

TECHNICAL SPECIFICATION, FUNCTIONAL REQUIREMENTS AND SERVICE LEVEL AGREEMENT FOR THE PILOT PROJECT OF DIGITAL VILLAGE (TELE-EDUCATION SERVICE)

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Change History

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1.	Version 1.0	09 Dec 2016	Devendra Azad Gunjan Shivhare	Technical Committee for Tele-education
2.	Version 1.1	10 Jan 2017	Upmith Singh Gunjan Shivhare	

This is version 1.1

Metadata of the Standard

S. No.	Data Elements	Values
1.	Title	Technical Specification, Functional Requirements And Service Level Agreement for the Pilot Project of Digital Village (Tele-Education Service)
2.	Present Status (Draft/Released/Withdrawn)	Updated Draft- for consultation
3.	Publisher	MeitY along with NISG
4.	Brief Description	This document outlays the technical specification of the IT setup, function requirement specification and service level agreements for Tele-Education services which would act as the base document for the technical committee to finalize the technical & functional specifications along with SLAs.
5.	Target Audience	Digital village - Technical Committee and other stakeholders for Tele Education services
6.	Source (Reference to the resource from which present resource is derived)	The set of technical specification, functional requirement specification and SLAs for the following have been drafted: a) Tele-Education Service b) Tele-Medicine Service c) LED Lighting & WiFi hotspot service d) Central cloud based MIS Monitoring system <u>This document is “Technical Specification, Functional Requirements And Service Level Agreement For The Pilot Project Of Digital Village (Tele-Education Service)”</u>
7.	Document Number	DV/Specification/TELEDU/v1.1

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1. Introduction to Pilot Project of Digital Village

In line with the vision of Digital India, Ministry of Electronics and Information Technology (GoI) has envisaged the Pilot of Digital Village with a view to showcase the transformation that Digital India Programme can bring about, to different stakeholders like Departments of Union Government, State Governments, Private Telecom Players, other corporate services providers and citizens especially living in the rural areas.

Digital Village pilot intends to provide a platform for availability of services such as tele medicine, tele education, LED Lighting and Wi-Fi Hotspot, skill development to the people at the Gram Panchayat level in select blocks across various States/UTs. This project moves away from the traditional approach of e-Governance projects (that focused on creating infrastructure) and adopts a service based approach for pilot of the Digital Village and will be launched across 30 States and UTs.

The key sub components under Digital Village pilot Project are:

- Tele Medicine services – which is realization of ekranti pillar of Digital India.
- Tele Education services – which is realization of ekranti pillar of Digital India.
- LED Lighting and Wi-Fi Hotspot services – which is part of Digital Connectivity of Digital India.
- Skill Development services – which is part of Digital empowerment of Digital India

Digital Village is envisaged to be rolled out pan India in two stages. The first stage would be a pilot implementation in selected block(s) across 30 States/UTs in India for Digital Village. The total duration of the pilot shall be 3 years out of which, the operations & maintenance/service delivery phase will span over 2.5 years post implementation. Post incorporating the learning's from the pilot, implementation strategy for pan India roll out shall be prepared.

Objectives:

Given this context, MeitY along with NISG has come out with the Technical & Functional Specifications with the following key objectives:

- a) Provide basic development services to rural areas using digital technology and demonstrate the potential of digital technologies to improve quality of life in rural areas

- b) To provide Wi-Fi access at common place in the village
- c) To facilitate access to regional medical centres for local population for expert opinion, thus, ensuring availability of basic medical facilities at village level.
- d) To provide access to interactive teaching in local schools having shortage of teachers.
- e) To provide LED lighting at a common area in the village.
- f) To provide resource centres to be used for providing skill development training, holding information sharing sessions and organizing interactive sessions with experts, government officers etc.

2. Introduction to Tele-Education Service

Rural India has deficiency of good teachers/ availability of teachers. This deficiency becomes critical in some subjects like Science, Mathematics, and English etc. In addition to the above, due to the limited exposure of the teachers to the various higher education and career opportunities available in conventional and non-conventional fields, they are not able to guide the students towards higher education and career goals. In view of this, Tele Education services are envisaged, in which a group of rural schools shall be parented to a lead school. The lead school shall be a government school reputed for quality education delivery at block, district or state/UT level. However the lead school can also be private school, but this will require the approval from the respective state / UT government.

