Waist belt	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	0.25
r.	Belt loop length	2	2	2	2	2	2	2	2	2	2	2	2	0.25
s.	Belt loop width	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.25
t.	Placement of loop at belt	02 at side seam and 01 at center back												
u.	Fly width	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.25
v.	Fly length full	6.5	7	7	7	7	7.5	7.5	7.5	8	8	8	8	0.25
w.	Zip	6	6.5	6.5	6.5	6.5	7	7	7	7.5	7.5	7.5	7.5	0.25
x.	Length	46												0.5

TECHNICAL DRAWING SHIRT

ANNEX D TO
PN SPECIFICATION NO 20/2021
PROMULGATION DATE: FEB 2022



FRONT



BACK

1422

NOTE:-
FOR FURTHER DETAILS SEE STOCK/APPROVED SAMPLE.

w	CUFF WIDTH/LENGTH	m	FRONT POCKET LENGTH INCLUDING FLAP
v	SHOULDER LOOPS LENGTH (AT PAGE 15)	l	FRONT FLAP HEIGHT (AT PAGE 15)
u	SHOULDER LOOPS WIDTH (AT PAGE 15)	k	FRONT FLAP WIDTH (AT PAGE 15)
t	COLLAR CORNER WIDTH (AT PAGE 15)	j	CUFF HEIGHT
s	COLLAR HEIGHT FROM CENTRE BACK (AT PAGE 15)	h	ARM HOLE
		g	SLEEVE OPENING (N/A)
r	COLLAR	f	SLEEVE LENGTH
q	FRONT POCKET HEM	e	SHOULDER
p	FRONT FLAP OF POCKET PLACEMENT FROM SHOULDER SEAM	d	BOTTOM
		c	WAIST
		b	CHEST FULL
n	FRONT POCKET WIDTH	a	LENGTH FROM CENTRE BACK

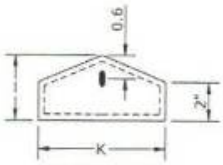
y	FIRST BUTTON DISTANCE
x	FRONT BUTTON DISTANCE

DITD KARACHI		
TITLE:- SHIRT FOR DRESS KHAKI (MAIN BODY)		
DWG NO: TD-2614/2021	DIMENSION: INCHES	
DATE: 10-12-2021	SCALE: NTS	
DRAWN BY	CHECKED BY	FINALIZED BY
xx SD xx	xx SD xx	xx SD xx
HDM M.ASGHAR I/c DWG	LT CDR SANA KANWAL SO TEXTILE	CAPTAIN MUHAMMAD AFSAR DID

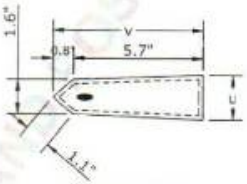
Lt PN Sajjad Umer (ADP & PRINTING POST)

TECHNICAL DRAWING SHIRT(SMALL PARTS)

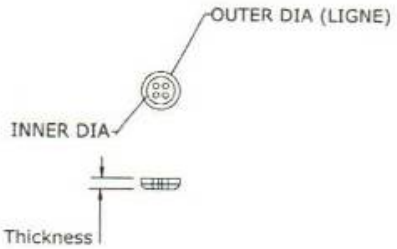
APPENDIX I TO ANNEX D TO
PN SPECIFICATION NO 20/2021
PROMULAGATION DATE: FEB 2022



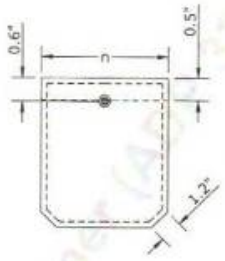
POCKET FLAP
DETAIL-1



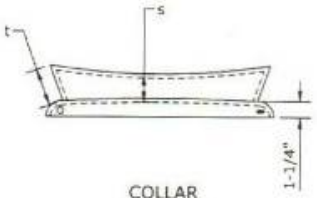
SHOULDER FLAP
DETAIL-3



BUTTON
DETAIL-5



POCKET
DETAIL-2



COLLAR
DETAIL-4

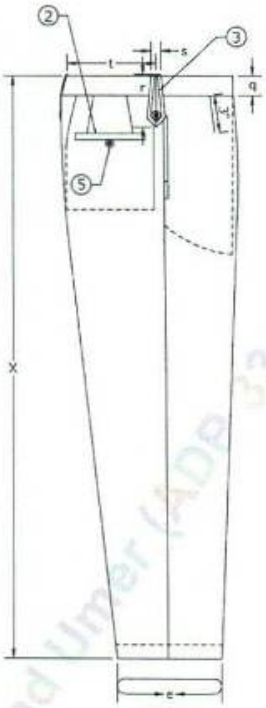
1423

DITD KARACHI		
TITLE:- SHIRT FOR DRESS KHAKI (SMALL PARTS)		
DWG NO: TD-2615/2021	DIMENSION: INCHES	
DATE: 10-12-2021	SCALE: NTS	
DRAWN BY	CHECKED BY	FINALIZED BY
xx SD xx	xx SD xx	xx SD xx
HDM M.ASGHAR I/c DWG	LT CDR SANA KANWAL SO TEXTILE	CAPTAIN MUHAMMAD AFSAR DID

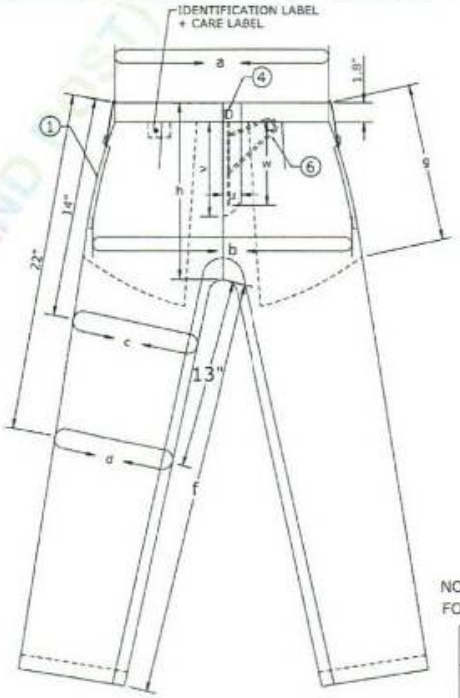
NOTE:-
FOR FURTHER DETAILS SEE STOCK/APPROVED SAMPLE.

TECHNICAL DRAWING TROUSER

ANNEX E TO
PN SPECIFICATION NO 20/2021
PROMULGATION DATE: FEB 2022



SIDE



FRONT

1424

NOTE:-
FOR FURTHER DETAILS SEE STOCK/APPROVED SAMPLE.

		t	PLACEMENT OF FRONT LOOP AT BELT	j	SIDE POCKET OPENING (AT PAGE 17)
		s	BELT LOOP WIDTH	h	BACK RISE
		r	BELT LOOP LENGTH	g	FRONT RISE INCULDED BELT
		q	WAIST BELT	f	INSEAM
		p	BACK POCKET DEPTH INNER (AT PAGE 17)	e	BOTTOM
x	LENGTH	n	BACK POCKET WIDTH (AT PAGE 17)	d	KNEE ON 13" FROM CROUCH (FULL)
w	ZIP	m	SIDE POCKET WIDTH (AT PAGE 17)	c	THIGH
v	FLY LENGTH (FULL)	l	SIDE POCKET DEPTH INNER (AT PAGE 17)	b	HIP
u	FLY WIDTH	k	SIDE POCKET OUTER LENGTH (AT PAGE 17)	a	WAIST (FULL)

DITD KARACHI

TITLE:-
TROUSER FOR DRESS KHAKI
(MAIN BODY)

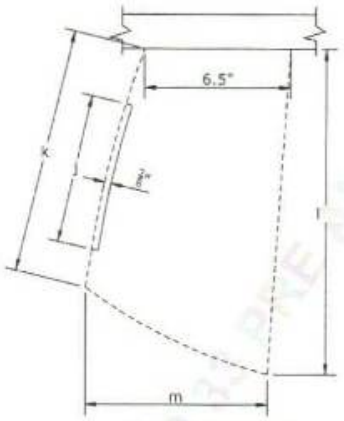
DWG NO: TD-2616/2021	DIMENSION: INCHES
DATE: 13-12-2021	SCALE: NTS

DRAWN BY	CHECKED BY	FINALIZED BY
xx SD xx	xx SD xx	xx SD xx
HDM M.ASGHAR I/c DWG	LT CDR SANA KANWAL SO TEXTILE	CAPTAIN MUHAMMAD AFSAR DID

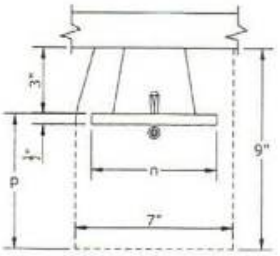
Lt PN Sajjad Umer (ADP 33 PRE AND POST)

TECHNICAL DRAWING TROUSER (SMALL PARTS)

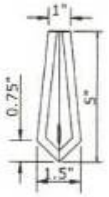
APPENDIX I TO ANNEX E TO
PN SPECIFICATON NO. 20/2021
PROMULGATION DATE: FEB 2022



FRONT POCKET
DETAIL-1

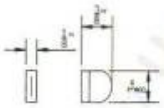


BACK POCKET
DETAIL-2



BELT LOOP
DETAIL-3

1425



HOOK
DETAIL-4



BUTTON
DETAIL-5



INNER FLAP
DETAIL-6

NOTE:-
FOR FURTHER DETAILS SEE STOCK/APPROVED SAMPLE.

DITD KARACHI		
TITLE:- TROUSER FOR DRESS KHAKI (SMALL PARTS)		
DWG NO: TD-2617/2021	DIMENSION: INCHES	
DATE: 13-12-2021	SCALE: NTS	
DRAWN BY	CHECKED BY	FINALIZED BY
xx SD xx	xx SD xx	xx SD xx
HDM M.ASGHAR I/c DWG	LT CDR SANA KANWAL SO TEXTILE	CAPTAIN MUHAMMAD AFSAR DID

ANNEX F TO
PN SPECIFICATION NO 20 /2021
PROMULGATION DATE FEB 22

COMMON DEFECTS IN GARMENTS

S.No	Defects	Major	Minor
1.	Needle hole	Major	
2.	Skipped stitches		
3.	Threads break		
4.	Broken stitches		
5.	Seam pucker		
6.	Pleated/ defected seam	major <1cm	minor> 1cm)
7.	Wrong stitch density	Major at front	Minor at back
8.	Uneven stitch density		
9.	Oil stains/ marks		
10.	Reserved garments parts	Major	
11.	Wrong shade of thread used.		
12.	Open seam		
13.	Stitch end		Minor
14.	Asymmetry	major	
15.	Any missing accessories Dimension color are4 different		
16.	Malfunction of zippers		
17.	Button inside out		
18.	Damaged button		
19.	Button hole too small		
20.	Omitted button hole		
21.	Uncut/ partial cut button hole		
22.	Ragged edges of button hole		minor
23.	Broken button hole stitches	Major	
24.	Misaligned/ misplaced button and holes		
25.	Malfunction of zippers		
26.	Zipper slider running not smoothly		

27.	Missed zipper teeth		
28.	Missed zipper puller		
29.	Wavy zippers		
30.	Gap at zippers top and bottoms		
31.	Fussing bubbles/ wrinkles on buckram		Minor (if it's too small)

PN SPECIFIC (PRE AUDIT) 19 Nov 21 1432 hrs
Lt PN Sajjad Umer (ADP 33) 20/2021

ANNEX G TO
PN SPECIFICATION NO 20 /2021
PROMULGATION DATE FEB 22

ACCEPTABLE QUALITY LEVELS (AQL)

1. Acceptable Quality Level (AQL) is maximum average defective items in a lot or limit / percentage of defective items in product /offered store. It is expressed in a percentage. Number of average defective items is determined by following formula:

$$\text{Average defective item} = \frac{\text{No.of defective item found during inspection}}{\text{Total no.of item to be inspected}} \times 100$$

2. AQL process: it is used for inspection of finished product / garment by the QC professionals. AQL standard is depend on the quality of the product to be inspected, random sampling, and experience of inspector. Normally lower figure AQL standard e.g. 01% is used for high quality products/ narrow width fabric and high figure AQL standard e.g. 10% for low quality product/ garment. AQL standard 2.5% means that allowable limit of defective item is 2.5 % of total items inspected .Usually AQL 2.5% is used for major defects, AQL 4.0 % is used for minor defects and AQL 6.5% is used for slight defects, however zero acceptance for critical defects Allowable limit of Major defects are less than minor defects and it depends upon nature of item /offered store. It can be less than 01% or greater than 10%. .Following AQL table is used to determine lot size/ offered store quantity, least No. of sample to be inspected, AQL %, and acceptance & rejection points:

SINGLE SAMPLING PLAN FOR NORMAL INSPECTION OR AS PER ORDER OF INSPECTING OFFICER.

