

## SECTION V: REQUIREMENTS

### SCHEDULE 3: REQUIREMENTS OF THE EMPLOYER

#### 3.1 Scope of Services

*(In accordance with Sub-Clause 3.1 of the General Conditions)*

##### 1. Background

The United Nations Office for Project Services' (UNOPS) mission is to serve people in need by expanding the ability of the United Nations, governments and other partners to manage projects, infrastructure and procurement in a sustainable and efficient manner.

Within these three core areas of expertise, UNOPS provides its partners with advisory, implementation and transactional services, with projects ranging from building schools, hospitals, administrative offices etc to procuring goods and services and training local personnel. UNOPS works closely with governments and communities to ensure increased economic, social and environmental sustainability for the projects we support, with a focus on developing national capacity.

Working in some of the world's most challenging environments, our vision is to advance sustainable implementation practices in development, humanitarian and peace building contexts, always satisfying or surpassing partner expectations.

We employ more than 6,000 personnel and on behalf of our partners create thousands more work opportunities in local communities. Through our headquarters in Copenhagen, Denmark and a network of offices, we oversee activities in more than 80 countries.

UNOPS' work in this region focuses on the construction and operation of high quality sustainable infrastructure and sustainable procurement, project management, timely provision of services, and the use of most relevant technologies. Such projects provide social and economic benefits to vulnerable populations across the country, and contribute to poverty eradication. This includes construction of schools, hospitals, water networks, urban sewerage and drainage facilities, harbors and anchorages, waste management facilities, climate change mitigation, as well as a range of "soft" support in Capacity Building, operations and maintenance of public assets, local governance, etc.

##### Project Background

This project, a collaboration between UNOPS and the Ministry Of Health (MOH), Sri Lanka, aims to improve the IT infrastructure in 30 hospitals, including 20 base and 10 district, general and teaching hospitals. Each hospital has allocated a dedicated server room, and UNOPS will procure IT equipment for installation separately. This TOR focuses on the procurement of services to conduct site assessments and develop detailed drawings, with specific attention to accurate cable routing for the IT infrastructure.

**List of Hospitals for Lot 01**

1. District General Hospital (DGH) Negombo
2. District General Hospital (DGH) Horana
3. De Soysa Maternity Hospital
4. National Hospital for Respiratory Diseases Welisara (NHRD)
5. Teaching Hospital Karapitiya
6. Colombo South Teaching Hospital Kalubowila
7. National Institute of Mental Health
8. Rheumatology and Rehabilitation Hospital Ragama (RRHR)
9. Base Hospital (BH) Homagama
10. Base Hospital (BH) Dambadeniya
11. Base Hospital (BH) Galgamuwa

**List of Hospitals for Lot 02**

1. District General Hospital (DGH) Embilipitiya
2. District General Hospital (DGH) Kegalle
3. Base Hospital (BH) Kebithigollewa
4. Base Hospital (BH) Kekirawa
5. Base Hospital (BH) Kahawaththa
6. Base Hospital (BH) Bibile
7. Base Hospital (BH) Akkaraipattu
8. Base Hospital (BH) Dehiyatakandiya
9. Base Hospital (BH) Hingurakgoda
10. Base Hospital (BH) Medawachchiya
11. Base Hospital (BH) Kalmunai South
12. Base Hospital (BH) Kanthale
13. Base Hospital (BH) Mahaoya
14. Base Hospital (BH) Sammanthurai
15. Base Hospital (BH) Kalawana
16. Base Hospital (BH) Kolonna
17. Base Hospital (BH) Siyabalanduwa
18. Base Hospital (BH) Welimada
19. Base Hospital (BH) Karawanella

## 2. Comprehensive and explicit scope of the Services:

The scope of the overall project includes the procurement and installation of IT equipment for 30 Government Hospitals. Given that no existing architectural or ELV drawings are available from the hospitals, a consultant is required to perform detailed site visits, assess the conditions and create comprehensive ELV drawings for IT infrastructure cabling, including necessary details for cable paths, installation of cable/cable trays etc details, details on laying cables through existing service lines/areas, data points, and access points. This includes consideration for specific design elements such as cable trays, conduits, or underground/overhead pathways, especially for hospitals with multiple buildings.

