# PAKISTAN AERONAUTICAL COMPLEX, KAMRA MIRAGE REBUILD FACTORY

TENDER NOTICE : OPEN TENDER

**Tender reference**: MRF/Log/24-25/OT-7

Tender No : OT-7

Publishing date : 12 December, 2024

Last date of submission of bids : 26 December, 2024 (1000 Hrs)

Opening date & Time : 26 December, 2024 (1100 Hrs)

1. Sealed tenders for purchase / repair of items as per enclosed list are invited from sales tax registered Suppliers who are on Active Taxpayers List (ATL) of FBR.

### **Pattern of Quotations**

- 2. The quotation shall comprise a single package containing 02 separate envelopes. Tender reference along with due date of opening and Category Number must be clearly marked. Each envelope shall contain separately, the financial proposal and the Technical proposal respectively. Each bid (financial / technical) will be on separate leaf against single line item, envelope cover must be marked with "Item name". Quotations with multiple line items on single page will be dropped. Quotations should be on original letter head (color printed). The quotations shall be addressed to Managing Director MRF, PAC Kamra as per terms given below:-
  - Technical Offer: It should be without prices and contain all relevant essential specifications along with literature / brochures. Tender number, date of opening and word (Technical offer) should be clearly marked. The tendered Part No should be mentioned against guoted item / offer. Any details of equivalent / variables being guoted should be clearly mentioned against Part No being tendered. NSN / OEM Part No should be mentioned on both technical and commercial quotations. All quoted products must have traceable local / foreign OEM. Country / Place of Manufacture / OEM of stores is to be provided along with Technical / Commercial offer. Certificate of Conformance (where applicable), Technical Data Sheet (TDS) and Material Safety Data Sheet (MSDS) along with any other relevant literature by OEM are must for all Aviation Items, Chemicals, Material and Equipment. All precision measuring equipment must be quoted with provisioning of fresh Calibration Certificate. Spectrometric analysis report against raw material / hardware items may be required to establish conformity of delivered product. All Chemicals, lubricants and any item of shelf life range must be quoted with provisioning of MSDS along with fresh Laboratory Test Reports against corresponding LOT No. Batch No. Date of Production. Date of Expiry of delivered stores. Part Catalogues, IPBs (Illustrated Part Breakdown), User Guides, Operating / Maintenance Manuals, Brochures, Prices which ever available / applicable would be provided free of cost along with delivered stores. Unit of issue must be same as mentioned in tender notice. Confirmation to this effect is to be furnished by written certificate along with quotation. License keys, activation / access passwords and source codes are to be provided along with all software whether purchased individually or as a part of any system/equipment or machinery.
  - (b) Financial Offer: It should indicate price of quoted item (to be delivered at MRF, Kamra premises with all liabilities on Suppliers) and confirmation to the terms and condition of MRF tender inquiry. The words "Financial offer" should be clearly marked. The Quoted prices are to be exclusive of GST levied by the Government and these should be in accordance with the current Local market prices. GST must be mentioned separately. All

other charges must be incorporated in offered price. Rates must be mentioned in both "words" and "figures". Following documents must accompany financial offer:-

- (i) Proof of being on active taxpayers list
- (ii) Sales tax registration certificate
- (iii) NTN certificate
- (iv) Professional Tax certificate of the province where the contract is being concluded as per MAG letter No 54/AT/S/1687-Vol-XXVII/P-29 dated 22 April, 2013 and Taxation department Punjab letter No SO (TAX) 1-33/77 (P-IV) date 28 August, 2003.
- (v) Any specific SRO / Tax exemptions if applicable must be notified along with commercial offer.
- (c) Bid Money / Earnest Money: The unregistered firms with PACB (Pakistan Aeronautical Complex Board, Kamra) will have to furnish earnest money @ 5% of the quoted value through Bank Draft / CDR in favour of Public Fund Account MRF PAC, Kamra. The earnest money instrument should indicate Tender reference and firm/company name. In case where the exact Quantity has not been mentioned the earnest money should be calculated against MOQ / market available standard OEM packaging. The exact bid money in this scenario will have to be furnished within 01 week of intimation of being technically accepted, lowest financial bidder. The confirm purchase order will be furnished upon receipt of earnest money. Earnest money of bidders backing out of submitted quote or failing to provide in time delivery will be forfeited along with initiation of disciplinary actions.

