المواصفات الفنية الخاصة بالمناقصة العامة

رقم المناقصة : (٢٠١٣/٩)

الخاصة بشراء وتوريد :

المجموعة (الاولى) :عدد (٥,٠٠٠) جهاز FWT.

المجموعة (الثانية) : عدد (١٠,٠٠٠) جهاز FWP.

المؤسسة العامة للاتصالات السلكية واللاسلكية

الإدارة العامة للمشتريات والمخازن

إدارة المشتريات – قسم العقود والمناقصات

الجمهورية اليمنية

المؤسسة العامة للاتصالات السلكية واللاسلكية

لجنة المناقصات_اللجنة الفنية

خدمة تجمعنا..

خدمة الهاتف الثابت

General Technical Specification For Supply 5000 Fixed Wireless

CDMA2000 1X Terminal

FWT

1. General Requirement

1.1 The company name & model shall appear on FWT terminal.

1.2 The specification gives the technical requirement of FWT for CDMA2000 1X system over IS2000 (IS 95A/B,J-STD-008 backward compatible).

1.3 The offer must be complete with all necessary accessories like:

    1.3.1 External Antennas.

    1.3.2 USB/USB cable to use internet.

    1.3.3 Battery.

    1.3.4 Power supply charger.

    1.3.5 user manual Arabic + English language

    1.3.6 Other accessories for use all terminal properties require in this RFP.

1.4 Operating frequency bands are: uplink 824 MHz to 849 MHz downlink 869MHz to 894MHz including the freq band uplink (835-845) downlink (880-890).

1.5 The CDMA fixed wireless phone Terminals shall comply with CDMA2000 1X or 1xRTT and 3GPP2 standards and voice codec of 13kbps EVRC (Enhanced Variable Rate Codec) or 8 kbps EVRC.

1.6 The tendered are required to provide all documents including:

    1.6.1 comprehensive technical description and specifications of the FWT's.

    1.6.2 operation manual.

    1.6.3 Maintenance manual and technical circuit diagram used for repairing the faulty units and troubleshooting procedures .

1.7 The tendered are required to provide Flash software to repair operation software faulty (include cables or box if need).

1.8 The tendered are required to provide one sample of FWT.

1.9 Tenderer shall confirm that the entire FWT's are compatible with ITU-T, 3GPP2, IS2000 standards air interface.

1.10 All FWT's must be equipped and support fax, data, voice and Internet services.

1.11 FWTs, must support external 12V car battery connection, with protection fuse.

1.12 MSM chipsets shall be of MSM 5105 or above which supports at least SMS , VMS, MMS.

1.13 FWT's Equipped by Antenna interface which can used to connecting indoor outdoor antenna.

1.14 The logo (هاتفي) of P.T.C should be printed on terminal cover.

1.15 The tenderer is required to provide all software needed for programming the FWT's.

1.16 Driver and modem software installing Automatic when plug with PC (support operation system windows 2000, windows xp, vista ,windows7 32 & 64).

1.17 The tenderer is required to program of all IP/WLL devices with initial data system as the following :

- Channel: 384 – 425
- SID: 10,000
- NID :   1
- Internet Information (User name: ptc)
- Internet Information (Password: ptc)

2. General SPESCIFICATION

   2.1 FWT's shall support Wireless Local Loop (WLL) system based on Code Division Multiple Access (CDMA) technology.

Standards:

     2.1.1 Air interface standard: IS – 2000

     2.1.2 Vocoder: IS – 127, IS – 733, IS-96 A

     2.1.3 RF specification: IS –98C

   2.2 Power specification

     2.2.1 Input: 90 ~ 270 VAC, 48 ~ 62HZ

     2.2.2 Output: From 9Vdc ~ 36 VDC 2A max

   2.3 Terminal Power specification

     2.3.1 Input voltage :   12v DC

   2.4 Back-up Battery

     2.4.1 type & capability :   Lithium 2AH

     2.4.2 Normal (stand-by):   > 24 hours

     2.4.3 Talk time :   > 3 hours

   2.5 RF specification at 800 MHZ

     2.5.1 Freq. Range: TX:824-849MHZ, RX:869-894MHZ

(Including TX:835-845MHZ, RX:880-890MHZ)