Lot size	Least No. of sample to be Inspected	Allowable Quality levels(AQL) % • Acceptable/ Allowable defective sample (Ac) • Rejected /Exceed allowable limit of defective item (Re)									
		1.5%		2.5%		04%		6.5%		10%	
		Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re
281-500	20-80	1-3	2-4	1-5	2-6	2-7	3-8	3-10	4-11	5-14	6-15
501-1200	32-125	1-5	2-6	2-7	3-8	3-10	4-11	5-14	6-15	7-21	8-22
1201-3200	50-200	2-7	3-8	3-10	4-11	5-14	6-15	7-21	8-22	10-21	11-22
3201-10000	80-315	3-10	4-11	5-14	6-15	7-21	8-22	10-21	11-22	14-21	15-22
10001-35000	125-500	5-14	6-15	7-21	8-22	10-21	11-22	14-21	15-22	21	22
35001-150000	200-800	7-21	8-22	10-21	11-22	14-21	15-22	21	22	21	22
150001-500000	315-1250	10-21	11-22	14-21	15-22	21	22	21	22	21	22
500001-above	500-2000	14-21	15-22	21	22	21	22	21	22	21	22

3. If the inspector have time constrain then AQL is beneficial/ helpful in inspection of whole lot/ offered store. It safe time, cost and give effective/ statistical result of product /offered store e.g. If inspector needs 5 minutes to check the item , the quantity to be inspected is 2,500 items then it took 208 hours to check the whole consignment/ offered store.it means 26 days approx. for one store. Calculation is as follows:

$$\frac{5\ \text{min} \times 1\ hr}{1\ item\ \times 60\ min} \times 2{,}500\ items = 208.33\ hrs \cong 26\ days$$

After Implementing AQL standard so the sample taken from the lot/ offered store is 200 items/ sample:

$$\frac{5\ \text{min} \times 1\ hr}{1\ item\ \times 60\ min} \times 2{,}00\ items = 16.66\ hrs \cong 02\ days$$

4. Quality parameters/ AQL limits may be defined by Inspecting Authority (if deemed appropriate) and communicate to the manufacturer, so the manufacturer set their quality levels (AQL limits) accordingly for their internal audit. Therefore, good quality product is ready for inspection.

Lt PN Sajjad Umer (ADP 33 PRE) PN SPECIFICATION NO 20/2021 Nov 26, 1432 hrs

ANNEX H TO
PN SPECIFICATION No 20 /2021
PROMULGATION DATE FEB 22

FEEDBACK FORM

Unit Name: _____

Item Description#: _____

Issue/Problem occurred: _____

PN SPEC #: _____

Possibility to resolve Issue: _____

Any Other Remarks: _____

_____

Note:

- It's good to give feedback for improvement in any clothing Item.
- Recurring problem will also be intimated through this form.

Name Stamp

COUNTERSIGNED By CO/Admin Authority
Name Stamp

PN SPECIFICATION PREAMBLE 19 Nov 21 1430 hrs
Lt PN Sajjad Umer (ADP 33)

PAKISTAN NAVY SPECIFICATION NO. 02/2025
PROMULGATION DATE: 28 AUGUST 2025

JOCKEY CAP KHAKI

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Prepared by:

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KARACHI

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did@paknavy.gov.pk

PROMULGATION ORDER

1. This specification is hereby approved and promulgated for information, guidance and compliance by all concerned.

2. Details contained in the specification are to be studied and implemented with due regard to interest of the Service.

SUGGESTIONS FOR AMENDMENT

1. The specification has been prepared to bring the test methods and procedures in line with up-to-date PN requirements and facilities held in Pakistan. CINS may request to amend any test requirement/ test procedure in light of the experience emanating from its inspection history, through the feedback form placed at Annex G. However, such an alteration will be effective when the amendment is promulga2ted by this Directorate, and will be effective on the contracts which materialize after the promulgation date of respective amendment.

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PN SPECIFICATION 02/2025
(JOCKEY CAP KHAKI)

0101. DESIGNATION

1. Jockey Cap Khaki.

0102. USAGE

1. This Jockey Cap Khaki will be used by Pakistan Navy Police (PNP), Pakistan Navy Boat Pool (PNBP) and Pakistan Navy Central Fire Brigade (PNCFB).

0103. INTRODUCTION

1. This specification is prepared by Director of Inventory Deletion (DID) of ITD Wing -South, to provide necessary guidance to the potential manufacturers/ suppliers of the items mentioned herein. This specification is to be used for testing and deciding upon acceptance, or otherwise, of the items mentioned. Any alteration or addition in this specification can be suggested to DID at ITD Wing. However, it cannot be implemented without prior approval of Directorate of Clothing Stores (DCLS).

2. This specification consists **24** pages, including cover page and **07** Annexes.

0104. SCOPE

1. This specification covers the manufacturing/ inspection requirements of Jockey Cap Khaki to be used by Pakistan Navy Police (PNP), Pakistan Navy Boat Pool (PNBP) and Pakistan Navy Central Fire Brigade (PNCFB). This specification lays down the standard to which the stores shown under designation above should conform. It defines and lays down the quality, standard and details of materials, workmanship and finish. It also lays down the details of sampling, testing, inspection rejection, marking, preservation, packing and delivery etc.

2. The supplier/ manufacturer shall comply in every respect with the terms of this specification and ensure that the stores conform to it, in all respects.

0105. RELATED DOCUMENTS

1. The latest standards documents that have been referred to in this specification are:

a.	AATCC-20A	Determination of fiber quality.
b.	AATCC-8	Color fastness to crocking.
c.	ASTM D 1667	Flexible cellular materials.
d.	ASTM D 1777 opt 5	Standard test methods for thickness.
e.	ASTM D 3776 opt D	Standard test methods for mass per unit area (weight) fabric.
f.	ASTM D 5034	Tearing strength of fabric.
g.	ASTM D2256	Elongation, strength and tenacity of thread
h.	ASTM D 5170	Peel strength for hook and loops.

j.	ASTM D 5169	Shear strength for hook and loops.
k.	ISO-105-C10 (C3)	Color fastness to washing.
l.	ISO-105-E02	Colour fastness to Seawater test.
m.	ISO-105-E04	Colour fastness to Perspiration.
p.	ISO 6330 (4N)	Domestic washing and drying procedures for textile testing.
q.	ISO-105-X12	Colour fastness to Rubbing test.
r.	ISO-7211/1	Determination of Weave pattern.
s.	ISO-7211/2	Determination of number of thread per unit length.
t.	ISO-7211/5	Determination of linear density of yarn removed from fabric.
u.	ISO-3801	Determination of mass per unit length and area.
v.	ISO-13934	Tensile properties of fabrics Determination of maximum force and elongation at maximum force using the strip method.
w.	ISO-2589	Determination of thickness.
x.	ISO-3801	Weight per Sq. mtr.
y.	BS EN ISO 12945-2	Determination of fabric propensity to surface fuzzing and to pilling.
z.	BS EN ISO 12947-2	Determination of the abrasion resistance of fabrics by the Martindale method.
aa.	BS EN 25077	Determination of Dimensional Change in washing and drying.
ab.	Mil spec A-A-55126B	Fasteners tapes Hook loop synthetic.
ac	PN Specifications 11/2021	Khaki Cloth for Dress Khaki.

0106. **DEFINITIONS & ABBREVIATIONS**

1. Definitions for the terms used in this standard are given at Annex A.

0107. **TECHNICAL DETAILS OF JOCKEY CAP KHAKI**

1. The technical details of Jockey Cap Khaki is given at Annex B of this specification.

0108. **MEASUREMENT SCHEDULE**

1. The measurement schedule of Jockey Cap Khaki is given at Annex C of this specification.

0109. **MANUFACTURING DETAILS OF JOCKEY CAP KHAKI**

1. Jockey Cap Khaki shall be fabricated in accordance with the measurement schedule and drawings as illustrated in the drawing at Annex C and D, respectively.
2. It is a 6 triangular panels attached with each other with a D shape panel at front to form Jockey Cap Khaki as per Annex B. The panels are stitched with each other using double needle stitch neatly using 10-12 SPI.

3. Piping used on inner side of Jockey Cap Khaki is 10mm wide and both sweat absorbing band & lining should be Black in color.

4. Base fabric should be used at upper and lower side polymeric peak.

5. Velcro tape (fasteners tapes Hook loop synthetic) used for adjustment of cap shall be 2.5 cm i.a.w Mil spec A-A-55126B. The color of Velcro and embroidery on eyelets shall be Black in color.

6. The dia of top Button is 17mm ± 1mm and it is covered with same fabric used in upper of cap.

7. Care label and identification label may be attached with the sweat absorbing band.

0110. QUALITY OF WORKMANSHIP AND FINISHING

1. Workmanship and finish of the Jockey Cap Khaki shall be as per drawing and it shall be best of its class and to the entire satisfaction of the inspector.

0111. TESTING

1. The material shall be subjected to tests laid down in this specification at Annex B and related documents. At least 03 x meters fabric and two Jockey Caps Khaki will be required to complete all the tests mentioned at Annex B of this specification. The material may also be subjected to such tests which are deemed necessary by the inspection authority in order to determine their suitability. Inspecting Authority reserves the right to get any B/R samples tested from any reputable Laboratory other than PN. However, any test considered important by Inspecting Authority other than Annex B may also be conducted in order to check its suitability.

0112. TENDER SAMPLE

1. Tender sample to be approved by INS.

2. For each contract 05 samples of Jockey Caps Khaki along with 05 meters fabric shall be supplied by the manufacturer at the time of tendering along with samples of materials used in manufacturing of caps for inspection.

0113. ADVANCE SAMPLE

1. Advance sample or pre-production sample, when required, shall be submitted in accordance with terms of the contract for inspection, testing and approval. The minimum quantities required for Jockey Cap Khaki are as follows:

a.	Jockey Caps Khaki Cloth	05 meter
b.	Jockey Caps Khaki	03 of any size
c.	Sewing thread polyester	50 gm
d.	Embroidery thread	50 gm
e.	Velcro tape	1 meter

2. Whenever Tender, Advance or pre-production sample is not required, the suppliers / manufacturer are advised in their own interest to submit to the Inspecting Officer or his representative an initial delivery of 01 % of the contract or 10 x samples of Jockey Caps Khaki, whichever are more along with samples of materials for inspection.