### Quantity

3. Quantity can be increased / decreased at the time of order as per MRF requirement without change of financial quotations. Bids once submitted will not be allowed to be changed and will be binding on suppliers for delivery of stores if purchase order is furnished, however, clarifications may be sought.

### Offer requirement / validity

- 4. The quotation should be valid if it contain under mentioned information.
  - (a) Quote Validity should be minimum **90 days** and extendable on request. Quotations with less validity will be rejected.
  - (b) EDD must be available on Commercial Quote. Quotation will not be accepted without delivery period.
  - (c) Picture and TDS must be available with technical quote.
  - (d) Separate quote for every single line item.
  - (e) Mentioning of date on commercial / technical quotes is mandatory.
  - (f) Terms & Conditions should be mentioned on commercial / technical quotes.

### **Delivery Period**

5. Items are to be delivered at MRF, PAC KAMRA premises with all liabilities on Suppliers. Stores are required within minimum possible delivery period. Offer with minimum delivery period are likely to be preferred. However, the delivery period should be factual as no subsequent extension will be granted except under extreme / un-avoidable circumstances. Delivery period will invariably start from furnishing of written (provisional / firm) purchase order whichever is earlier. Delivered stores must be in standard packing (free of any separate

cost). Delivery of items shall be strictly made as per timeline mentioned in purchase order. In case of failure, MRF reserves the right to cancel any PO.

### 6. Acceptance of Stores / General Terms & Conditions

- (a) **Certificate of Conformance**, **TDS** and **MSDS** by OEM is must for all aviation items, Materials and Equipment.
- (b) All precision measuring equipment must accompany fresh Calibration Certificate either from OEM or any certified credible facility.
- (c) All Chemicals, lubricants and any item of shelf life range must accompany MSDS along with fresh laboratory test reports against corresponding LOT number, Batch number, date of production, date of expiry of delivered stores.
- (d) In case of life items, the remaining shelf life must be at least 75 % at the time of delivery.
- (e) Stores will be accepted after inspection by concerned user / Quality Control Directorate as per QMS of MRF.
- (f) Supplier will be made responsible for **warranty / guarantee** of newly purchased items **at least one year or maximum possible**. In case of rejection of item on receipt or any defect / anomaly found within warranty period whether before use or while in use, the supplier will provide free of cost repair / replacement (which applicable) at MRF Kamra premises bearing all liabilities.
- (g) All repair works / services will INVARIABLY be under at least **06 months warranty**, unless contracted otherwise and depends upon case to case basis.
- (h) Part Catalogues, IPBs (Illustrated Part Breakdown), User Guides, Operating / Maintenance Manuals, Brochures, Prices which ever available / applicable would invariably be provided free of cost along with delivered stores.
- (j) Items should be current year's production.
- (k) Supplier will retain record of all products delivered to MRF karma, for at least 03 years.
- (I) MRF reserves the right to visit / inspect any premises of supply chain against required / offered products.
- (m) The supplier will be responsible for in time payment of all applicable taxes and duties to relevant agencies as per in vogue GOP regulations. The supplier must be able to furnish / produce such record as and when demanded by MRF.
- (n) Any item being tendered if obsolete / discontinued by OEM may please be communicated along with said certification by OEM. Suitable replacements / substitutes / interchangeable may also be communicated along with complete technical / operational details.
- (p) All quotations/ bids, correspondence and clarifications / queries must be on company letter head duly signed by authorized signatory authority. Active contact / correspondence details (phone no. mobile no. email & postal address must be mentioned).
- (q) All quotations, bids, clarifications, queries, correspondence and product will be kept strictly confidential.