2.5.2 Wideband: 1.25 MHZ

2.5.3 TX maximum output power: 0.2w or more

2.5.4 X minimum output power: -50dBm below

2.5.5 RX sensitivity: -104 dBm below (at FER= 0.5%)

2.5.6 Freq. Stability: fo± 300HZ

2.5.7 Single tone desensitization: -101dBm below (at FER 1%)

2.5.8 RX conducted spurious emission: TX:-61dBm below, RX:-81dBm below

2.5.9 Inter-modulation Spurious Response attenuation:

-101dBm-below at CW1:900KHZ,CW2:1.7MHZ,-43dBm

-90dBm below at CW1:900KHZ,CW2:1.7 MHZ,-32dBm

-79dBm below at CW1:900KHZ,CW102:1.7 MHZ,-21dBm

2.5.10 TX conducted spurious Emission:

-60dBm below at-13dBm/1.23MHZ

-48±9.5dBm at system power-25dBm

2.5.11 Open Loop power control:

-8±9.5dBm at system power-65dBm

19dBm~Maximum at system power-105dBm

2.5.12 Time reference: ± 1us below

2.5.13 Wave quality: 0.944 above

2.5.14 Channel access method: DS-CDMA

2.5.15 Mod/Demod: OQPSK/QPSK

2.5.16 Vocoder: 8kbps, 13kbps QCELP/BK EVRC

2.5.17 Max data transmission:

phase 1: 153kbps

phase 2: 307kbps

phase 3: 2.4Mbps

2.5.18 Operating temperature: 0 c° ~ 55c°

2.5.19 Operating humidity 5% ~ 95%

2.6 Subscriber interface specification:

2.6.1 Line voltage: 48V± 6V

2.6.2 Line current: 25mA±10mA

2.6.3 Ring driving: 5.0 REN

2.6.4 Ring voltage: 70Vrms± 15Vrms (25Hz, 1REN)

2.6.5 Dimensioning & weight: To be detained by tendered

2.6.6 The internal antenna: support and designed as dual

polarity type (BI-directional antenna type).

2.7 AC power fluctuation protection: to be detained by tendered
2.8 Polarity reversal protection: default (detailed
                                              description needed

2.9 Visual & Audio Indications:
    2.9.1 Low Battery.
    2.9.2 Battery Charging.
    2.9.3 AC operation.
    2.9.4 Battery Operation.
    2.9.5 Signal strength indication (SSI)
2.10 Over voltage and lightning protection:
    The tenderer shall submit a detailed protection method against lightning, Electromagnetic emission and Spark Quench.

3. **FWT Features:**
   3.1. FWT's equipped by ESN and ESN can't change.
   3.2. FWT's without UIM port support only programming on phone.
   3.3. Support internet access via USB/USB port.
   3.4. Support Fax, G3 analogue Fax, PC Fax.
   3.5. SUPPORT OTAPA & OTASP function
   3.6. Polarity Reversal signal for metering (Payphone-16KHz)
   3.7. DC voltage Polarity Reversal ($\pm$ Changing) or Reversing protection
   3.8. RSSI indication.

4. FWT's, accessories should include extra set of spare battery.

5. **Manufacturer supply record:**
The tendered shall provide the supply record and the No. of FWT's working in his country and other worldwide countries.

6. **Country of origin:**
The tendered shall state the country of origin for the manufacturing of all parts of FWT's.

7. **Warranty**
The tendered warrants all FWT'S for a period of 12 months and replace or repair faulty devices.

Bill of Quantity

	Item	Quantity
1	FWT with above mention accessary	5,000

الجمهورية اليمنية

المؤسسة العامة للاتصالات السلكية واللاسلكية

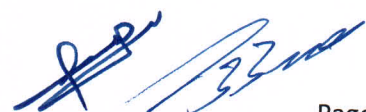لجنة المناقصات-اللجنة الفنية

خدمة تجمعنا..

خدمة الهاتف الثابت

General Technical Specification For Supply 50000 Fixed Wireless

CDMA2000 1X Terminal

FWP

1. General Requirement

1.1 The company name & model shall appear on FWP terminal.

1.2 The specification gives the technical requirement of FWP for CDMA2000 1X system over IS2000 (IS 95A/B,J-STD-008 backward compatible).

1.3 The offer must be complete with all necessary accessories like:

    1.3.1 External Antennas.

    1.3.2 USB/USB cable to use internet.

    1.3.3 Battery.

    1.3.4 Power supply charger.

    1.3.5 user manual Arabic + English language

    1.3.6 Other accessories for use all terminal properties require in this RFP.

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1.5 The CDMA fixed wireless phone Terminals shall comply with CDMA2000 1X or 1xRTT and 3GPP2 standards and voice codec of 13kbps EVRC (Enhanced Variable Rate Codec) or 8 kbps EVRC.

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    1.6.2 operation manual.

    1.6.3 Maintenance manual and technical circuit diagram used for repairing the faulty units and troubleshooting procedures .

1.7 The tendered are required to provide Flash software to repair operation software faulty (include cables or box if need).

1.8 The tendered are required to provide one sample of FWP.

1.9 Tenderer shall confirm that the entire FWP's are compatible with ITU-T, 3GPP2, IS2000 standards air interface.

1.10 All FWP's must be equipped and support fax, data, voice and Internet services.

1.11 FWPs, must support external 12V car battery connection, with protection fuse.

1.12 MSM chipsets shall be of MSM 5105 or above which supports at least SMS , VMS, MMS.

1.13 FWP's Equipped by Antenna interface which can used to connecting indoor outdoor antenna.

1.14 The logo (هاتفي) of P.T.C should be printed on terminal cover.

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1.16 Driver and modem software installing Automatic when plug with PC (support operation system windows 2000, windows xp, vista ,windows7 32 & 64).

