ITEM FOR FINANCE COMMITTEE

CAPITAL WORKS RESERVE FUND
HEAD 710 - COMPUTERISATION
Social Welfare Department
**New Subhead "Implementation of Information Systems Strategy Phase II -
Technical Infrastructure/Client Information System"**

> Members are invited to approve a new commitment of $241,053,000 for implementing Phase II of the Social Welfare Department's Information Systems Strategy.

PROBLEM

The Social Welfare Department (SWD) lacks a department-wide information technology (IT) infrastructure to support the effective use of IT in the delivery of welfare services. To provide the best customer service through cost-effective means, SWD needs a computerised database to facilitate sharing of information amongst frontline workers, case management and service planning.

PROPOSAL

2.	The Director of Social Welfare (DSW), in consultation with the Director of Information Technology Services, and with the support of the Secretary for Health and Welfare and the Secretary for Information Technology and Broadcasting, proposes to implement a technical infrastructure (TI) and a client information system (CIS) under Phase II of the department's Information Systems Strategy (ISS), at an estimated non-recurrent cost of $241,053,000.

/JUSTIFICATION .....

JUSTIFICATION

Present status of SWD in use of IT

3.   SWD completed a study on an ISS for the department in July 1997. Like all ISSs, the strategy involves various major application systems and is to be implemented in phases according to service priorities. A Computerised Social Security System (CSSS) was developed under Phase I with a commitment of $224.7 million approved by Finance Committee in November 1997. We have fully implemented the CSSS within budget and on time - with the system going live in October 2000. CSSS has also fully met the stated objectives of speedier processing of applications with greater accuracy, quicker payment arrangements, and more efficient production of management information for service monitoring and policy formulation. CSSS supports SWD's social security business with online accessibility to all case data, and allows case processing outside office environment with mobile support, e.g. at a customer's home, hospital or old people's home. The pledged savings arising from implementation of CSSS have also been fully delivered.

4.   Outside of CSSS, the networking facilities within SWD are very limited. As at end December 2001, while the total number of personal computers (PCs) was 4 829, only 177 users in SWD were connected through the Government Communications Network. This limited networking has considerably hampered the exchange and sharing of documents electronically, access to applications and person-to-person communication. In a recent review of IT developments commissioned by the Information Technology and Broadcasting Bureau, it has been identified that there is a need for SWD to consider a comprehensive data management approach conducive to knowledge sharing and joined-up government initiatives. A department-wide TI to support the effective use of IT in the delivery of welfare services is long overdue.

5.   Social and family problems are becoming increasingly complex and customers now enter SWD's support services at various service points. Moreover, different members of the family may use 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 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 thus a demonstrated need for a computerised CIS to facilitate sharing of client information, case management and service planning. Such a need is strongly echoed in the Review of Family Services in Hong Kong completed in 2001.

6.   As identified in the ISS, development of TI and CIS should be the next priority, and taking forward this phase of ISS is fully in line with the E-government initiative. Separately, to address the use of IT in the social welfare sector as a whole, SWD has mapped out an IT strategy for the entire welfare sector. DSW chairs a Joint Committee on IT for the Social Welfare Sector comprising representatives from the Hong Kong Council of Social Service, non-governmental organisations (NGOs) and IT experts. Development of a CIS, initially within SWD and subsequently extended to NGOs, forms an important part of that IT strategy.

Proposed Systems under SWD's ISS Phase II

7.   The proposed systems under Phase II of SWD's ISS for which funding is sought are -

  (a) *Technical Infrastructure* – This provides a communication backbone for SWD to deploy department-wide information systems. The infrastructure must be in place for CIS and any other SWD ISS-recommended systems to be fully implemented. It includes desktop computers, communication networks, communication lines and information processing equipment that allow the future integration of all SWD's ISS systems. It also provides a common office environment for word processing, spreadsheet and e-mail capabilities.

  (b) *Client Information System* – This 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. The CIS workflow encompasses the core case management process and captures relevant client information to facilitate case management decisions. The system provides instant access to most client information via electronic case records available at any SWD location at any time. It also creates new capabilities for SWD management staff 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.

Encl. 1 Details of the proposed systems are set out in Enclosure 1.

8.   The combined solution of TI and CIS will transform SWD from paper-based information management to electronic information management. In seeking to provide a more efficient service, the proposed systems will take into account the need to protect the confidentiality of service recipients' data in line with the requirements of the Personal Data (Privacy) Ordinance.

