Appendix 1 -Service Specification

1. Project Background and Objective

1.1 The Visiting Medical Practitioner Service (VMPS) is launched by the Social Welfare Department (SWD) for providing medical consultations and advices to residents of provate and self-financing Residential Care Homes(RCHs), including both Residential Care Homes for the Elderly (RCHEs) and Residential Care Homes for Persons with Disability (RCHDs). BOKSS is commissioned by SWD as an administrator and service coordinator for service delivery to provide the necessary support for participating Doctors in Hong Kong East Cluster (Eastern and Wanchai) and New Territories East Cluster (Shatin, Tai Po and North).

1.2 This Request for Proposal aims at seeking Service Provider to develop a VMPS Operation Management System. The system is expected to provide a user-friendly interface, efficient work-flow, and accurate data-processing, reliable and high security level to protect data. The system needs to serve at least 500 users and allow at least 200 users access in the system at the same time.

2. General Requirement

2.1 The system should in web platform and should be hosted by Baptist Oi Kwan Social Service. The requirements and configurations of server hosting should be stated in the tender.

2.2 Supplier is responsible for the data migration, data initial setup and installation (if any).

2.3 Supplier should provide a dedicated project manager to follow up the project.

2.4 Supplier may be invited to attend 1 to 3 times of presentation and tender board interview in the tendering period.

3. Scope of Work

3.1 The Service Provider shall provide the VMPS Operation Management System that can meet all the functional and non-functional requirements specified in the following sections.

3.2 The Service Provider shall design and implement the system. The data of the system should migrated by the Service Provider.

3.3 The scope of the Project covers the detail design, development, installation, configuration, integration, testing, migration, training, nursing and all other necessary activities to ensure the successful implementation and on-going operation of the system.

3.4 The appointed Service Provider shall deliver the system and complete the migration and installation of hardware in this requirement document with target system go-live date on/before end of March 2020.

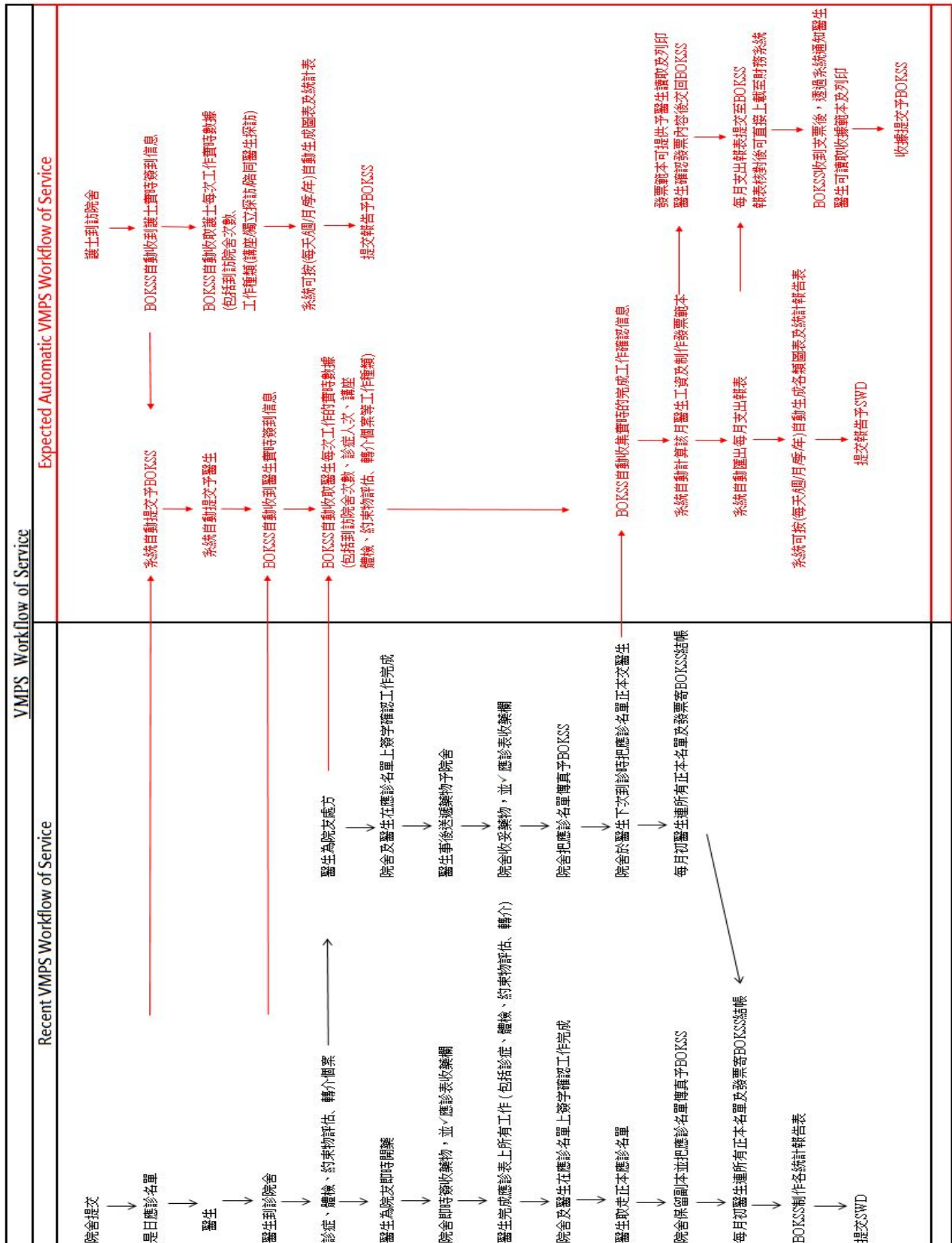## 4. Project Deliverables, Milestones & Implementation Schedule

