

Annexure-B

Bill of Material

Device	Features	Interfaces Required Quantity	
MPLS - P / PE Router with console cable, power cable.	Should have advanced IP (IPV6 and IPv4) and MPLS capabilities along with sufficient nos. and types of interfaces. Main role as P / PE router, however it can also function as normal IP router. Also see the technical specifications given in section VI	GE / FE (4 nos.) ; GE Optical (4 nos.)	2
Gateway Router with console cable, power cable.	Should have advanced IP (IPV6 and IPv4) and MPLS capabilities along with sufficient nos. and types of interfaces. Main role as Internet Gateway Router. It can also function as normal MPLS P / PE router. Also see the technical specifications given in section VI	GE / FE (4 nos.) ; GE Optical (4 nos.)	1
CE Router with console cable, power cable.	Should have advanced IP and MPLS (IPV6 and IPv4) capabilities along with sufficient nos. and types of interfaces. Main role as CE router however it can also function as normal MPLS P / PE router. Shall have interfaces for remote testing also Also see the technical specifications given in section VI	GE / FE (4 nos.) ; GE Optical (4 nos.)	2
Aggregation switch with console cable, power cable.	Layer 3 (IPV6 and IPv4) capable Ethernet switch Also see the technical specifications given in section VI	GE Optical - 2 nos. ; FE - 10 nos.	1
Firewall with console cable, power cable.	All capabilities of Firewall with full IPv6 & IPv4 functionality. Also see the technical specifications given in section VI	FE - 8 nos.	1
Layer 2 Ethernet Switch with console cable, power cable.	Layer 2 managed Ethernet switch. For providing connectivity to servers. Should transport IPv6 and IPv4 traffic Also see the technical specifications given in section VI	GE Optical - 2 nos. ; FE - 24 nos.	1
Servers (Linux or free Unix) with console cable, power cable.	With IPv4 and IPv6 compliant open source operating system for implementing IPv6 DNS, Web, Mail, AAA, & other services Also see the technical specifications given in section VI	FE - 2 Nos	4
Microsoft Windows server 2008 R2 with console cable, power cable.	With IPv4 and IPv6 compliant Windows operating system for implementing IPv6 DNS, Web & other services on windows platform Also see the technical specifications given in section VI	FE - 2 Nos	2
Mid-range Server with console cable, power cable.	With virtualisation, for hosting OS and applications as per testing requirement. Also see the technical specifications given in section VI	FE - 2 Nos	1

NOTE:

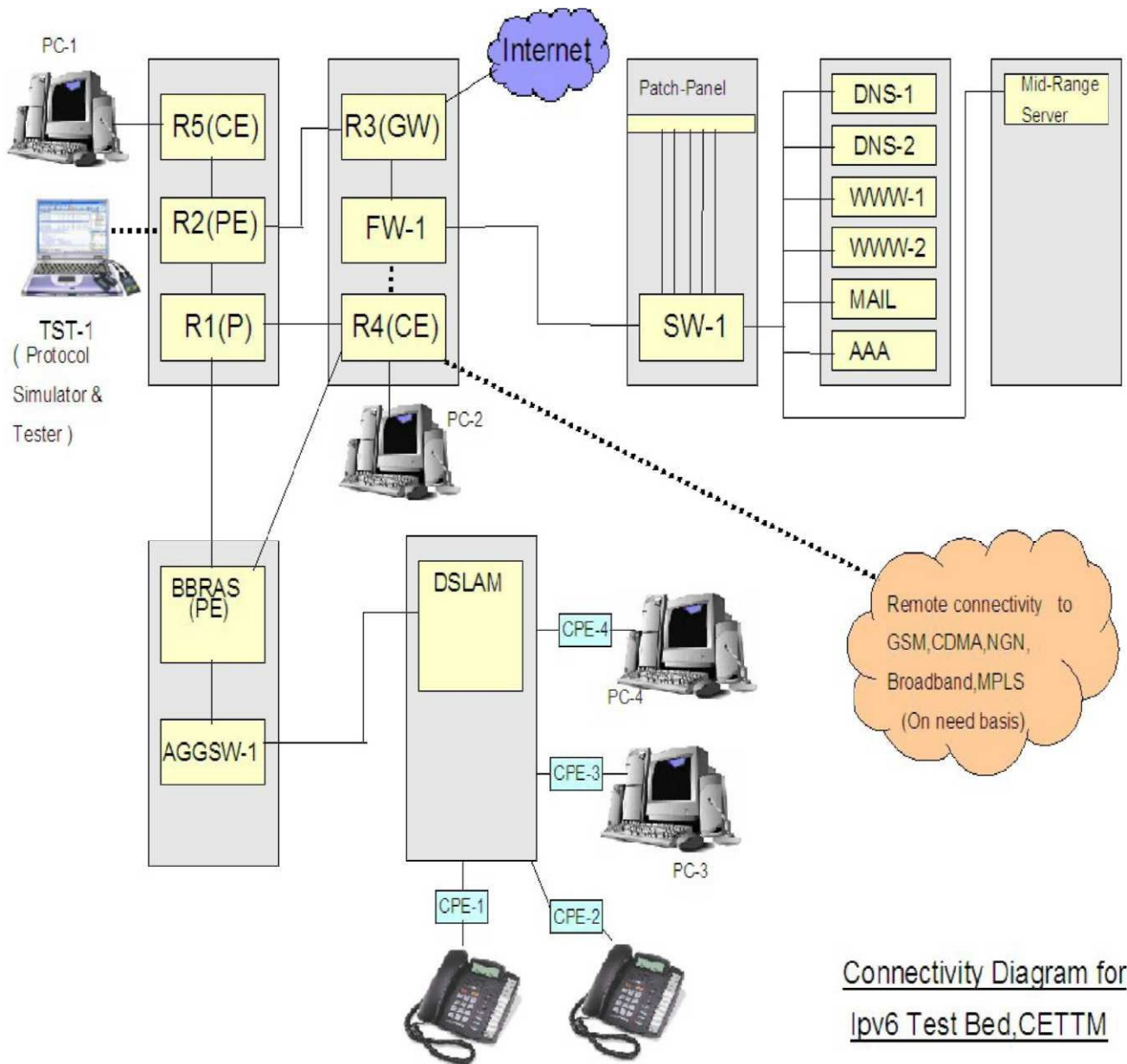
A/C Distribution Box with sufficient no of MCBs with proper load metres should be provided. The Power supply to individual racks should be extended from this ACDB. All Eqpt should be extended with proper earthing from the existing source.

Passive Components as per the Connectivity Diagram

SL No.	Device	Specification	Quantity
1	42U Racks	19" Aluminium Rack 1000MM depth 800 mm width with Glass front door and	5

		perforated back door, Castors wheel (4 Nos) 4 nos 90cfm fans,230V A/C, 3 shelves per rack, A/C Main channel vertical with sufficient no of outlets to cater to the devices (normal and alternate supply) as per the connectivity diagram with sufficient Eqpt mounting trays.	
2	24 port RJ45 Patch Panel	This should conform to TIA/EIA 568 2.1 and IEC 60603-7-4 for Cat-6 component performance. Should comply with the performance requirements for current and proposed applications like Gigabit Ethernet, 100-Base-Tx, Digital Video and analog and digital VOIP service 1.75 in (1U) high & 19" in width with 24 modular jack port wired to T568B.	2
3	Patch Cords	Patch cords meeting Cat-6 performance standards T568A/T568B (Length as per requirement) Total Cat-6 cable length 1000 metres	100
4	Optic fibre Patch cords	LC/LC Duplex Patch Cord 50/125 (Length as per requirement) At least 2 patch cords with approx length of 200 metres	24
6	Power Socket Panel	6A 230 V A/C Socket Panel with 12 Sockets	5

Connectivity Diagram for IPv6 Test Bed



Schematic Diagram for Ipv6 Testbed

Connectivity Diagram for Ipv6 Test Bed, CETTM

Schematic for IPv6 Test Bed at CETTM