The tele-education classroom environment shall have a Video-Conference (VC) setup. The classes will be held in two way interactive manner. The local teacher (where ever available) at rural school shall assist the lead school teacher in carrying out tele education sessions. The subjects, syllabus etc. to be taught over the tele-education classroom shall be decided by the concerned states/UTs.

In view of the above, an empanelment would be carried out at the central level for Tele-Education service. Respective States/UTs will select the agencies from the empaneled list for implementing the Tele-Education service in the identified pilot block(s). The selected agency will implement the pilot of Digital village in adherence to predefined Service Level Agreement (SLA) and Quality of Service (QoS) in the State/UT.

In line with above objectives, Technical Committees have been formed to review & finalize the technical & functional specifications along with SLA for all services under pilot project of digital village.

3. Major IT component under Tele-education Service

Mentioned below are the major IT components envisaged under Tele-education services:

Sl.No	Equipment name
1.	Video Conferencing equipment
2.	HD LED Display Unit
3.	Layer 2 switch
4.	Desktop
5.	Printer
6.	2 KVA UPS with batteries (for L2 Switch +VC equipment + LED Display + Speakers)
7.	White board
8.	Rack (Industry Standard Metallic Rack for secure housing of VC equipment)
9.	Rack for switch

3.1 Technical Specification

Given below are the technical specifications for the various IT components envisaged under Tele education services

3.1.1 Video Conferencing unit

Sl.No	Technical Specification
1	OEM should figure in the leaders or challengers quadrant in Gartner's magic quadrants for Group Video Systems published July 2016
2	System
	a) The proposed system must support PAL with a PTZ camera with mount, microphone array with mute button on the mic, wireless remote control, etc. The codec must be based on industry standards wherever possible such as the H.323 and SIP standards for IP-based video conference.
	b) HD Video Conferencing system should be capable of working over IP networks with a minimum of 4 Mbps connecting speeds
	c) All equipment should support minimum 720p from day one without requirement of any additional hardware or software
3	Video Standards and Protocols
	a) H.323 and SIP standards compliant
	b) Should support all standard video protocols
	c) Should support all standard audio protocols
	d) H.281 local and far end camera control
	e) Built-in Acoustic echo canceller with Noise Reduction
	f) Should support high definition video resolution of 720p 60fps for live video for both Transmit and receive

Sl.No	Technical Specification
	g) Support for people + content using standards based H.239 and BFCP over SIP for simultaneously sending/receiving HD Content/presentation along with HD live video on two different HD monitors at 720p 60fps video resolution and content at 720p resolution simultaneously for both video and content while sharing presentation in a point to point call
4	Inputs (Video/Audio)
	a) Should have required audio and video outputs to connect with Two (2) HD monitors with min 5 meters connecting cables
	b) Should have inputs for connecting One (1) nos. of High Definition PTZ cameras of 720p60 resolutions and one content/presentation Device (laptop/PC) simultaneously to share HD content
	c) Should have input to connect directly a Laptop/PC for content/Presentations at 1920x1280, 1280x720, SXGA, XGA, WXGA, resolution along with Audio & video using DVI/HDMI/VGA interfaces. Suitable Connecting cable of 5 meters length for connecting Laptop/Desktop using HDMI and VGA (15 Pin D-sub) interfaces
	d) Should have Mic inputs to connect 2 or more Microphones to the system directly or through daisy chain. The system should come along with at least one microphone.
	e) Two nos. of high quality table Omni-directional microphones along with minimum 7.5mtrs, Cable should be supplied.
	f) One Line level audio input RCA audio jack to connect with external audio system and one 3.5mm stereo mini (PC audio) for connecting PC/laptop audio
	g) Audio and video Error Concealment over IP
5	Outputs (Video/Audio)
	a) 2xDVI-I/HDMI Port
	b) One Line level audio output RCA/3.5mm audio jack to connect with external audio system
	c) Automatic Gain Control (AGC)
6	Camera
	a) High Definition Video Conferencing System should be supplied with a high-end camera system to provide accurate close-up view of the person who is speaking
	b) Should have One (1) motorized Pan-Tilt-Zoom HD camera of 720p60 resolution with minimum of 10x optical zoom, auto focus and white balance features. Cameras should be controllable from hand held remote control of VC system. Mounting structures required to mount the cameras on top of LCD/wall/ceiling should also be supplied. The HD cameras should be capable of working in normal illumination conditions. Each of the cameras should be supplied with minimum of 3 meters connecting cable, in case of integrated device, cable is not required.”
	c) PAN Rotation: 360 degrees, PAN Rotation: +/- 90 degrees, Tilt Rotation: min +/- 15 degrees or more, Minimum Scene Illumination: 0.1Lux
	d) Easy to use infra-red hand held remote control with operating distance of minimum 25 feet
7	Video & Content Resolution

