Terms of Reference
for
Nationwide Data Connectivity

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World Vision Bangladesh

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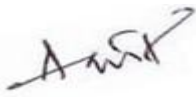**Email: ITSupport@wvi.org**
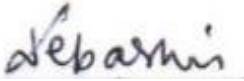
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     4.1 Technical proposal evaluation criteria

1 Executive Summary

World Vision is a Christian humanitarian organization dedicated to working with children, families, and their communities worldwide to reach their full potential by tackling the causes of poverty and injustice. Working in nearly 100 countries around the world, World Vision serves all people, regardless of religion, race, ethnicity, or gender.

World Vision Bangladesh (WVB) has extended its' operation to remote village level and supporting its operation through 59 remote offices and 3 Cluster offices (total number of 62 Zone- remote offices) and the National Office (NO) being located at Abedin Tower, Banani, Dhaka. All WVB ROs having router (Mikrotik) and switch (Cisco) are connected via 4 Mbps MPLS connection to the NO having Edge Routers (Cisco/Microtik), UTM (Meraki) There are 10 physical Dell servers, 2 Dell Storage Server, 3 Dell 42u Rack and located in the National Office Data Centre. There are various industry standard as well as proprietary applications – such as Cloud based (at WVI Malaysia Data Centre), Desktop /Web Interface on Virtual Environment on HyperV (at NO Data Centre) - are serving our ICT (Information and Communication Technology) users to perform their day-to-day job and to collect various data from the field level.

The IT department is seeking to engage a single vendor to provide and continue the existing Nationwide data connectivity to connect all remote/branch offices with National office by L3/L2 local loop secure connectivity and ensure internet for all offices within the centrally managed infrastructure. Any proposed system should be compatible with World Vision Bangladesh current IT infrastructure and implemented without harming continuity with a very minimum downtime by maintaining all World Vision Bangladesh IT policy procedure.

1.1 Vision

  i.   To deliver a secured robust and scalable data network in all WVB offices.
 ii.   To procure stable network services with 99% availability.
iii.   Continue World Vision Bangladesh's IT infrastructure up and running for productive business continuity.

1.2 Objectives

1.2.1 Business Objectives

  i.   To deliver continuity of present connectivity services up to 80% and above

 ii.   To connect all WVB offices under one umbrella for central management, monitoring and ensuring security

iii.   Provide new connection to any new location where WVB open a new office or shift any existing connection to any new location

iv.   Get service desk support on call dedicatedly .

1.2.2   Technology Objectives

I.   To get 24x7 support and service

II.   To get technical support for ensure smooth operation of data and internet connection.

III.   To ensure MTTR (Mean Time to Repair- average time required to repair a failed component or device) for externally involved equipment's/systems/ wire/wireless/ antenna/solutions including ISP to destination all 2nd/3rd parties etc <=2 Business Day.

IV.   To ensure 99% availability of network and solutions.

V.   To configure/reconfigure/implement any existing Network devices (Cisco/Nexas/Mikrotik/any) in data center or remote offices.

VI.   To integrate equipment's/system's/ solutions with SNMP server.

VII. To build up and a Microwave transmission network to support MPLS or any upcoming technology in the near future.

VIII. To provide minimum of 1Gbps dedicated full duplex internet redundant connection to National office to use by all remote offices including National Office.

IX.   To train WVB IT to operate any new tech or equipment's or configuration introduced or changed by the provider.

X.   Vendor shall provide full duplex redundant connection in national office both for WAN and INTERNET aggregation

1.3   Scopes

II.   Infrastructure design and security related to connectivity will be implemented by vendor/partners along with WVB IT team or as per WVB needs.

III.   QoS or any configuration will be done by vendor during/after installation of any network as per WVB need or request.

IV.   Vendor should ensure 100% Technology Objectives which have been described in this TOR.

V.   Establish Key Account Manager and dedicated single point of contact Service management to get quick troubleshooting and problem solving approach.

VI.   Establish a password protected secure web application to real time one click incident management and monthly reporting system for GOS/ Availability which also support mobile platform

VII.   Provide any new connection or shift existing connection as per contract timeframe and package when requested to anywhere in Bangladesh.

