



**REQUEST FOR PROPOSAL, INTERNET SERVICE PROVIDER
FOR
MALDIVES NATIONAL DEFENCE FORCE**

13-Oct-2015

NETWORKS DEPARTMENT
SIGNALS

Introduction

This document is for the Technical Requirement for the Request for Proposal to find an Internet Service provider for MNDF for a term of 02 years from 01 Dec 2015. The Service Provider must meet the following set Technical Requirements by MNDF SIGNALS.

Technical Requirements

1. Service should be provided 24/7 and the bandwidth provided to MNDF must at all times be dedicated 40Mbps download and 40Mbps upload (**symmetrical connection**).
2. The bandwidth must not be shared with any other party (Distribution ration must be 1:1)
3. Internet service provided to MNDF **must** be via a dedicated link with direct access to Internet (raw Internet) without a proxy or any other filtering mechanism.
4. A total of 10 public IPs must be provided to MNDF.
5. Service provider could choose to provide Internet via direct fiber optic link, or satellite link, by wireless or leased line.
6. A backup link (redundant link and equipment's) must be provided and should be instantly activated on primary link failure.
7. Service provider must provide and setup the following equipment's and services. A lease charge can be charged by the service provider for the Agreement Period for the equipment's provided and at the end of the service agreement the equipment's can be claimed back by the service provider. At the period of the agreement any damage and service enhancement that needs to be brought to the Equipment's would have to be carried out by the service provider at their own costs and if there is a service interruption due to a failure of a device, it needs to be changed as soon as possible and service must be restored at the earliest.
 - a. All Endpoint equipment's for the Link setup (e.g., GEAPON Device or Fibre media Converters, etc.
 - b. Bandwidth Management Server and User Management Server and setup for the Internet Network of MNDF.
 - c. Traffic Shaping Server within the Network of MNDF Internet.
 - d. Customer Premises Equipment (CPE) (Wireless and wired compatible Devices) to be used at the Remote locations where the uplink could be of Wireless or Wired connection from the ISP.
8. Service provider must allocate a specific bandwidth with the approval of MNDF SIGNALS from the Total Bandwidth taken to MNDF and use that bandwidth to provide internet service to the

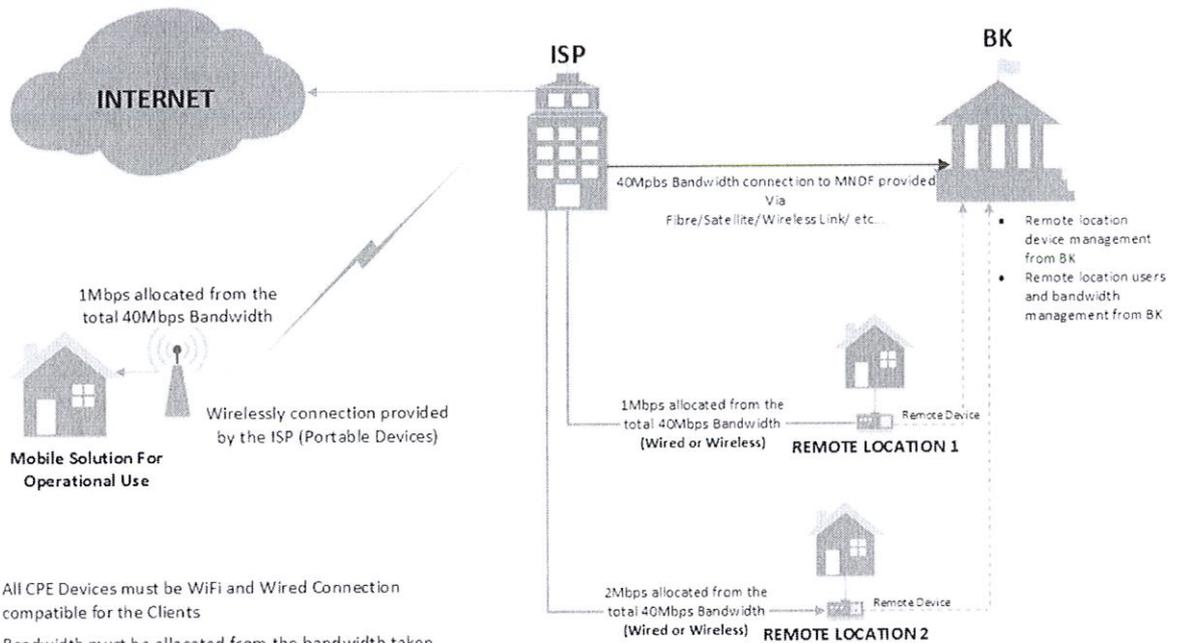
Remote Area Location(s) of MNDF and service must be provided by using a Wired or Wireless link to the following locations. The provided Customer Premises Equipment (CPE) must be capable of Wireless and Wired Connectivity to the Client Side. The Bandwidth and end user equipment must be at the control of MNDF and could be managed by MNDF at desired times when needed.

