

**For discussion  
on 18 March 2010**

**Legislative Council Panel on Education  
Integrated Student Financial Assistance System**

**Purpose**

This paper seeks Members' views on the Administration's proposal to implement an Integrated Student Financial Assistance System (ISFAST) for the purpose of improving the efficiency and effectiveness of the Student Financial Assistance Agency (SFAA) in the administration of student financial assistance schemes.

**Problem**

2. At present, SFAA processes applications received under 13 means-tested and non-means-tested financial assistance schemes for students of various levels and under 28 scholarship, merit award and related schemes. In 2008/09 academic year, SFAA received around 821 000 applications under various financial assistance and scholarship schemes, and provided financial assistance amounting to about \$5.1 billion, including about \$3.6 billion in the form of cash grants or fee waivers or scholarships and about \$1.5 billion in the form of loans. It is also now handling about 145 000 student loan repayment accounts involving \$5.3 billion of outstanding loan. SFAA is currently using six separate major computer systems, which were developed and launched at different times from 1998 to 2008 to support the implementation of these schemes. The systems are now providing support for SFAA staff to capture application details, vet applications, arrange payment, authenticate successful cases, and administer loan repayment and recovery. Details of the financial assistance schemes and scholarship schemes currently administered by SFAA, and the six computer systems that support these schemes are detailed at Annex A and Annex B respectively.

3. The six computer systems have become obsolete and are inadequate to meet the ever increasing service needs of SFAA in an efficient and effective manner. These deficiencies are detailed in the ensuing paragraphs.

## Scheme-based administration of financial assistance schemes

4. New financial assistance schemes have been introduced to provide assistance to students from time to time. It has been SFAA's established practice that whenever a new financial assistance scheme was to be implemented, a new computer system and a new business section would be set up for administration of the scheme rather than upgrading and modifying the existing systems, which was usually more complicated, time-consuming and might interrupt the operation of the existing schemes. As a result, the technology and design of the existing systems do not support flexible upgrading/modification. For example, when the Financial Assistance Scheme for Post-secondary Students (FASP) was introduced in the 2001/02 academic year, a new computer system was developed by "cloning" an existing system which served a scheme that adopted the same means test (i.e. the Tertiary Student Finance Scheme – Publicly-funded Programmes (TSFS)), rather than upgrading and modifying that system.

5. Over time, SFAA has developed six computer systems, each of them designed and developed with functions and specifications to cater for the operation of individual scheme(s). The systems are separately managed by different sections of SFAA responsible for different financial assistance schemes. This scheme-based mode of administering financial assistance schemes, in terms of both staff and system, is found to have serious drawbacks for both the applicants and SFAA. For example, a family applying for assistance under more than one assistance scheme in respect of the same student or more than one student in the family may need to make individual applications for different schemes, thereby duplicating application efforts. As the details of applications made under different schemes by a family may be stored in different systems and handled by different staff, the family may need to direct enquiries concerning its applications to different sections. To SFAA, applications submitted by the same family under different schemes may need to be processed by different systems managed by different sections. This may duplicate vetting efforts by SFAA staff, and give rise to inconsistencies in the vetting processes amongst sections. There is an imminent need to streamline the application and vetting procedures, and improve the public enquiry services.

## Technical limitations of existing systems

### *Failure to support data-sharing amongst systems*

6. Most of the existing core computer systems adopted the proven technology at the time of implementation - aged more than ten years for

some of them. The design and system features do not support data-sharing amongst systems/sections within SFAA, as well as between SFAA and other stakeholders such as other government departments, schools and institutions. This has prohibited sections from cross-checking information provided by the same applicant electronically so as to ensure consistency in the vetting process of applications and accuracy of assessments, and to prevent double subsidy as some courses are eligible for subsidy under more than one scheme. Besides, the present computer systems of SFAA do not support interfaces with those of other government departments, e.g. the Department of Justice (DoJ) and hence do not facilitate SFAA to expedite referral of loan default cases through electronic means to DoJ for taking legal recovery action, as recommended in Report No. 53 of the Director of Audit, which was published in November 2009. In addition, due to system constraints, SFAA cannot establish an electronic communication channel with the schools/institutions concerned to release the application results of students. Much staff efforts of the schools/institutions concerned are hence required to manually process and verify application data, which is time-consuming and error-prone.

