

Ministry of Labour

**SOCIAL SECURITY BOARD**



**Terms of Reference (TOR)**

**Appendix (E) - Description of the Deliverables**

**FOR THE DEVELOPMENT AND IMPLEMENTATION OF**

**Software Development Deliverables**

**For the**

**SOCIAL SECURITY BOARD INFORMATION SYSTEM (SSB-IS)**

**Nay Pyi Taw, Myanmar**

**April, 2024**

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## 0 Introduction

### 0.1 Context

This document describes the expected deliverables that must be produced by the supplier and approved by SSB.

The supplier must indicate **the cost for each deliverable in the pricing section** of this request for proposals. The supplier should consider the **cost and timeline of getting approval of the deliverable** and its internal cost for project management.

### 0.2 General delivery procedure

All deliverables will have to be identified with a standard approval form that indicates clearly: the **name** of the deliverable, the **name of the supplier's team leader** responsible for the deliverable, the **expected delivery date**, the **latest finish date** of the planned deliverable, the **actual date** of delivery, the **version number** of the deliverable, and the **SSB person responsible** for its approval. (latest finish date: The latest possible date a scheduled activity can be completed without delaying the rest of the project).

All deliverables consisting of documents must be delivered in **an editable electronic format** such as MS-Word, MS-Excel, MS-PowerPoint, Visio or MS-Project compatible with Windows 10.

All documents produced using other specific documentation tools will also be accepted, but the supplier must provide the proper software licensing rights to SSB for a period of **at least 6 years**.

The sections that follow describe each expected deliverable.

As explained in the TOR, most of the system component deliverables need design documentation that must be approved before any deployment. The design documentation is part of the deliverable.

All SSB staff **training must be done on site** in NayPyiTaw .

## 1 Hospital Management System

The supplier must develop a Web process that are used in Workers' Hospitals. All functions of the Workers' Hospitals must be implemented. This System must be able to connect with the SSB IS Software that was developed in 2023-2024 financial year. The SSB Hospital Management System will be implemented according to the following procedures:

- Patient admission, discharge and transfer Management (ADT)
- Scheduling patient appointments with doctors and specialists
- The process of digitizing patient medical records, diagnoses, medications, lab results, and treatment plans.
- Surgical room, laboratory and radiology management process
- Human resource management process
- User roles and User management process
- Hospital food service process
- Token display & queue management system in outpatient department
- Pharmacy management process
- Daily, Weekly, Monthly and Yearly Reporting

A software with operations such as admission, discharge and transfer to another hospital must be provided to be connected and used by the (3) workers' hospitals.

All hospitals will be connected and share the same database, using a unique patient ID. This patient ID is directly linked to workers and beneficiaries using the social security insurance number.

This means that the Organizational Master Patient Index needs to be used and linked to all hospitals. The format for this may depend on the ADT to be submitted by the supplier. All SSB hospital resources and all medical clinic resources need to know all the circumstances surrounding the patient's hospitalization.

Hospitals will also use the same web function designed for clinics to provide healthcare for workers, transfer to other hospitals, compile medical records, etc. Therefore, the provider must design a system structure to connect the ADT system and the medical record system.

All health records in social security clinics must be accessible from all SSB hospitals and clinics. Patients' health records must be accessible to all health service providers affiliated with the Social Security Board.

The hospital management system must conform to the HL7 standard. The solution must be able to connect with the SSB Information System implemented in the first phase and the second phase. There must be an API that can be connected to the .Net application that will be designed for use in the clinic.