4.1 The Service Provider is required to commence the Project in accordance with the Service Specification on the Contract Commencement Date.

4.2 The Service Provider shall complete all requirements in this Service Specification on or in accordance with the schedule stated in clause 4.5 below.

4.3 All requirements in this Service Specification shall be completed to the satisfaction of the BOKSS.

4.4 The Service Provider shall commence the system nursing after the satisfactory acceptance of all services and deliverables by the BOKSS in writing. The system-nursing period shall last for 3 months.

4.5 The Service Provider is required to propose an implementation schedule with the planned completion date for each task. Major Tasks and completion date are listed as follows:

Major Tasks	Required Completion Date
Project Awarded	Early of September 2019
Sign Non-Disclosure Agreement	After the project awarded
Project Initialization	End of September 2019
System Analysis and Design	To be recommended by the Service Provider (4-6 weeks)
System Development	To be recommended by the Service Provider (3-4 months)
System Integration Test	To be recommended by the Service Provider (2-4 weeks)
Data Conversion & System Installation	To be recommended by the Service Provider (2-4 weeks)
User Acceptance Test	To be recommended by the Service Provide (2-4 weeks)
Production Rollout	End of March 2020
System Documentation (System Installation Manual and Application System Administration and Operation Manual)**	1 month after System Production Rollout
User Training	To be recommended by the Service Provider (4 weeks)
System Nursing	3 months after System Production Rollout

Note:

**The System Installation Manual and System Administration and Operation Manual shall show the procedures for system installation and Application System administration and operation process, where screen dump, if applicable, shall be attached to illustrate the system response and user input such that the BOKSS's supporting staff can easily follow. The Language of all manuals shall in Chinese Traditional.