VIII. Maintain / troubleshoot all active connections as per contract SLA.

IX.   Supply and deploy any equipment/ solution / product as per list within the contract the short time

X.   Based on Ticket type mentioned as P1, P2, P3 & P4 as severity level vendor will engage and provide any kind of support to WVB.

XI. In case of any extension needed which is in the same building e.g fiber cable extension from floor to floor shall be done free of cost by the vendor.

XII. Vendor will perform vulnerability check time to time and mitigate those vulnerabilities by them self by providing a note what they done and why when it is on ISP layer and also do the same but by previous notice and take permission first when it will be at WVB layer directly.

1.4   Requirement Engineering

The selected vendor is expected to do following as a part of requirement engineering after receiving LOI (Letter of Intent):

i.   Vendor must ensure they perceive existing network and all infrastructure very clearly and can support/ troubleshoot from scratch from the beginning.

ii. Vendor must ensure they perceive TOR very clearly and present mode of maintenance and operations as well

iii. Vendor must provide LLD and HLD of any implementation if a) it's a new deployment, b) requested by WVB

1.5 Engineering Support

This includes surveys and other information gathering, as required, to document configuration, to determine specific operational capability requirements, development of installation plans, determine personnel/equipment requirements, and develop an EID, UAT, and Bill of Materials (BOM) for WVB review and approval. The selected vendor shall also:

- Be responsible for the installation, Integration, deployment and testing, day to day troubleshooting, manage services, security, provide new connections, shift existing connections, configure, mount/dismount of any data connectivity related equipment's and infrastructure as per this TOR.

- Provide comprehensive system documentation of system deployed including diagrams, labelling, schematics, configuration, SOPs, orientation, if WVB asks for each time supply or deployment during the contract period.

1.6 Implementation Support

This includes Design, installation, Configurations, test and acceptance, and transition support

The selected vendor shall:

- Ensure that the supplied equipment/system/software/platform is fully operational, new and performs properly and meet technical specification with evidence based documentation.

- Be responsible for warranty and support service for any equipment that is given to WVB in any package or as individual equipment as per its warranty.

- Provide consultancy, guidance to improve where necessary to make those devices/platform more functional or smooth if found any.

- Assist network high level and low level designs, services design, etc. if requested or applicable.

- World Vision Bangladesh can extend this contract or terminate the contract base on urgent issues of the organization at any time.

- Vendor have to be maintain a good working relationship and coordination in day to day work.

- Involve site operations and maintenance and vendor shall be responsible for maintaining 100% SLA for their service and WVB may impose penalty to vendor against any violation of SLA

1.7 Deliverables

Vendor will provide, unless otherwise directed, the following deliverables:

- Scalable and robust Network infrastructure of National Office 1Gbps full duplex redundant internet and remote location local loop L3/L2 connections as per requested Mbps for each location's terminated to National office.
- " Farther proof" the architecture of network so it can respond rapidly to changing business needs (e.g New services, latency, sensitive traffic, bandwidth intensive traffic, VOIP, video).
- Lower packet loss means faster response for many applications.
- Network survivability from its fully meshed nature.
- Onsite or remote support for any escalation of installation/change or troubleshoot anytime needed.
- Vendor has to ensure sufficient resources at hand to meet the following response and resolution time:

  - Critical Event – Any failure affecting data storage data access, data recovery. Expected Resolution Time: Within 6 hours of vendor notification.

  - Major Event – Redundancy Outage – Any failure resulting in loss of redundancy.
    Expected Resolution Time: Within 12 hours of vendor notification.

1.8   Severity Level

Vendor will provide centralized single contract info for 24 X 7 support with following SLA Matrix:

Priority	Designation	Impact	Response Initiation Time	Response Window	Service Restoration Time	GOS	In case of workaround for an issue resolution time no more than (Problem Management window)
P1*	Critical	Outages affecting traffic flow / Requests critical in nature	Immediate	24 x 7	6 Hours	97%	20 business days
P2*	Major	Loss of network (redundancy)	Immediate	8 x 7	12 Hours	95%	30 business days
P3	Minor		Within 8 business hours	8x7	15 Business days	90%	30 business days
P4	Information		Within 8 business hours	8x7	20 Business days	90%	60 Business days

Definition of Severity:

Critical (P1)
Critical events severely affect service, capacity/traffic and maintenance capabilities. Critical events require immediate corrective action, regardless of time of the day, or day of the week. Critical Failure is deemed to exist when e.g.:

- ✓ Traffic or system capacity is reduced.
- ✓ There is a failure of a major network element component or a loss of operational capability
- ✓ There is a significant reduction of revenue generating capability (more than daily average)
- ✓ Any site down will be counted as P1

Major (P2)
Urgent event causes such a conditions that seriously affect system operation, maintenance, and administration. Urgent events require immediate attention. Urgent Failure category is deemed to exist when e.g.:

- ✓ A non-service imparting network element component (e.g. network management port) fails

✓ Traffic capacity has no impact
✓ There is a loss of network redundancy
✓ Insufficient Bandwidth, latency, ping loss etc. will be counted as P2

Minor (P3)

Minor events are problems that are not viewed as critical or major. Minor events neither significantly impact the functioning of the system nor significantly affect services toned users. These events are trouble during system use. A minor event on the device may have impact on one or limited number of users. Minor failure is deemed to exist when

✓ There is an unexplained and minor increase in customer problem report.
✓ There is issue that requires correction but does not have direct or noticeable impact on the system operation by more than 10%.
✓ There is a reduction of performance or alarm system of greater than 10%

Informational (P4)

Informational events are used to note data for tracking and trending purposes or issues requiring long lead items or long lead requests.
✓ Establish new connection, shift existing connection to new office location, increase/decrease existing bandwidth

Note: WVB has the right to adjust a failed system priority/ urgency, based on business needs.

1.9 Stakeholders

Stakeholder	Interested in
National Director	Alignment with Organization vision and strategy
ICT Department	Providing planning, implementation and operation support services
All other departments	Benefited as general ICT resource users.
Remote Offices	Benefited as general ICT resource users.

1.10 Location & Charging

We are using all of the facilities in remote office, Coordination Office and National Office through Data Center. Therefore, all cost charge for the support service or any equipment Servicing or add a new device should be equally distributed to all active projects and AP offices and budget being confirmed to kept in every remote office by National office budget guideline and charge from National office. The list below is current remote location list which can be change by adding, removing or marge at any time as per the need of the organization.

1	Biral AP
2	Birampur AP
3	Birganj AP

4	Dhamoirhat AP
5	Dinajpur AP
6	DR Site Bogura
7	Fulbari AP
8	Gaibandha AP
9	Ghoraghat AP
10	Godagari AP
11	Kaharole AP
12	Kishoregonj AP
13	Mithapukur AP
14	Nilphamari AP
15	Paba AP
16	Pirganj AP
17	Plain Land Cluster Office (Bogura)
18	Rangpur AP
19	Tanore AP
20	Thakurgaon AP
21	Amtoli AP
22	Barishal AP
23	Bhandaria AP
24	Debhata AP
25	Dharampasha AP
26	Fulbaria AP
27	Islampur AP
28	Jamalpur APC(Jalchatra)
29	Jamalpur BIeNGS
30	Jhinaigati BIeNGS
31	Kachua AP
32	Kotalipara AP
33	Morelgonj AP
34	Muktagacha AP
35	Nandail AP
36	Nazirpur AP
37	Pirojpur AP
38	Purbadhala AP
39	Rampal AP
40	Sribordi AP
41	Wazirpur
42	NJP Dacope
43	NJP Khulna
44	NJP Koyra
45	NJP Shyamnagar
46	Cox's Bazar AP
47	Palong AP
48	Mahesh Khali AP
49	Bandarban Sadar AP

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50	Dhaka East Urban Development Center
51	Gowainghat AP
52	Hazaribaugh Urban Development Center
53	Karnaphuli Urban Development Center
54	Laksam AP
55	Mirpur Urban Development Center
56	Sunamganj AP
57	Sylhet AP
58	Tahirpur AP
59	Tongi Urban Development Center
60	Ukhya(Rajapalong) AP
61	Teknaf AP
62	Ramu AP

1.11 Quality Control

1.11.1 WVB Quality Assurance

WVB IT, specially NOC team or assigned person will monitor all network operation from central and will be the main point of contact for any technical issues. WVB NOC also prepare GOS reports monthly and impose penalties as require. New office survey/ New location request/ Shifting request or any service improvement request will be carried out from WVB-NOC and National Office SCM. After any work or service improvement vendor should submit related document/Screenshot and WVB NOC /related field IT will confirm with a reply.

