

**JOINT COMMITTEE ON
INFORMATION TECHNOLOGY
FOR THE SOCIAL WELFARE SECTOR**

**Mini-Feasibility Study on Client Information System
for Family Services Centres in the Subvented Sector**

PURPOSE

This paper informs Members about a plan to conduct a mini-feasibility study on a client information system (CIS) for family services centres¹ (FSCs) operated by non-governmental organisations (NGOs) to dovetail with the development of a CIS for the Social Welfare Department (SWD).

BACKGROUND

2. Social and family problems are becoming increasingly complex and customers now enter support services at various service points. Moreover, different members of the family may patronise different services. In order to assist them effectively, frontline workers need to possess and access a wide range of information relating to recipients of social work services in an efficient manner. At present, much of the information is collected and compiled by frontline social work professionals manually. There is no data standard and data are stored in different modes, from primitive paper records to some end-user computing systems. At the service planning level, aggregate data can only be compiled and analysed after a lengthy period and in a labour-intensive manner. There is a demonstrated need for a computerised CIS to facilitate sharing of client information, case management and service planning.

¹ Including family services centres and family counselling units

3. In July 1999, SWD completed a Feasibility Study on a department-wide technical infrastructure (TI) and a computerised CIS under Phase II of its Information Systems Strategy (ISS). The Feasibility Study has come up with core user requirements for the CIS based on a case management workflow for individual services provided by SWD. The CIS provides a client-focused, automated case management process, standardising and streamlining case screening, case assignment, needs assessment, care plan development and management, and case closure. It captures relevant client information to facilitate case management decisions and provides instant access to most client information via electronic case records available at any service location at any time. The CIS also creates new capabilities for management to manage caseloads through electronic distribution, auditing and approval of care plans, and to evaluate the performance and outcomes of services delivered through comprehensive and timely management information.

4. The Feasibility Study on SWD's CIS has recognised the need to extend CIS to the whole NGO sector. It is generally agreed that the case management workflow designed for the CIS reflects good social work practice in working with clients from entry (enquiry and intake) to exit (termination) of service. It can be applied to all social welfare service delivery, irrespective of whether it is provided by SWD or NGOs. The need to extend CIS to NGOs is strongly echoed in the Review of Family Services in Hong Kong completed in 2001 which recommends, *inter alia*, that the Government should develop a user and service information system to facilitate case management, programme improvements and service planning.

5. In 2001, SWD conducted a six-month Case Management Pilot Project involving 50 frontline workers from 12 service units in Kwun Tong with a view to testing out the effectiveness of using an electronic mode in doing case management. A workflow-based case management software application developed in the United Kingdom was used in the pilot project. Experience gained in the pilot project has re-confirmed many of the user requirements identified in the Feasibility Study on SWD's CIS and is shedding new light on the future CIS design.

6. We have examined various options to achieve a sector-wide CIS and concluded that the most pragmatic way forward is to proceed with the development of CIS for SWD straight away whilst at the same time conducting a mini-feasibility study with NGO FSCs with the aim to confirming the feasibility of extending CIS to NGOs and identifying specific user requirements, if any, unique to NGOs' operating environment.

7. We have consulted the Social Welfare Advisory Committee and the Legislative Council (LegCo) Panel on Welfare Services and have obtained their full support for the proposed TI/CIS implementation, including the above-mentioned approach to extend the CIS to the NGO sector. We conducted a briefing session on 10 January 2002 for relevant NGOs on the proposal to conduct a mini-feasibility study on CIS for FSCs in the NGO sector. The NGOs concerned are generally supportive of the direction and are willing to participate in the study. We have scheduled to seek funds from the LegCo Finance Committee for implementing TI and CIS for SWD at its meeting on 8 March 2002. We will approach the Lotteries Fund Advisory Committee for a grant to carry out the mini-feasibility study at its meeting on 27 February 2002.