5 Workflow of Service

VMPS Workflow of Service

Expected Automatic VMPS Workflow of Service

- 護士到訪院舍
- BOKSS自動收取護士實土到訪信息
- BOKSS自動收取護士每次工作實時數據（包括到訪院舍次數、工作種類（護理等）及獨立探訪陪同醫生探訪）
- 系統可按（每天/週/月/季/年）自動生成圖表及統計表
- 提交報告予BOKSS

- 系統自動提交予BOKSS
- 系統自動提交予醫生
- BOKSS自動收取醫生實時到訪信息
- BOKSS自動收取醫生每次工作的實時數據（包括到訪院舍次數、診症人次、護理、體檢、約束物評估、轉介個案等工作種類）
- BOKSS自動收集實時的完成工作確認信息
- 系統自動計算該月醫生工資及制作發票範本
- 系統自動匯出每月支出對賬表
- 系統可按（每天/週/月/季/年）自動生成各類名稱及統計報告表
- 提交報告予SWD

- 發票範本可提供予醫生讀取及列印
- 醫生確認發票內容後傳送交回BOKSS
- 每月支出對賬表經核對後可直接上載至財務系統
- BOKSS收到支票後，透過系統通知醫生
- 醫生可讀取收據範本及列印
- 收據提交予BOKSS

Recent VMPS Workflow of Service

- 院舍提交
- 是日應診名單
- 醫生
- 醫生到訪診舍
- 診症、體檢、約束物評估、轉介個案
- 醫生為院舍即時開藥
- 院舍即時發放藥物，並√應診表收藥欄
- 醫生完成應診表上所有工作（包括診症、體檢、約束物評估、轉介）
- 醫生及院舍在應診名單上簽字確認工作完成
- 醫生於下次到診時把應診名單正本交院舍
- 院舍保留副本並把應診名單真予BOKSS
- 每月初醫生連所有正本名單及發票寄BOKSS結帳
- BOKSS制作名結計報表
- 提交予SWD

6 System Major Functions

6.1 Basic requirement

6.1.1   A web-based application system with encrypted connection and responsive web design.

6.1.2   The web site will provide an optimal viewing and interaction experience to the audience.

6.1.3   One display language (Traditional Chinese)

6.1.4   Different level of user authority to access, create and edit restricted data.

6.1.5   Tracking log of the activity of the user in the system

6.1.6   For all the products, solutions and services provided, the service provider has to ensure the installation; setup, configuration and fine tuning are fit to BOKSS' environment.

6.1.7   Auto data transfer and manual data entry

6.1.8   System Audit Log

6.1.9   Data backup every 7 days.

6.1.10 Personal Data Handling: Take appropriate and reasonable measures – in terms of both technology and management – to properly protect the personal data provided and prevent leakage, loss or destruction of any personal data.

6.2 Mobile App System

6.2.1   Support Android v7 or above and iOS 11 or above.

6.2.2   Data can be stored locally while network is not available to access Internet to upload the data to the server.

6.2.3   Data will be uploaded to the server automatically once Internet access is available.

6.2.4   Push notification to alert users on scheduled visits, reports received, etc.

6.2.5   The Apps will be available for download on both Play Shop (Android) and App Store (iOS).

6.3 RCHs Management Module

6.3.1   Management of joining RCHs information and service record

6.3.2   Management of RCHs not joining or cease operation

6.3.3   Service matching between RCHs and Doctors

6.3.4   Service Referral Management: RCHs staff make referrals by fill in the number of referred visits, medical examinations, restrain assessment to be provided by their responsible doctors and set up a visiting schedule between RCHs and Doctors

6.3.5   Record the number of completed visits, medical examinations, restrain assessment, drugs delivery and talks of each RCHs provide by their responsible doctors

6.3.6 Read, create, amend and verify the visiting doctor's service information by RCHs staff such as attendance, consultation, medical examination, restrain assessment, drugs delivery and talks)

6.3.7 Report of communicable diseases and special cases in RCHEs

6.3.8 Information searching, filtering and export to Excel or PDF format according to districts and nature of RCHs

6.3.9 The details of the module functions will be discussed and confirmed by the BOKSS and Service Provider after the tender confirmation.

6.4 Doctor Attendance and Work Management Module

6.4.1 Management of joining Doctor's information, included the practicing certificate, certificate of insurance and business registration (BR) and service record.

6.4.2 Remind the doctor and staff on or before one month of the expiry date of doctor's practicing certificate, certificate of insurance and business registration (BR) for the renewal of their licenses and insurance.