2 Vendor Furnished Resources

i. Vendor/partner shall furnish / provide all hardware's that needed to be establish WAN connection include everything for WAN side (cables/connector/Radio devices/Antenna/Tower/Receivers/Media converters/ TJ box/Wall mount rack with 24 port loaded patch panel/Mikrotik Router (RB450 GIG Port supported), one EarthLink from Network rack and WVB will provide only LAN side equipment's. Mounting Rack and provide connectivity by terminating to Mikrotik and tested is the scope of New WAN connection. This shall be called WAN connection option 1 (Appendix-2)

ii. New connection where WVB will provide used Rack, Mikrotik router and all other inside equipment's will be named as WAN connection option 2 (Appendix-2) and vendor shall provide all and everything as like option 1 (Appendix-2) which are needed before the router but again mounting everything (rack/patch panel) and given switches shall be the scope of this work.

iii.   LAN work inside the new office will not be a scope of WAN connection but a separate work as per predefine price during the contract period. If WVB issued any separate PO, then vendor shall do the LAN work as per predefined guidelines found in Appendix 2.

iv.   During service contract period all equipment's before router will be vendor's responsibility. Vendor shall change/repair any WAN side antenna/tower, equipment's/converter with their own costing immediately to keep service up and running. WVB will not pay for this, vendor should maintain all supplies materials in good quality.

v.   Any equipment which have been provided by vendor should have ensure the warranty under P1

vi.   Vendor shall provision, test and perform UAT after completing any new connection establishments or configure change after fully commissioned and submitted. WVB Field IT or anyone from NOC will perform the test.

vii.   Vendor shall plan and take over current network smoothly during shifting the connection one location to another without any major interruption of current business continuity with a minimum down time.

viii.   If any established location's outage has been observed frequently (two/ three times in a month and also regular basis in next months), vendor shall provide redundant connection's or change NTTN to resolve the issue permanently by their own cost. In these improvement period, WVB can impose extra penalties like reduce bill amount for the location by counting the trouble days (service outage) by passing GOS with proper comments.

ix.   Vendor shall deploy extra level of security (IPSEC over GRE) for every site as long any service not interrupting reported by WVB.

x.   Vendor should have the capacity to increase or decrease BW of any remote or central location as per business needs for long or short time (10 to 15 days) under P3.

xi.   Vendors engineers shall report to WVB IT persons to explain in written about any configuration details with diagram or in details where needed.

xii.   Vendor shall have access limitedly to WAN and Internet aggregation routers and remote location routers also with WVB IT for quick troubleshoot and problem resolving but they can only work with prior permission or as per request of WVB.

2.1 Agreement Duration

i.   The procurement contract duration should be as per WVB SCM Policy with selected vendor (Initially three years and possibility of two more years' extension)

ii.   World Vision reserve all rights to terminate the contract with the vendor with a prior notice of one month

> iii. Yearly or half yearly negotiations or service related meeting can be arranged by any party

2.2 Return on Investment (ROI)

I. Users will get office network access 24/7 by maintaining all compliances and security measurements in all WV and WVB systems from anywhere in the county where our field offices exist connectivity is available
II. Users will get access 24/7 to all systems.
III. Manage System and Network security centrally.
IV. Single vendor service management to get connection and support service to increase productivity by minimizing down time.

2.3 Financial Plan

The budget needs to be reserved in the beginning of FY under the budget in budget guidelines for each location for local loop and Internet connection including new connection, shifting or any equipment change. However, the following amount of budget is required for the remote offices. As the internet passing through National office so National office use as shared internet which remain ideal after deliver to all remote office so no need to keep the budget

3 Risks

ICT WVB has identified some initial generic risks related to this service plan. The vendor is also encouraged to review this risk and consult and execute some mitigation of risks. Some typical risk identified for this service plan as follows.

