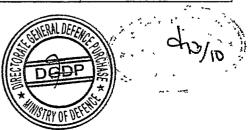
ANNEX E TO
DGDP TENDER NO 215.250.24
DATED: 10 NOVEMBER 2024

TECHNICAL SPECIFICATION OF REPEATER STATION FOR WALKIE TALKIE (DP-5)

| Ser | Description | Technical Specifications | To be filled by the Principal/Manufacturer |
|------|---|--|---|
| (a) | (b) | (c) | (d) |
| PART | Γ-1: GENERAL SPECIFACATION | | |
| 1. | Nomenclature | Repeater Station for Walkie Talkie with all accessories | |
| 2. | Brand | To be mentioned | |
| 3. | Model | To be mentioned | |
| 4. | Type of Radio | Digital Mobile radio (DMR) capable of functioning in analog/digital mode (Compatible with existing analog Repeater Station of BD Army | |
| 5. | Country of Origin | Group A Countries | |
| 6. | Country of Manufacture | To be mentioned | |
| 7. | Country of Assemble | To be mentioned | |
| 8. | Name of Manufacturer with complete address (Office Address, Telephone, Fax, e-mail and website) | To be mentioned | |
| 9. | Name of Principal with complete address (Office Address, Telephone, Fax, e-mail and website) | | |
| 10. | Name of Local Agent with complete address (Office Address, Telephone, Fax, e-mail and website) | To be mentioned | |
| PAR | T-2: TECHNICAL SPECIFACATION | | |
| 11. | Frequency Band | UHF | |
| 12. | Frequency Range | 400 - 470 MHz | |
| 13. | Total number of Channels | To be mentioned | |
| 14. | Number of Preset Memory Channels | To be mentioned | |
| 15. | Channel Spacing | To be mentioned | |
| 16. | Modulation | Details to be mentioned | |
| 17. | Display | a. Must be able to operate in bright Daylight and Night mode.b. Basic info (Rx/Tx, fault finding alarm) to be shown | |
| 18. | Audio Performance with background noise suppression | To be available. Must have clear communication at varying signal strength. Details to be mentioned | |
| 19. | Radios Features | a. Should be able to transmit and receive all encrypted (AES 128 or higher) data b. Other Radio Features to be mentioned. | |
| 20. | Programming Kit and Software complete | To be available. One complete software system/ solution to be provided along with all accessories for full range of operation. | |



FOR OFFICIAL USE ONLY

| | | OFFICIAL USE OINLY | = |
|-----|--|--|--|
| Ser | Description | Technical Specifications | To be filled by the Principal/Manufacturer |
| (a) | (b) | (c) | (d) |
| 21. | Software Performance | To be performed and compatible with all types of system (i.e. Handheld, Base Station, Vehicle Version and Repeater Station) | |
| 22. | Communication Range | a. Open Area - 10 Km Radius. b. Urban Area (i) 10 Km Radius. (ii) Up to 05 km radius (if LOS is not clear) c. Hilly Area (i) 10 Km Radius. (ii) Up to 05 km radius (if LOS is not clear) | |
| 23. | Power Output (RF) | | |
| 20. | | | T |
| | a. Minimum 40 Watt or above is preferable b. Power output at various selectable | • | |
| | | | |
| | (1) At Low Power | To be mentioned | |
| | (2) At High Power | To be mentioned | |
| 24. | Receiver Sensitivity | To be mentioned | |
| 25. | Transmitter Performance | To be available. Details to be mentioned. | |
| 26. | Receiver Performance | To be available. Details to be mentioned. | |
| 27. | Antenna System | High Gain Omni directional flexible antenna complete to be available | |
| 28. | Antenna Gain | Minimum 8 dBm | |
| 29. | Antenna Lightening Protection | LPI standard lightening protection system to be available and installed for the system | |
| 30. | Lightening Arrester | Standard Lightening Arrester to be available | |
| 31. | Feeder Cable | Cable length minimum 120 feet. Details to be mentioned | |
| 32. | Clamps | To be available | |
| 33. | Battery System: | | |
| | a. Brand, Model, Country of Manufacture and Year of production (May be supplied from local sources). | To be mentioned | |
| | b. Type c. Ampere (AH) | Sealed maintenance free battery Min120 AH | |
| 1 | | | |
| | d. Number of Battery | 01No | |
| | e. Battery backup time | Min 1 hour | |
| 34. | Power Supply/ Charging System/ | Following Charging system/ facility | available |
| | a. Brand, Model, Country of Manufacture and Year of production | To be mentioned. | |
| | | | |