- a. Hulhumale 2 Locations – 1Mbps (dedicated 1:1) Each
 - b. Villimale – 1Mbps (dedicated 1:1)
 - c. HA Uligam – 1Mbps (dedicated 1:1)
 - d. HDH Hanimadhoo – 1Mbps (dedicated 1:1)
 - e. HDH Kulhudhufushi 2 Locations – 1Mbps (dedicated 1:1) Each
 - f. LH Madivaru – 2Mbps (dedicated 1:1)
 - g. LH Maafilaafushi – 2Mbps (dedicated 1:1)
 - h. L Kadhdhoo – 4Mbps (dedicated 1:1)
 - i. Kaadedhdhoo – 1Mbps (dedicated 1:1)
 - j. GDG Thinadhoo – 1Mbps (dedicated 1:1)
 - k. Fuvahmulah MNDF Post – 1Mbps (dedicated 1:1)
 - l. S Hithadhoo - 1Mbps (dedicated 1:1)
 - m. S GAN 4 Locations - 1Mbps (dedicated 1:1) Each
 - n. S GAN HQ – 4 Mbps (Dedicated 1:1)
9. Need internet service provided for Mobile locations. Therefore need 08 Mobile Customer Premises Equipment (CPE) (internet provided via Wireless Link) that can be used Portable at any time that is needed to establish internet connection to the location needed. The CPE must be compatible for Wireless and wired connections for the clients. It must be usable in any area of the country with no service interruption and each device must be allocated with 01Mbps Bandwidth Default and bandwidth has to be in control of MNDF SIGNALS whenever needed.
10. All remote location internets should be setup in a way that MNDF SIGNALS could manage and monitor the network and the End Devices at the locations.
11. Technical focal point should be identified by the service provider to provide prompt technical assistance to MNDF when required.
12. Technical focal point should be identified by MNDF to provide prompt technical faults and keep in contact at times required to the Service Provider.
13. MNDF SIGNALS **must** be informed of any Major Technical works that is scheduled to be carried out OR any major Technical Faults occurred by the service provider which might lead to any Service Interruptions and **must** be informed as soon the work finished or fault is fixed and service(s) back running.

14. Inbound and outbound communications **SHOULD NOT BE** logged on service provider's servers or any other equipment's for any reason.

15. Setup system(s) for Monitoring, logging Internet Service status and logging Service outage incidents.

CONCEPTUAL DIAGRAM SHOWING HOW MNDF INTERNET SERVICE MUST BE PROVIDED TO REMOTE LOCATIONS BY ISP



- All CPE Devices must be WiFi and Wired Connection compatible for the Clients
- Bandwidth must be allocated from the bandwidth taken for MNDF and it must be in control of MNDF SIGNALS.
- All CPE devices must be given management control to MNDF SIGNALS and must be setup in such a way MNDF SIGNALS Network Administrator can manage and configure the device.

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