3. The approval of the sample authorizes the commencement of bulk production but does not relieve the suppliers/ manufacturers from compliance with all the provisions of this specification.

4. The pre-production sample shall be manufactured by the manufacturer with the same facilities which will be used for manufacturing of the bulk items.

5. Firm shall provide advance sample along with quality verification reports of Jockey Cap Khaki from an accredited laboratory to ensure in process inspection/ quality procedure of the firm.

0114. **INSPECTION**

1. **Bulk Representative Sample.** B/R random sampling will be carried out as per rules in vogue.

2. **Bulk Inspection.** Bulk inspection will be carried out after satisfactory completion of Visual Examination and Testing of B/R Sample.

3. **Inspection of Jockey Caps Khaki.** 100% of the offered store shall be inspected. The common defects for such examination/ inspection are listed at Annex E.

4. **Inspection/ Acceptance and Rejection of Stores.** Inspection/ acceptance is to be carried out to the satisfaction of Chief Inspector Naval Stores.

a. The Jockey Cap Khaki shall be examined for the correctness of material, shape, design, dimension, size, workmanship and finish.

b. All Jockey Cap Khaki shall be inspected especially for stitching and finishing, weaving defects, defective shape, discoloration/ fading, pinholes. Stitching and embroidery of Jockey Cap Khaki are to be especially checked.

c. CINS reserves the right to reject the whole supply in case, upon examination, material or packing of any sample or portion of the consignment is found **NOT CONFORMING** to this specification.

d. If on examination of 5% of any delivery, 20% of those examined from bulk supply are found **NOT CONFORMING** to this specification in respect of the pattern, dimensions, workmanship and finish, the whole consignment may be rejected without any compromise.

e. All stores and packing NOT fully in accordance with this specification shall be rejected.

f. Jockey Cap Khaki with major defects as described in Annex E of this specification will be rejected.

5. **Responsibility for Inspection.** The supplier is responsible for the performance of all inspection requirements (examinations and tests) as specified herein. PN reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to ensure supplies and services conform to prescribed requirements.

6. **Responsibility for Compliance.** The inspection set forth in this specification shall become a part of the supplier's overall inspection system or quality program. The absence of any inspection requirements in the specification shall not relieve the contractor of the responsibility of ensuring that all products or supplies submitted to PN for acceptance comply with all requirements of the contract. Sampling inspection, as part of manufacturing operations, is an acceptable practice to ascertain conformance to requirements, however, this does not authorize submission of known defective material, either indicated or actual, nor does it commit PN to acceptance of defective stores (material).

7. **Replacement by the Contractor.** The supplier/ manufacturer is responsible for replacement of the consignment or any part thereof whenever it is found to be not conforming to this specification. The supplies so tendered in replacement, shall be subjected to testing/ inspection and acceptance by the Inspecting Officer.

8. **Responsibility for Safety.** The supplier/ manufacturer is wholly responsible for the safety of supplies during inspection, storage at firm's premises, proper packing, dispatch and delivery up to consignee.

0115. STAMPING OF ACCEPTED/ REJECTED STORES BY THE INSPECTOR

1. Following instructions are to be followed:

a. **Stamping of Accepted Stores.** Each acceptable Jockey Cap Khaki shall be stamped with Inspector's Individual Acceptance Mark. The stamping shall be legible.

b. **Stamping of Rejected Stores.** The rejected Jockey Cap Khaki shall be marked with Inspector's Rejection Mark to avoid re-submission by the supplier.

c. The Inspector is the authority in all matters pertaining to inspection.

0116. SPECIAL INSTRUCTIONS

1. **Care Label Instructions.** Care instructions in English and Urdu shall be attached with each Jockey Cap Khaki as indicated in the drawing and have minimum requirement as follows:

a. Washing procedure e.g. gentle cycle machine wash.
b. Ironing procedure e.g. Warm iron.
c. Drying procedure e.g. Air dry.

d. Any prohibition e.g. Do not bleach and dry clean etc.

0117. PACKING DETAILS

1. The store when ordered to be delivered 'PACKED' shall be packed as per following instructions:

a. 10 x Jockey Cap Khaki shall be packed in a neat, dry and clean condition in standard polyethylene packing of 0.035 mm thickness. These bags shall be sealed with transparent adhesive tape of 2.54 cm with thickness of 0.04-0.05 mm.

b. 30 x such bundles (300 caps) shall be packed in Carton Corrugated Card board box (07 ply).

c. Each Carton shall contain one size of Jockey Cap Khaki only.

d. Each Box Board packing shall be securely and properly packed with transparent adhesive tape of 10 cm with thickness of 0.04-0.05 mm.

0118. IDENTIFICATION LABEL

1. Each Jockey Cap Khaki shall bear following minimum information on the label attached with Jockey Cap Khaki, as indicated in Technical drawing at Annex D of this specification:

a. Item name/ item description with NSN/Pattern No.
b. Material Composition and Size.
c. Contract number and Date.
d. Year of manufacturing.
e. Contractor's name, initials, or trade mark.
f. Batch no.

0119. PACKING LIST

1. Firm is bound to provide a packing list of store offered for inspection along-with the challan, which include complete details about the store i.e. Pattern No., Designation, quality packed, size, quantity, contract No, and Date, Challan No. and Date. A packing list shall be enclosed after completion of inspection with each packed box giving full details about the stores packed i.e. Pattern No., Designation, quality packed, size, quantity, contract No, and date, I/Note No. or voucher No. and date, consignee, consignor, date of packing and packer's signature.

0120. MARKING OF STORES

1. Each carton of Jockey Cap Khaki will stenciled with quick drying Black indelible ink/ print in clearly define characters as per followings:

a. On Front and Top:

(1) Catalogue No and Designation of the store packed.
(2) Contract No and date.
(3) Quantity of the Item packed.

b. On Back:

(1) Consignee address.
(2) Designation i.e Railway Station.
(3) Weight of the Package.
(4) The No. of individual Package and the total No of Packages in the consignment joined by the Word 'of 'e.g. 2 of 300.

c. On Bottom:

(1) Consignor's Name.
(2) Voucher No. or inspection note no. and date.
(3) Month and year of packing.

0121. **DELIVERY**

1. The consignment of store will be delivered in accordance with the terms of contract.

2. The store shall be delivered in Brand new, clean and dry condition.

3. The contractor/ manufacturer is fully responsible for the safety of the supplies during inspection, storage at firms premises proper packing, dispatch and delivery up to consignee.

XXXXXSDXXXXX

RAO MUZAFFAR ALI
Captain Pakistan Navy
Director

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ANNEX A TO
PN SPECIFICATION NO.02/2025
PROMULGATION DATE 28 AUG 25

DEFINITIONS & ABBREVIATIONS

1. DEFINITIONS

a. Following definitions are used in this specification and will be adopted for use:

(1) **Inspector.** The term inspector shall include the "Inspection Authority", Inspecting Officers and their representatives, duly authorized for the purpose of discharging inspection duties involved.

(2) **Inspection Authority.** Chief Inspector of Naval Stores (CINS). His verdict in respect of Sealed Inspection matters is to be taken as final.

(3) **Inspecting Officers.** An Officers nominated by the CINS for carrying out inspection of stores supplied by the supplier, against a specified contract or order, in accordance with the particulars stipulated therein.

(4) **Acceptance Quality Level (AQL).** It represent allowable limit/ tolerance of defects or non-conformities in an offered store/ lot/ batch. It represent in percentage, also known as Allowable Quality Limits.

(5) **Minor Defects.** They are small insignificant issues that don't affect the function or form of the item. Highest tolerance of AQL has been set for minor defects.

(6) **Major Defects.** They would likely result in product return but don't poses safety risk. AQL tolerance depend upon the description/ quality of finished product.

2. ABBREVIATIONS

a. Following abbreviations are used in this specification and will be adopted for use:

(1) **CINS**: Chief Inspector of Naval Stores.

(2) **DID**: Directorate of Indigenous Technical Development.

(3) **DCLS**: Directorate of Clothing Stores.

(4) **PNCSD**: Pakistan Navy Clothing Store Depot.

(5) **PNCTA**: Pakistan Navy Central Testing Authority.

ANNEX B TO
PN SPECIFICATION NO 02/2025
PROMULGATION DATE 28 AUG 25

TECHNICAL DETAILS OF JOCKEY CAP KHAKI

S NO	ITEMS	INTERNATIONAL STANDADS	RESULTS	
1.	**BASE FABRIC MATERIAL SPECIFICATION**			
	PN Specifications 11/2021 Dated 31 Aug 21 (Khaki Cloth for Dress Khaki).			
2.	**ABSORBENT FABRIC**			
	a. Material	AATCC-20A	100% cotton	
	b. No of Thread/ 2.54 cm (1) Wrap (2) Weft	ISO-7211/2	 93 53	
	c. Linear Density (Ne) (1) Wrap (2) Weft	ISO-7211/2	 10^s ±2 15^s ±2	
	d. Color fastness to perspiration (1) Change in shade (2) Staining (a) Wool (b) Acrylic (c) Polyester (d) Nylon (e) Cotton (f) Acetate	ISO-105 E04	**Acidic** GS 4 or better	**Alkaline** GS 4 or better
	e. Color fastness to sea water (1) Change in shade (2) Staining (a) Wool (b) Acrylic (c) Polyester (d) Nylon (e) Cotton (f) Acetate	ISO-105 E02	GS 4 or better	
	f. Color fastness to rubbing (1) Dry (2) Weft	AATCC-20A	GS 4 or better	
	g. Tensile Strength (N) (50mm x 200mm B G) (1) Wrap (2) Weft	ISO-13934	 ≥520N ≥350N	
	h. Weight/Sq meter in grams	ISO-3801	320gsm±2%	
	j. Weave Pattern	ISO-7211/1	3 x 1 twill	
	k. Shade	Visual Analysis	Black | Black	
	l. Nature of Dye	Chemical Analysis	Reactive	
3.	m. Shrinkage % (1) Wrap (2) Weft	ISO-6330 (4N) BSEN 25077	 ± 2%	

4.	**STITCHING THREAD MATERIAL SPECIFICATION**			
	a. Material	AATCC-20A	**Black**	**Khaki**
			Polyester	Polyester
	b. Color	Visual Analysis	Black	Khaki
	c. Count of yarn	ISO-7211/5	2/18 Tex	2/13 Tex
	d. Construction	Visual Analysis	2 Cord each single	
5.	**STITCHINGTHREAD PERFORMANCE TESTING**			
	a. Color fastness to washing (Test No. 3)Change in Shade b. Staining (1) Wool (2) Acrylic (3) Polyester (4) Nylon (5) Cotton (6) Acetate	ISO-105-C10 (C3)	GS 4 or better	
6.	**PLASTIC PEAK MATERIAL SPECIFICATION**			
	a. Material	Identification of Plastic	Virgin Plastic	
	b. Thickness	ISO-2589	1.59mm±1%	
	c. Hardness	IRHD	97.4 IRHD± 2%	
	d. Density	ASTM D 1667	0.9264 g/cm^3	
7.	**CARE LABEL MATERIAL SPECIFICATION**			
	a. Material	AATCC-20A	Polyester with visible printing which remain satisfactory after washing test	
	b. Shade	Visual Analysis	Nearest to fabric color	
8.	**EMBROIDERY THREAD MATERIAL SPECIFICATION**			
	a. Colour	Visual Analysis	Black	
	b. Material	AATCC-20A	Viscose	
	c. Count of yarn	ISO-7211/5	2/14 Tex	
9.	**EMBROIDERY THREAD PERFORMANCE TESTING**			
	a. Colour fastness to washing Test No. 3 (1) Change in Shade (2) Staining (a) Cotton (b) Wool	ISO-105-C10 (C3)	GS 4 or better	
10.	**VELCRO TAPE MATERIAL SPECIFICATION**			
	a. Material	AATCC-20A		
	(1) Male		Polyester	
	(2) Female		Polyester	
	b. Colour	Visual Analysis	Black	