### **Release of Payment**

7. Payment will be released by Dte of Budget and Accounts, MRF PAC, Kamra on submission of Sales Tax invoice along with copies of GST registration, NTN certificate and Professional Tax certificate. Sales Tax Return against previous transactions (if any) during current financial year and copy of relevant SRO (if applicable) will also be required. All payments are to be received after successful acceptance of delivered stores by user and upon furnishing of requisite documentation. After receipt of payment, supplier is to furnish monthly sales tax return declaration along with Annexure "C" (DOMESTIC SALES INVOICE DETAIL) duly depicting invoice number against which payment has been received from MRF, Kamra. Specified amount of GST and Income tax will be withheld/ deducted at source as per GOP instructions in vogue. Any exemption in this regard will only be entertained upon furnishing of FBR issued EXEMPTION certificate in name of Firm / Company against specified item.

### **Terms and Conditions**

8. The terms and conditions mentioned in this document will be integral part of any purchase order furnished against this tender, whether or not mentioned again.

#### Clarifications of Queries

9. Queries if any may be cleared by contacting **051-90994414**, **90994727**.

### Rejection

- 10. Offers are liable to be rejected if:
  - (a) There is a deviation from any instruction.
  - (b) Offers are found conditional or incomplete in any respect.
  - (c) Overwriting / erasing in prices.
  - (d) Firm **BLACKLISTED** / **UNDER EMBARGO** / **DELISTED** by any **Government Organization**.
  - (e) Any terms and conditions not in conformity with tendered terms and conditions.

### **Delivery of Tender**

11. Each quotation (financial / technical) shall be on separate leaf against single line item. Both the envelopes of Technical and Commercial offers should be enclosed in one cover properly sealed, envelope cover must be marked with "Item name" and bear the following address of Indigenous Provisioning office, MRF with tender Inquiry number and opening date.

### O i/c Indigenous Provisioning

Mirage Rebuild Factory, Pakistan Aeronautical Complex, Kamra District Attock

### **Opening of Tender**

12. The quotations must be in original and are to reach at this factory by **1000 Hrs** on **26 December**, **2024**. All quotations are to be dropped in the tender box placed at the MRF Guard Room. No quotation will be accepted in photocopy, through Fax and after due date and time. Tender will be opened on **same day at 1100 Hrs** in the presence of witnessing officers and available representatives of the firms in O i/c Indigenous Provisioning. MRF reserve the right to cancel or reject any or all bids / proposals against complete tender or any part thereof, at any time

without any liability. In case of official holiday the Tender will be opened on next working day. Details of requirements are as follows: -

"Turco 3976, Turco4409, Ardrox-2302 (P-669), Camera Fixed 8 MP, UPS 2 Kva, Led 43 Inch, 24 Core Optical Fiber Cable (ODC) Duct Type G.652d, Optical Fiber Cable 48 Single Mode, HDPE Pipe 2 Inch Dia 3MM Thickness-100 Pure Material, Gas Path Cleaner, Walki Talki Set Handheld, Office -Work Pc Core I5 With Full Accessories, Kaspersky Endpoint Security For Business Advanced Public Sector Renewal 1500-2499, Nickel Sulfamate, Compressor(UK Made), Hydraulic Oil, Ultraviolet Lamp Mercury, Corrosion Inhibitor C038, Androx AV 25 C272, Sealing Compound, Anti-Seize Lubricant, Cleaning Compound C30, Solvent C023."

13. List of items can also be downloaded from PPRA website <a href="www.ppra.org.pk">www.ppra.org.pk</a> and as well as PACB website <a href="www.pac.org.pk">www.pac.org.pk</a> free of cost or can be collected from DTE of Log (LP Section) MRF PAC Kamra Distt Attock from 13 December, 2024 during working hours (except holidays).