Sl.No	Technical Specification
	a) The system should support HD 1080p, HD 720p, 4SIF/4CIF, SIF, CIF, QSIF and QCIF video resolutions
	b) Should be interoperable with H323,SIP complied HD1080p60, HD720p60, HD720p30 and Standard Definition Videoconferencing endpoints, MCU and Gateways
	c) “Should be upgradable to operate for Multipoint Functionality with at least 3 additional locations at minimum 720p resolution in continuous presence mode by installing suitable Software License / through hardware device. Dial-in and Dial-out to other Video conferencing systems shall be possible using same VC system remote Controller - Only to be provided at Lead School end
8	Network Interface
	a) Should have 10/100/1000 Mbps auto speed Ethernet port
	b) Should work with IPv4 and IPv6 addressing schemes
	c) Should support QOS (Quality of Service) definitions
	d) Serial/Ethernet control port for integrating with external control system
	e) Down speeding feature over IP
	f) IP Address Conflict Warning
9	Security
	a) Global Directory / Centralized directory support, Software Up-gradation via IP, PC, LAN, Downloading CDR and Directory Services
	b) Should support H.460.X Firewall traversal protocol
	c) The system should support secure web, Telnet based access, Embedded AES, H.235V3, Support for IPv6, H.235 Annex D and NTLM authentication protocol.”
	d) SNMP/http/ https for enterprise management
	e) Should be capable of performing QoS
10	Power
	Should operate on 230v, 50 Hz Power supply with 3 pin Plug/Top with tolerance.
11	Audio Speaker
	40W external speaker digital amplifier with 3.5mm Audio out port with connecting cables compatible with codec.

3.1.2 LED Display

Sl.No	Technical Specification
1.	LED Screen Size (diagonally) should be min 55”/140 cm or more
2.	Resolution of 1920x1080 pixels

Sl.No	Technical Specification
3.	Video In : RCA Pin Type X 1 1.0V(p-p) 75
4.	Audio In : RCA Pin Type x 2 0.5V(rms) min
5.	Audio output: Min 15 W inbuilt
6.	HDMI IN : TYPE A Connectors x 2 (Side) min
7.	Optical Out x 1, SD Input x 1, USB Input x 2, VGA
8.	Should work satisfactorily with VC systems as specified in VC specification
9.	Shall be supplied with 5 meters HDMI & DVI-I/VGA cable with Audio
10.	Easy to use Remote Controller
11.	OEM supplied Table Top Stand, Wall mount kits
12.	220 V, 50 Hz AC input with tolerance

3.1.3 Layer 2 Switch

Sl.No	Technical Specification
1	OEM should in the Leaders quadrants of Gartner's magic quadrants for switching components as on August 2016
2	Port type/density/architecture
	a) L2 managed switch with minimum Ethernet 8 port 10/100/1000Mbps ports Base T with min 1 gigabit SFP ports for uplink
	b) All ports on the switch should be of non-blocking architecture
	c) Switch should be equipped with Variable speed Fan for cooling
	d) Supports Layer 2 features such as Port Trunking, SNMP, IGMP, VLAN and other required protocols
	e) High performance architecture of switch that is capable for providing the non-blocking switch fabric and wire-speed throughput of min 20Gbps
3	Should have minimum 256 MB DRAM and 256 MB Flash
4	Should support IPv6 in hardware and software from day 1
5	Switch should have a console port for configuration and diagnostic purposes
6	Management Features:
	a) SNMPv3, NTP, HTTPS, SSHv2, SCP2, SFTP, TELNET
	b) L2 Ping & L2 trace route, IPv6 telnet and TFTP, LLDP and CDP
	c) Switch should have OS API interfaces to integrate with 3rd party applications
	d) Should have automated port profile technology for smart plug and play and seamless deployment
	e) Should have media traffic monitoring with 802.1AVB or any other protocols for lossless audio video transport
	f) Switch should support 4 groups of embedded RMON (history, statistics, alarm and 3events)
7	Operating Condition