11.	**VELCRO TAPE PERFORMANCE TESTING**		
	a. Before Sticking/ unsticking 300 times at 300 g	Visual Analysis	Satisfactory
12.	b. After Sticking/ unsticking 300 times at 300 g		
	c. Class – I for hook and loops	AATCC-20A	100% Nylon with salvage
	d. Type – II		5.8 mil denier hook
	e. Width		1 inch
	f. Thickness () (1) Hook (2) Loop	ASTM D 1777, opt 5	 0.05 in (min) 0.095 in (min)
	g. Weight Grams/ linear yard () (1) Hook (2) Loop	ASTM D 3776 opt D	 4.7 5.9
	h. Breaking strength lbs (min) () (1) Hook (2) Loop	ASTM D 5034	 100 75
	j. Peel strength lbs/inch/ (min) (1) Before wash (2) After 03 launderings	ASTM D 5170	 1-1.5 1.0
	k. Shear strength, (1) Before wash (2) After 03 launderings	ASTM D 5169	 10 10
	l. Fray resistance after 03 launderings	Mil spec A-A-55126B	No fraying observed
13.	**FOAM (USED AT INNER SIDE OF FRONT)**		
	a. Material	AATCC-20A	Polyester
	b. Thickness	ISO-2589	4.66mm
	c. Density	ASTM D-1667	0.032g/cc
	d. Shade	Visual Analysis	Black
14.	**FOAM (USED WITH ABSORBENT FABRIC)**		
	a. Material	AATCC-20A	Polyester
	b. Thickness	ISO-2589	2.15mm
	c. Density	ASTM D-1667	0.018g/cc
	d. Shade	Visual Analysis	Black

ANNEX C TO
PN SPECIFICATION NO.02/2025
PROMULGATION DATE 28 AUG 25

MEASUREMENTS SCHEDULE

S. No	DESCRIPTION	SIZE (CM)				TOLERANCE
a.	Internal circumference	55	57	59	61	±0.5
b.	Peak width from center	7.5				±0.2
c.	Peak width from edges	13				±0.2
d.	Peak Length from bottom edges	16				±0.2
e.	Peak length from top edges	18				±0.2
f.	Height of cap	12				±0.5

Note:

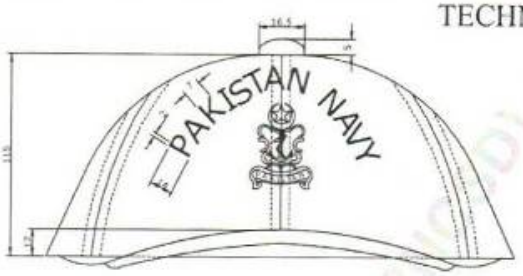
The tolerances are given only for made up caps to cover the stitching allowance. Manufacturer will ensure exact size.

PN SPECIFICATION (CO PNSD) 02 Sep 25
Cdr PN M Kamran Rafique

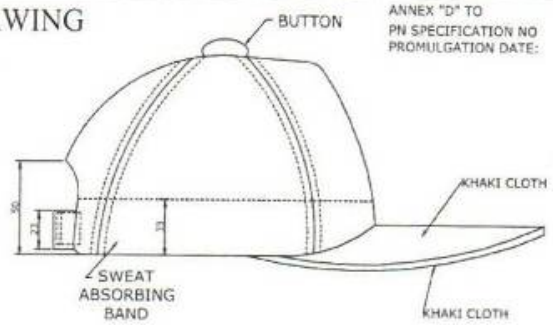
TECHNICAL DRAWING

ANNEX "D" TO
PN SPECIFICATION NO
PROMULGATION DATE:

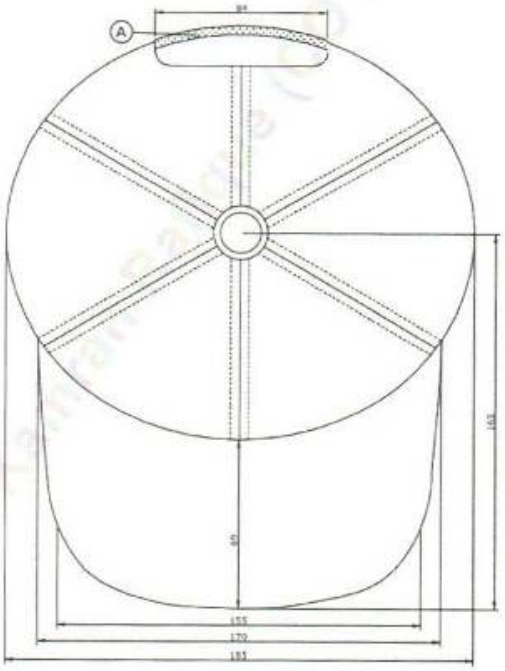
FRONT



SIDE



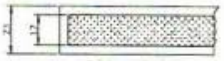
TOP







HOOK - VELCRO



LOOP - VELCRO

DETAIL-A

1555

NOTE:
FOR FURTHER DETAILS SEE STOCK/APPROVED SAMPLE

DITD KARACHI		
TITLE: JOCKEY CAP KHAKI		
DWG.NO. TD-2747/2022		DIMENSIONS: mm
DATE: 06-06-2024		SCALE: NTS
DRAWN BY	CHECKED BY	FINALIZED BY
ADNAN NISAR D/MAN	LT CDR SANA KANWAL DD TECH TEXTILE	CAPTAIN AZHAR HUSSAIN SHAH TI M DTD

ANNEX E TO
PN SPECIFICATION NO 02/2025
PROMULGATION DATE 28 AUG 25

COMMON DEFECTS

S.No	Defects	Definition
	FABRIC	
a.	**Abrasion Mark (bruise, Chafe Mark or rub)**	An area of fabric damaged by friction Damaged due to a braded or uneven surface in a machine.
b.	**Baggy or wavy cloth**	Cloth that will not lie flat on a Cutting Table Tight or loose yarn either in warp or filling (weft).
c.	**Barré Mark**	An unintentional, repetitive visual pattern of continuous bars and stripes usually parallel to the filling of woven fabric. Barré can be caused by physical, optical, or dye differences in the yarns, geometric differences in the fabric structure, or by any combination of these differences.
d.	**Blotch**	An off colored area of any shape caused by grease or Oil. (Syn. oil spot).Cause due to leakage/ slippage from machine.
e.	**Bow**	A fabric condition resulting when filling yarns are displaced from a line perpendicular to the selvages and form one or more arcs across the width of fabric.
f.	**Broken filament**	In multifilament yarn, breaks in one or more filaments.
g.	**Clip mark**	An open place causing a streak of variable length approximately parallel of the length of width.
h.	**Decanting Mark**	A crease marks or impression extending across the cloth near the beginning or end of a piece due to the thickness of the fabric leader seam.
j.	**Double Pick**	In woven fabrics, two picks wrongly place in the same place.
k.	**Draw Back**	A weave distortion characterized by tight and stack places in the same warp yarn.
l.	**End out**	A void caused by a missing warp yarn.
m.	**Float**	In woven fabrics, the portion of a warp or filling yarn that extends unbound over two or more warp of filling yarns.
n.	**Filling Band**	In woven fabrics, visual defect across the width due to a change occurring in the yarn for a large number of picks.
p.	**Frosting**	A change in color in a limited area of fabric cause by abrasive wear.
q.	**Hole**	In fabric, imperfection, wear one or more yarn or sufficiently damaged to create an aperture.
r.	**Fuzzy**	Characterized by a hair appearance due to protruding broken fibers or filaments.

s.	**Let-off Mark**	In woven fabrics, a corrugated defect pattern distributed across the fabric width.
t.	**Loom fly**	Waste fibers create during weaving that are woven into a fabric.
u.	**Loop Salvage**	An improperly woven salvage of uneven width or a salvage containing irregular filling loops extending beyond the outside edges.
v.	**Messiness**	Surface distortion in a fabric characterized by objectionable unevenness due to many minor deformations.
w.	**Pin Hole**	In fabric, a very small hole, approximately the size of the a cross section of the pin.
x.	**Pin Mark**	A series of holes near the edge parallel with the lengthwise direction of a fabric caused by the holding device on the pin tender frame.
y.	**Reed Mark**	In woven fabric, a creak between groups of ends, either continues or at intervals.
z.	**Scalloped Salvage**	An abrupt, narrow indentation in the salvage.
aa.	**Salvage Mark**	In finished cloth, a lengthwise crease mark along the salvage caused by an edge being folded or doubled.
ab.	**Shiner**	A streak, usually short, caused of a lustrous section of filament yarn.
ac.	**Smash**	In woven fabrics, relatively large hole characterized by broken warn ends and floating picks.
ad.	**Skew**	A fabric condition resulting when filling yarns are angularly displace from a line perpendicular to the edge or side of the fabric.
ae.	**Snag**	In fabrics, a yarn or part of a yarn pulled or plucked from the surface.
af.	**Thin Place**	In fabric, appearance characterized by a small area of loosely placed yarn or by a congregation of thin yarn as compared to the adjacent construction.
ag.	**Tight Salvage**	In woven fabrics, salvage yarn shorter than warp yarn in the body of the fabric.
ah.	**Streak**	An extended unintentionally strips narrow width, often a single yarn.
aj.	**Tram Mage**	In woven crepes, a puckered area in which a filling yarn has twist running in the same direction for several picks instead of alternating S and Z twist.
ak.	**Temple Mark**	In woven fabrics, small holes or distortions adjacent to the salvage.
al.	**Tender Mark**	A visible deformation on the side edge or body of a fabric due to pressure for clips or pins.
am.	**Shaded Parts**	Any garment portion puckered, twisted, or pleated at joining seam. Quality of any part not as per specification. Any part shaded or any shade bar. Any panel mismatch with other panels

an.	**Color**	Color of embroidery or fabric fades out, not as per specification. Color of any part not as per specification.
ap.	**Cleanliness**	Any slub, spot, or stain on outer side. Threads ends not trimmed or loose threads ends not removed (to be scored only when condition exists on major portion of Jockey Cap). Any identification stamping visible on outer side. Poor Workmanship.
aq.	**Seams and Stitching**	Velcro stitched poorly. Any twisted, puckered, or pleated. Stitching tension tight resulting in breakage of stitches when normal pull is applied. Poor embroidery on eyelets and Pak Navy logo.
ar.	**Packing and Marking**	Sample are not packed and marked as mentioned in the specification. Poor marking and packing. Identification label and care label not provided

PN SPEC (CO PNCSD) 04 Sep 25 093 1/5
Cdr PN M Kamran Rafique

ANNEX F TO
PN SPECIFICATION NO 02/2025
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ACCEPTABLE QUALITY LEVELS (AQLs)

1. Acceptable Quality Level (AQL) is maximum average defective items in a lot or limit / percentage of defective items in product /offered store. It is expressed in a percentage. Number of average defective items is determined by following formula:

$$\text{Average defective item} = \frac{\text{No.of defective item found during inspection}}{\text{Total no.of item to be inspected}} \times 100$$