Yours Sincerely,

(RAFAY JAMAL)
Squadron Leader
for Managing Director
MRF, PAC Kamra

#### MRF QUALITY SYSTEM REQUIREMENTS

Following are the requirements to be satisfied by the Supplier (External Provider) / Sub-Contractor (Local Vendor) of MRF:-

- 1. The processes, products, and services to be provided including the identification of relevant technical data (e.g., specifications, drawings, process requirements, work instructions).
- 2. The approval of products and services, methods, processes, equipment, and the release of products and services.
- 3. Provide inspection and testing criteria for acceptance by MRF.
- 4. Obtain approval from MRF of changes in product / process.
- 5. Provide Objective evidence of the quality of product.
- 6. To ensure product conformance to specified requirements.
- 7. To provide manufacturing date and Lot number.
- 8. To provide shelf life and expiry date as applicable
- 9. Competence, including any required qualification of persons.
- 10. The external providers' interactions with the organization.
- 11. Control and monitoring of the external providers' performance to be applied by the organization.
- 12. Verification or validation activities that the organization, or its customer, intends to perform at the external providers' premises.
- 13. Supplier (External providers) apply appropriate controls to their direct and sub-tier Suppliers (external providers), to ensure that requirements are met.
- 14. Design and development control.
- 15. Special requirements, critical items, or key characteristics.
- 16. Test, inspection, and verification (including production process verification).
- 17. The use of statistical techniques for product acceptance and related instructions for acceptance by the organization.
- 18. To provide Material / Metallurgical test reports along with raw material for traceability through Lot / Batch No. External Provider will also provide date of manufacture of provided Lot / Batch No of raw material.
- 19. The need to:
  - (a) Implement a Quality Management System.
  - (b) Use customer-designated or approved external providers, including process sources (e.g., special processes).
  - (c) Notify the organization of nonconforming processes, products, or services and obtain approval for their disposition.
  - (d) Prevent the use of counterfeit parts.
  - (e) Notify the organization of changes to processes, products, or services, including changes of their external providers or location of manufacture, and obtain the organization's approval.
  - (f) Flow down to external providers applicable requirements including customer requirements.
  - (g) Provide test specimens for design approval, inspection/verification, investigation, or auditing.
  - (h) Retain records (documented information), including retention periods and disposition requirements.
- 20. Ensuring that persons are aware of:
  - (a) Their contribution to product or service conformity.
  - (b) Their contribution to product safety.
  - (c) The importance of ethical behavior.

## MRF/Log/24-25/OT-7 Date of Publishing 12 December, 2024 Last Date of Bids Submission 26 December, 2024

S No	Part No	Noun	Qty	UI	Shop	Remarks / Specifications
1	TURCO3976	Turco 3976	500	Ltr	Cleaning Bay	Description: additive for rectifying decarbonizing solution Appearance: colorless liquid
2	093-997-449-1	Turco4409	1004	Kg	Cleaning Bay	<b>Description</b> : inhibited phosphoric acid <b>Appearance</b> : colorless liquid
3	093-997-046-1	Ardrox-2302 (P-669)	300	Ltr	Cleaning Bay	<b>Description:</b> used for removing paint <b>Appearance:</b> straw yellow 2 phase type liquid
4	5836PK1990001	Camera Fixed 8 MP	As Req	Ea	Surveillance Recovery Team(SRT)	Camera Fixed 8 MP
5	SP2000DR	UPS 2 KVA	4	Ea	Surveillance Recovery Team(SRT)	UPS 2 KVA
6	43LH516	Led 43 inch	5	Ea	Surveillance Recovery Team(SRT)	Industrial Grade LED 43 Inch
7	6015PK11500020	24 Core Optical Fiber Cable (ODC) Duct Type G.652D	3000	Mtr	Surveillance Recovery Team(SRT)	Part No :- 6015PK11500020 Noun :- 24 CORE OPTICAL FIBER CABLE (ODC) DUCT TYPE G.652D
8	PC-SM-G652-DT-48F	Optical Fiber Cable 48 Single Mode	3000	Mtr	Surveillance Recovery Team(SRT)	Part No :- PC-SM-G652-DT-48F Noun :- OPTICAL FIBER CABLE 48 SINGLE MODE
9	6060PK11500025	HDPE Pipe 2 Inch Dia 3mm Thickness- 100 Pure Material	1500	Mtr	Surveillance Recovery Team(SRT)	HDPE pipe 2 inch dia 3mm thickness-100 3pure material as per sample
10	B-AND-B3100	Gas Path Cleaner	5	Gln	TFE 731 Engine	As per sample.
11	5810PK1910001	Walki Talki Set Handheld	5	Ea	Gc Sqn	As per attached list
12	PC-COREI5-2023	Office -Work Pc Core I5 With Full Accessories	1	Ea	Plasma Shop	As per attached list