MINI-FEASIBILITY STUDY

Objectives

8. The CIS includes essentially a workflow-based case management process and a management information system for statistical reporting. Taking account of the similarity of case management activities and processes for NGOs and SWD, it is anticipated that only minor modifications are necessary to take care of NGO-specific requirements and finalise the CIS specifications. A diagrammatic illustration of the case management workflow is at Annex I, and a high-level summary of SWD's CIS user requirements is at Annex II.

9. In accommodating NGOs' requirements, it requires proper analysis and definition to ascertain the substance of modifications required to the CIS specifications. A mini-feasibility study is therefore

required with the following objectives -

- (a) to examine the applicability of SWD's CIS specifications to NGO FSCs by walking through the core user requirements with them;
- (b) to identify any additional user requirements for CIS which are common to all NGO FSCs;
- (c) to propose technical options and solutions for implementing CIS in NGO FSCs as well as its interfacing with SWD's CIS;
- (d) to identify the infrastructure required for NGO FSCs for the CIS implementation; and
- (e) to assess the productivity gains for NGO FSCs arising from the CIS implementation.

Scope and Duration

10. At present, there are 12 NGOs operating 23 FSCs and 7 subvented family counselling units with a total of 192 frontline social workers and 30 supervisors. All these NGOs will be involved in the mini-feasibility study. A list of the NGOs together with their FSCs / subvented family counselling units is provided at Annex III.

11. The mini-feasibility study will proceed in a fast-track intensive manner and is expected to complete within six months. Based on the core requirements for the case management workflow identified in SWD's CIS Feasibility Study, the study with NGO FSCs is expected to be quick, sharp and short, producing results in time for any additional common user requirements to be incorporated into the finalised design of the CIS architecture.

Consultancy

12. As we are working to a tight schedule in implementing the mini-feasibility study, we plan to commission EDS, the Government's

existing term contractor under the Information Technology Services Arrangement (ITSA), to undertake the study. EDS is the contractor who conducted the Feasibility Study on CIS for SWD and was involved in the pilot project on case management in Kwun Tong in 2001. Because of their previous involvement in the CIS Feasibility Study, EDS has the advantage of having first hand apprehension of the evolution of core user requirements identified in the Feasibility Study. This carries particular weight given the fact that the mini-feasibility study with NGO FSCs has to be completed within a short timeframe.

Proposed Methodology

13. The mini-feasibility study will be carried out largely according to the standards, procedures, methodologies and guidelines adopted by the Government. The various stages of the mini-feasibility study are highlighted in Annex IV.

14. In order to ensure that the future CIS as extended to NGO FSCs reflects and fits their business workflow, a social work consultant will be lined up in the project team for the mini-feasibility study. The organisation chart of the project team and the roles of the incumbents are set out in Annex V. The project team will work closely with the 12 NGOs operating FSCs through intensive sessions, focus group discussion and other activities such as completion of questionnaires and user acceptance tests. Details of the activities involving NGO FSCs in the course of the mini-feasibility study are set out in Annex VI. We expect that this exercise will also create momentum for the culture change in our shift from a paper-based mode to an electronic mode in doing our business.

Project Management Structure

15. To ensure satisfactory and smooth implementation of the mini-feasibility study, a project management structure in line with relevant Government standard practice and guidelines will be put in place. The structure comprises mainly a Project Steering Committee (PSC) and a Project Assurance Team (PAT).

16. The PSC is to be chaired by Deputy Director of Social Welfare (Administration) and comprises representatives from SWD, Information Technology Services Department, the Hong Kong Council of Social Service (HKCSS) and the NGOs operating FSCs. A Member from the Joint Committee on Information Technology for the Social Welfare Sector will also be invited to sit on the PSC to help steer the implementation of the mini-feasibility study and consider acceptance of the deliverables of the study.

17. The PAT comprises senior project staff of the ITSA contractor as well as representatives at the working level from SWD, HKCSS and NGOs operating FSCs. It will be responsible for checking and monitoring the progress of the mini-feasibility study to ensure that all the major deliverables are produced on time and of good quality for submission to the PSC and major stakeholders for endorsement.