Service Benefits of SWD's ISS Phase II

9.   Upon successful implementation of TI and CIS, there will be significant service benefits, including -

      (a)   **<u>Improved Service Delivery</u>**

            We estimate that with the implementation of CIS, the amount of time SWD staff spend on such tasks as checking other service units for existing files and checking index cards / fact sheets for information about services provided to clients will be reduced by 60%. Client information will become readily available to SWD staff at any service location. Reduced manual effort will enable frontline staff to dedicate more time to clients and to provide more efficient and client-oriented professional services.

      (b)   **<u>Faster Access to Services and Reduced Waiting Time for Clients</u>**

            The CIS allows immediate verification of client information from historical or current files at the time of enquiry or request for service. We estimate that with the implementation of CIS, the clients' enquiry time can be reduced by 20% as they will no longer have to repeat the information they have provided to SWD on previous occasions. It also enables intake reports to be completed electronically, thereby reducing the time for completion and submission of the reports by 10% and hence assignment of cases by supervisors by 35%. This will shorten clients' waiting time for service delivery.

      (c)   **<u>More Appropriate and Quality Care Planning</u>**

            The CIS' structured case management workflow helps social workers better serve their clients' needs. Access to a client's past records including previous experiences and interventions allows the social work professional to have a clear understanding and focus on the client's service history and needs. This will expedite the formulation of an appropriate and better focused care plan for the client, which will in turn raise client satisfaction with the service outcome and in extreme distress cases, prevent family or individual tragedies.

      (d)   **Streamlined Case Management Process**

           The CIS standardises and supports the key steps in effective case management which are case screening, case assignment, needs assessment, care plan development and management, and case closure. CIS-supported case management will improve administrative efficiency and make it easier for social work professionals to formulate needs and risk assessment for clients. It also helps supervisory staff provide timely advice and supervision on individual social work professionals' case management.

      (e)   **Potential for Inter-Sectoral Efforts**

           SWD staff will be able to perform their tasks more efficiently with rapid access to needed information and improved communications within SWD and with other government departments / bureaux and NGOs. It helps to facilitate joining up government and inter-sectoral efforts.

      (f)   **Improved Management Information**

           Without a computerised system, SWD does not have systematic or timely information on the profile of our service users. We have to rely on sample case surveys or other smaller scale single-issue end-user systems to collate and provide updated service utilisation and service user information. This has hampered the evaluation and planning of services. With changing social problems and changing needs of families, we need much better management information to ensure effective monitoring and to support service reviews, as well as to facilitate evidence-based planning of social welfare services.

Moreover, against the backdrop of enhanced public sector productivity and containing the size of the civil service, technology assistance is a crucial way to ensure that SWD could meet growing demands.

Cost Benefits of Phase II of SWD's ISS

10.   On cost savings, we estimate that the proposed TI/CIS implementation will generate an annual realisable saving of $63,513,000. This is the full staff cost derived from deletion of a total of 178 civil service posts, comprising 131 General Grades staff and 47 Departmental and Common Grades staff, upon full commissioning of the systems, as well as savings from reduction in expenditure on

Encl. 2

consumables and contract maintenance for equipment. A breakdown by rank of the 178 posts is at Enclosure 2. SWD has assessed the staffing situation and is confident that delivery of these realisable staff savings would not give rise to staff redundancies. In practice and as a special arrangement to address the affected staff's concern, the anticipated surplus staff in the General Grades will be returned in phases to their respective Heads of Grade for re-deployment to other parts of the Government to fill vacancies. This process will begin as soon as funding approval is obtained instead of awaiting the commissioning of the projects. In other words, there will be over two years to arrange staff re-deployment. In the interim, SWD will employ temporary staff to fill any service gap pending the implementation of the projects. SWD will also closely monitor the staff intake and wastage in Departmental and Common Grades in the next few years to maximise the scope for internal re-deployment to absorb the anticipated surplus.

11.   Given the large number of service units and staff who would benefit from the enhanced efficiency under TI and CIS, we expect notional staff savings of $102,003,000. This includes savings arising from reduced or eliminated staff effort and time in the areas covered by the projects. While it is not practicable to realise the time and effort savings spread over a large number of offices and staff, SWD is committed to absorbing additional workload generated by the increasing number of individuals and families seeking welfare services in the few years following system implementation with these fragmented staff savings.