#### *Limited processing capability*

7. The existing mode of operation and technical capabilities of the existing systems (the existing operation) are no longer adequate to cope with the increasing workload arising from the various financial assistance schemes. With the huge number of applications processed by SFAA, the existing operation has already reached or exceeded its processing limits and fallen far short of meeting the present day and future service requirements. The burden of the existing operation would become heavier as it is required to cope with an increasing demand for financial assistance for post-secondary education arising from both the continued increase in the number of students receiving senior secondary and post-secondary education with the implementation of the 334 academic structure from the 2009/10 academic year and the ongoing development of the self-financing post-secondary sector. There may also be an increase in the number of applications under other schemes such as FASP as a result of the new academic structure.

#### *Failure to support new advanced processing functions*

8. As far as means-tested financial assistance schemes are concerned, the existing computer systems concerned only assist staff in capturing application details and conducting basic data checking of applications, but are not equipped with any advanced functions to help process applications.

There have been concerns from the stakeholders, as mentioned in the recent Audit Report No. 53, about the increasing number of overpayment cases of means-tested grants and loans, and that SFAA should consider strengthening its gate-keeping function, such as by doing risk-profiling of applications. However, the design of the existing systems does not enable the incorporation of advanced functions which would help SFAA identify those “high-risk” applications amongst the large number of applications for more targeted vetting. Major structural changes to the existing systems are required to build in such functions.

#### *Failure to support new public services*

9. SFAA has been facing rising expectations from the public for more efficient, readily accessible and user-friendly online services such as online submission of applications, online enquiry of application progress and online management of their loan accounts. There is a strong need for SFAA to better manage its service channels. The technical configurations of the existing computer systems however do not support provision of these new electronic services to the public, despite that it is promulgated in the latest Digital 21 Strategy announced by the Government in 2008 that the availability of convenient and secure electronic services will enhance public’s quality of life and hence public services should be made accessible by electronic means as far as practicable.

#### Increasing costs and difficulties of maintaining the existing systems

10. SFAA has considered the feasibility of upgrading and modifying the existing systems to allow interfaces of the systems concerned, expand their processing capabilities and incorporate new advanced functions etc. However, the vendors of the existing systems are phasing out support in terms of both hardware and software. Other system fixes and upgrade solutions to these obsolete facilities are very limited in the market. This means that maintenance of the existing systems would become more difficult, giving rise to higher potential instabilities and security risks of the systems, and the cost of maintenance would increase. Any further investment to modify and upgrade the existing obsolete systems is therefore not justified. In addition, the risk of modifying the existing systems is high, given the technical complexity of the modification works and that any problem arisen may undesirably affect the operation of the financial assistance scheme(s). There is hence an imminent need to replace the existing computer systems and develop a new system.

## **Business Process Review and Feasibility Study**

11. In February 2006, SFAA commissioned the Efficiency Unit (EU) to conduct a holistic Business Process Review (BPR) to study how the operations of SFAA could be re-engineered to enhance their effectiveness and efficiency. As a result of the review, the EU put forward a series of recommendations which were adopted by SFAA. They are summarised at Annex C. In gist, the EU recommended that SFAA should adopt a new service delivery mode under which applications should be processed on a household basis and the operations of SFAA should be supported by an integrated function-based computer system to replace the current scheme-based mode of operations in terms of both staffing and computer system. SFAA subsequently engaged an external consultant to examine the feasibility of the recommendations in 2007. The feasibility study, completed in early 2009, confirmed that the recommendations put forward in the BPR were feasible, and had on this basis developed solid business and technical options, implementation plan and cost/benefit analysis for SFAA's consideration.