2. AQL process: it is used for inspection of finished product / garment by the QC professionals. AQL standard is depend on the quality of the product to be inspected, random sampling, and experience of inspector. Normally lower figure AQL standard e.g. 01% is used for high quality products/ narrow width fabric and high figure AQL standard e.g. 10% for low quality product/ garment. AQL standard 2.5% means that allowable limit of defective item is 2.5 % of total items inspected .Usually AQL 2.5% is used for major defects, AQL 4.0 % is used for minor defects and AQL 6.5% is used for slight defects, however zero acceptance for critical defects Allowable limit of Major defects are less than minor defects and it depends upon nature of item /offered store. It can be less than 01% or greater than 10%. .Following AQL table is used to determine lot size/ offered store quantity, least No. of sample to be inspected, AQL %, and acceptance & rejection points:

SINGLE SAMPLING PLAN FOR NORMAL INSPECTION OR AS PER ORDER OF INSPECTING OFFICER											
Lot size	**Least No. of sample to be Inspected**	**Allowable Quality levels(AQL) %** • **Acceptable/ Allowable defective sample (Ac)** • **Rejected /Exceed allowable limit of defective item (Re)**									
		1.5%		**2.5%**		**04%**		**6.5%**		**10%**	
		Ac	**Re**	**Ac**	**Re**	**Ac**	**Re**	**Ac**	**Re**	**Ac**	**Re**
281-500	20-80	1-3	2-4	1-5	2-6	2-7	3-8	3-10	4-11	5-14	6-15
501-1200	32-125	1-5	2-6	2-7	3-8	3-10	4-11	5-14	6-15	7-21	8-22
1201-3200	50-200	2-7	3-8	3-10	4-11	5-14	6-15	7-21	8-22	10-21	11-22
3201-10000	80-315	3-10	4-11	5-14	6-15	7-21	8-22	10-21	11-22	14-21	15-22
10001-35000	125-500	5-14	6-15	7-21	8-22	10-21	11-22	14-21	15-22	21	22

35001-150000	200-800	7-21	8-22	10-21	11-22	14-21	15-22	21	22	21	22
150001-500000	315-1250	10-21	11-22	14-21	15-22	21	22	21	22	21	22
500001-above	500-2000	14-21	15-22	21	22	21	22	21	22	21	22

3. If the inspector have time constrain then AQL is beneficial/ helpful in inspection of whole lot/ offered store. It safe time, cost and give effective/ statistical result of product /offered store **e.g**. If inspector needs 5 minutes to check the item , the quantity to be inspected is 2,500 items then it took 208 hours to check the whole consignment/ offered store.it means 26 days approx. for one store. Calculation is as follows:

$$\frac{5\ \text{min} \times 1\ hr}{1\ item\ \times 60\ min} \times 2{,}500\ items = 208.33\ hrs \cong 26\ days$$

After Implementing AQL standard so the sample taken from the lot/ offered store is 200 items/ sample:

$$\frac{5\ \text{min} \times 1\ hr}{1\ item\ \times 60\ min} \times 2{,}00\ items = 16.66\ hrs \cong 02\ days$$

4. Quality parameters/ AQL limits may be defined by Inspecting Authority (if deemed appropriate) and communicate to the manufacturer, so the manufacturer set their quality levels (AQL limits) accordingly for their internal audit. Therefore, good quality product is ready for inspection.

Cdr PN M Kamran Rafique (CCD) PN SPEC (05 hrs)

ANNEX G TO
PN SPECIFICATION NO 02/2025
PROMULGATION DATE 28 AUG 25

FEEDBACK FORM

Unit Name: _____

Item Description#: _____

Issue/Problem occurred: _____

PN SPEC #: _____

Possibility to resolve Issue: _____
_____
_____

Any Other Remarks: _____
_____

Note:

- It's good to give feedback for improvement in any clothing Item.
- Recurring problem will also be intimated through this form.

Name Stamp

COUNTERSIGNED By CO/Admin Authority
Name Stamp

PAKISTAN NAVY SPECIFICATION NO.03/2025
PROMULGATION DATE: 28 AUGUST 2025

HAT KHAKI

This document is the property of the Pakistan Navy and its use is authorized for personnel in the course of their Inspection, Quality Assurance, Stowage, and Issuance and on need to know basis. The unofficial retention or destruction of this document is an offence.

Prepared by:

Directorate of Inventory Deletion
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(NRDI) ITD Wing (South)
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KARACHI

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Email: ditd-s@paknavy.gov.pk
did@paknavy.gov.pk

PROMULGATION ORDER

1. This specification is hereby approved and promulgated for information, guidance and compliance by all concerned.

2. Details contained in the specification are to be studied and implemented with due regard to interest of the Service.

SUGGESTIONS FOR AMENDMENT

1. The specification has been prepared to bring the test methods and procedures in line with up-to-date PN requirements and facilities held in Pakistan. CINS may request to amend any test requirement/ test procedure in light of the experience emanating from its inspection history, through the feedback form placed at Annex G. However, such an alteration will be effective when the amendment is promulgated by this Directorate, and will be effective on the contracts which materialize after the promulgation date of respective amendment.

Lt PN Sajjad Umer (ADP 33 PRE AND POST)

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PN SPECIFICATION 03/2025
(HAT KHAKI)

0101. DESIGNATION

1. Hat Khaki.

0102. USAGE

1. This Hat Khaki will be used by Pakistan Navy Police (PNP) personnel.

0103. INTRODUCTION

1. This specification is prepared by Director of Inventory Deletion (DID) of ITD Wing -South, to provide necessary guidance to the potential manufacturers/ suppliers of the items mentioned herein. This specification is to be used for testing and deciding upon acceptance, or otherwise, of the items mentioned. Any alteration or addition in this specification can be suggested to DID at ITD Wing. However, it cannot be implemented without prior approval of Directorate of Clothing Stores (DCLS).

2. This specification consists **23** pages, including cover page and **07** Annexes.

0104. SCOPE

1. This specification covers the manufacturing/ inspection requirements of Hat Khaki to be used by Pakistan Navy Police (PNP). This specification lays down the standard to which the stores shown under designation above should conform. It defines and lays down the quality, standard and details of materials, workmanship and finish. It also lays down the details of sampling, testing, inspection rejection, marking, preservation, packing and delivery etc.

2. The supplier/ manufacturer shall comply in every respect with the terms of this specification and ensure that the stores conform to it, in all respects.

0105. RELATED DOCUMENTS

1. The latest standards documents that have been referred to in this specification are:

a.	AATCC-20A	Determination of fiber quality.
b.	AATCC-8	Color fastness to crocking.
c.	ASTM D 1667	Flexible cellular materials.
d.	ASTM D 1777 opt 5	Standard test methods for thickness.
e.	ASTM D 3776 opt D	Standard test methods for mass per unit area (weight) fabric.
f.	ASTM D 5034	Tearing strength of fabric.
g.	ASTM D2256	Elongation, strength and tenacity of thread

h.	ASTM D 5170	Peel strength for hook and loops.
j.	ASTM D 5169	Shear strength for hook and loops.
k.	ISO-105-C10 (C3)	Color fastness to washing.
l.	ISO-105-E02	Colour fastness to Seawater test.
m.	ISO-105-E04	Colour fastness to Perspiration.
p.	ISO 6330 (4N)	Domestic washing and drying procedures for textile testing.
q.	ISO-105-X12	Colour fastness to Rubbing test.
r.	ISO-7211/1	Determination of Weave pattern.
s.	ISO-7211/2	Determination of number of thread per unit length.
t.	ISO-7211/5	Determination of linear density of yarn removed from fabric.
u.	ISO-3801	Determination of mass per unit length and area.
v.	ISO-13934	Tensile properties of fabrics Determination of maximum force and elongation at maximum force using the strip method.
w.	ISO-2589	Determination of thickness.
x.	ISO-3801	Weight per Sq. mtr.
y.	BS EN ISO 12945-2	Determination of fabric propensity to surface fuzzing and to pilling.
z.	BS EN ISO 12947-2	Determination of the abrasion resistance of fabrics by the Martindale method.
aa.	BS EN 25077	Determination of Dimensional Change in washing and drying.
ab.	Mil spec A-A-55126B	Fasteners tapes Hook loop synthetic.
ac.	PN Specifications 11/2021	Khaki Cloth for Dress Khaki.

0106. **DEFINITIONS & ABBREVIATIONS**

1. Definitions for the terms used in this standard are given at Annex A.

0107. **TECHNICAL DETAILS OF HAT KHAKI**

1. The technical details of Hat Khaki is given at Annex B of this specification.

0108. **MEASUREMENT SCHEDULE**

1. The measurement schedule of Hat Khaki is given at Annex C of this specification.

0109. **MANUFACTURING DETAILS OF HAT KHAKI**

1. Hat Khaki shall be fabricated in accordance with the measurement schedule and technical drawings as illustrated in the technical drawing at Annex C and D, respectively.

2. Piping used on inner side of Hat Khaki is wide and both sweat absorbing band & lining should be Black in color.

3. Care label and identification label may be attached with the sweat absorbing band.

0110. QUALITY OF WORKMANSHIP AND FINISHING

1. Workmanship and finish of the Hat Khaki shall be as per drawing and it shall be best of its class and to the entire satisfaction of the inspector.

0111. TESTING

1. The material shall be subjected to tests laid down in this specification at Annex B and related documents. At least 03 x meters fabric and two Hat Khaki will be required to complete all the tests mentioned at Annex B of this specification. The material may also be subjected to such tests which are deemed necessary by the inspection authority in order to determine their suitability. Inspecting Authority reserves the right to get any B/R samples tested from any reputable Laboratory other than PN. However, any test considered important by Inspecting Authority other than Annex B may also be conducted in order to check its suitability.

0112. TENDER SAMPLE

1. Tender sample is to be approved by TSR committee.

2. For each contract 05 samples of Hat Khaki along with 05 meters fabric shall be supplied by the manufacturer at the time of tendering along with samples of materials used in manufacturing of Hats for testing. Quality repot shall be provided with TSR sample.

0113. ADVANCE SAMPLE

1. Advance sample or pre-production sample, when required, shall be submitted in accordance with terms of the contract for inspection, testing and approval. The minimum quantities required for Hat Khaki are as follows:

a.	Hat Khaki Cloth	05 meter
b.	Hat Khaki	03 of any size
c.	Sewing thread polyester	50 gm
d.	Embroidery thread	50 gm
e.	Dori	02 meters

2. Whenever Tender, Advance or pre-production sample is not required, the suppliers / manufacturer are advised in their own interest to submit to the Inspecting Officer or his representative an initial delivery of 01 % of the contract or 10 x samples of Hat Khaki, whichever are more along with samples of materials for inspection.

3. The approval of the sample mentioned in Para 0111 & 0112 authorizes the commencement of bulk production but does not relieve the suppliers/ manufacturers from compliance with all the provisions of this specification. One approved sample shall be properly sealed by INS and returned to the firm for guidance; rest of the approved sample shall be retained by INS for future use in bulk Inspection.

4. The pre-production sample shall be manufactured by the manufacturer with the same facilities which will be used for manufacturing of the bulk items.

5. Firm shall provide advance sample along with quality verification reports of Hat Khaki from an accredited laboratory to ensure in process inspection/ quality procedure of the firm.

0114. **INSPECTION**

1. **Bulk Representative Sample**. B/R random sampling will be carried out as per rules in vogue.

2. **Bulk Inspection**. Bulk inspection will be carried out after satisfactory completion of Visual Examination and Testing of B/R Sample.

3. **Inspection of Hat Khaki**. 100% of the offered store shall be inspected. The common defects for such examination/ inspection are listed at Annex E.