Description	Likelihood	Impact	Mitigating Actions
Service failure – cost/time overrun or quality issues	High	High	Vendor's previous dealing with WVB and other NGO/ iNGOs should be verified
Organizational policy not adhered to	Medium	Low	After selection of vendor, they should be introduced with organizational policies
Vendor fails to provide services/ product as committed or change their business strategy or shutdown their business	High	High	Vendor's previous dealing with WVB and other NGO/ iNGOs should be verified.
Technical obsolesce of service product / services	Low	Medium	Vendor should provide necessary actions to mitigate this risk.

3.1 Assumptions

- There will be no changes in legislative, business strategy or policy during contract period that may go against the expected deliverables/Scoops.
- Prices of cloud platform/services will NOT increase during the course of the contract
- Selected vendor is expert enough to successfully complete the supplies
- World Vision Bangladesh can complete the total replacement of the old technology within the contract period and get the proper budgets accordingly

3.2 Constraints

- Budget/ scope and time allocated is fixed and does not allow for overrun.
- The services must be implemented after-hours to minimize the operational impact on the business.

Appendix-1: General Compliance

| Serial	Requirement	Compliant Yes / No	Comments
1.1	Vendor is preferred to be a Technical Support partner in the region for proposed Hardware and Software.	Yes	
1.2	Vendor must provide default support scheme of 24/7.	Yes	
1.3	Turn-key project implementation should be done by the factory trained engineers on the proposed technologies and WVB ICT staff will be only involved during UAT and after.	Yes	
1.4	At least three customer reference of similar implementation for the proposed work.	Yes	
1.6	Able to provide all listed documents.	Yes	
1.8	Vendor provide Typical Escalation Process flowchart for post implementation support.	Yes	
1.9	Vendor should have all certification and licensing to install build operate such kind of Network, Voice , Data services from Bangladesh Government or related Government Organizations (BTRC) and need to be submitted as response of this RFQ	Yes	

World Vision

Appendix-2: Package's and Service's Price Bid Sheet

SN	Item description	Quantity	Unit	Unit Price	Total Taka P*rice
1	New WAN Connection (Option 1) to any requested location in Bangladesh. [Which include: anything that needed before Network Switch like Fiber, TJ BOX, Cables, Antenna/Tower, Radio device set, MC, Network Rack with 24 ports loaded patch panel which may have capacity to mount three(3) 2960 X or Meraki MX 120 switches along with router RB 450 G and other adaptors, one Mikrotik RB 450 Router and mounting them to the wall as needed, one EarthLink from Rack to Ground, in case of radio a EarthLink connection from outdoor radio to ground for thunder protection.(LAN work is not included)	N/A	One Job as package		
2	New WAN connection (Option 2): WVB provide Router to all other equipment's that comes after the router including Rack basically reuse from any other location and Vendor will do all before the router like fiber or Radio systems before router and mount as well. Earthlink connection from Radio device out door and Rack should be included in the scope. (LAN work is not included)	N/A	One Job as package		
4	LAN Work Per Node: (Option 1) Included Cat-6 cable, Modular, Face plate, RJ45, Plastic pipe to cover the wire, Plastic Channel where necessary, fully mount and Tagged both end with proper leveling and tested.	N/A	Per Node		
5	LAN Work Per Node: (Option 2) Included Cat-6A cable, Modular, Face plate, RJ45 Plastic pipe to cover the wire, Plastic Channel where necessary,	N/A	Per Node		

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	fully mount and Tagged both end with proper leveling and tested.				
6	Mikrotik Router RB 450G	N/A	1		
7	Internet	N/A	1Gbps/ monthly		
8	Local Loop Data Connection from requested location to NO configured & commissioned.	N/A	Per Mbps/ monthly		

Note: In case of taking over existing infrastructure takeover needs any OTC, WVB will not provide any OTC for such type.

To keep service up and running all equipment's/wires/any system/adaptor/component that stands before the router will be the responsibility of vendor, they will change/maintain those when get expired/disorder by their own cost without cleaning to WVB throughout the contract period.