Cost and Benefit Analysis

Encl. 3

12.   A cost and benefit analysis of SWD's ISS Phase II is set out in Enclosure 3. The analysis shows that taking account of notional staff savings, investment on TI/CIS will break even in January 2008 (i.e. in 37 months following the CIS go-live). As explained above, TI/CIS will bring about significant intangible benefits in terms of enhancing customer service and improving the efficiency of SWD through electronic client data management, which will contribute towards improvement to the social welfare service delivery.

FINANCIAL IMPLICATIONS

Non-recurrent expenditure

13.   We estimate that the total non-recurrent cost for implementing SWD's ISS Phase II is $307,789,000 and we are seeking a commitment of $241,053,000. The cost breakdown and the cash flow are as follows –

/**Non-recurrent** .....

	2002-03	2003-04	2004-05	2005-06	Total
	$'000	$'000	$'000	$'000	$'000
Non-recurrent expenditure					
(a) Hardware and software	1,152	36,466	19,863	2,598	60,079
(b) Communication line	185	7,162	4,955	862	13,164
(c) Site preparation	708	11,115	3,675	-	15,498
(d) Implementation services	12,573	43,684	48,641	11,989	116,887
(e) Training	285	3,712	3,673	823	8,493
(f) Consumables	135	2,040	2,301	542	5,018
(g) Contingencies	1,504	10,418	8,311	1,681	21,914
Sub-total	**16,542**	**114,597**	**91,419**	**18,495**	**241,053**
Non-recurrent civil service staff cost					
(h) SWD staff	16,924	19,101	26,145	4,566	66,736
Total	**33,466**	**133,698**	**117,564**	**23,061**	**307,789**

14.   As regards paragraph 13(a), the expenditure of $60,079,000 is for the acquisition of computer hardware and software. It includes computer servers, network equipment, desktop and notebook computers, and other information processing equipment.

15. As regards paragraph 13(b), the expenditure of $13,164,000 is for the installation of communication lines connecting the data centres and various SWD offices.

16. As regards paragraph 13(c), the expenditure of $15,498,000 is for site preparation. It includes installation of trunking and power sockets, and cabling work at SWD service units, other SWD offices and the data centres.

17. As regards paragraph 13(d), the expenditure of $116,887,000 is for contract services to provide technical support in tendering and contract management as well as undertake system development and implementation. It also includes provision for hire of contract staff for data conversion and technical management.

18. As regards paragraph 13(e), the expenditure of $8,493,000 is for the provision of training on the use of PCs and the CIS application during project implementation.

19. As regards paragraph 13(f), the expenditure of $5,018,000 is for the acquisition of consumables during project implementation.

20. As regards paragraph 13(g), the sum of $21,914,000 represents a 10% contingency on the cost items set out in paragraphs 13(a) to (f).

21. As regards paragraph 13(h), the expenditure of $66,736,000 represents staff costs of the following SWD staff for the implementation of the proposed systems from April 2002 to June 2005 -

   (a) 39 man-months of Assistant Director of Social Welfare (ADSW);
   (b) 39 man-months of Chief Social Work Officer (CSWO);
   (c) 163 man-months of Senior Social Work Officer (SSWO);
   (d) 242 man-months of Social Work Officer (SWO);
   (e) 223 man-months of Assistant Social Work Officer (ASWO);
   (f) 2 man-months of Statistical Officer I;
   (g) 0.25 man-month of Chief Social Security Officer;
   (h) 0.5 man-month of Senior Social Security Officer;
   (i) 1 man-month of Social Security Officer I;
   (j) 2 man-months of Social Security Officer II; and
   (k) 5 man-months of Senior Social Security Assistant.

These officers will be responsible for the tendering, refinement of user requirements for the systems, contract management, co-ordination of site preparation, re-design of forms and documents, co-ordination with individual branches of SWD on user acceptance test, supervision of data conversion, and training for the CIS project. Some other officers will be involved for carrying out user acceptance tests in the course of the proposed project. All these staffing requirements will be met by SWD through internal re-deployment. Noting the fiscal constraints and the need to contain the size of the civil service, SWD would not increase the departmental establishment for carrying out these time-limited tasks during the period.

Recurrent expenditure

22.   The estimated recurrent expenditure for maintaining and supporting CIS and TI is $48,226,000 per year upon full implementation. The cost breakdown is as follows –

	2004-05 $'000	**2005-06** $'000	**2006-07 onwards** $'000
(a) Hardware and software maintenance	3,266	6,065	6,065
(b) Communication line	1,836	7,345	7,345
(c) System support services	10,734	18,822	19,403
(d) Facility management	1,231	4,924	4,924
(e) Training	88	353	353
(f) Consumables	958	3,832	3,832
Sub-total	**18,113**	**41,341**	**41,922**
(g) SWD staff	-	4,728	6,304
Total	**18,113**	**46,069**	**48,226**

23.   As regards paragraph 22(a), the annual expenditure of $6,065,000 is to meet the maintenance service charges for computer hardware and software.