The main objective of this Terms of Reference (TOR) and Request for Proposal (RFP) is to engage a qualified service provider with capacity to dispatch adequate number of teams (as detailed in the technical requirements) to conduct site assessments and produce detailed ELV drawings, ensuring the Network cabling infrastructure is accurately designed and installed to meet the project's needs. The drawings should provide precise cable paths, connections, and layout requirements, including support structures like cable trays, where necessary.

### Detailed Scope of Services:

#### Task 1: Site Assessment and Stakeholder Consultation

- Conduct preliminary site assessments.
- Validate the existing network diagrams provided by MOH.
- Identify cable paths including mode of laying (ex: hang on wall, ceiling, underground etc)
- Identify exact locations of the data & access points
- Identify obstacles for cabling and recommend detailed solutions
- Identify details on power requirements for the networking equipment which to be facilitated by MOH
- Photo survey to cover the cable path, locations of data & access points, location of other accessories of the network
- Engage in stakeholder consultations to capture hospital-specific needs and address any concerns raised by hospital management, related to networking.

#### Task 2: Preliminary Design

- Develop the first set of cable path layouts that outline the proposed network routes for both Cat 6 and fiber optic cables within and between hospital buildings.
- The cable path layouts shall be supported with the photos covering each area concerned. A reference has to be established between the layout drawings and the photos, for convenient reading.
- identify locations for network equipment, including racks, switches, access points, and data points.
- Provide equipment schedules related to network cabling.
- Present the preliminary design package to stakeholders at each hospital for validation and refinement.

- Submit the preliminary design package to UNOPS and MOH for initial review.

### **Task 3: Detailed Design**

- Provide comprehensive Cable Route Drawings: Finalized diagrams for Cat 6 and fiber optic cable paths throughout each hospital. All key areas (e.g., wards, clinics, administration etc) requiring connectivity will be clearly indicated.
- Provide details for Equipment Placement and Support Systems: Designated locations for network equipment will be specified, including server racks and patch panels.
- Support systems such as cable trays, conduits, brackets, and poles for any overhead cables will be outlined in detail, ensuring secure installation and compliance with local building standards.
- Where underground cabling/overhead cabling is required, details of the cable trenches and mounting details of poles such as layout, architectural & structural etc. have to be provided.
- Any obstacles for cabling have to be identified for each hospital and detailed with identified solutions in the drawings & the design package.
- **Identify Access Points & Data Point Placement:** Wi-Fi access points and network data points will be placed as per the requirement of each hospital.
- Conduct a Photo Survey and provide Mounting Details: A photo survey of each hospital's critical areas will be conducted, detailing cable paths, equipment placement, and mounting points for racks, conduits, and cable trays. A standardized set of fixing details will be applied across all hospitals to ensure uniformity and ease of implementation.
- Prepare the Bill of Quantities (BoQ): The design consultant will prepare an accurate BoQ for each hospital, listing all required materials and equipment. (the supporting calculation details of all quantities shall be attached separately to the BoQ)
- In hospitals where layout plans are unavailable, the design consultant will outline all major building facilities and provide detailed information on cabling paths, data point locations, and other relevant data. The information in the layout drawings shall be sufficient to convey the requirements to contractors during the implementation phase.
- Health, Safety & Environmental protection measures.
- Any other details necessary to complete the network cabling successfully.