13	KL4867IAWFD	Kaspersky Endpoint Security For Business Advanced Public Sector Renewal 1500-2499	800	Ea	IT MRF	Part No: KL4867IAWFD Noun: Kaspersky Endpoint Security For Business Advanced Public Sector Renewal 1500-2499
14	6850PK0940024	Nickel Sulfamate	150	Kg	Etp Shop	As per attached list
15	SSR-ML75	Compressor(UK Made)	1	Ea	F100 Mechanical Accessory	Scope Of Work  a) Complete control system b) PCB Card c) Temperature sensor d) Pressure sensor Required to be replaced.
16	HYSPIN-AWS32	Hydraulic Oil	600	Ltr	Fuselage Repair Shop	Part No: HYSPIN-AWS32 Noun: Hydraulic Oil
17	ULTRAVIOLETLAMP	Ultraviolet Lamp Mercury	4	Ea	NDI Bay (TFE 731)	Mercury bulb of ultraviolet light, Mercury spot Sylvania USA 100w. Bulb intensity should be minimum 2000 µW/cm² at 15 inch distance. Bulb intensity will checked on receipt.
18	MIL-PRF-16173EGRADE4	Corrosion Inhibitor C038	5	Ea	AW-139 Helicopter O/H Project,RMC (PAF PROJECT)	Appearance: Vapor density Specific gravity at 25° C (77°F) Evaporation rate Liquid: Heavier than air 0,87 Slower than ether
19	MIL-C 16173DGRADE3AMS3066	Androx AV 25 C272	1	Btl	AW-139 Helicopter O/H Project,RMC (PAF PROJECT)	Colour: Flash point Storage temperature Shelf life Transparent beige: 38° C (100°F) 5° to 30° C (40° to 85° F) 36 months

20	AMS-S- 8802(PROSEAL890)TYPEIIC LASSB-2	Sealing Compound	3	Tub	AW-139 Helicopter O/H Project,RMC (PAF PROJECT)	Appearance: Specific gravity Boiling point Vapor density Evaporation Black paste: 1,88 118,9° C (246° F) Heavier than air Slower than ether
21	MIL-PRF-907	Anti-Seize Lubricant	1	Kg	AW-139 Helicopter O/H Project,RMC (PAF PROJECT)	Color: Odor Droppong point Flash point Temperature range Solvent resistant Silver: Mild odor 182° C (360° F) 250° C (482° F) -183° to 982° C (-297° to 1800° F) Excellent in water, salt water, and ionized water
22	AMS-S8802CTYPEIICLASSB	Cleaning Compound C30	1	Btl	AW-139 Helicopter O/H Project,RMC (PAF PROJECT)	Ams-s-8802c Type ii, Class B, Grade 1/2

23	LOCTITE7031	Solvent C023	2	Btl	AW-139 Helicopter O/H Project,RMC (PAF PROJECT)	Chemical base: Solvent Color Specific gravity at 25° C (77° F) Flash point (COC) Vapour pressure, 22° C (71,6°F),MBAR Shelf life at 20° C (68° F), months Toxicity Organic neutralizer: Heptance Clear, colourless 0,688 -12°C (10,4°F)(Highly Flammable) <50 12 no chronic toxic effects
----	-------------	--------------	---	-----	---	---