4. **Inspection/ Acceptance and Rejection of Stores**. Inspection/ acceptance is to be carried out to the satisfaction of Chief Inspector Naval Stores.

a. The Hat Khaki shall be examined for the correctness of material, shape, design, dimension, size, workmanship and finish.

b. All Hat Khaki shall be inspected especially for stitching and finishing, weaving defects, defective shape, discoloration/ fading, pinholes. Stitching and embroidery of Hat Khaki are to be especially checked.

c. CINS reserves the right to reject the whole supply in case, upon examination, material or packing of any sample or portion of the consignment is found "**NOT CONFORMING**" to this specification.

d. If on examination of 5% of any delivery, 20% of those examined from bulk supply are found "**NOT CONFORMING**" to this specification in respect of the pattern, dimensions, workmanship and finish, the whole consignment may be rejected without any compromise.

e. All stores and packing NOT fully in accordance with this specification shall be rejected.

f. Hat Khaki with major defects as described in Annex E of this specification will be rejected.

5. **Responsibility for Inspection.** The supplier is responsible for the performance of all inspection requirements (examinations and tests) as specified herein. PN reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to ensure supplies and services conform to prescribed requirements.

6. **Responsibility for Compliance.** The inspection set forth in this specification shall become a part of the supplier's overall inspection system or quality program. The absence of any inspection requirements in the specification shall not relieve the contractor of the responsibility of ensuring that all products or supplies submitted to PN for acceptance comply with all requirements of the contract. Sampling inspection, as part of manufacturing operations, is an acceptable practice to ascertain conformance to requirements, however, this does not authorize submission of known defective material, either indicated or actual, nor does it commit PN to acceptance of defective stores (material).

7. **Replacement by the Contractor.** The supplier/ manufacturer is responsible for replacement of the consignment or any part thereof whenever it is found to be not conforming to this specification. The supplies so tendered in replacement, shall be subjected to testing/ inspection and acceptance by the Inspecting Officer.

8. **Responsibility for Safety.** The supplier/ manufacturer is wholly responsible for the safety of supplies during inspection, storage at firm's premises, proper packing, dispatch and delivery up to consignee.

0115. STAMPING OF ACCEPTED/ REJECTED STORES BY THE INSPECTOR

1. Following instructions are to be followed:

   a. **Stamping of Accepted Stores.** Each acceptable Hat Khaki shall be stamped with Inspector's Individual Acceptance Mark. The stamping shall be legible.

   b. **Stamping of Rejected Stores.** The rejected Hat Khaki shall be marked with Inspector's Rejection Mark to avoid re-submission by the supplier.

   c. The Inspector is the authority in all matters pertaining to inspection.

0116. SPECIAL INSTRUCTIONS

1. **Care Label Instructions.** Care instructions in English and Urdu shall be attached with each Hat Khaki as indicated in the drawing and have minimum requirement as follows:

   a. Washing procedure e.g. gentle cycle machine wash.
   b. Ironing procedure e.g. Warm iron.
   c. Drying procedure e.g. Air dry.
   d. Any prohibition e.g. Do not bleach and dry clean etc.

0117. **PACKING DETAILS**

1. The store when ordered to be delivered 'PACKED' shall be packed as per following instructions:

a. 10 x Hats Khaki shall be packed in a neat, dry and clean condition in standard polyethylene packing of 0.035 mm thickness. These bags shall be sealed with transparent adhesive tape of 2.54 cm with thickness of 0.04-0.05 mm.

b. 30 x such bundles (300 Hats) shall be packed in Carton Corrugated Card board box (07 ply).

c. Each Carton shall contain one size of Hat Khaki only.

d. Each Box Board packing shall be securely and properly packed with transparent adhesive tape of 10 cm with thickness of 0.04-0.05 mm.

0118. **IDENTIFICATION LABEL**

1. Each Hat Khaki shall bear following minimum information on the label attached with Hat Khaki, as indicated in technical drawing at Annex D of this specification:

a. Item name/ item description with NSN/Pattern No.
b. Material Composition and Size.
c. Contract number and Date.
d. Year of manufacturing.
e. Contractor's name, initials, or trade mark.
f. Batch no.

0119. **PACKING LIST**

1. Firm is bound to provide a packing list of store offered for inspection along-with the challan, which include complete details about the store i.e. Pattern No., Designation, quality packed, size, quantity, contract No, and Date, Challan No. and Date. A packing list shall be enclosed after completion of inspection with each packed box giving full details about the stores packed i.e. Pattern No., Designation, quality packed, size, quantity, contract No, and date, I/Note No. or voucher No. and date, consignee, consignor, date of packing and packer's signature.

0120. **MARKING OF STORES**

1. Each carton of Hat Khaki will stenciled with quick drying Black indelible ink/ print in clearly define characters as per followings:

a. On Front and Top:

(1) Catalogue No and Designation of the store packed.

(2) Contract No and date.
(3) Quantity of the Item packed.

b. On Back:

(1) Consignee address.
(2) Designation i.e Railway Station.
(3) Weight of the Package.
(4) The No. of individual Package and the total No of Packages in the consignment joined by the Word 'of 'e.g. 2 of 300.

c. On Bottom:

(1) Consignor's Name.
(2) Voucher No. or inspection note no. and date.
(3) Month and year of packing.

0121. **DELIVERY**

1. The consignment of store will be delivered in accordance with the terms of contract.

2. The store shall be delivered in Brand new, clean and dry condition.

3. The contractor/ manufacturer is fully responsible for the safety of the supplies during inspection, storage at firms premises proper packing, dispatch and delivery up to consignee.

XXXXXSDXXXXX

RAO MUZAFFAR ALI
Captain Pakistan Navy
Director

Annexes:

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DEFINITIONS & ABBREVIATIONS

1. DEFINITIONS

a. Following definitions are used in this specification and will be adopted for use:

(1) **Inspector**. The term inspector shall include the "Inspection Authority", Inspecting Officers and their representatives, duly authorized for the purpose of discharging inspection duties involved.

(2) **Inspection Authority**. Chief Inspector of Naval Stores (CINS). His verdict in respect of Sealed Inspection matters is to be taken as final.

(3) **Inspecting Officers**. An Officers nominated by the CINS for carrying out inspection of stores supplied by the supplier, against a specified contract or order, in accordance with the particulars stipulated therein.

(4) **Acceptance Quality Levels (AQLs)**. It represent allowable limit/ tolerance of defects or non-conformities in an offered store/ lot/ batch. It represent in percentage, also known as Allowable Quality Limits.

(5) **Minor Defects**. They are small insignificant issues that don't affect the function or form of the item. Highest tolerance of AQL has been set for minor defects.

(6) **Major Defects**. They would likely result in product return but don't poses safety risk. AQL tolerance depend upon the description/ quality of finished product.

2. ABBREVIATIONS

a. Following abbreviations are used in this specification and will be adopted for use:

(1) **CINS**: Chief Inspector of Naval Stores.

(2) **DITD**: Directorate of Indigenous Technical Development.

(3) **DCLS**: Directorate of Clothing Stores.

(4) **PNCSD**: Pakistan Navy Clothing Store Depot.

(5) **PNCTA**: Pakistan Navy Central Testing Authority.

TECHNICAL DETAILS OF HAT KHAKI

S NO	ITEM	TEST METHODS	RESULTS	
1.	**MAIN FABRIC KHAKI CLOTH MATERIAL SPECIFICATION**			
a.	PN Specifications 11/2021 Dated 31 Aug 21 (Khaki Cloth for Dress Khaki).			
2.	**ABSORBENT FABRIC**			
a.	Material	AATCC-20A	100% Cotton	
b.	Thread per inch (1) Wrap (2) Weft	ISO-7211/2	 93±2 53±2	
c.	Linear Density (1) Wrap (2) Weft	ISO-7211/2	 10^s ±2 15^s±2	
d.	Color fastness to perspiration (1) Change in shade (2) Staining Wool (a) Acrylic (b) Polyester (c) Nylon (d) Cotton (e) Acetate	ISO-105 E04	**Acidic** GS 4 or better	**Alkaline** GS 4 or better
e.	Color fastness to sea water (1) Change in shade (2) Staining (a) Wool (b) Acrylic (c) Polyester (d) Nylon (e) Cotton (f) Acetate	ISO-105 E02	GS 4 or better	
f.	Color fastness to rubbing (1) Dry (2) Weft	AATCC-20A	GS 4 or better	
g.	Tensile Strength (1) Wrap (2) Weft	ISO-13934	 340 ± 5 N 319 ± 5 N	
h.	Weight	ISO-3801	320gms±2%	
j.	Weave Pattern	ISO-7211/1	3 x 1 Twill	
k.	Shade	Visual Analysis	Black	
l.	Nature of Dye	Chemical Analysis	Reactive	

m.	Shrinkage % (1) Wrap (2) Weft	ISO-6330 (4N) BSEN 25077	 ± 2% ± 2%
3.	**EMBROIDERY THREAD MATERIAL SPECIFICATION**		
a.	Colour	Visual Analysis	Black
b.	Material	AATCC-20A	Viscose
c.	Count of yarn	ISO-7211/5	2/14 Tex
4.	**EMBROIDERY THREAD MATERIAL SPECIFICATION**		
a.	Colour fastness to washing Test No. 3 (1) Change in Shade (2) Staining (a) Cotton (b) Wool	ISO-105-C10 (C3)	GS 4 or better
a.	Breaking strength lbs (min)	ISO 13934	0.54 kg
5.	**DORI**		
a.	Circumference	Physical Analysis	14mm
b.	Wt/ Linear mtr	ISO-3801	2.2056gm
c.	Material	AATCC-20A	Polyester
d.	Construction	Visual Analysis	03 Cord
e.	Colour	Visual Analysis	Black
f.	Nature of Dye	Chemical Analysis	Disperse dye
6.	**EYELETS**		
a.	Diameter	Physical analysis	9.37mm
b.	Material	AATCC-20A	Brass
c.	Coating	Visual analysis	Black

PN SPEC (ADP 33 PRE AMD) 19 NOV 2025 1446 hrs
Lt PN Sajjad Umer

MEASUREMENT SCHEDULE

S. No	DESCRIPTION	SIZE (CM)				TOLERANCE
a.	Internal circumference	55	57	59	61	±0.5
b.	Peak width from center	7.5				±0.2
c.	Peak width from edges	13				±0.2
d.	Peak Length from bottom edges	16				±0.2
e.	Peak length from top edges	18				±0.2
f.	Height of cap	12				±0.5

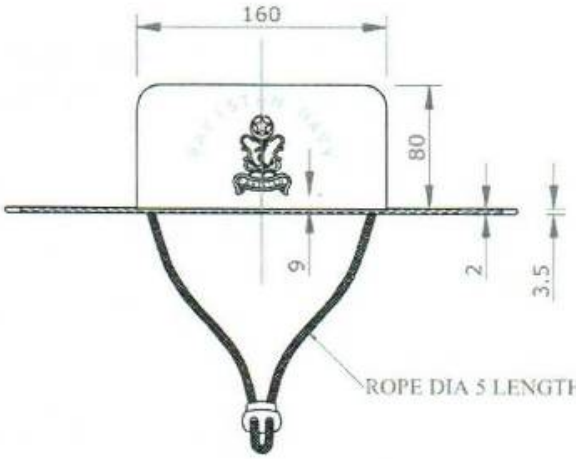
Note:

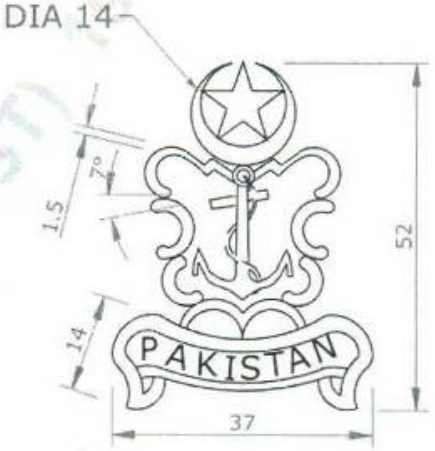
The tolerances are given only for made up caps to cover the stitching allowance. Manufacturer will ensure exact size.