Following are the main sub-deliverables to be produced:

- Hospital Process design
- Hospital Software implementation and configuration setting in the Data center
- Hospital Management Software deployment and Integration with SSB Information System (Core Software)
- Testing
- Acceptance test in the development environment
- Training
- Trial period in one hospital
- Hospital Software rollout in all hospitals
- Reporting and BI reporting(weekly, monthly, yearly and other outstanding report)

## **2 Human Resource Management System and Data Entry and Cleaning Service for Database Conversion- Registration/ Contribution**

The supplier must develop a Web process that will be used in all SSB Offices, Workers' Hospitals and SSB Clinics This System must be able to connect with the Financial Accounting System that was developed in 2023-2024 financial year. The System must be included the following processes:

- Organization Structure
- Staff Information Registration using Unique staff Identification number
- Recruitment and Selection Process

- Promotion, Relocation and Resignation Process
- Retirement Process
- Honour and Awarding Process
- Training and Development
- Payroll Process
- Leave Management Process
- Compensation and Benefits Process
- Attendance Management System (finger print device by SSB)
- Overtime Management Process
- Performance Evaluation Management Process
- Employee Relations Process
- Daily, Weekly, Monthly ,Yearly and other Outstanding Report System

Following are the main sub-deliverables to be produced:

- Process design
- HR Software implementation and configuration setting in the Data center
- HR Management Software deployment and Integration with SSB Information System (Core Software)
- Testing
- Acceptance test in the development environment
- Training
- Trial period in SSB Head Office
- Hospital Software rollout in all SSB Facilities

The supplier must **provide and organise the work of human resources** to upload information on employer and employee/worker registrations and worker contributions from Data Entry and Cleaning database and old Excel spreadsheets into the new database. There are also contributions on paper documents. Some simple data entry functions should be developed to help upload the information from the two formats (Excel and paper-based) into the new database. The SSB IT team will share (with the supplier) their preliminary work. A manual

process should also be designed to support this data entry task. An intermediate database may have to be used; the best strategy is up to the supplier to decide.

Following are the main sub-deliverables to be produced:

- Data entry and cleaning function design
- Data entry and cleaning function development
- Data entry and cleaning function deployment
- Data entry and cleaning service for Hard copy 350,000 (form#2 employee registration) and contribution Excel sheets (From 2/2024 To 1/2025)
- Provide Data Entry Operators for data entry process

### **3 Inventory Control Management System**

The supplier must develop a Web process that are used in all SSB Offices, Worker Hospitals and SSB Clinics. This System must be able to connect with the SSB IS Software that was developed in 2023-2024 financial year. SSB building and inventory maintenance management process include:

- Recording land, building, vehicles, equipment, furniture, stationery and software
- Depreciation process
- Resource allocation process
- Alert system for license renewals and minimum stock balances process
- Recording the resources in all branches, hospitals and clinics of SSB and auditing from the headquarters level
- Tracking process for the location of distributed and remaining materials
- Write-off process
- Maintenance scheduling process
- Recording the usage of vehicles, office equipment (Furnitures, servers, printers, copiers, computers, etc...)
- Inspections ratings evaluation process per building per component
- Maintenance work order management process
- Maintenance supplier Management process
- Real time auditing process from the SSB HQ

- Daily, weekly, monthly and annual and other outstanding reports.

Following are the main sub-deliverables to be produced:

- Process design
- Software installation in the data centre
- Software deployment and Integration with SSB Information System (Core Software)
- Testing
- Acceptance test in the development environment
- Training
- Trial period in three Division
- Inventory Software rollout in all SSB Facilities

#### **4 One-Year Guarantee, Maintenance and Operation Agreement**

The supplier must support a one-year guarantee and maintenance period for all the functions and hardware once all of them have been delivered.

The supplier must support a one-year guarantee, maintenance and operation period as soon as all the agreed-upon functions go into production.

Service level agreement (SLA) for guarantee and maintenance:

- All components of the SSB-IS should be available 24 hours/7 days per week.
- Guarantee calls and maintenance calls for critical components should be answered from 8:00 AM to 10:00 PM 7 days per week.
- Guarantee and maintenance services for other components will have to be supported from 9:00 AM to 18:00 PM 5 days per week.