Sl.No	Technical Specification
	a) Operating Temp: 0° C to minimum + 45° C
	b) Operating Humidity: 10% to 95% non- condensing

3.1.4 Desktop

Sl.No	Technical Specification
1	The OEM should fall in the leaders Quadrant of Gartner's magic quadrant for Global Enterprise Desktops and Notebooks as of November 2014.
2	Specifications
	a) Intel Core i5 2.4GHz (or higher), 4 GB DDR3 RAM,500GB SATA HDD or above
	b) Windows 8 or above, MS Office 2016, Standard Antivirus
	c) Integrated Graphics Card - Full HD Graphics
	d) Standard Keyboard & Optical Scroll Mouse(optionally wireless)
	e) Minimum 15.6" Full HD screen or higher standard Color TFT/LCD
	f) Network Interface Card : Ethernet 10/100/1000 Mbps Wireless Connectivity : IEEE 802.11 b/g/n WLAN
	g) Speakers: In-built
	h) Min External I/O Ports : VGA- 1 Nos, Network RJ-45 -1 Nos;USB Port – Min 4 Nos, audio port -1 Nos, Speaker jack-1 Nos, HDMI-1 Nos

3.1.5 Printer

Sl.No	Technical Specification
1	The OEM should fall in the leaders and challengers Quadrant of Gartner's magic quadrant for Managed Print Services as of December 2015.
2	Multi-Function Printer
	a) Print(Black and white) - Copy – Scan functions
	b) Speed: A4 -Minimum 18 ppm
	c) Resolution : 600 X 600 dpi or better
	d) Scan-to-Email facility
	e) Interface : USB 2.0 high-speed and built in Ethernet Network

3.1.6 2 KVA Online UPS

Sl.No	Parameter	Technical Specification
1.	Technology & Topology	Fully Microprocessor with PWM technology
2.	Input Source	Source Mains/Active Power Factor Correction Make DG Set (UPS should be compatible to take input from local DG Set)
3.	Active Power Factor Correction	In built design

Sl.No	Parameter	Technical Specification
a.	Output power factor	VA at 0.7 power factor output
4.	Input (Voltage)	160 V to 270 V Output (Voltage) 230V +/- 5 % (both for load and supply variations)(Base Voltage adjustable)
5.	Output (Voltage)	230V +/- 5 % (both for load and supply variations)(Base Voltage adjustable)
6.	Waveform (Output)	Sine Wave form with TDH less than 3%
7.	Minimum metering/investor efficiency	<ol style="list-style-type: none"> 1. Backup available 2. Battery low audio alarm. 3. Output OK indicator. 4. Input/ Output voltage meters. 5. Load Utilization Indicator 6. UPS on Mains/Battery 7. Output frequency greater than 94%
8.	UPS type	On line (to act as power conditioner as well as Backup)
9.	Battery charger	Current limited, maximum voltage equal to 2.33 V/Cell
10.	Battery type and backup time	SMF batteries of sufficient AH rating for 2 KVA UPS to be able to run all the equipment for at least 4 hours
11.	Protection	MCB, Fast acting Fuse, Electronic Overvoltage, under voltage, short circuit, Battery under voltage protection

3.1.7 White Boards

Sl.No	Specification
1	Magnetic White Board, Minimum size :36 x 24 x 1 inches

3.2 Functional Requirement Specification

3.2.1 Functional and Other Requirement Specification: Technology Solution

Sl.No	Functional Specification
1.	Video Conferencing units should be interoperable with all technology solution that are part of Tele education service as mentioned in this document.
2.	The quality of the video conferencing for tele education system should not be compromised in case of the following : a) online interactive classroom session b) Video streaming c) Combination of above two
3.	The system should be able to support external high quality audio system.
4.	The lead school level Tele education system should have multiple point connectivity of at least 1: 3 point enabled from day one.
5.	The Tele education system should be enabled from day one to connect computers to run Power Point presentations, audio, video, and any other content that is being displayed on the computer screen. It should be enabled to broadcast and view the presenter and presentation at the same time at the end points at school level.
6.	Tele education system should enable an alert at lead school level whenever any participant raises any question at school level
7.	Tele education system at lead school should allow to view in full screen or view mix of upto three end points in different template
8.	Tele education system should have feature at lead school level to put a text ticker and a logo.
9.	Configuration management through GUI based software utility and using interfaces. GUI tools shall be provided. Event and system history logging functions shall be available.
10.	Tele education system should able to push / pull session logs to any external application
11.	The Tele education system should have feature to capture photographs of class room at both lead school and school level.
12.	System should work through all firewalls using the Secure HTTP (HTTPS) protocol
13.	The offered solution shall sustain levels for capacity performance, scalability, availability and manageability that meet present and future requirements of any system and software upgrades.