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- NID :   1
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2.1.2 Vocoder:	IS – 127, IS – 733, IS-96 A	
2.1.3 RF specification:	IS –98C	

2.2 Power specification

2.2.1 Input: 90 ~ 270 VAC, 48 ~ 62HZ
2.2.2 Output: From 9Vdc ~ 36 VDC 2A max

2.3 Terminal Power specification

2.3.1 Input voltage :   12v DC

2.4 Back-up Battery

2.4.1 type & capability :   Lithium 2AH
2.4.2 Normal (stand-by):   > 24 hours
2.4.3 Talk time :   > 3 hours

2.5 RF specification at 800 MHZ

2.5.1 Freq. Range: TX:824-849MHZ, RX:869-894MHZ

(Including TX:835-845MHZ, RX:880-890MHZ)

2.5.2 Wideband: 1.25 MHZ

2.5.3 TX maximum output power: 0.2w or more

2.5.4 X minimum output power: -50dBm below

2.5.5 RX sensitivity: -104 dBm below (at FER= 0.5%)

2.5.6 Freq. Stability: fo± 300HZ

2.5.7 Single tone desensitization: -101dBm below (at FER 1%)

2.5.8 RX conducted spurious emission: TX:-61dBm below, RX:-81dBm below

2.5.9 Inter-modulation Spurious Response attenuation:

     -101dBm-below at CW1:900KHZ,CW2:1.7MHZ,-43dBm

     -90dBm below at CW1:900KHZ,CW2:1.7 MHZ,-32dBm

     -79dBm below at CW1:900KHZ,CW102:1.7 MHZ,-21dBm

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     -48±9.5dBm at system power-25dBm

2.5.11 Open Loop power control:

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     19dBm~Maximum at system power-105dBm

2.5.12 Time reference: ± 1us below

2.5.13 Wave quality: 0.944 above

2.5.14 Channel access method: DS-CDMA

2.5.15 Mod/Demod: OQPSK/QPSK

2.5.16 Vocoder: 8kbps, 13kbps QCELP/BK EVRC

2.5.17 Max data transmission:

     phase 1: 153kbps

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2.6.2 Line current: 25mA±10mA

2.6.3 Ring driving: 5.0 REN

2.6.4 Ring voltage: 70Vrms± 15Vrms (25Hz, 1REN)

2.6.5 Dimensioning & weight: To be detained by tendered

2.6.6 The internal antenna: support and designed as dual

polarity type (BI-directional antenna type).

2.7   AC power fluctuation protection: to be detained by tendered
2.8   Polarity reversal protection: default (detailed
     description needed

2.9   Visual & Audio Indications:
    2.9.1 Low Battery.
    2.9.2 Battery Charging.
    2.9.3 AC operation.
    2.9.4 Battery Operation.
    2.9.5 Signal strength indication (SSI)- on LCD
2.10 Over voltage and lightning protection:
    The tenderer shall submit a detailed protection method against lightning, Electromagnetic emission and Spark Quench.

3. FWP Features:
3.1. FWP's equipped by ESN and ESN can't change.
3.2. FWP's without UIM port support only programming on phone.
3.3. Support internet access via USB/USB port.
3.4. SUPPORT OTAPA & OTASP function
3.5. Polarity Reversal signal for metering (Payphone-16KHz)
3.6. DC voltage Polarity Reversal (± Changing) or Reversing protection
3.7. Arabic & English LCD menu's .
3.8. Caller ID (CLI Display).
3.9.   Alarm Clock function.
3.10. display (time, data, RSSI, Battery, Message,).
3.11. .Can save received ,Dialed ,Missed call records
3.12. Support Dial feature- Last number redial, out dial, speed dialing, ring type selection of 15 melodies volume adjustment, ringer volume control, key-one.
3.13. display call duration time.

4. FWP's, accessories should include extra set of spare battery.

5. Manufacturer supply record:
The tendered shall provide the supply record and the No. of FWP's working in his country and other worldwide countries.
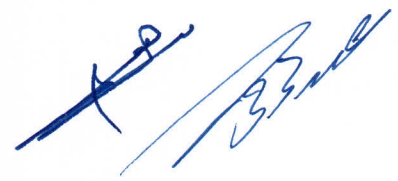
6. Country of origin:

The tendered shall state the country of origin for the manufacturing of all parts of FWP's.

7. Warranty
The tendered warrants all FWP'S for a period of 12 months and replace or repair faulty devices.

Bill of Quantity

	Item	Quantity
1	FWP with above mention accessary	10,000

جدول الكميات

م	الصنف	الكمية المطلوبة
١-	المجموعة الاولى: FWT	5,000
٢-	المجموعة الثانية: FWP	10,000