### S No 11 Specification Of Walki Talki Set Handheld Accessories

/lodel	alkie Talkie Set	PD 788 G	11		
ype	TOTAL STATE OF THE PARTY OF THE	VHF Versatile digital portable tow way radio with Built in encryption			
reque	ncy Range	136-174 MHZ	H		
Power		1W 5W	44		
Channe	el Capacity	1024 Channels			
Make		Hytera / HYT			
Origin		Chaina	8		
		LI -ION Battery 2000 MAH	H		
	Accessories	Power adaptor			
	Accessories	MCU Rapid rate charger	4		
		Polt clin	101		
	bombs can be dr	Belt clip  NER ontainer can be used directly as a trash strategically pla ropped are used directly as a containment system with c	ced whe		
parcel	Blasting Bomb C bombs can be dr rams.  Height Outside d Thickness	NER container can be used directly as a trash strategically pla copped are used directly as a containment system with co  : 850-900mm  : 400-500mm  s of container wall : 18-19mm	ced whe		
parcel	Blasting Bomb C bombs can be dr rams.  Height Outside d Thickness Weight (A	NER ontainer can be used directly as a trash strategically pla opped are used directly as a containment system with o  850-900mm  400-500mm  18-19mm  50-60 Kgs	ced whe		
parcel	Blasting Bomb C bombs can be dr rams.  Height Outside d Thickness Weight (A	NER container can be used directly as a trash strategically pla copped are used directly as a containment system with complete are used directly as a containment system with complete are used directly as a containment system with complete are used directly as a containment system with complete are used directly as a containment system with complete are used directly as a containment system with complete are used directly as a trash strategically plant of the containment system with complete are used directly as a trash strategically plant of the containment system with complete are used directly as a containment system with complete are used directly as a containment system with complete are used directly as a containment system with complete are used directly as a containment system with complete are used directly as a containment system with complete are used directly as a containment system with complete are used directly as a containment system with complete are used directly as a containment system with complete are used directly as a containment system with complete are used directly as a containment system with complete are used directly as a containment system with complete are used directly as a containment system with complete are used directly as a containment system with complete are used directly as a containment system.	ced whe		
parcel	Blasting Bomb C bombs can be dr rams.  Height Outside d Thickness Weight (A Blastic pr	NER container can be used directly as a trash strategically pla copped are used directly as a containment system with complete are used directly as a containment system with complete are used directly as a containment system with complete are used directly as a containment system with complete are used directly as a containment system with complete are used directly as a containment system with complete are used directly as a trash strategically plant of the containment system with complete are used directly as a trash strategically plant of the containment system with complete are used directly as a containment system with complete are used directly as a containment system with complete are used directly as a containment system with complete are used directly as a containment system with complete are used directly as a containment system with complete are used directly as a containment system with complete are used directly as a containment system with complete are used directly as a containment system with complete are used directly as a containment system with complete are used directly as a containment system with complete are used directly as a containment system with complete are used directly as a containment system with complete are used directly as a containment system with complete are used directly as a containment system.	ced whe		
parcel	Blasting Bomb C bombs can be dr rams.  Height Outside d Thickness Weight (A	NER container can be used directly as a trash strategically pla copped are used directly as a containment system with complete are used directly as a containment system with complete are used directly as a containment system with complete are used directly as a containment system with complete are used directly as a trash strategically play play play as a trash strategically play play play play play as a trash strategically play play play play play as a trash strategically play play play play play play play	ced whe		
parcel	Blasting Bomb C bombs can be dr rams.  Height Outside d Thickness Weight (A Blastic pr Shelf life Colour	NER container can be used directly as a trash strategically pla opped are used directly as a containment system with container used directly as a containment system with container with a soft container wall and the soft container wall approx.)  Approx.) 50-60 Kgs  Volt 42-50 at 480m/s  20-25 years  Black / Orange	ced whe		
parcel	Blasting Bomb C bombs can be dr rams.  Height Outside d Thickness Weight (A Blastic pr Shelf life Colour	NER container can be used directly as a trash strategically pla copped are used directly as a containment system with complete are used directly as a containment system with complete are used directly as a containment system with complete are used directly as a containment system with complete are used directly as a trash strategically play play play as a trash strategically play play play play play as a trash strategically play play play play play as a trash strategically play play play play play play play	ced whe		
parcel	Blasting Bomb C bombs can be dr rams.  Height Outside d Thickness Weight (A Blastic pr Shelf life Colour	NER container can be used directly as a trash strategically pla opped are used directly as a containment system with container used directly as a containment system with container with a soft container wall and the soft container wall approx.)  Approx.) 50-60 Kgs  Volt 42-50 at 480m/s  20-25 years  Black / Orange	ced whe		