6.4.3 Job assignment for the doctor: different work tasks could be assigned to the doctor.

6.4.4 Attendance management feature: attendance date/time, late or absent, and other data shall be input and edit in the system. Monthly service payment calculation will be linked to the attendance record.

6.4.5 Taking attendance to cross check attendance record and send the report automatically via email.

6.4.6 Alert to the doctor and staff if the actual visit is not on default schedule.

6.4.7 Record the completion status of the service referral from RCHs in each visit.

6.4.8 Assign relieving doctor and provide information to BOKSS's staff.

6.4.9 Information searching, filtering and export to Excel or PDF format according to districts and nature of RCHs.

6.4.10 The details of the module functions will be discussed and confirmed by the BOKSS and Service Provider after the tender confirmation.

6.5 Nurse Attendance and Work Management Module

6.5.1 Work management feature: set up a visiting schedule, home visit date/time, record late or absent, nature of visit (individual visit or visit with the doctor) and other data shall be input and edit in the system.

6.5.2 A webpage/mobile app for taking attendance to cross check attendance record and send the report automatically via email.

6.5.3 Alert to the nurse and staff if the actual visit is not on default schedule.

6.5.4 Submission of report after visit

6.5.5 Actual number of talks and home visits by each nurse in the day/week/ month/quarter/year.

6.5.6 Reply and record of communicable diseases and special cases reported by RCHEs

6.5.7   Information searching, filtering and export to Excel or PDF format according to districts and nature of RCHs.

6.5.8   The details of the module functions will be discussed and confirmed by the BOKSS and Service Provider after the tender confirmation.

6.6 Visit Management Module

6.6.1   Visit Management feature: Record the number of visits, date and time, responsible doctor, etc.

6.6.2   Target number of visits to each RCHs in the day/week/month/quarter/year

6.6.3   Actual number of visits to each RCHs in the day/week/month/quarter/year

6.6.4   Target number of RCHs visits by each doctor in the day/week/ month/quarter/year

6.6.5   Actual number of RCHs visits by each doctor in the day/week/month/quarter/year

6.6.6   Actual number of medical consultation of each RCHs visits in the day/week/ month/quarter/year

6.6.7   Alertness to VMPS staff and doctors if the default schedule is not fulfilled

6.6.8   Information searching, filtering and export to Excel or PDF format according to districts and nature of RCHs

6.6.9   The details of the module functions will be discussed and confirmed by the BOKSS and Service Provider after the tender confirmation.

6.7 Medical Examination Management Module

6.7.1   Medical examination feature: Record the number of medical examination, date and time, responsible doctor, etc.

6.7.2   Number of referred medical examinations from each RCHs in the day / week / month / quarter / year

6.7.3   Actual Number of medical examinations completed by doctors in the day / week / month / quarter / year

6.7.4   Alertness to VMPS staff and doctors if the default schedule is not fulfilled

6.7.5   Information searching, filtering and export to Excel or PDF format according to districts and nature of RCHs

6.7.6   The details of the module functions will be discussed and confirmed by the BOKSS and Service Provider after the tender confirmation.

6.8 Restraint Assessment Management Module

6.8.1   Restraint Assessment feature: Record the number of restraint assessment, date and time, responsible doctor, etc.

6.8.2   Number of referred restraint assessment from each RCHs in the day / week / month / quarter / year

6.8.3   Actual Number of restraint assessment completed by doctors in the day / week / month / quarter / year

6.8.4   Alertness to VMPS staff and doctors if the default schedule is not fulfilled

6.8.5   Information searching, filtering and export to Excel or PDF format according to districts and nature of RCHs

6.8.6   The details of the module functions will be discussed and confirmed by the BOKSS and Service Provider after the tender confirmation.

6.9   Referral Case Management Module

6.9.1   Record the number of referral case from each RCHs, reasons for referral, date and time, responsible doctor and the destination of referral (CGAT/A&E/PGT/MOSTE) etc.