Appendix-3: WVB Network Diagram

HLD Data Connectivity Diagram WVB
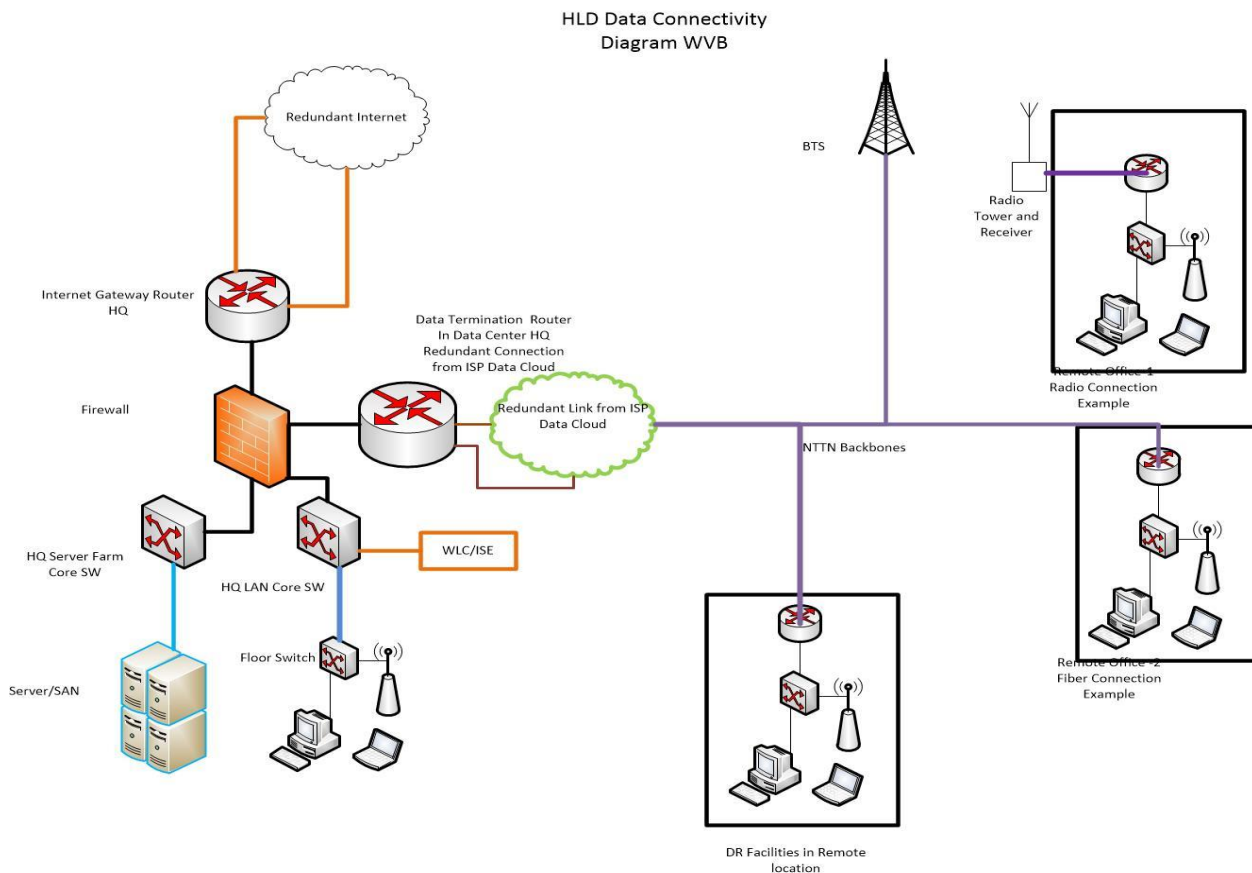
4.1 Technical proposal evaluation criteria

The following evaluation criteria and the weighted scale will use to evaluate technical proposal by an evaluation team.

Technical proposal evaluation criteria for the Firm/Organization/Contractor

Technical Evaluation for Nationwide Data Connectivity, Total score- 100, Pass marks- 70						
	Attain Prebid ToR understand meeting	Appendix-1 fullment mentioned in ToR	Support Service	Experience of work with INGO/ Corporate/ Company	Availability of related engineer	Establish NOC department
Marks distribution	25	20	25	5	20	5

4.2 Mode of Payment:

All payment shall be bank transfer using Straight to Bank (S2B) process and VAT/TAX shall be deducted as per govt. policy and according to the agreement signed in between the Firm/Organization/Contractor and WVB.

4.3 WVB Contact regarding Technical Specification:

Kallol Sarker |ICT Coordinator NOC Team Leader mobile: +88 01714016958 | kallolsarker@wvi.org

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