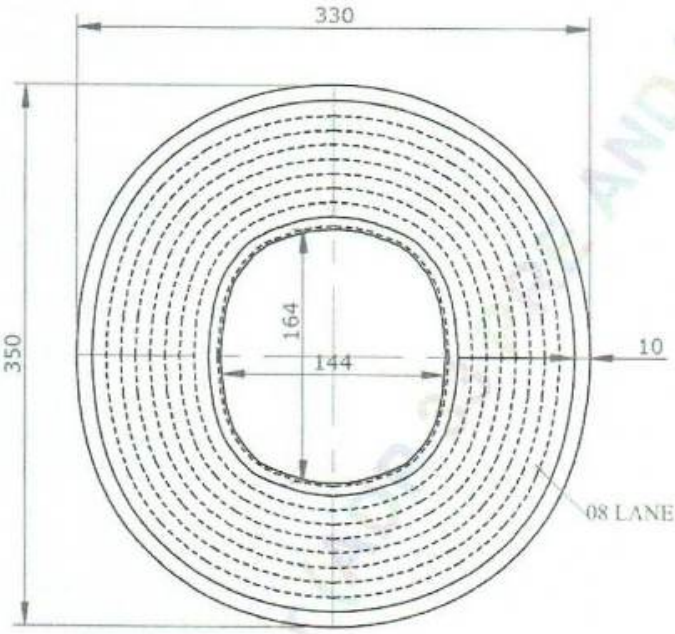
Lt PN Sajjad Umer (ADP 33 PRE AND POST) 19 Nov 25

TECHNICAL DRAWING

ANNEX "D" TO
PN SPECIFICATION NO. 03/2025
PROMULGATION DATE: 28 AUGUST 2025







1556

ITD WING		
TITLE: HAT KHAKI		
DWG.NO. TD-2748/2024		DIMENSIONS: MM
DATE: 29-05-2024		SCALE: NTS
DRAWN BY	CHECKED BY	APPROVED BY
xxx SD xxx	xxx SD xxx	xxx SD xxx
HDM M. ASGHAR	LT CDR SANA KANWAL DD TECH TEXTILE	CAPTAIN PN ROA MUZAFFAR ALI DID

Lt PN Sajjad Umer ... AND POST) ... 29 Nov 26, 1446hrs

ANNEX E TO
PN SPECIFICATION NO 03/2025
PROMULGATION DATE 28 AUG 25

COMMON DEFECTS

S.No	Defects	Definition
		FABRIC
a.	**Abrasion Mark (bruise, Chafe Mark or rub)**	An area of fabric damaged by friction Damaged due to a braded or uneven surface in a machine.
b.	**Baggy or wavy cloth**	Cloth that will not lie flat on a Cutting Table Tight or loose yarn either in warp or filling (weft).
c.	**Barré Mark**	An unintentional, repetitive visual pattern of continuous bars and stripes usually parallel to the filling of woven fabric. Barré can be caused by physical, optical, or dye differences in the yarns, geometric differences in the fabric structure, or by any combination of these differences.
d.	**Blotch**	An off colored area of any shape caused by grease or Oil. (Syn. oil spot).Cause due to leakage/ slippage from machine.
e.	**Bow**	A fabric condition resulting when filling yarns are displaced from a line perpendicular to the selvages and form one or more arcs across the width of fabric.
f.	**Broken filament**	In multifilament yarn, breaks in one or more filaments.
g.	**Clip mark**	An open place causing a streak of variable length approximately parallel of the length of width.
h.	**Decanting Mark**	A crease marks or impression extending across the cloth near the beginning or end of a piece due to the thickness of the fabric leader seam.
j.	**Double Pick**	In woven fabrics, two picks wrongly place in the same place.
k.	**Draw Back**	A weave distortion characterized by tight and stack places in the same warp yarn.
l.	**End out**	A void caused by a missing warp yarn.
m.	**Float**	In woven fabrics, the portion of a warp or filling yarn that extends unbound over two or more warp of filling yarns.
n.	**Filling Band**	In woven fabrics, visual defect across the width due to a change occurring in the yarn for a large number of picks.
p.	**Frosting**	A change in color in a limited area of fabric cause by abrasive wear.
q.	**Hole**	In fabric, imperfection, wear one or more yarn or sufficiently damaged to create an aperture.
r.	**Fuzzy**	Characterized by a hair appearance due to protruding broken fibers or filaments.

s.	**Let-off Mark**	In woven fabrics, a corrugated defect pattern distributed across the fabric width.
t.	**Loom fly**	Waste fibers create during weaving that are woven into a fabric.
u.	**Loop Salvage**	An improperly woven salvage of uneven width or a salvage containing irregular filling loops extending beyond the outside edges.
v.	**Messiness**	Surface distortion in a fabric characterized by objectionable unevenness due to many minor deformations.
w.	**Pin Hole**	In fabric, a very small hole, approximately the size of the a cross section of the pin.
x.	**Pin Mark**	A series of holes near the edge parallel with the lengthwise direction of a fabric caused by the holding device on the pin tender frame.
y.	**Reed Mark**	In woven fabric, a creak between groups of ends, either continues or at intervals.
z.	**Scalloped Salvage**	An abrupt, narrow indentation in the salvage.
aa.	**Salvage Mark**	In finished cloth, a lengthwise crease mark along the salvage caused by an edge being folded or doubled.
ab.	**Shiner**	A streak, usually short, caused of a lustrous section of filament yarn.
ac.	**Smash**	In woven fabrics, relatively large hole characterized by broken warn ends and floating picks.
ad.	**Skew**	A fabric condition resulting when filling yarns are angularly displace from a line perpendicular to the edge or side of the fabric.
ae.	**Snag**	In fabrics, a yarn or part of a yarn pulled or plucked from the surface.
af.	**Thin Place**	In fabric, appearance characterized by a small area of loosely placed yarn or by a congregation of thin yarn as compared to the adjacent construction.
ag.	**Tight Salvage**	In woven fabrics, salvage yarn shorter than warp yarn in the body of the fabric.
ah.	**Streak**	An extended unintentionally strips narrow width, often a single yarn.
aj.	**Tram Mage**	In woven crepes, a puckered area in which a filling yarn has twist running in the same direction for several picks instead of alternating S and Z twist.
ak.	**Temple Mark**	In woven fabrics, small holes or distortions adjacent to the salvage.
al.	**Tender Mark**	A visible deformation on the side edge or body of a fabric due to pressure for clips or pins.
am.	**Shaded Parts**	Any garment portion puckered, twisted, or pleated at joining seam. Quality of any part not as per specification. Any part shaded or any shade bar. Any panel mismatch with other panels

an.	**Color**	Color of embroidery or fabric fades out, not as per specification. Color of any part not as per specification.
ap.	**Cleanliness**	Any slub, spot, or stain on outer side. Threads ends not trimmed or loose threads ends not removed (to be scored only when condition exists on major portion of Jockey Cap). Any identification stamping visible on outer side. Poor Workmanship.
aq.	**Seams and Stitching**	Velcro stitched poorly. Any twisted, puckered, or pleated. Stitching tension tight resulting in breakage of stitches when normal pull is applied. Poor embroidery on eyelets and Pak Navy logo.
ar.	**Packing and Marking**	Sample are not packed and marked as mentioned in the specification. Poor marking and packing. Identification label and care label not provided

ANNEX F TO
PN SPECIFICATION NO 03/2025
PROMULGATION DATE 28 AUG 25

ACCEPTABLE QUALITY LEVELS (AQLs)

1. Acceptable Quality Level (AQL) is maximum average defective items in a lot or limit / percentage of defective items in product /offered store. It is expressed in a percentage. Number of average defective items is determined by following formula:

$$\text{Average defective item} = \frac{\text{No.of defective item found during inspection}}{\text{Total no.of item to be inspected}} \times 100$$

2. AQL process: it is used for inspection of finished product / garment by the QC professionals. AQL standard is depend on the quality of the product to be inspected, random sampling, and experience of inspector. Normally lower figure AQL standard e.g. 01% is used for high quality products/ narrow width fabric and high figure AQL standard e.g. 10% for low quality product/ garment. AQL standard 2.5% means that allowable limit of defective item is 2.5 % of total items inspected .Usually AQL 2.5% is used for major defects, AQL 4.0 % is used for minor defects and AQL 6.5% is used for slight defects, however zero acceptance for critical defects Allowable limit of Major defects are less than minor defects and it depends upon nature of item /offered store. It can be less than 01% or greater than 10%. .Following AQL table is used to determine lot size/ offered store quantity, least No. of sample to be inspected, AQL %, and acceptance & rejection points:

SINGLE SAMPLING PLAN FOR NORMAL INSPECTION OR AS PER ORDER OF INSPECTING OFFICER											
Lot size	**Least No. of sample to be Inspected**	**Allowable Quality levels(AQL) %** • **Acceptable/ Allowable defective sample (Ac)** • **Rejected /Exceed allowable limit of defective item (Re)**									
		1.5%		**2.5%**		**04%**		**6.5%**		**10%**	
		Ac	**Re**	**Ac**	**Re**	**Ac**	**Re**	**Ac**	**Re**	**Ac**	**Re**
281-500	20-80	1-3	2-4	1-5	2-6	2-7	3-8	3-10	4-11	5-14	6-15
501-1200	32-125	1-5	2-6	2-7	3-8	3-10	4-11	5-14	6-15	7-21	8-22
1201-3200	50-200	2-7	3-8	3-10	4-11	5-14	6-15	7-21	8-22	10-21	11-22
3201-10000	80-315	3-10	4-11	5-14	6-15	7-21	8-22	10-21	11-22	14-21	15-22

10001-35000	125-500	5-14	6-15	7-21	8-22	10-21	11-22	14-21	15-22	21	22
35001-150000	200-800	7-21	8-22	10-21	11-22	14-21	15-22	21	22	21	22
150001-500000	315-1250	10-21	11-22	14-21	15-22	21	22	21	22	21	22
500001-above	500-2000	14-21	15-22	21	22	21	22	21	22	21	22

3. If the inspector have time constrain then AQL is beneficial/ helpful in inspection of whole lot/ offered store. It safe time, cost and give effective/ statistical result of product /offered store **e.g**. If inspector needs 5 minutes to check the item , the quantity to be inspected is 2,500 items then it took 208 hours to check the whole consignment/ offered store.it means 26 days approx. for one store. Calculation is as follows:

$$\frac{5\ \text{min} \times 1\ hr}{1\ item\ \times 60\ min} \times 2{,}500\ items = 208.33\ hrs \cong 26\ days$$

After Implementing AQL standard so the sample taken from the lot/ offered store is 200 items/ sample:

$$\frac{5\ \text{min} \times 1\ hr}{1\ item\ \times 60\ min} \times 2{,}00\ items = 16.66\ hrs \cong 02\ days$$

4. Quality parameters/ AQL limits may be defined by Inspecting Authority (if deemed appropriate) and communicate to the manufacturer, so the manufacturer set their quality levels (AQL limits) accordingly for their internal audit. Therefore, good quality product is ready for inspection.

ANNEX G TO
PN SPECIFICATION NO 03/2025
PROMULGATION DATE 28 AUG 25

FEEDBACK FORM

Unit Name: _____

Item Description#: _____

Issue/Problem occurred: _____

PN SPEC #: _____

Possibility to resolve Issue: _____

_____

_____

Any Other Remarks: _____

_____

Note:

- It's good to give feedback for improvement in any clothing Item.
- Recurring problem will also be intimated through this form.