### **Proposal**

12. Having carefully considered the findings and recommendations of the BPR and feasibility study, we propose, with the support of the Government Chief Information Officer, to-

- (a) build up a new integrated function-based computer system, i.e. ISFAST, to replace the existing six computer systems in phases; and
- (b) carry out organisation restructuring of SFAA to build up a new function-based service delivery mode to support and in tandem with the implementation of ISFAST, conduct relevant training and promotion for SFAA staff and stakeholders including applicants and relevant schools/institutions on the new system and service delivery mode to facilitate smooth migration.

### **Operation of ISFAST**

13. ISFAST would be a powerful and comprehensive computer system that would incorporate all the existing functions of the six computer systems with improvements, and new advanced functions to enhance SFAA's management of the financial assistance schemes and to support provision of new services to the public. It would cover the operation of all the 13

student financial assistance schemes, as well as 28 scholarship schemes, both publicly-funded and privately-donated, currently administered by SFAA, and would be equipped with sufficient capacity and capability for supporting new schemes and enhancements to the existing schemes that may be introduced in the future.

14. Under ISFAST, all applications received under different financial assistance schemes would be centrally processed by a single system, which SFAA would use to capture the application details, perform initial vetting and risk-profiling of applications, process applications under relevant established criteria (for example, conducting income and/or asset assessment for applications submitted under means-tested financial assistance schemes) and generate assessment results, issue notifications and arrange payment, manage loan accounts and refer loan default cases to DoJ for legal action, etc. The organisation of SFAA would be re-structured into functional units to support these various business processes. Specifically, instead of arranging staff to handle these business processes under each scheme, staff responsible for the same business process such as initial vetting or arranging payment under each scheme would be pooled together and trained to handle applications/cases across schemes. The organisation structure and computer support of SFAA would be changed from the previous scheme-based mode to a function-based mode. The organisation structures of SFAA before and after the implementation of ISFAST are shown at Annex D.

## **Justifications**

### Streamlining procedures of making and processing applications

15. With the implementation of ISFAST and the associated organisation restructuring, applications would be processed on a household basis instead of on a scheme basis. This would make application much easier. An applicant family that wishes to apply for assistance under more than one scheme or has more than one family member applying for assistance in an academic year would only need to fill in and submit one application form, instead of multiple applications in respect of each family member and for each financial assistance scheme as at present. Vetting and processing applications submitted on a household basis would eliminate duplicated efforts and ensure consistency in the assessment results of the same applicant across schemes and amongst family members. Processing applications of a household using a single system would obviate the need to cross-check data between different computer systems within SFAA and between family members of the same household. Notification of results

and payment of assistance can be released to eligible recipients much earlier.

#### Enhancing risk management

16. ISFAST would incorporate functions to enable risk-profiling of applications received by SFAA. Risk management may include conducting data-matching with relevant departments, such as Companies Registry, Land Registry, Social Welfare Department, etc., to detect whether an applicant holds valuable assets or receives similar subsidies from other departments. A risk profile would be built up for each application and high-risk applications would be identified. The risk management function could be optimised by fine-tuning parameters of risk factors. This risk-profiling function of ISFAST would enhance risk management by SFAA staff who could then focus efforts in processing applications with higher than average level of risk so that irregularities can be more readily identified, assessment can be more accurate and the possibility of overpayment of assistance to applicants can be minimised. Apart from improving the application vetting process, the function can also assist SFAA staff in identifying high-risk cases for subsequent authentication. The risk management function would also deter applicants from supplying inaccurate or incomplete information.

#### Supporting new and more convenient public services

17. ISFAST would store comprehensive data relating to applications under all financial assistance and scholarship schemes and thus support SFAA to provide convenient one-stop counter/hotline enquiry services to the public. It would be able to support new e-services for the convenience of the public. In future, the applicants can submit applications, enquire about the status of their applications submitted, access their loan accounts and repay their loans online, etc. These online channels would be suitably integrated into the education and training cluster of GovHK, youth.gov.hk, etc. to provide citizen-centric public services. SFAA would also follow the Government's strategy of channel management and formulate plan to enhance the quality and attractiveness of e-services so as to boost their utilisation.