24.   As regards paragraph 22(b), the annual expenditure of $7,345,000 is for the rental of communication lines.

25.   As regards paragraph 22(c), the annual expenditure of $19,403,000 is to meet the cost of ongoing system maintenance and helpdesk support. Maintenance of the proposed systems is human resource intensive. We will decide in due course whether in-house operation or complete outsourcing or a hybrid approach should be adopted to achieve the best value for money.

26.   As regards paragraph 22(d), the annual expenditure of $4,924,000 is for contract services for the ongoing management of the facilities at the data centres. We are exploring co-location in the long run of the data centres for CIS/TI and CSSS with a view to reducing the recurrent cost and achieving an economy of scale for facility management.

27.   As regards paragraph 22(e), the annual expenditure of $353,000 is for the provision of training required after the live-run of the proposed systems.

28.   As regards paragraph 22(f), the annual expenditure of $3,832,000 is for the acquisition of consumables required after the live-run of the proposed systems. These include cartridges for printers, tape cartridges for backup data, optical disks and paper.

29.   As regards paragraph 22(g), the annual expenditure of $6,304,000 is required to meet the staff cost of six additional non-directorate posts (two Senior Social Work Officers, two Social Work Officers and two Assistant Social Work Officers) in SWD for ongoing system administration, business support, operation support and user training of the proposed systems. These are essential in-house staff needed to manage a project of this scale. They will also oversee the contractor for performing application maintenance and for providing business support service and system management of the CIS.

30.   Taking account of the estimated realisable annual savings of $63.5 million mentioned in paragraph 10 above, there will be a net gain of $15.3 million per year.

/**Implementation** .....

Implementation Plan

31.   We plan to implement SWD's ISS Phase II according to the following timetable -

Major system functions/activities	Scheduled completion date
Tendering for the implementation of TI and CIS	February 2003
Implementation of TI	February 2004
Implementation of CIS	December 2004

BACKGROUND INFORMATION

Information Systems Strategy

32.   It is Government's policy to take full advantage of IT to improve service delivery as well as operational and management efficiency. In 1996, SWD commissioned a consultancy study to advise on areas where the application of IT can bring about improvements in service and efficiency and to recommend an ISS for implementation. The study was completed in July 1997.

Encl. 4

33.   In their final deliverable, the Consultants have outlined seven application systems for further development including TI and CIS, as described in Enclosure 4. The Finance Committee approved funding for the implementation of Phase I of SWD's ISS on 28 November 1997. The implementation was completed on schedule in October 2000. In August 1998, we proceeded with Phase II and commenced Feasibility Studies for TI and CIS. The studies were completed in July 1999. We now seek Members' funding approval for the implementation of Phase II. As for the applications in Phase III of SWD's ISS, we will re-visit priorities and how to take these forward in the light of changes and developments that have taken place in the welfare sector. We therefore do not intend to start any feasibility studies on the subsequent applications until we have reviewed SWD's strategic IT needs against these developments.

Recent Developments with Impact on Client Information System and Technical Infrastructure

34.   The Feasibility Study on TI/CIS has clearly identified the scope and extent of tangible savings in terms of deletion of posts arising from the

implementation of the computerisation project. Since the completion of the Feasibility Study for TI/CIS in July 1999, there have been considerable changes in SWD and the delivery of welfare services. These include the Enhanced Productivity Programme, efforts to contain the size of the civil service, the re-organisation of SWD with the disbandment of regional offices, the implementation of the Service Performance Monitoring System, rationalisation of medical social services and the re-engineering of Family Services Centres into Integrated Family Services Centres. We have accordingly updated the findings of the Feasibility Study on the basis of the latest situation. We have also taken into account lessons learnt from the implementation of CSSS.