Critical components:

- SSB-IS security (cyber-attack monitoring)
- SSB-IS and Internet connection
- SSB-IS database status (no fatal error monitoring)
- SSM-IS system and database backup operation.

Production service level agreement (SLA):

- The SSB-IS is to be operated on a 24 hour/7 day per week schedule.



- The supplier must support operations from 8:00 am to 10:00 PM. It must be on-call for the remaining time of the day.

To support the guarantee, maintenance and operation agreement, SSB expects the supplier to operate a Helpdesk centre to receive and handle support calls from SSB users concerning issues and problems with system usage.

#### Guarantee:

Guarantee means the remediation of any bugs or problems that are causing data accuracy or corruption problems, security issue problems, reporting problems, performance problems and usability problems. Bug correction includes testing approval and deployment steps.

#### Maintenance:

Maintenance means improvement of the current system according to an agreed-upon plan with SSB. All improvement request should be analysed and prioritized with the Steering Committee or SSB Board of Directors.

Maintenance will focus on adding some data concepts that may have been forgotten, introducing new social security schemes, improving reports, improving the BI database, improving or modifying the eMoney scheme and linking with bank services, and improving data import and export functions.

It will also include Microsoft planned upgrade implementation and other OS planned upgrades required. It also includes ensuring that the database behaves according to Microsoft rules (for example, manage warning messages).

The maintenance process includes documentation, testing, approval and deployment steps.

#### Operation agreement:

Operation agreement means actively supporting SSB IS staff by working with them to perform the following tasks:

- Operate a Helpdesk to receive calls from SSB users and IT staff. Calls will concern SSB-IS system access problems, security issues, reporting problems, BI solution problems, transaction problems.
- Maintain essential documentation on maintenance steps.

- Monitor system performance (latency time for online transactions, execution time for database updates).
- Security surveillance for malware and outside threats, in the database and in the network Interface.
- Manage user enrolment (newly hired personnel, personnel who leave) in the system; provide new system access ID to new SSB personnel.
- Provide support to main users.
- Execute systematic system backup and rollback of all SSB-IS components: code, database, BI database.
- The backup recovery exercise should be run at least once per year.
- Provide support to ensure proper correct batch processing such as BI database uploading.
- Provide support to produce extraction queries for export purposes. Support reporting using Power BI. Provide support for the database administration task to keep the entire system running smoothly.

Minimal supplier resource requirement:

For this guarantee, maintenance and operation agreement to work, **SSB requests** that the supplier maintain in the SSB's head office facilities at **least 7 (seven) IT specialists and at least 2 (two) helpdesk resources, making a total of 9 (nine) resources:**

- One team leader and system analyst.
  - The team leader will be responsible for managing the workload and making sure that all bugs are corrected, maintenance demands are prioritized and deployed, and that system operations are executed properly.
- One database administrator.
- One security and software specialist.
- Three software developers knowledgeable of all SSB-IS functions.
- One BI and report specialist.
- Two helpdesk resources.

The MINIMUM number of resources to be maintained in SSB headquarter is 9 resources.

**Remark: Each supplier's IT resource will have to be paired with at least one SSB IT staff member. The SSB-IT staff member will learn from and work with the supplier's personnel.**

On-call specialist

On top of the minimal supplier's guarantee, maintenance and operation team, the supplier must provide ad hoc IT specialists to support its team when required. Those IT specialists do not have to be in SSB's offices, but they must be easily available to support the supplier's team when required.

The supplier's IT specialists must have been part of the supplier's team for the development of the SSB-IS. They must be knowledgeable of the system.