Implementation Timeline and Project Deliverables

18. The implementation timeline for the mini-feasibility study is set out in Annex VII. The deliverables expected of each stage is as follows -

Project Sub-stage	Major Deliverables	Target End Date
Project initiation	<ul style="list-style-type: none"> ➤ Project initiation document ➤ Quality plan ➤ Detailed project schedule ➤ Collecting current NGO environment information 	Week 6 (In the week of 29 April 2002)
User requirements definition	<ul style="list-style-type: none"> ➤ User requirements ➤ Business activity model 	Week 11 (In the week of 3 June 2002)
Selection of feasibility options	<ul style="list-style-type: none"> ➤ Business system options ➤ Technical system options ➤ Data specifications 	Week 18 (In the week of 22 July 2002)

Project Sub-stage	Major Deliverables	Target End Date
	<ul style="list-style-type: none"> ➤ Function specifications Selected technical system options 	
Assembly of Feasibility Study report	<ul style="list-style-type: none"> ➤ Cost/Benefit analysis ➤ Draft Feasibility Study report ➤ Presentation of Feasibility Study report ➤ Users' confirmation on the Feasibility Study report 	Week 20 (In the week of 5 August 2002)
Project closure	<ul style="list-style-type: none"> ➤ Quality assurance review ➤ Project evaluation report ➤ Users' confirmation on the project evaluation report 	Week 24 (In the week of 2 September 2002)

Financial Implication

19. The non-recurrent cost for conducting the mini-feasibility study is estimated to be \$2,000,000, made up of \$1,863,740 as ITSA consultancy services and \$136,260 as contingency. The consultancy services are assessed based on the following manpower resources valued according to the ITSA assignment cost model -

- (a) 20 man-days of Senior Technical;
- (b) 20 man-days of Overseas Consultant;
- (c) 70 man-days of Project Manager;
- (d) 50 man-days of Technical Specialist; and
- (e) 210 man-days of Senior Systems Analyst.

Consumables and equipment cost relating to the study will be absorbed under SWD recurrent expenditure.

WAY FORWARD

20. Subject to the findings and recommendations of the mini-feasibility study, we plan to tap Lotteries Fund to meet the non-recurrent cost for the implementation of CIS for NGOs in due course.