6.9.2   Actual Number of referral case by doctor of each RCHs in the day / week / month / quarter / year

6.9.3   Alertness to VMPS staff and doctors if the default schedule is not fulfilled

6.9.4   Information searching, filtering and export to Excel or PDF format according to districts and nature of RCHs

6.9.5   The details of the module functions will be discussed and confirmed by the BOKSS and Service Provider after the tender confirmation.

6.10   Talk Management Module

6.10.1   Talk Management feature: Record of date and time, topic, name of the doctor, attendance of the talk (the staff of RCHs and the resident of RCHs), etc.

6.10.2   Target Number of RCHs received talk service in the day/month/quarter/year

6.10.3   Actual Number of RCHs received talk service in the day/month/quarter/year

6.10.4   Alertness for staff and doctors if the default schedule is not fulfilled

6.10.5   Talks information offered by each doctor

6.10.6   Talks information offered by nurse

6.10.7   Talks service received by each RCHs

6.10.8   Information searching, filtering and export to Excel or PDF format according to districts and nature of RCHs

6.10.9   The system can handle issuing of Invoice and Receipt.

6.10.10   The details of the module functions will be discussed and confirmed by the BOKSS and Service Provider after the tender confirmation.

6.11   Service Satisfaction Management Module

6.11.1   Service Satisfaction Questionnaire for service users, RCHs and doctors to fill in

6.11.2   Generate the summary of Service Satisfaction results of service users, RCHs and doctors such as satisfaction percentage of each questions, the percentage of satisfaction with over 75% service users indicated in the questionnaires and the percentage of satisfaction with over 80% in each RCHs.

6.11.3 Information searching, filtering and export to Excel or PDF format according to districts and nature of RCHs

6.11.4 The details of the module functions will be discussed and confirmed by the BOKSS and Service Provider after the tender confirmation.

6.12   Hotline Enquiry Module

6.12.1 The module can give the staff to record the detail and history of hotline enquiries from RCHs to VMPS staff and doctors.

6.12.2 The module can give the doctors and staff to record the detail and history of hotline enquiries from RCHs.

6.12.3 Actual Number of each doctor and staff received hotline enquiries in the day/month/quarter/year

6.12.4 Information searching, filtering and export to Excel or PDF format according to districts and nature of RCHs

6.12.5 The details of the module functions will be discussed and confirmed by the BOKSS and Service Provider after the tender confirmation.

6.13   Service Fee Management Module

6.13.1 Service fee management: create, read, update, delete, search and export doctor and RCHs database.

6.13.2 Service Fee management feature and workflow: After the doctor has visited the home and the home has submitted the ALL DONE JOB note, the system will generate the summary of service fee record automatically for each doctor in Excel format.

6.13.3 The system has service fee invoice and receipt sample for doctor access.

6.13.4 Service Fee automatic calculation workflow: According to the different number of visit, together with the performance marks, to finalize and summarize the service fee calculation.

6.13.5 Payment Record of doctor fee and relieving doctor in the day/week/month/quarter/year

6.13.6 Expenditure report (included the invoice no., invoice date, payee name, amount or other data) can export to EXCEL for inserting in BOKSS financial system

6.13.7 Bank-In notification

6.13.8 The system can handle issuing of invoice and receipt with void and reprint function.

6.13.9   Financial Reports

6.13.10 Fee category management (according to the number of places of the RCHs or special arrangement)

6.13.11 The details of the module functions will be discussed and confirmed by the BOKSS and Service Provider after the tender confirmation.

6.14   Users and User Right Management Module

6.14.1 The system shall allow the user management such as create, update, delete the user.

6.14.2 The system will be controlled by user right management so that different user will be controlled and allow the access different module in the system. This user right function shall be designed via a role base control, for example a doctor will be allowed to read and edit his own data and cannot read and edit other data.

6.14.3 Management of System User Account

6.14.4 Access Right Control

6.14.5 The details of the module functions will be discussed and confirmed by the BOKSS and Service Provider after the tender confirmation.