#### Enhancing operational efficiency and management of work progress

18. Information and Communication Technology (ICT) is an indispensable tool for SFAA to transform its business with a view to providing much improved services to the public. By using modern ICT such as document management system and workflow and case management software, documents would be digitised and stored in ISFAST to facilitate

efficient data-sharing between different functional sections of SFAA. The complete work progress can be monitored online and various reports can be readily generated to facilitate timely review by the management. With business analytics facilities incorporated into ISFAST, trend and impact analyses can be conducted to enhance management. ISFAST would also communicate with systems of relevant schools/institutions to facilitate exchange of student information, as well as with those of DoJ to expedite referral of default cases for legal recovery action.

#### Higher system stability and flexibility

19. A rule-based engine will be installed in ISFAST so that it can be more easily and quickly adapted to cater for the implementation of new financial assistance/scholarship schemes and enhancements to existing schemes without affecting existing services to the public. Collaboration with other Government departments to provide joined-up services will also be more easily achieved. Major changes to ISFAST would therefore not be necessary, which would otherwise be costly and time-consuming.

20. Considering that ISFAST supports all financial assistance schemes and scholarship schemes of SFAA, high availability and load balancing technical solutions conforming to the prevailing industry standards and best practices will be incorporated into ISFAST to ensure its high performance and stability. As the core components of ISFAST would be proven commercial off-the-shelf software which is readily available in the market, future upgrading and modification of ISFAST would be easier and more cost effective than a totally tailor-made system like the existing ones. A flexible and stable system would ensure effective and efficient services to the public.

### **Financial Implications**

#### Non-recurrent Expenditure

21. We estimate that the tendering, setting up of infrastructure and implementation of the proposed ISFAST will require a total non-recurrent expenditure of \$65.371 million over seven years from 2010-11 to 2016-17. Apart from costs associated with purchasing hardware, software and services for system implementation (such as system analysis and design, programming, data conversion, system setup, user acceptance test, system nursing, etc), as ISFAST would be a completely new system, SFAA has to conduct both training for its staff internally and promotion campaigns for the public on the ISFAST to ensure smooth migration to the new system. Contract staff will be hired to carry out system implementation tasks and to



provide support for the associated organisation re-structuring. As ISFAST would incorporate a central database on the particulars of the applicants and their applications, proper measures will be implemented in ISFAST to ensure and protect data privacy, such as encryption of personal data when stored in the database and during transmission on the Internet, and two-factor authentication will be required for accessing the personal data. SFAA will conduct detailed security and data privacy assessments before implementation of the system. The detailed cost breakdown is set out below -

<b>Estimated Expenditure</b>	<b>Amount (\$ million)</b>	
Implementation Services	23.911	(36%)
Hardware and Software	21.103	(32%)
Hiring of Contract Staff	11.555	(18%)
Site Preparation	2.372	(4%)
Security and Privacy Assessments	0.487	(1%)
Contingency	5.943	(9%)
Total:	65.371	(100%)

22. The estimated cashflow requirements between 2010-11 and 2016-17 are as follows –

	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15 and beyond</b>	<b>Total</b>
<b>Estimated Expenditure (\$ million)</b>	0.410	21.880	9.575	12.230	21.276	<b>65.371</b>

#### Recurrent Expenditure

23. We estimate that the recurrent expenditure for maintaining and running the new system, as well as new expenditure required for functions such as document digitisation, will be \$13.780 million per annum as from 2016-17, which will be fully met by realisable savings mentioned in paragraph 24 below.

#### Recurrent Cost Savings

24. We estimate that the implementation of ISFAST will generate annual savings of \$25.307 million from 2016-17 onwards, which can fully offset the

estimated recurrent costs of \$13.780 million per annum. The annual savings will consist of -

- (a) realisable savings of \$15.667 million per annum, including –
  - (i) \$3.388 million arising from the reduction in the cost of engaging service contractors for batch input of data from paper application forms to electronic format and reduction in the postage fees due to availability of electronic channels to submit applications and to notify application results;
  - (ii) \$5.775 million of maintenance costs of the existing systems, including hardware, software, and system maintenance services provided by contractors; and
  - (iii) \$6.504 million of contract staff costs, arising from the deletion of 38 posts of various ranks and some fragmented contract staff resources which would be redeployed internally. The savings are efficiency gains after process re-engineering, e.g. elimination of duplicated processing efforts under the new household-based mode of submitting and processing applications.
- (b) notional savings of \$9.640 million per annum, including –
  - (i) \$1.852 million arising from avoidance of overpayment made possible by efficient and effective system-to-system data-matching with other relevant departments; and
  - (ii) \$7.788 million of fragmented staff cost savings, which could not be realised by deletion of posts or deployment of the staff concerned to provide other services.