35.   Furthermore, to assess the usefulness of IT in social work case management and to ascertain the actual workload impact on these case management staff, SWD conducted a six-month Case Management Pilot Project as recommended in the Feasibility Study in 2001. The pilot was conducted involving 50 frontline staff from 12 service units in Kwun Tong with the assistance of external IT experts. Evaluation feedback from the staff participating in the project is positive, particularly on the use of an electronic mode in managing client information and doing case management. Experience gained from the Case Management Pilot Project also indicates that the use of an electronic system may not save as much professional manpower as envisaged in the Feasibility Study and that it takes time for staff to achieve the necessary cultural change including adaptation to the shift from a paper-based mode to an electronic mode. While client information sharing among social work staff is possible and quicker through an electronic system, it cannot substantially reduce the time taken for verbal or face to face discussion with service recipients and between helping professionals on case handling.

36.   Taking account of the updating results, the TI/CIS business case now proposed involves a total deletion of 178 civil service posts as against the original deletion of a total of 313 posts identified in the Feasibility Study.

Extension of Client Information System to Non-governmental Organisations

37.   In the Feasibility Study on CIS, there was a recognition for the need to extend CIS to the whole NGO sector. It is generally agreed that the case management workflow designed for the proposed 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. 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 as proposed whilst at the same time conducting a mini-feasibility study with NGO family services centres (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. This approach would allow such special and additional requirements to be incorporated into the finalised design of the SWD CIS architecture. SWD has secured a Lotteries Fund grant to carry out the feasibility study. Lotteries Fund would also be the main source of non-recurrent funding for subsequent implementation.

38. We conducted a briefing session on 10 January 2002 for relevant NGOs on the implementation of TI/CIS for SWD and the idea of conducting a mini-feasibility study on CIS for FSCs in the NGO sector. Attendees are generally supportive of the direction and are willing to participate in the study. Members of the Social Welfare Advisory Committee also fully support the proposed approach to extend the CIS to NGOs.

Consultation

39. We consulted the Legislative Council Panel on Welfare Services at its meeting held on 4 February 2002. Members supported the proposal.

Social Welfare Department
April 2002

**Technical Infrastructure and Client Information System
for the Social Welfare Department**

Technical Infrastructure

The technical infrastructure (TI) for the Social Welfare Department (SWD) includes building a SWD network, TI management tools, two data centres, common desktops, e-mail, groupware and other office automation tools. It provides the backbone for SWD to deploy department-wide information systems. This infrastructure must be in place in order for other information systems recommended by the SWD's Information Systems Strategy (ISS) to be implemented.

2. The major technical components of TI include workstations and a collection of powerful, centralised computer servers in the data centres. These workstations and servers are connected via networks and managed centrally so that the total system is secure and functions well together.

3. The proposed TI includes approximately 1 980 personal computers (PCs), 110 notebook computers and 780 printers of various types. A Wide Area Network (WAN) will connect 283 SWD offices and the data centres. Within most offices, the workstations and printers will be connected to a Local Area Network (LAN), and these LANs will connect to the WAN.

4. The SWD network will be connected to the Government's Central Internet Gateway in order to provide Internet access. This will allow SWD staff to access the Internet for finding information and communicating with external parties such as non-governmental organisations (NGOs). The SWD network will also be connected to the Government Backbone Network. This connection allows SWD to communicate with other Government departments and bureaux. The SWD network will also integrate with the network of the Computerised Social Security System (CSSS).

5.   The data centres house the equipment used to manage the network, monitor the PCs and run the ISS applications. This includes servers, disk storage, backup media, network and system management consoles, etc. There will be two data centres, one for production and the other for disaster recovery.

6.   To ensure that all TI components are operating at maximum capabilities, they are centrally managed and controlled from the TI network and system console. All errors and alert messages received by users are sent to the TI network and system console and are monitored by the helpdesk support staff. This will allow speedier support and timely resolution of problems.

7.   With the implementation of TI, SWD will move from a paper-based organisation to an electronic-based organisation that uses information technology to streamline and enhance operations and services. SWD staff will be able to perform their tasks more efficiently with rapid access to needed information and improved communications within SWD and with other Government departments/bureaux and NGOs. Sharing of information for knowledge management will become easier and more effective.

Client Information System

8.   The Client Information System (CIS) for SWD is to provide a workflow-based database which collects and shares client data across SWD for operational, management and planning purposes. This will enable SWD to improve the use of its resources and provide better and more effective levels of client service.

9.   CIS is made up of three components –

  (a) a secure database to hold client personal data and their service history;

  (b) different types of application functionality to allow different tasks, such as -

    (i) processing of queries, client intake and referrals;

(ii)   case opening, allocation of staff to clients, and case management through to case closure;

(iii)   workload management and case supervision; and

(iv)   generation of management reports from the underlying data;

(c)   a common user interface which provides services for some or all CIS users. This will include electronic mail, access to office applications such as word processing, on-line help and a management information facility.