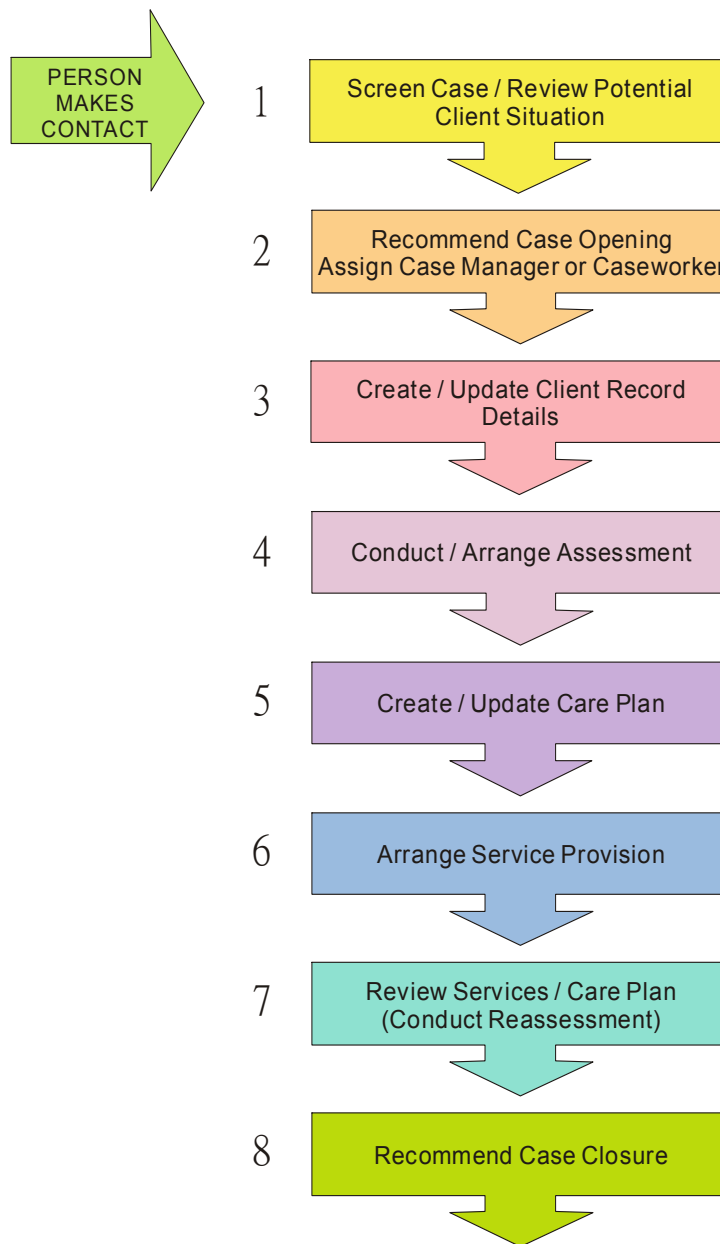
ADVICE SOUGHT

21. Members are invited to note the plan to conduct a mini-feasibility study on CIS for NGO FSCs and to volunteer or nominate a Member to sit on the Project Steering Committee.

Social Welfare Department
February 2002

Case Management Workflow

Case management is a client focused process, consisting of a series of sequentially related tasks aimed at delivering suitable services to client, which are as follows -



User Requirements for SWD's Client Information System

Req-01	Search records on enquiries/intakes/clients/contacts/cases
Req-02	Enquiry/Intake, contact and case screening
Req-03	Open case – assign case manager or caseworker
Req-04	Create and update detailed client/case record
Req-05	Create and update assessment details
Req-06	Financial assessment
Req-07	Create and update care plan
Req-08	Refer cases to other case managers/ workers or other service units
Req-09	Transfer cases to other case managers / workers or other service units
Req-10	Create and update service provision, and authorise provision of service
Req-11	Client and case event log
Req-12	Change event record details
Req-13	Caseload monitoring and supervision
Req-14	Automate case bring-up
Req-15	Close case
Req-16	Reactivate case
Req-17	Generate statistics/ management reports and performance indicators
Req-18	Produce standard letters and forms
Req-19	Maintain templates for standards letters and forms
Req-20	Create and update registers
Req-21	Maintain security profiles
Req-22	Provide back-up facilities
Req-23	Set data retention period
Req-24	Maintain code tables
Req-25	Track movement of case files
Req-26	Import/export data
Req-27	Incorporating the functions of client related EUC systems
Req-28	External communication

**List of FSCs / Subvented Family Counseling Units
operated by NGOs**

Name of NGO	Name of Centre
Against Child Abuse Limited	*Against Child Abuse - Chuk Yuen Centre
	*Against Child Abuse - Tuen Mun Centre
Caritas - Hong Kong	Caritas Family Service - Caine Road
	Caritas Family Service - Chai Wan
	Caritas Family Service - Aberdeen
	Caritas Family Service - Ngau Tau Kok
	Caritas Family Service - Tung Tau
	Caritas Family Service - Kowloon
	Caritas Family Service - Sham Shui Po
	Caritas Dr & Mrs Olinto de Sousa Family Service - Shatin
	Caritas Family Service - Tsuen Wan
	Caritas Family Service - Tuen Mun (South)
	Caritas Family Service - Tuen Mun (North)
Christian Family Service Centre	Christian Family Service Centre - Family Counselling Service