25. On the basis of the cost and benefit analysis in the feasibility study, we would be able to recover the initial investment, i.e. the non-recurrent expenditure of \$65.371 million, in about 10 years after its full implementation in 2016-17, which is considered reasonable for a project of this scale. The life span of ISFAST is estimated to be at least 10 years. The cost and benefit analysis is shown at Annex E.

## **Reorganisation of SFAA and Staffing Implications**

26. Implementation of ISFAST would necessitate a major revamp of the organisation of SFAA and re-engineering of its existing business processes involving all the operational divisions of SFAA. To oversee and co-ordinate the complex development of ISFAST as well as the multi-faceted organisation restructuring and business process re-engineering, there is a need for SFAA to set up a dedicated change management team comprising the existing senior management of SFAA, including the Controller of SFAA, the five Deputy Controllers and one Senior Systems Manager, and two supernumerary posts to be created for five years. The proposed two supernumerary posts include one Chief Executive Officer (CEO) as the dedicated change manager responsible for providing the steer for and managing and co-ordinating the development of the system and associated organisation restructuring. The CEO would be supported by one Senior Executive Officer (SEO) particularly on human resource matters pertaining to organisation restructuring. The structure of the change management team is shown at Annex F. The required staff resources amount to \$21.607 million.

### **Implementation Plan**

27. Having regard to the large number of schemes and stakeholders involved as well as the complexity of the project, ISFAST will be implemented and start operating in three phases. The first phase (completed by January 2013) will cover the setting up of the infrastructure and computer functions to support the operation of those financial assistance schemes involving income test only (i.e. means-tested financial assistance schemes for pre-primary, primary and secondary school students). The remaining schemes, including the schemes involving both income and asset tests (i.e. means-tested financial assistance schemes for post-secondary students) and non-means-tested loan schemes for students pursuing post-secondary and continuing education, will be migrated to ISFAST in the second phase (completed by October 2014). The third phase (completed by January 2016) will mainly focus on the implementation of new e-services such as online submission of applications, online enquiry of application status and online management of loan accounts, for the public.

28. The whole period of implementation of ISFAST is estimated to take about five years. The tentative timeframe and the financial assistance schemes migrating to the new ISFAST under each phase are shown at Annex G. Assuming that the tender for the implementation of the project can be awarded in 2010-11, the implementation of ISFAST can start in 2011-12 and

be completed in 2015-16 in phases.

### **Way Forward**

29. Subject to Members' views, we will seek funding approval for the implementation of ISFAST from the Finance Committee of the Legislative Council in April 2010.

### **Background**

30. It is the Government's policy to ensure that no student is denied access to education due to lack of means. To meet this objective, SFAA provides publicly-funded financial assistance in the form of grants and/or loans to students of different levels and administers publicly-funded and privately-donated scholarship schemes. In the 2008/09 academic year, SFAA provided financial assistance of about \$5.1 billion under various financial assistance and scholarship schemes. As part of the Government's measures to provide further financial support to help needy families, a non-recurrent commitment of \$550 million has been allocated in 2008-09 for the disbursement of a one-off grant of \$1,000 each for students (from kindergarten to post-secondary levels) eligible to receive means-tested financial subsidies in the 2008/09 academic year under the relevant financial assistance schemes administered by SFAA. \$530 million has been disbursed to some 530 000 students.