Sl.No	Functional Specification
14.	All Equipment should be covered under comprehensive on-site warranty/ Maintenance for 3 years by the TSP from the date of commissioning of tele education service. Additionally TSP is required to provide on-call support

3.2.2 Functional Requirement Specification: Service Provider

Sl.No	Functional Specification
1.	Service Provider should ensure all sites i.e. lead school and school level should have VC end point units which should be interoperable with tele education solution.
2.	Service Provider should ensure clear pick up of audio, video and live streaming of tele education session in lead school and school level classrooms.
3.	Service provider should ensure clear and audible audio output system is be integrated with the tele education system for clear reception of audio.
4.	Service provider should ensure availability of Far end camera control at lead school end and should operate controller according to classroom session
5.	Service provider should ensure the good quality view of participants and interaction on tele education system
6.	Service provider should facilitate connectivity of computers to run Power Point presentations, share information, exchange of files and any information that is being displayed on the computer screen and also control presenter and presentation views according to classroom session.
7.	Service provider should facilitate high quality audio / video system.
8.	Service provider should ensure that tele education system should support audio, video and data collaboration at all sites
9.	Service provider should ensure Tele education system at lead school level should have multiple point connectivity of at least 1: 3 point enabled from day one.
10.	Service provider should control display of both presentation & presenter in the same screen by splitting it into two view according to classroom session.
11.	Service provider should control view in full screen or view mix of upto three end points in different template at lead school level and school level according to classroom session.
12.	Service provider should maintain a text ticker and a logo on screen if required to display.

Sl.No	Functional Specification
13.	Service provider should maintain logs which will include (but not limited to) details of scheduled and delivered lectures which allows to fill in details about the class room session.
14.	Service provider should ensure work through all firewalls using the Secure HTTP (HTTPS) protocol
15.	Service provider should ensure session logs to be push / pull to any external application
16.	Service provider should capture photographs of class room at both lead school and school level from tele education system
17.	Service provider should manage Configuration management of tele education system through GUI based software utility and using interfaces and maintain information of system history logging functions.
18.	Service provider should ensure support wire rate throughput for L2, traffic with QoS and Security features for all interfaces.
19.	Service provider should ensure supply of equipment, installation, integration, testing, Commissioning and maintenance/support of fully functional tele-education System along with the collaborative tools, material/consumables and services at all sites
20.	Service provider should be responsible for supply, testing, commissioning, test run, operation and maintenance of the tele-education System (VCS),all those things and accessories deemed necessary & explicitly not covered in Bill of quantities (BOQ)
21.	Service provider should ensure that the tele-education setup should be able to cover the entire classroom at school level
22.	Service Provider will be responsible to maintain the equipment's of tele education system at schools, for a period of 2.5 years from go-live. The make & model of the product supplied by service provider for the project should not come to end of life and end of support in next 5 years from the date of commissioning (OEM Certificate should be submitted by service provider).
23.	All Equipment should be covered under comprehensive on-site warranty/ Maintenance for 2.5 years from go-live by the service provider from the date of commissioning and acceptance of the system