### S No 12 Specification Of Office -Work Pc Core I5 With Full

### MODIFICATION IN SPECS / DISTRIBUTION OF COMPUTERS HELD IN MRF SPECIFICATIONS FOR QTY 548 PCS

	Job	Specific Requisite Spe	cification				
Description	Office Work (Qty 453)	CAD-CAM/Graphic Designing & CCTV (Qty 71)	S/W-Development & Web/Server Applications (Qty 24)				
Brand	Well reputed Brand ava	allable in Pakistan (i.e. HP	/Dell/ or Latest)				
Processor/ Motherboard	Core i5 or Higher (Latest 3 Generations)	Core i7 or Higher (Latest 3 Generations)	Core i9 or /Higher (Latest 3 Generations)				
RAM	08 GB/Higher	16 GB/Higher	24 GB/Higher				
Hard Disk	500GB SSD/Higher	1TB SSD/Higher	1TB SSD X 2/Higher				
Display	LED 20* /Higher	LED 24"/Higher					
External Graphic Card	Not Required	128 bits /Higher					
Power Supply	Branded	Branded & Compatible v	with Graphic Card				
NIC Card	Built-in *						
Keyboard & Mouse	Branded						
Accessories	Standard available I/O's, Cables & Mouse Pad						
V-Pro/Related Technologies	OEM's Certificate of non-availability of V-Pro / Related Technologies						
Warranty		anty (minimum 03 Years)					
Specifications fo	r Qty 08 Laptops (All I						
Brand	Well reputed Brand av	rallable in Pakistan (i.e. H	P/Dell/ or Latest)				
Processor/ Motherboard	Core i5//Higher (Latest 3 Generations)						
RAM	08 GB/Higher	The state of the s					
Hard Disk	1TB SSD/MSATA/Hig	her					
Display	LED 15.6"/Higher						
Graphic Card	Built-in						
AC Adopter*	Branded						
NIC/WIFI/Camera	a Built-in						
Keyboard & Mouse	Built-in with back-light						
Accessories	Standard available I/O's, Cables & Carrying Bag						
V-Pro/Related Technologies	OEM's Certificate of non-availability of V-Pro / Related Technologies						
Warranty	OEM's Standard Warranty (minimum 03 Years)						

#### NOA: -

- Replacement (if any) would be subjected to BOOs' seconded by Director IT.
- The world Higher would not be applicable before expiry of Service Life.

### **S No 14 Specification Nickel Sulfamate** SPECIFICATION OF PRODUCT Prod No: - P-0060 Part no: - 6850PK0940024 Noun: - Nickel Sulfamate SPECIFICATION: -General Characteristics: -(A) Chemical Formula: - Ni (NH<sub>2</sub>SO<sub>3</sub>)<sub>2</sub> Appearance: - Clear Green Concentrated Solution Density: - 1.50 - 1.57 Kg/ Dm3 (0.054 TO 0.056 LB/CU.IN Chemical Composition: -Limits (in weight) Elements = 145 TO 195 G/L (19 TO 26 OZ/US GAL) Nickel Anhydrous Nickel Sulfamate = 620 TO 840 G/L (83 TO 112 OZ/US GAL) (in Anhydrous Salt) (E) Impurities: -= 0.0025% max = 0.0025% max (b) Cu (c) Fe+Cu = 0.0050% max = 0.0030% max = 0.0030% max = 0.60% max S04 (e) Pb = 0.006% Sectrometric PH at 20 Deg C<sup>0</sup> (70 Deg F<sup>0</sup>): 3 TO 5 = 0.006% max