### Implementation Plan

Lot No	Province		Week 1					Week 2					Week 3					Week 4					Week 5				
			M	T	W	T	F	M	T	W	T	F	M	T	W	T	F	M	T	W	T	F	M	T	W	T	F
Lot - 01	WESTERN PROVINCE	Team 1	National Institute of Mental Health							District General Hospital (DGH) Negombo										Colombo South Teaching Hospital Kalubowila							
		Team 2					National Hospital for Respiratory							Base Hospital (BH) Homagama													
	NORTH WESTERN	Team 3	Base Hospital (BH) Galgamuwa					Base Hospital (BH) Dambadeniya								De Soysa Maternity Hospital											
	SOUTHERN PROVINCE	Team 4	Teaching Hospital Karapitiya							District General Hospital (DGH) Horana														Rheumatology and Rehabilitation			
Lot - 02	EASTERN PROVINCE	Team 5	Base Hospital (BH) Akkaraipattu							Base Hospital (BH) Kanthale								Base Hospital (BH) Mahaoya									
		Team 6					Base Hospital (BH) Sammanthurai							Base Hospital (BH) Kalmunai South								Base Hospital (BH) Dehiyatakandiy					
	NORTH CENTRAL PROVINCE	Team 7	Base Hospital (BH) Kebithigollewa					Base Hospital (BH) Hingurakgoda					Base Hospital (BH) Medawachchiy				Base Hospital (BH) Kekirawa										
	SABARAGAMUWA PROVINCE	Team 8	District General Hospital (DGH) Kegalle							Base Hospital (BH) Kahawaththa								Base Hospital (BH) Kolonna					Base Hospital (BH) Kalawana				
	UVA PROVINCE	Team 9	Base Hospital (BH) Welimada				District General Hospital (DGH) Embilipitiya					Base Hospital (BH) Bibila				Base Hospital (BH) Karawanella								Base Hospital (BH) Siyabalanduwa			

### 3. Schedule of Technical Requirements

**Table of technical requirements**

	Description	Details
1	Design Requirements	<p>The consultant is required to strictly follow the following guidelines, in addition to other requirements mentioned in the TOR.</p> <ul style="list-style-type: none"> <li>• The consultant is required to follow and adopt as necessary, Design Standards applicable in Sri Lanka, design sign-off and formal planning processes. Consultant shall provide a Design Brief that defines the key elements and approach to the design for approval.</li> <li>• The consultants must ensure that the design of cabling and associated infrastructure shall be designed to both disaster resilience and local climate conditions. The detailed calculations and design parameters shall be clearly stated in the design report.</li> <li>• The consultants shall prepare all drawings, specifications and designs using the metric system and embody the latest design criteria.</li> <li>• The technical specifications should be detailed enough to ensure the sustainability and quality of all materials. The consultant shall propose the methodology and quality control mechanisms to ensure the items used are equivalent to those used for preparing the cost estimates.</li> <li>• The designs shall be incorporating sustainable elements and green building requirements as much as practicable to meet the requirement. Consultant should pay special attention to the areas of Site Evaluation, Energy Efficiency and Renewable Energy, Waste Management, Material Selection in design and specifying requirements.</li> <li>• Consultant shall prepare a user guide to educate MOH about the sustainable design, systems, required maintenance, and use of environmentally friendly materials.</li> <li>• AutoCAD drawings should be standardized with international drafting standards including Standards scale, font, font sizes, line thickness etc. UNOPS AutoCAD standards guideline shall be followed in the drafting.</li> <li>• The consultant should not refer to shop drawings for contractors and the design shall include detailed drawings for all elements of the design including fittings and fixtures.</li> </ul>
2	Submission of Methodology	After three (3) days of signing the Contract, submit a detailed methodology and work program.
3	Site Visits	Successful Bidder to conduct site visits and verify existing drawings as indicated in the scope of services.
4	Design Packages	Successful Bidder to provide the design packages as detailed in the scope of services.
5	Draft Report on Findings	Successful Bidder to draft report on findings & recommendations for UNOPS approval.
6	Final Report Submission	After UNOPS acceptance, The successful Bidder to provide three signed hard copies and one soft copy of the approved report
7	Photo Records	The successful Bidder to provide all Photo records of all surveys and visits.
8	Provision of Tools and Equipment	The successful Bidder will provide all equipment and tools or any other required material to carry out the services satisfactorily.