6.15   Staff Users Account

6.15.1 Different level of user authority to access restricted data

6.15.2 The system shall allow the following function for each user after login:

6.15.2.1 Email Notification for daily operation warning and update (content will be discussed and confirmed by the BOKSS and Service Provider after the tender confirmation). Account detail update, e.g. change password

6.15.2.2 Login/Logout the system

6.15.2.3 The system will provide the system timeout function when the system idle time is longer than the preset duration.

6.15.2.4 The details of the module functions will be discussed and confirmed by the BOKSS and Service Provider after the tender confirmation.

6.15.2.5 The system needs to serve 50 staff accounts.

6.16   Report Management Module

6.16.1 Service Provider shall provide a module or function to export confirmed forms to Excel or PDF format. The details of the exporting function will be discussed and confirmed by the BOKSS and Service Provider after the tender confirmation.

6.16.2 The data of system can export to Excel or PDF format. The details of the reporting function will be discussed and confirmed by the BOKSS and Service Provider after the tender confirmation.

6.16.3 Standard information searching and advance searching

6.16.4 The format of the report may change in the maintenance period based on SWD request or service need.

6.16.5 Report Sample

6.16.5.1 The following sample forms are for reference only. The details of the reporting will be discussed and confirmed by the BOKSS and Service Provider after the tender confirmation.

1.   Statistical Information System (SIS) Form
2.   服務統計總結表

3. 醫生到診數據統計表
4. 院舍診症次數統計表
5. 診症人次統計表
6. 體檢統計表
7. 約束物統計表
8. 講座統計表
9. 轉介統計表
10. 電話諮詢統計表
11. 護士到訪院舍統計表
12. 護士報告表
13. 院舍名單及接受服務院舍總覽表
14. 財務總表
15. 各醫生服務費統計表
16. Attendance Record
17. 醫生年度執業證及保險到期名單
18. 以上各表需提供每日/週/月/季及年度統計/報告表
19. 每年問卷調查報告表(院舍、院舍住客及醫生意見問卷調查)
20. 每月總支出報告 Import To Flex System(PV PC)

6.17 System Installation and configuration

6.17.1 Service Provider shall propose the details specifications for the above items in the proposal

6.17.2 Service Provider shall perform the system installation.

6.17.3 The installation of systems shall include the database, mobile app and the web application system.

6.18 Server Requirement

6.18.1 Supplier should provide the details of server to BOKSS, include :

- Operating System
- Processor
- Memory
- Hard Disk Space
- Web Server
- Data base Server
- Software License

6.19 System Data Migration

6.19.1 Service Provider shall provide data migration service within the project development period, nursing period and maintenance period. The data will be prepared by BOKSS, Service Provider shall provide templates to migrate the data.

6.20   Training

6.20.1 Service Provider shall conduct four half day (4 hours/ half day) user training with the use of user manual to guide user on the use of the captioned system

6.21   Maintenance

6.21.1 Service Provider shall provide 1-year unlimited warranty within 4 hours response after the nursing period. The warranty period will start after satisfactory completion of Nursing period and the issue of Acceptance Certificate. Detail schedule as below,

   Monday to Friday 9AM – 1PM, 2PM – 6PM

   Saturday 9AM – 1PM

6.21.2 Service Provider shall discuss any corrective action with 5 days thereafter. Unlimited warranty shall include but not limited to Email, Phone Call, Remote and Onsite Support. The Unlimited warranty include bug fix and usage consultation but not include any code and functions change.

7 Payment Schedule

7.1 Upon receipt and acceptance of the deliverables by the BOKSS with satisfaction and upon the submission of invoices to the BOKSS by the Service Provider, the Service Provider shall be paid in accordance with the following payment schedule within 60 (sixty) calendar days of the receipt of the invoices. The percentages of payment do not imply or indicate the relative or absolute amount of resources and expenses to be spent by the Service Provider in order to produce the concerned deliverables and to complete the Project. The payment schedules are as follows:

Payment Milestone	Payment Schedule (Percentage of Proposal submitted)
Project Awarded	30%
Successful completion of User Acceptance Test	45%
Successful completion of System Nursing	25%
Total	100%