Procurement Request

Description/ Title: Provision of Dedicated Internet Connection to AMANAT/MSI main Office in Kabul.

Technical Specification:

WiMAX Internet Connection

- 1. PTP Wireless
- 2. Bandwidth: Dedicated 10 Mbit/s downstream 10 Mbit/s upstream with 100% backup and 99,0 % uptime
- 3. Installation: PTP Wireless Device with installation & configuration
- 4. Equipment: PTP equipment (including POE devices/Routers etc. necessary for the Internet service) should be provided by ISP till the end of contract free of cost
- 5. AMANAT will provide firewall/Router with Fast Ethernet connection interface. Please include equipment capable of delivering link to our firewall.
- 6. Please, do NOT include UPS, wireless routers or switches, AMANAT will provide such equipment.
- 7. Number of Public IP addresses required 3 Public IPs
- 8. Public IP addresses should NOT be NAT, firewalled or filtered for any traffic.
- 9. Fiber Optic link over WiMAX is required.
- 10. Link minimum availability should be 99.8%
- 11. Unlimited usage.
- 12. Every 15 minutes downtime deduct one day from monthly payment

ISP should provide TOP level ISP detailed information and internet traffic routing information. AMANAT traffic cannot be routed at any level through Iran or Iranian Internet Service Providers.

Network Performance Specifications

Packet loss should not be greater than 5% measured as follows:

- ICMP echo ping packets will be sent to a www public site such as www.google.com (http://www.google.com) at a rate of 20 or more each 5 minute. For example:
- Ping testing will normally be conducted during network loads of 50-80% if possible.
- A loss, or a response time > 750 ms, of more than 5% (>1 out of 20) for any 5-minute interval will cause that 5-minute period to be counted as unacceptable. If the number of unacceptable 5 minutes periods exceeds 5% of the number of periods in a > calendar month is unacceptable. The payment for any month with an unacceptably high rate of packet loss will be reduced by a percentage equal to the percentage of packet loss in > excess of 5%.
- Ping testing will be conducted 24x7 during network loads of 80% or less.
- A loss, or a response time > 750 ms, of more than 5% (>1 out of 20) for any 5 minutes interval will cause that 5-minute period to be counted as unacceptable.
- Link should not be filtered by any firewall applications or proxy.
- ISP should provide telephone numbers of 3 different level engineers for technical support 24x7.
- The Internet Service Provider (ISP) is requested to provide a 24/7 online/technical support

in case of any connectivity problem.

 If the main connection is not available the ISP is required to provide a 100% backup connection. A graphical interface for checking the bandwidth usage should be also provided by the ISP. Should the ISP fail to provide the required service mentioned above for more than 15 minutes (during one day), MSI AMANAT will cut the payment for that specific day.

Installation Requirements

- Ensure the full protection of the equipment and cables from any external damages.
- WiMAX or other communication equipment must be attached to a sturdy mast, firmly attached to the building and properly grounded.
- Final report of installation including photographs upon completion of installation to be provided.
- The designated IT Manager or a designated AMANAT IT member must accept the initial installation in writing.