Name of NGO	Name of Centre
Hong Kong Catholic Marriage Advisory Council	*Hong Kong Catholic Marriage Advisory Council - Hong Kong Centre
	*Hong Kong Catholic Marriage Advisory Council - Kowloon Centre
Hong Kong Children & Youth Service	Hong Kong Children & Youth Service - Hung Hom Centre
Hong Kong Christian Service	Hong Kong Christian Service - Counselling Service
Hong Kong Family Welfare Society	Hong Kong Western Centre
	Hong Kong Eastern (Healthy Village) Centre
	East Kowloon (Ngau Tau Kok) Centre
	East Kowloon (Shun Lee) Centre
	West Kowloon Centre
	New Territories (Cheung Shan) Centre
	New Territories (Kwai Fong) Centre
Hong Kong Sheng Kung Hui Welfare Council	*Tung Chung Integrated Services Centre
International Social Service	*International Social Service - Hong Kong Branch
Neighbourhood Advice Action Council	*Tung Chung Integrated Services Centre

Name of NGO	Name of Centre
St. James' Settlement	St. James' Settlement - Family and Child Services Division
Yang Memorial Methodist Social Service	Yang Memorial Methodist Social Service - Counseling Unit

Remarks :

Centres indicated with '*' are multi-service centres providing family counselling service.

Stages of the Mini-Feasibility Study

Project Initiation

The Project Manager (PM) of ITSA Project Team will develop the Project Initiation Documents (PID), Quality Plan (QP) and Detailed Stage Plan (DSP) with the input gathered from the user team. The PM will prepare the composition and terms of reference of the Project Steering Committee (PSC) in the PID. Membership of the Project Assurance Team (PAT) will also be proposed and documented in the PID as well. The documents (PID, QP, and DSP) will be submitted to PAT for review. These documents will be presented to PSC for endorsement after comment and quality review.

Define the Problems and User Requirements

Once the PID is endorsed, the Social Welfare Consultant (SWC) of ITSA Project and PM will lead the ITSA Project Team to visit and hold meetings with the relevant NGO family services centres¹ (FSCs). Information gathered from the interviews, the case management workflow and the Feasibility Study on CIS of SWD will be used to establish any additional user requirements for CIS common to all NGO FSCs.

The physical sittings, operating environment, work processes, transactions and data volume of the FSCs will be collected. These different categories of information will be recorded and analysed for determining the future operating environment of the NGOs.

The Current Environment Description (CED) would not be produced as the standard deliverable since it is not required in developing the feasible options for the CIS.

The ITSA Project Team will compile the User Requirements (UR) based on the information obtained during the various workshops and interview sessions. The

¹ Including family services centres and family counselling units

pilot CIS system would be used as the demonstration kit to confirm the UR. The UR will consist a set of core CIS functions and additional functions that are common to all NGO FSCs. The functional specification and the data model for the user requirements will also be developed.

Select Feasibility Options

Having identified the requirements, the project team will analyse the situation at the NOGs and recommend the most suitable business option for CIS at the NGOs.

Once the Business System Options (BSO) is confirmed, the Technical System Options (TSO) to support the BSO will be developed.

Once the Technical System Option is selected, the ITSA Project Team will take the lead to finalise the technical environment and the sizing details. The ITSA Project Team will take steps to ensure that TSO is in line with the Government's IT standards and guidelines.

Assemble Feasibility Study Report

The user requirements, the business options, the technical operations, the CBA and implementation plan will be assembled to form the mini-feasibility study report.

Acceptance of Feasibility Study Report

The mini-feasibility study report with management summary will be submitted to PAT for endorsement before being presented to PSC for approval.

Project Closure

The project closure report which includes project evaluation and reporting on performance metrics is the last deliverable of the project. It will be submitted

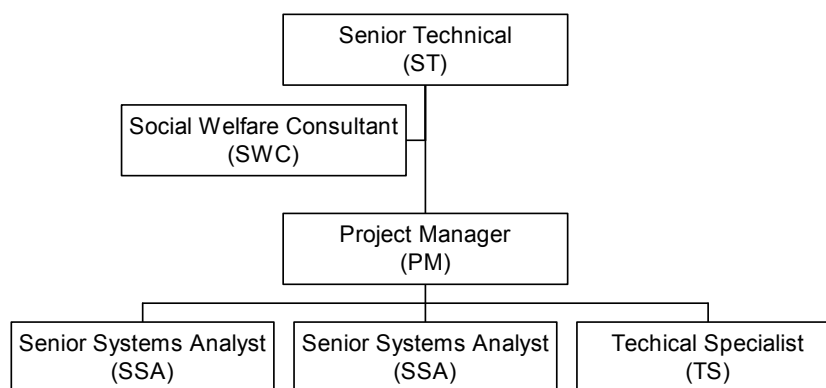
to PAT for endorsement before being presented to PSC for approval.