Education Bureau  
Student Financial Assistance Agency  
March 2010

**Financial Assistance Schemes and Scholarship Schemes administered by SFAA**

	Scheme	Scope of Beneficiaries	2008/09 Academic Year		
			No. of applications	Grants disbursed (\$ million)	Loans disbursed (\$ million)
<b>Financial Assistance Schemes</b>					
1.	Tertiary Student Finance Scheme - Publicly-funded Programmes (TSFS)	A <u>means-tested</u> (income and asset tests) financial assistance scheme providing grants and loans to needy full-time students pursuing publicly-funded post-secondary programmes of University Grants Committee - funded institutions, Hong Kong Institute of Vocational Education of the Vocational Training Council, Hong Kong Academy for Performing Arts and Prince Philip Dental Hospital, to meet tuition fees, academic expenses, compulsory student union fees and living expenses.	30 946	782.9	289.0
2.	Financial Assistance Scheme for Post-secondary Students (FASP)	A <u>means-tested</u> (income and asset tests) financial assistance scheme providing grants and loans to needy full-time students aged 25 or below pursuing self-financing locally-accredited post-secondary programmes, to meet tuition fees, academic expenses and living expenses.	21 943	588.7	180.9

	Scheme	Scope of Beneficiaries	2008/09 Academic Year		
			No. of applications	Grants disbursed (\$ million)	Loans disbursed (\$ million)
3.	Non-means-tested Loan Scheme for full-time tertiary students who are covered under TSFS (NLSFT)	A <u>non-means-tested</u> scheme to provide loans to students eligible for applying for assistance under TSFS to meet tuition fees.	6 471	-	211.0
4.	Non-means-tested Loan Scheme for Post-Secondary Students (NLSPS)	A <u>non-means-tested</u> scheme to provide loans to students eligible for applying for assistance under FASP to meet tuition fees, academic expenses and living expenses.	11 405	-	395.0
5.	Extended Non-means-tested Loan Scheme (ENLS)	A <u>non-means-tested</u> scheme to provide loans to students not covered by TSFS or FASP, and pursuing eligible post-secondary and continuing education courses to meet tuition fees.	11 129	-	388.7
6.	School Textbook Assistance Scheme (STAS)	A <u>means-tested</u> (income test) financial assistance scheme providing assistance to needy primary and secondary students in public sector schools and local private schools under the Direct Subsidy Scheme to purchase textbooks and to meet other school-related expenses.	294 763	470.6	-

	Scheme	Scope of Beneficiaries	2008/09 Academic Year		
			No. of applications	Grants disbursed (\$ million)	Loans disbursed (\$ million)
7.	Student Travel Subsidy Scheme (STSS)	A <u>means-tested</u> (income test) financial assistance scheme providing travel subsidy to needy students who receive formal primary or secondary education or attend a full-time day course up to the first degree level, provided that these students are living beyond ten minutes' walking distance from their school.	244 144	337.9	-
8.	Examination Fee Remission Scheme (EFRS)	A <u>means-tested</u> (income test) financial assistance scheme providing fee waivers to needy Secondary 5 and Secondary 7 students taking public examinations conducted by the Hong Kong Examinations and Assessment Authority.	11 355	15.2 (fee waivers)	-
9.	Project Yi Jin (PYJ)	A scheme providing partial tuition fee reimbursement to students who have completed modules under PYJ and full fee reimbursement to those needy students who have passed the means (income) test.	13 466	108.4 (tuition fee reimbursement)	-
10.	Financial Assistance Scheme for Designated Evening Adult Education Courses (FAEAEC)	A scheme providing partial school fee reimbursement to all students of designated evening secondary courses who can meet the attendance requirement, and full or 50% fee reimbursement to those needy students who have passed the means (income) test.	786	3.1 (school fee reimbursement)	-

	Scheme	Scope of Beneficiaries	2008/09 Academic Year		
			No. of applications	Grants disbursed (\$ million)	Loans disbursed (\$ million)
11.	Pre-primary Education Voucher Scheme (PEVS)	A <u>non-means-tested</u> scheme to provide fee subsidies for parents of children attending nursery, lower and upper classes in eligible local non-profit-making kindergartens in the form of pre-primary education vouchers.	45 344 (43 283 certificates of eligibility issued)	544.5 (face value of vouchers)	-
12.	Kindergarten and Child Care Centre Fee Remission Scheme (KCFRS)	A <u>means-tested</u> (income test) financial assistance scheme providing assistance to needy parents in the form of fee remission for their children receiving whole-day child care services in child care centres and their children receiving pre-primary education in kindergartens (on top of the fee subsidy from PEVS).	51 039	309.7	-
13.	Continuing Education Fund (CEF)	A scheme providing tuition fee reimbursement to eligible persons pursuing continuing education and training in specified sectors.	68 147	394.4 (tuition fee reimbursement)	-