Sl.No	Functional Specification
24.	Service Provider must observe proper circuit polarity. No cables shall be wired with polarity reversal between connectors with respect to either end. Special care shall be taken while wiring cables, to ensure that constant polarity is maintained.
25.	Service Provider must provide adequate protection to install equipment against electrical surges.
26.	Service Provider should be responsible for providing point to point connectivity from presence of connectivity.
27.	Service provider should provide cabling of LAN connection at all sites.
28.	Service provider should provide power backups.
29.	Service provider should be responsible for renovating /repairing any electrical work in class room
30.	Service Provider should be responsible to establish Virtual Class rooms & Central Studio for delivery of services mentioned in the RFP within 30 days from the award of contract
31.	Training for knowledge transfer to engineers/operators and support personnel will also be the responsibility of the Service provider.
32.	Service Provider must furnish components, wires, connectors, materials and parts, equipment for the complete installation of the system, in accordance with recommendations of the equipment manufacturer.
33.	Service Provider shall provide on-call support including assistance with operation and maintenance of the system at respective location(s) all free of cost from the date of the first successful start/functioning/operation of the equipment
34.	Operators deployed by the service provider at sites will be responsible for operating the entire tele education system

4. Service Level Agreement of Service Provider

Service Level Agreement of Service provider																									
1	<p>Uptime at School Level <i>"Uptime" shall mean the time period for which the specified services / components with specified technical and service standards are available to at that location.</i></p> <p><i>Uptime, in percentage, will be calculated as: Uptime school % = (actual uptime of that school) / (Total Time during that period for that school) * 100]</i></p>																								
2	<p>Uptime at Lead School Level Uptime will also be measured for lead schools based on the formula given below</p> <p><i>Uptime of associated lead school % = (actual uptime of that lead school) / (Total Time during that period for that lead school) * 100]</i></p>																								
3	<p>For calculation of uptime for service level adherence purpose, the lower uptime percentage out of the following two would be considered as the uptime for that school :</p> <ul style="list-style-type: none"> a) Uptime school % b) Uptime of associated lead school % 																								
4	<p>Based on the uptime identified above , the following penalty shall be applicable</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th colspan="3">System Availability SLAs and Penalty per location</th> </tr> <tr> <th>S.No</th> <th>System availability value for month/quarter</th> <th>Penalty</th> </tr> </thead> <tbody> <tr> <td>a)</td> <td>>= 99.7%</td> <td>Nil</td> </tr> <tr> <td>b)</td> <td>> 99% but < 99.7%</td> <td>1% of monthly/quarterly billed amount for that location</td> </tr> <tr> <td>c)</td> <td>>= 98% but < 99%</td> <td>2% of monthly/quarterly billed amount for that location</td> </tr> <tr> <td>d)</td> <td>>= 96% but < 98%</td> <td>4% of monthly/quarterly billed amount for that location</td> </tr> <tr> <td>e)</td> <td>>= 90% but < 95%</td> <td>7% of monthly/quarterly billed amount for that location</td> </tr> <tr> <td>f)</td> <td>< 90%</td> <td>10% of monthly/quarterly billed amount for that location</td> </tr> </tbody> </table>	System Availability SLAs and Penalty per location			S.No	System availability value for month/quarter	Penalty	a)	>= 99.7%	Nil	b)	> 99% but < 99.7%	1% of monthly/quarterly billed amount for that location	c)	>= 98% but < 99%	2% of monthly/quarterly billed amount for that location	d)	>= 96% but < 98%	4% of monthly/quarterly billed amount for that location	e)	>= 90% but < 95%	7% of monthly/quarterly billed amount for that location	f)	< 90%	10% of monthly/quarterly billed amount for that location
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f)	< 90%	10% of monthly/quarterly billed amount for that location																							
Manpower																									
5	The service provider should provide sufficient manpower to ensure platform availability																								

6	Availability of the operator at all sites during the service sessions should be ensured Penalty on non-availability of the operator would be 1 % per hour of non-availability of monthly/quarterly billed amount for that location
Penalty capping	
7	The maximum penalty is capped at 15% of the monthly/quarterly billed amount for that location

5. Session logs

To enable central monitoring of the service delivery, the following parameters are proposed to be captured and pushed/ pulled to the external centralized monitoring application from the VC component and L2 switch:

Authentication	Session	Hardware	User details	Demography	Network
User ID (of service provider)	Start time	Mac ID	Name of Service provider	Gram Panchayat name	Avg. packet loss
Access ID/ Participants ID (end users)	End Time	Device ID		Block name	Max. packet loss
SSID/Security	Date of session			District name	IP address (IPv4)
	Daily Logins			State Name	IPv6
	Time Used				Avg Jitter
	Expire In				Max Jitter
	Expire Out				Bandwidth capacity estimate
	Download & Upload (in Mb/Gb per device)				Link Speed
				L3 & L2 Up	
					L3 & L2 Down

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