Organisation and Roles of the Project Team

Organisation Chart

The organisation chart of the project team for the mini-feasibility study is as follows -

Mini-FS CIS Project Organisation Chart for NGO



Senior Technical

Roles include –

1. To be responsible for the technical assurance and integrity of the project.
2. To act as the Senior Technical in the Project Steering Committee to advise on technical aspects of the project and other related matters.

Responsibilities include -

1. Consider the technical implications of the project.
2. Consider and agree product descriptions of technical products.
3. Consider and agree project/stage technical plans.
4. Assign technical resources needed by the project.
5. Resolve conflicts concerning technical requirements and their priorities.

Social Welfare Consultant

1. To facilitate the information collection process and document the user requirements of the required systems.
2. To define the requirements and solution approach.
3. To identify tangible and intangible benefits of the proposed system and producing a business case for illustrating the identified benefits.
4. To suggest improvements over the existing performance measures and indicators.
5. To highlight the required changes brought by the proposed system.

Project Manager

Roles – To leading the ITSA Project Team in conducting the study, formulating the options, delivering the feasibility study report and completing the project on time.

Responsibilities include -

1. Managing, monitoring, co-ordinating and controlling all project events.
2. Planning and monitoring project resources.
3. Monitoring project progress and product quality.
4. Performing quality review on project deliverables.
5. Project reporting.
6. The project manager will also take up the role of TAC in the PAT for this project.

Technical Specialist

Roles – To formulate the technical system option based on the selected business solution option.

Responsibilities include -

1. To evaluate the technical feasibility of the project.
2. To review and develop the technical solution based on the current and future requirements.

3. To ensure that the appropriate Government IT standards and procedures are followed.
4. To define technical environment for future system production, training and development.

Systems Analysts

Roles include -

1. To be responsible for analysing business, policy and security requirements and evaluating implementation options.
2. To support the Project Manager and the Technical Specialists for the Feasibility Study.