FOR OFFICIAL USE ONLY

| Ser | Description | Technical Specifications | To be filled by the |
|-------------|---|---|------------------------|
| | | • | Principal/Manufacturer |
| (a) | (b) | (c) | (d) |
| | b. Input voltage and current | To be mentioned | |
| | c. Charging facilities/Cable | Necessary cable for Charging the battery system to be provided | |
| 35. | Automatic Voltage Stabilizer | To be available | |
| | (a) Brand, Model, Country of Manufacture and Year of production | To be mentioned. | |
| | (b) Capacity (VA), Input and Output voltage range | To be mentioned | |
| 36. | Uninterrupted Power Supply (UPS) | Off line UPS to be available | |
| | (a) Capacity | To be mentioned | |
| | (b) Input and Output Voltage range | To be provided | |
| | (c) Battery of UPS | (1) Type, Brand, Model, country of Manufacture, and Year of production - To be mentioned. | |
| | | (2) Voltage and Ampere to be mentioned | |
| | (d) Back up time | Minimum 1 Hour | |
| 37. | Duplexer Separation | To be mentioned | |
| 38. | Integration Interfaces | Details to to be mentioned | |
| 39. | Equipment Rack | Minimum 6U Rack | |
| | System Types Support and Network compatibility | | |
| 40. | a. Analog Conventional with Digital System | | |
| | b. The System must be compatible for the total UHF network | | |
| 41. | List of Standard Accessories | List to be submitted for full range of operation | |
| 42. | List of Optional Accessories | List to be submitted | |
| 43. | Physical Specification | | · |
| | a. Dimension (H x W x D) | To be mentioned | |
| | b. Weight at functional condition | Detail to be mentioned | |
| | d. Color | Manufacturer standard (To be specified by Bidder) | 1 1 1 1 1 |
| 44. | Environmental Standard /Issues | | |
| | a. Shock/ Vibration Proof | 05 (Five) minutes @250 RPM (Revolution Per Minute) | |
| | b. Dust Proof | To be available and Standard to be specified | |
| 45. | Operating/ Storage Condition | | |
| | a. Operating Temperature range | -5°C to +55°C | |
| | b. Storage Temperature range | -10°C to +60°C | |
| | c. Humidity | 95% and above | |
| 46. | IP Standard | To be mentioned | |

FOR OFFICIAL USE ONLY

| Ser | Description | Technical Specifications | To be filled by the |
|------------|--|---|------------------------|
| 7-1 | | | Principal/Manufacturer |
| (a) 47. | Any items/accessories not mentioned above but required for full range of operation, of the offered Repeater Station with all accessories are to be mentioned and must be supplied free of cost | To be confirmed | (d) |
| 48. | Warranty | 02 (Two) years | |
| 49. | Model Validity | Minimum 05 (Five) years | |
| 50. | After Sales Service Support | 03 (Three) years from the end of Warrantee period | |
| PART | III: TRAINING REQUIREMENT | | |
| 51. | User Training | As per requirement | |
| 52. | Operational, Repair and Maintenance Training | | - |
| 53. | Equipment Management Training | | |
| PART | - IV: REPAIR AND MAINTENANCE RE | QUIREMENT LESS LIST OF SPARE | <u>s</u> |
| 54. | Books and Publications | | |
| | a. Owners/ Operators Manual in English (Book Type) or in CD/DVD/Pen Drive | Dte and EME Dte | |
| | b. Workshop /Repair Manual in English (Book Type) including CD/DVD | As per user requirement of Sigs Dte and EME Dte | |
| | c. 100% Updated Master Spare Parts Catalogue/ List in English (Book Type) including CD/DVD | | |
| PART | - V: LIST OF SPARES | | |
| 55. | List of Spares | Complete list of spares to be provided as per requirement | |
| PART | - VI: TOOL LIST FOR DIFFERENT LEV | EL OF MAINTENANCE | |
| 56. | a. Analyzer, Measuring &Testing/ Fault finding and Diagnostic Set (If required) | List to be provided (As per requirement of Sigs Dte and EME Dte) | |
| | b. Special Service Tools (If required) | List to be provided (As per user requirement of Sigs Dte and EME Dte) | |
| | c. Special Service Materials (If required) | List to be provided (As per user requirement of Sigs Dte and EME Dte) | |

E-4 of 4 FOR OFFICIAL USE ONLY