10.   CIS is capable of close integration with other proposed ISS systems, particularly the proposed Service Provider Information System and Management Information System to be implemented in Phase III. It allows links for data exchange with external databases, and will have some integration with the CSSS to enable identification of clients receiving both social security and social work services.

11.   CIS automates case management, standardising and streamlining case screening, case assignment, needs assessment, care plan development and management, and case closure. It maintains a service history on clients, including previous contacts with social welfare personnel, problems encountered and services received. By allowing caseworkers to access clients' service history information, CIS provides staff with as much information as possible to facilitate more realistic care planning and intervention. This also helps to raise client satisfaction with SWD service.

12.   Client service is improved in many ways with CIS. CIS automates and streamlines the intake process by allowing client demographic data to be collected and recorded once. SWD staff can query CIS and know immediately if the department has served a client, thereby reducing the client's enquiry time and eliminating the need for clients to repeat information they have already provided to the department.

13.   CIS generates useful management information for service planning purposes. It allows staff to generate reports on the profile and number of clients served. Another example could be tracking an increasing number of child abuse and neglect cases to allow the department to adequately allocate resources for prevention programmes.

Staff Savings to be Realised
Arising from the Implementation of Phase II of
the Social Welfare Department Information Systems Strategy

Departmental Grades	
Social Work Officer	5
Assistant Social Work Officer	28
Senior Social Work Assistant	1
Social Work Assistant	9
Senior Welfare Worker	1
Sub-total	*44*
General Grades	
Assistant Clerical Officer	7
Clerical Assistant	118
Clerical Officer	1
Office Assistant	3
Statistical Officer II	2
Sub-total	*131*
Common Grades	
Clinical Psychologist	1
Enrolled Nurse	1
Workman II	1
Sub-total	*3*
Total	178

**Cost and Benefit Analysis of
the proposed Social Welfare Department Information Systems Strategy Phase II
(at 2001-02 prices)**

($'000)

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Costs								
Non-recurrent								
- expenditure	16,542	114,597	91,419	18,495				
- staff costs	16,924	19,101	26,145	4,566				
Sub-total	**33,466**	**133,698**	**117,564**	**23,061**				
Recurrent								
- expenditure	-	-	18,113	41,341	41,922	41,922	41,922	41,922
- staff costs	-	-	-	4,728	6,304	6,304	6,304	6,304
Sub-total	**-**	**-**	**18,113**	**46,069**	**48,226**	**48,226**	**48,226**	**48,226**
Total costs	**33,466**	**133,698**	**135,677**	**69,130**	**48,226**	**48,226**	**48,226**	**48,226**
Benefits								
Realisable savings		507	6,201	44,422	63,513	63,513	63,513	63,513
Notional benefits		1,159	13,908	98,833	102,003	102,003	102,003	102,003
Total benefits		**1,666**	**20,109**	**143,255**	**165,516**	**165,516**	**165,516**	**165,516**
Net benefits	**(33,466)**	**(132,032)**	**(115,568)**	**74,125**	**117,290**	**117,290**	**117,290**	**117,290**
Cumulative net benefits	**(33,466)**	**(165,498)**	**(281,066)**	**(206,941)**	**(89,651)**	**27,639**	**144,929**	**262,219**

Brief Descriptions of System Applications
Identified under SWD's Information Systems Strategy Study

Phase I

(a) **Computerised Social Security System** – This supports the processing of social security cases and automates key activities, thereby improving customer service as well as providing management information on the social security system.

Phase II

(b) **Technical Infrastructure** – This consists of networking and workstation facilities to enable individuals and groups to exchange key documents electronically, thereby facilitating person-to-person communication, access to other applications, etc.

(c) **Client Information System** – This provides a centralised database for SWD's clients, thereby facilitating sharing of client information among frontline workers in SWD, case monitoring and service planning.

Phase III

(d) **Service Provider Information System** – This is a centralised database with detailed information on services and staffing of all service units of SWD and NGOs, thereby facilitating better service co-ordination, monitoring and planning.

(e) **Human Resource Management System** – This is a centralised database of SWD staff, thereby facilitating staff management and training.

(f) **Project and Service Planning System** – The system contains updated and accurate information on all existing and new projects, thereby facilitating project monitoring, control and service planning.

(g) **Management Information System** – This system extracts information from the above applications and provides reports, thereby enabling better access and more accurate data to be made available for management and policy planning.