### **Table of Delivery Requirements**

#	Deliverable Description	Duration
1	Detailed Methodology & Work Program	in 03 days after contract signature
2	Demonstrate the composition & design documentation (of a preliminary design package) for one hospital which will be the reference for the remaining hospitals in the Lot.	in 02 weeks after contract signature
3	Preliminary Design Package for half of the Hospitals in the lot.	in 03 weeks after the contract signature
4	Detailed Design Package (drawings, specifications, bill of quantities, design calculations, photos) for all the hospitals in the lot	in 07 weeks after the contract signature
5	Photo Survey	in 07 weeks after the contract signature
6	Final Design Package (After addressing review comments by UNOPS and MOH) for all the hospitals in the lot	in 09 weeks after the contract signature

**Delivery Time: Services should be completed within Nine (09) weeks after signing of Contract**

**Note: If the offeror is submitting for both lots, the total delivery time for both lots will remain at 09 weeks.**

**The consultant will also organize progress review meetings weekly (02 meetings, at the start & end of the week) with UNOPS and other ad hoc meetings as and when required.**

### **Expertise of the Firm**

- Duly Registered Design Consultant Firm with Certificate of Incorporation in Sri Lanka.
- Completion of at least 02 similar projects in Sri Lanka and/or in the South Asian region
- The consultant shall include suitable staffing arrangements. A competent Project Manager having relevant experience shall lead the team of experts from the consultant and liaise with UNOPS, other stakeholders and relevant local authorities.
- The Project Manager appointed by the consultant should be in house staff (Direct staff members) who will have overall responsibility of the deliverables and the process involved during the design. He will organize weekly discussions with UNOPS to update on the progress of the study and to decide on any issues arising during the design process.

#### **4. Health, safety, social and environmental (HSSE) requirements:**

*(In accordance with Sub-Clause 3.16 of the General Conditions)*

UNOPS endeavours to design and implement infrastructure projects in a manner that ensures that reasonable measures are taken to prevent personal injuries, illnesses and damage to property. The Consultant shall be responsible to ensure:

- How their design will affect the health and safety of those who will interact with the system throughout its construction and life, including all the temporary works needed during implementation.
- That health and safety risks arising from the design during implementation are eliminated or minimised.
- The consultant's representatives are obliged to follow all the Health & Safety rules & regulations acting in Sri Lanka as well as per UNOPS Health, Safety, Social and Environmental Management Policy (Annex 04) while conducting site visits.

The offeror shall demonstrate in the proposal how the health, safety, social and environmental (HSSE) requirements in relation to the Services will be met.

#### **5. Quality Management System (QMS):**

*(In accordance with Sub-Clause 3.17 of the General Conditions)*

The Consultant shall prepare and implement a QMS to ensure that the Services as stated in relevant schedules of this RFP are performed and completed in compliance with the requirements of the Contract. The QMS shall be specifically prepared for the Services and submitted to the Employer together with the Programme identified in Sub-Clause 4.3 [Programme].

A detailed description of the Consultant's proposed Quality Management System shall be included in the proposal. The proposal must detail the Offeror's proposed Quality Management System (QMS) including quality assurance and quality control mechanisms. The Consultant, if awarded, shall be required to implement a Quality Management system across the complete scope of the design activities and onsite inspection activities.



## 6. The list of all Deliverables and/or the Consultant's Documents related to the Services:

The consulting company shall deliver the following for UNOPS approval in both electronic and hard copy forms.