**5 Automatic Feed Scanner**

Here is the detailed specification for the automatic feed scanner

<b>Automatic document feed duplex scanner</b>	
<b>Characteristics</b>	<b>Specifications</b>
Scanner	Duplex scanner (double-sided scan)
Image sensor	Colour CIS (Contact Image Sensor) x 2 (front/back)
Light source	3 Colour LED (Red/Green/Blue)
Optical resolution	600 x 600 dots per inch (dpi)
Scanning Speed (A4 portrait)	
Auto mode	Simplex or Duplex, 25 pages per minute (ppm)
Normal mode	Colour & Grayscale 150 dpi, Monochrome 300 dpi, Simplex/Duplex, 25 ppm
Better mode	Colour & Grayscale 200 dpi, Monochrome 400 dpi, Simplex/Duplex, 25 ppm
Best mode	Colour & Grayscale 300 dpi, Monochrome 600 dpi, Simplex/Duplex, 25 ppm
Excellent mode (3)	Colour & Grayscale 600 dpi, Monochrome 1200 dpi, Simplex/Duplex, 7 ppm

Supported Document Size	A4, A5, A6, B5, B6, Business Card, Post Card, Letter, Legal and Custom Size. Max: 216 mm X 360 mm (8.5 in. X 14.17 in.), Min: 50.8 mm X 50.8 mm (2 in. X 2 in.). Automatically recognizes document size.
Long paper scanning (3)(4)	863mm (34 in.)
Multi-feed detection	Must have a multi-feed detection sensor
Paper weight (thickness)	40 g/m2 to 209 g/m2 (11 lb. to 56 lb.)
Interface	USB 3.0 (USB 2.0/1.1 compatible)
Operating temperature	5 °C to 35 °C (41 °F to 95 °F)
Environment relative humidity	20% to 80% (non-condensing)
Driver and software	Windows 10 compatible
Power requirement	AC adapter AC 100 V to 240 V, 50/60 Hz
UPS	One-hour battery capacity + AC Adapter AC 100 V to 240 V, 50/60 Hz

## 6 Overhead Scanner

Here is the detailed specification for the overhead scanner

Overhead Scanner	
Characteristics	Specifications
Scanner type	Overhead system, simplex scanning
Scanning modes	Colour, Grayscale, Monochrome, Automatic (colour, grayscale, monochrome detection)
Distortion correction	Automatically correct distortion caused by curve of an opened book or magazine.
Image sensor	Lens reduction optics/colour CCD x 1
Light source	(White LED + lens illumination) x 2
Optical resolution	Horizontal scanning: 285 to 218 dpi, Vertical scanning: 283 to 152 dpi
Scanning speed	

Auto mode (3)	"Better mode" or "Best mode": 3 seconds/page
Normal mode	Colour/Grayscale: 150 dpi, Monochrome: 300 dpi 3 seconds/page
Better mode	Colour/Grayscale: 200 dpi, Monochrome: 400 dpi 3 seconds/page
Best mode	Colour/Grayscale: 300 dpi, Monochrome: 600 dpi 3 seconds/page
Excellent mode	Colour/Grayscale: 600 dpi, Monochrome: 1,200 dpi 3 seconds/page
Document Size	Automatically recognizes document size, A3 (landscape), A4 (landscape), A5 (landscape) A6 (landscape), B4 (landscape), B5 (landscape), B6 (landscape), Post (landscape), Letter, Legal (landscape) and Customized size (Max: 432 x 300 mm (17.0 x 11.8 in.), Min: 25.4 x 25.4mm (1 x 1 in.))
Interface	USB 2.0/USB 1.1 (connector B Type)
Image processing functions	Deskew by text on document, Auto paper size detection, Auto image rotation, Auto colour detection, Book image correction (8) Multiple document detection
Magnification in vertical scanning (length)	± 1.5%
Power requirement	AC 100 V to 240 V, 50 Hz/60 Hz
Operating environment	Temperature: 5 °C to 35 °C (41 °F to 95 °F) Relative humidity: 20 to 80% (Non-condensing)
Driver and software	Windows 10 compatible
Standards conformity	European Union General Product Safety Directive 2001/95/EU OR Underwriters Laboratories (UL)
UPS	One-hour battery capacity + AC Adapter AC 100 V to 240 V, 50/60 Hz

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