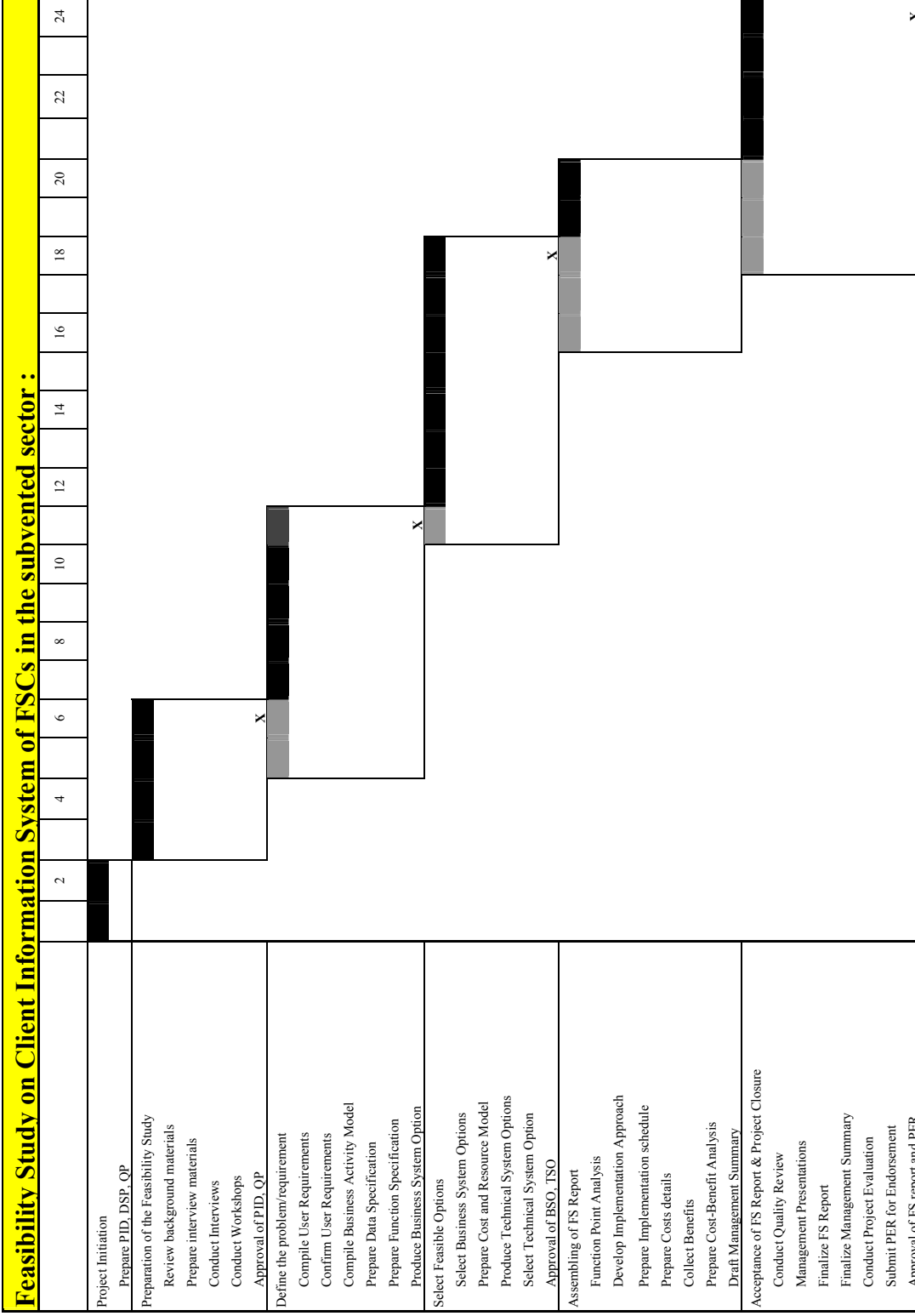
Responsibilities include -

1. To work under the Project Manager to obtain a detailed understanding of the CED's business and its information needs.
2. To work together with the Technical Specialists to develop and document specific business or technical related deliverables of the feasibility study report.

**Activities requiring Involvement of NGO FSCs
During Implementation of the Mini-Feasibility Study**

1. Intensive and regular meetings, at weekly or bi-weekly intervals, between NGOs, HKCSS, SWD and project consultants to discuss the current business workflow and draw up specific requirements for case management for NGO FSCs.
2. On-site meetings and interviews with casework supervisors and frontline caseworkers to look into the physical settings, operating environment and work processes of NGO FSCs.
3. Submission of samples of the commonly-used reports and forms, such as intake reports, statistical reports, referral forms, case recording sheets, to the project team for reference in working out the CIS data requirements.
4. Discussion with individual caseworkers concerned or through focus groups, by making reference to the paper case files, to fully understand the user requirements for every step of the case management process in NGO FSCs.
5. Completion of questionnaires on the comparison of time savings for the tasks in the case management process arising from the implementation of the electronic system.
6. Participation in the user acceptance tests on the CIS prototypes and technical solutions developed for NGO FSCs.

Implementation Timeline for the Mini-Feasibility Study



Note: X indicates payment stage

Total :

Resource (mandays)						
ST	Overseas consultant	PM	TS	SA 1	SA 2	
5	5	20	0	30	20	
5	10	20	20	25	25	
5	0	20	20	35	35	
5	5	10	10	30	10	
20	20	70	50	120	90	

- Legend :**
 ST - Senior Technical
 PM - Project Manager
 TS - Technical Specialist
 SA - System Analyst