- Detailed Work Program and Methodology
- Preliminary Design Package including the Design Brief, Site Assessment Reports and Concept Drawings with cable path layouts and locations for network equipment
- Detailed Design Package including the Design calculations, Specifications, Bill of Quantities and detailed design drawings. These should cover layouts, cross sections, intersections details and installation details on walls, ceiling or underground cabling etc.
- Photo survey detailing the cable paths, equipment placement and mounting points for equipment.
- Final Design Package: Final version of the detailed design package after attending to all the review comments. Provide three hard copies and soft copies (AutoCAD format) of all finalized drawings.

After UNOPS approval of the submitted documents and drawings, the consulting office shall provide three signed hard copies and one soft copy of the approved documents.

## 7. Monitoring and Progress Controls

- Prior to commencing services, the consultant must submit an outline of the methodology, including sample templates and tools to be used for conducting the activities, along with a timeline for each task. The CVs of the proposed team by the consultant needs to be approved by UNOPS prior to commencing services.
- UNOPS team will monitor the entire process, reviewing all submissions. Should revisions be necessary, the consultant shall revise the documents based on feedback from the UNOPS Project Manager.
- During the assignment, the UNOPS Project Manager or delegated engineers will supervise the consultant's activities to ensure compliance with project requirements and timelines.
- The consulting company must maintain full coordination and cooperation with the UNOPS team throughout the duration of the assignment.
- The UNOPS Project Manager will serve as the primary point of contact for official communications.
- The consultant will prepare a draft package of drawings for review by the UNOPS team. If the UNOPS Project Manager determines that additional information is necessary, the consultant must revisit the site, revise the documents, and incorporate the feedback as required.
- The first draft of the drawings must be submitted to the UNOPS Project Manager for review. The final report and drawings will be submitted after approval of the draft documents, ensuring all revisions are incorporated.

- The final design package will be subjected to UNOPS design review and the consultant is required to update or correct the package following the comments, if any.

## 8. Information/Documents/Services to be provided by UNOPS

- List of Hospitals
- Access Permissions to hospitals.
- Participation of UNOPS and MoH representatives during the first site visit
- Review and approve draft and final designs/drawings/reports and any other document submitted by the consultant.
- Design Review for Design Packages.
- Initial network diagrams for cabling
- UNOPS design planning manual
- UNOPS AUTOCAD guidelines
- UNOPS Design Review Structure

## 9. Other details

The awarded offeror, designated as the design consultant, will be required to sign a non-disclosure agreement with UNOPS in the format provided under the documents section (Annex 05). Additionally, the selected consultant will be ineligible to participate in the implementation of the network cabling project as either a bidder or a subcontractor.

## 3.2 Consultant's Delegations (Not Applicable)

## 3.3 Payment Schedule

(Based on the following payment schedule, In accordance with Sub-Clause 7.1 of the General Conditions)

Payment will be completed upon submission and approval of the following deliverables /milestones

No.	Milestone	Amount
1	Preliminary Design Package (for all the hospitals in the lot)	10% of the Contract Sum
2	Detailed Design Package - Network cabling (for all the hospitals in the lot)	30% of the Contract Sum
3	Photo Survey (along with the design package for all the hospitals in the lot)	20% of the Contract Sum
4	Final Design Package (upon addressing UNOPS/MOH Review for all the hospitals in the lot).	40% of the Contract Sum

Payments due to the Consultant shall be made within forty-two (42) days upon receipt and acceptance by UNOPS of the Consultant's invoices and supporting documentation, in line with the payment milestones set out in the table above

### 3.4 Programme Requirements

*(Description of the requirements associated with the Programme, in accordance with Sub-Clause 4.3 of the General Conditions)*

The Offeror's Programme provided with the proposal shall be prepared in sufficient detail to enable UNOPS to adequately evaluate the planned execution, staging and allocation of resources for the services. The Programme should include a summary that defines the overall approach to manage and operate all of the required services as set out in this section. The Offeror must provide details on how the different activities shall be organized, controlled and delivered based on the quality management system. This shall include details of the duration of each activity prepared in a Gantt chart format including a critical path for the execution of the services which shall clearly show the float times available within the programme and the earliest start/ earliest finish and latest start/ latest finish times for each and every activity.