Name Stamp

COUNTERSIGNED By CO/Admin Authority
Name Stamp

ANNEX 'B'
TO DP-2

GENERAL TERMS AND CONDITIONS – DRESS KHAKI 100% COTTON AND HAT KHAKI

S NO	GENERAL REQUIREMENTS, TERMS/ CONDITIONS
1.	PENALTY a. The Supplier before making the shipment shall carry out complete test of the equipment at its facilities to ensure that the same has been manufactured as per specifications. In case the equipment does not pass the test/ trials, Purchaser has the right to outright reject the equipment or impose penalty at the rate of 10- 15% of the value of the relevant equipment/ items. b. The penalty shall not absolve the Supplier to undertake the repairs in Pakistan or abroad at his cost and expense including freight charges. This shall be in addition to the penalties and obligations covered in the contract like warranty/ guarantee obligations on Form DPL-15.
2.	SCOPE OF SUPPLY/ WORK a. The Supplier undertakes to deliver equipment/goods/stores including Supplies and Services to the Purchaser on FOR/ FOB Karachi basis as per INCOTERMS 2020 as per details specified in Annex-A (Technical Specifications) and General Terms and Conditions given at Annex-B to this Indent. b. The Supplier shall, in accordance with the terms and conditions as set forth in the Indent, with due care and diligence, provide the equipment/goods/stores and supply the Services within the date(s) specified in the Project Time Schedule.
3.	CONTRACT COMPLETION CERTIFICATES Upon completion of all contractual obligations under this Contract, the Supplier shall submit a "No Demand Certificate" to the Purchaser stating that no stores/ goods, Supplies, Services and payments are outstanding. Concurrently, the Purchaser shall certify through a "No Objection Certificate" that the requirement placed by the Purchaser as per terms and conditions set forth in this Contract has been fulfilled. Specimen of Contract Completion Certificate/ No Demand Certificate shall be added in the contract prior contract signing. Upon receipt of both certificates, Bank Guarantee(s) shall be returned by CMA(DP) to the Purchaser for onward return to the Supplier.
4.	LIABILITY The supplier shall not be liable under any circumstances to the buyer, its officers, agent, employees, successors and / or assignees, for any special, consequential and / or incidental damage of whatsoever kind or nature, including, without limitation, any loss, cost, damage loss of revenue or profit or loss of user, incurred or suffered by the buyer or any third party arising out of or in connection with this contract. The foregoing shall not affect buyers right to claim compensation against the supplier for damages suffered by the buyer arising directly from the performance, bad performance or non-performance of the suppliers duties and/ or obligations under the contract provided however that the aggregate liability of the suppliers in connection with this contract for any cause whatsoever including indemnity and risk purchase, shall not exceed hundred percent (100%) of the total price actually paid to the supplier under this contract.
5.	REPEAT ORDER Supplier shall not increase the cost of stores if additional quantity of same item is purchased in next 12 months after commissioning of the equipment. He may however decrease the cost by considering lower market trend.
6.	TENDER SAMPLE Tender Samples are to be provided as per clause 0114 (Dress Khaki) and 0112 (Hat Khaki) of PN Specifications under heading Tender Sample. Lab Testing Report w.r.t. PN Specifications are required for TSR. If considered appropriate, tender samples will also be tested through renowned

	Lab. Lab Testing charges are to be borne by the supplier and same has to be paid by the supplier prior finalization of TSR.
7.	TECHNICAL SCRUTINY Technical scrutiny of quotations forwarded by the bidder shall be carried out by a committee nominated by CO PNCSD as per instructions of NHQs. The TSR committee may ask the Suppliers to demonstrate their equipment or give a presentation for clarification. TSR committee may also visit the OEM premises at the invitation/expense of the Supplier to evaluate the manufacturing/system's capabilities of the OEM.
8.	SPECIAL INSTRUCTIONS a. Contracted firm will be responsible for proper disposal of rejected clothing stores. Same are to be amended/ destroyed under supervision of PN authorities to prevent their misuse by terrorists/anti-social elements. b. In case a supplier intends to sale rejected uniform items in local market, the procurement agency will be approached for approval of sample after suitable alteration of military appearance into civilian fashion. After approval, CINS will inspect the bulk stores once again clear the lot for disposal in local market. c. The contractor/supplier shall submit a certificate/undertaking on firm's letter pad that the firm will be held responsible for any misuse of rejected uniforms. d. In case firm is unable to get approval of advance sample after 6 months from date of contract cancellation should be recommended by CINS or CSD. e. Marking of stores in accordance with specification NS/MISC/002/80. f. Firm will give two weeks clear notice for Inspection. g. Free delivery to consignee warehouse. h. As per NHQ instructions promulgated vide letter ST-P/9314/INS/04 dated 05 April 2006, Rejection of stores supplied by contractors will be dealt as under: (i) 1st rejection of govt expense. (ii) 2nd rejection on supplier's expense. (iii) On 3rd rejection, contract cancellation be recommended by CINS or CSD. j. Barcode sticker to be attached on each plastic packet containing Dress Khaki, Hat Khaki. k. The purchaser will have the flexibility to extend the contract up to 03 Months and also can order 15% excess of the total contracted quantity from the supplying firm at the contracted price. l. Purchaser is not bound to lift entire quantity of contract. m. PACKING (a). **Dress Khaki:** As per PN Specification 20/2021, Each Stitched Khaki Uniform shall be packed in neat, dry and clean condition in polyethylene bag of suitable size and further 10 x Stitched Khaki Uniforms shall be packed in a thick double wall corrugated cardboard box (05 ply). Moreover, Delivery Challan and Date shall also be mentioned on each double wall corrugated cardboard box. (b). **Hat Khaki:** As per PN Specifications 03/2025 for Hat Khaki, 10 x Hat Khaki shall be packed in a neat, dry and clean condition in standard polyethylene packing and further 30 such bundles (300 Hats) shall be packed in a double wall corrugated cardboard box (07 ply). Moreover, Delivery Challan and Date shall also be mentioned on each double wall corrugated cardboard box.

9	CHECKING OF SUPPLIES/ STORES AT CONSIGNEE'S END Upon arrival, Supplies shall be checked at consignee's end in the presence of the Purchaser and Supplier's representatives. If for the reasons of economy, or any other reason, the Supplier decides not to nominate his representative for such checking; an advance written notice to this effect shall be given by the Supplier to the consignee prior to or immediately on shipment of stores. In such an event, the Supplier shall clearly undertake that the decision of consignee with regard to quantities and description of the consignment shall be taken, as final and any discrepancy found shall be accordingly made up by the Supplier. In all other cases, the consignee shall inform the Supplier about arrival of consignment immediately on receipt of stores through fax. If no response from the Supplier is received within four (04) working days from initiation of letter through fax, the consignee shall have the right to proceed with the checking without Supplier's representative. Consignee's report on checking of stores shall be binding on the Supplier in such cases.
9.	INDEMNITY In the framework of the implementation of this project, both Parties shall waive off any claim against each other regarding every claim for indemnity for the losses caused to their respective personnel or respective personnel of subcontractors/agents and their properties. However, if these losses result from deliberate fault or unmistakable error or gross negligence of Supplier or his sub-contractors/agents and/or the Purchaser, the Party involved shall bear alone the burden of the damage repairs.
10.	OWNERSHIP OF CONTRACT In the event of a change of ownership of Supplier, the Supplier shall ensure that the legal instrument or mode by which the change of ownership takes place shall have specified provisions to the effect that: a. Such change of ownership shall not in any way change, alter or modify the Terms and Conditions of this Contract, and b. The Supplier under new ownership shall continue to be bound by the Terms and Conditions of this Contract.

TENDER NO R2611330424

NAME OF THE FIRM……
DGDP REGISTRATION NO……..
ADDRESS……
TELEPHONE NO. ……
OFFICIAL E-MAIL……..
FAX NO ……
MOBILE NO ……...

TO:

THE DIRECTOR OF PROCUREMENT
(SECTION P-33)
Through Bahria Gate
Near SNIDS Centre,
Naval Residential Complex, E-8,
Islamabad
Contact: Reception: 051-20062074
Bahria Gate: 0331-5540649
Section: 051-9262314
Email: dpn@paknavy.gov.pk
adpn33@paknavy.gov.pk

DEAR SIR

DATE_____

1. I/WE HEREBY OFFER TO SUPPLY TO THE DIRECTOR OF PROCUREMENT (NAVY) THE STORES DETAILED IN SCHEDULE TO THE TENDER INQUIRY OR SUCH PORTION THEREOF AS YOU MAY SPECIFY IN THE ACCEPTANCE OF TENDER AT THE PRICES OFFERED AGAINST THE SAID SCHEDULE AND FURTHER AGREE THAT THIS OFFER WILL REMAIN VALID UP TO **120 DAYS** AND WILL NOT BE WITHDRAWN OR ALTERED IN TERMS OF RATES QUOTED AND THE CONDITIONS ALREADY STATED THEREIN OR ON BEFORE THIS DATE. I/WE SHALL BE BOUND BY A COMMUNICATION OF ACCEPTANCE TO BE DISPATCHED WITHIN THE PRESCRIBED TIME.

2. I/WE HAVE UNDERSTOOD THE INSTRUCTIONS TO TENDERS AND GENERAL CONDITIONS GOVERNING CONTRACT IN FORM NO. DP-35 (REVISED 2002) INCLUDED IN THE PAMPHLET ENTITLED, GOVERNMENT OF PAKISTAN, MINISTRY OF DEFENCE (DIRECTORATE GENERAL DEFENCE PURCHASE) "GENERAL CONDITIONS GOVERNING CONTRACTS" AND HAVE THOROUGHLY EXAMINED THE SPECIFICATIONS/DRAWINGS AND/ OR PATTERNS QUOTED IN THE SCHEDULE HERETO AND AM/ARE FULLY AWARE OF THE NATURE OF THE STORES REQUIRED AND MY/OUR OFFER IS TO SUPPLY STORES STRICTLY IN ACCORDANCE WITH THE REQUIREMENTS.

3. THE FOLLOWING PAGES HAVE BEEN ADDED TO AND FORM PART OF THIS TENDER:

A. ……
B. ……
C. ……..

YOURS FAITHFULLY,
……
(SIGNATURE OF TENDERER)
……
(CAPACITY IN WHICH SIGNING)
ADDRESS:……..
DATE……
SIGNATURE OF WITNESS……
ADDRESS……..

*INDIVIDUAL SIGNING TENDER AND/OR OTHER DOCUMENTS CONNECTED WITH A CONTRACT MUST SPECIFY:-

(a) WHETHER SIGNING AS "SOLE PROPRIETOR" OF THE FIRM OR HIS ATTORNEY.
(b) WHETHER SIGNING AS A "REGISTERED ACTIVE PARTNER" OF THE FIRM OR HIS ATTORNEY.
(c) WHETHER SIGNING FOR THE FIRM "PER PROCURATION".
(d) IN THE CASE OF COMPANIES AND FIRMS REGISTERED UNDER THE ACT, 1913 AS AMENDED UP-TO-DATE AND UNDER THE PARTNERSHIP ACT 1932, THE CAPACITY IN WHICH SIGNING E.G., THE DIRECTOR, SECRETARY, MANAGER, PARTNER, ETC. OR THEIR ATTORNEY AND PRODUCE COPY OF DOCUMENT EMPOWERING HIM SO TO SIGN, IF CALLED UPON TO DO SO.
(e) Principal's Proforma invoice (in original)
(f) Earnest money
(g) Treasury Challan Form for tender Fees as applicable