The selected offeror on award will be required to provide a detailed methodology and a programme of works to UNOPS within 03 days of contract signature.

### 3.5 Nominated Sub-consultants (Not Applicable)

### 3.6 Employer's Delegations (Not Applicable)

### 3.7 Key Personnel Requirements

*(Details of Key Personnel requirements in accordance with Sub-Clause 3.6 of the General Conditions)*

The consulting company must have the capacity at minimum to have 1 project team and dispatch 4 field teams for Lot 01 and have 1 project team and dispatch 5 field teams for Lot 02 concurrently

No	Team	Position description/title	Required qualification and Experience
1	Main Project Team	<b>Project Manager - 01 position per lot</b> Responsible for coordinating all the field teams, arranging necessary logistics, progress reporting and ensuring the overall completion of all tasks within the given time frame.	<ul style="list-style-type: none"> <li>• Bachelor's degree in Electronics /Electrical /Civil /Structural Engineering</li> <li>• Minimum of 3 years experience in project management.</li> <li>• Minimum of 7 years' experience in engineering</li> </ul>
2	Implementing Team	<b>Civil Engineer/Technical Officer - 01 position per team</b> Responsible for overseeing site assessments, and ensuring the successful completion of all tasks, including any required measurements, structural tests.	<ul style="list-style-type: none"> <li>• Bachelor's degree in Civil/Structural Engineering</li> <li>• Minimum of 2 years' experience in Civil/Structural engineering</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>• NDT (Civil/Structural) or equivalent with a minimum of 4 years of relevant experience.</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>• NCT (Civil/Structural) or equivalent with a minimum of 08 years of relevant experience.</li> </ul>

	<b>ELV Engineer /Designer /Technical Officer - 01 position per team</b>  Responsible for coordinating all ELV-related assessments and drawings, ensuring compliance with required standards	<ul style="list-style-type: none"> <li>Bachelor's degree in Electrical/ELV Engineering</li> <li>Minimum of 2 years' experience in Electrical/ELV Engineering</li> </ul> OR <ul style="list-style-type: none"> <li>NDT or equivalent with a minimum of 4 years of relevant experience.</li> </ul> OR <ul style="list-style-type: none"> <li>NCT (Electrical/ELV) or equivalent with a minimum of 05 years of relevant experience</li> </ul>
	<b>AutoCAD Draftsman - 01 position per team</b>  Responsible for producing all the AutoCAD drawings, ensuring compliance with required standards	<ul style="list-style-type: none"> <li>National diploma or Certificate in AutoCAD drafting</li> <li>Minimum of 3 years' experience in Electrical/ELV Engineering draftings</li> </ul>

The offeror shall complete and submit the completed Schedule 0.5 (Format for Resume of Proposed Key Personnel) together with copies of certificates for both academic and professional qualifications for each of the key personnel proposed in schedule 4.4

## 3.8 Equipment and Machinery Requirements ( Not specified)

## 3.9 Insurance Requirements

(Details in accordance with Sub-Clause 9.1 of the General Conditions)

Insurances	Additional details on scope of cover	Period	Limit of Liability
<b>Public Liability Insurance</b>		From the Contract Effective Date until Final Completion of the Services.	Minimum Limit of LKR 5,000,000
<b>Workers Compensation Insurance</b>		From the Contract Effective Date until Final Completion of the Services.	As required by Law or by industry body or trade association

The offeror shall demonstrate that the requirements for insurance will be met, either through demonstrating that the offeror's insurances comply with the requirements of the RFP by completing returnable schedule Section VI: Schedule 4.8 [Insurance Details and Insurances] and providing a copies of the existing policies declared in

Schedule 4.8 along with the submission, or by providing a confirmation letter (or draft policy) from an insurer stating that the required insurance policies will be provided to the offeror, if selected, as specified in the table above.