	Scheme	Scope of Beneficiaries	2008/09 Academic Year		
			No. of applications	Grants disbursed (\$ million)	Loans disbursed (\$ million)
<b>Scholarships, Merit Awards and Related Schemes</b>					
	Scholarships, Merit Awards and Related Schemes	Awards are primarily made on academic merit by scholarship schemes including government-funded ones and privately-donated ones, such as the Sir Edward Youde Memorial Fund Scholarships and some 170 scholarships under the Education Scholarships Fund.	10 385	27.3 (of which 22.5 are privately donated)	-
		<b>Total :</b>	<b>821 323</b>	<b>3,582.7</b>	<b>1,464.6</b>

**Existing Major Computer Systems in SFAA**

	<b>Computer System</b>	<b>Year of Production</b>	<b>Schemes Supported</b>
1.	Student Financial Assistance Management System	1998	<ul style="list-style-type: none"><li>• TSFS</li><li>• NLSFT</li><li>• STAS</li><li>• STSS</li><li>• EFRS</li><li>• PYJ</li><li>• FAEAEC</li></ul>
2.	Kindergarten and Child Care Centre Fee Remission System	1999	<ul style="list-style-type: none"><li>• KCFRS</li><li>• PEVS</li></ul>
3.	Computer System for FASP	2003	<ul style="list-style-type: none"><li>• FASP</li><li>• NLSPS</li></ul>
4.	Computer System for CEF	2003	<ul style="list-style-type: none"><li>• CEF</li></ul>
5.	Extended Non-means-tested Loan Scheme System	2006	<ul style="list-style-type: none"><li>• ENLS</li></ul>
6.	New Student Loan System	2008	<ul style="list-style-type: none"><li>• TSFS (loan repayment function)</li></ul>

## **Summary of BPR Recommendations**

The recommendations of the Business Process Review completed in 2006 are summarised as follows -

### **Process Re-engineering**

- To adopt household approach in processing applications;
- To embed risk management into business processes;
- To introduce electronic channels for receiving applications;
- To streamline processing of applications involving primary and secondary students;
- To exchange information with institutions and relevant business partners electronically;
- To centralise payment and strengthening accounting control and financial management;
- To replace the current manual and primitive mode of data-matching with relevant departments by a new mode of direct system-to-system data-matching;
- To introduce self-service facilities through the Internet and an Interactive Voice Response System; and
- To provide one-stop counter/hotline enquiry services.

### **Organisation Restructuring**

- To implement the re-engineered business processes, SFAA should consider restructuring its organisation design from scheme-based to function-based one.
- To ensure smooth transition, restructuring needs to take place in phases and tie in with the detailed implementation plan of the integrated student financial assistance system and the change management plan.

### **System Implementation**

- To support the re-engineered business processes, SFAA should implement an integrated student financial assistance system.

## Annex D

### **Organisation Structure of SFAA before Implementation of ISFAST** (each scheme has a team of staff to support the various business processes)

Scheme	Receive Applications	Vet/Process Applications	Arrange Payment	Authenticate Cases	Administer Loan						
PEVS	D2 – KC										
KCFRS											
STSS	D2 - TT		D2 - SA								
STAS											
EFRS											
PYJ											
FAEAEC							D1 - PS				
TSFS	D1 - FS		D3 - PY	D1 - FS	D3	D4					
NLSFT	D3 - NL				- PY						
FASP	D1 - PS										
NLSPS							D3 - NL			D3	D4
ENLS										- PY	
CEF	OCEF										

Legend:

Division		Section	
D1	Division 1	PS	Post-secondary Students Section
		FS	Funded Programmes Students Section
D2	Division 2	KC	Kindergarten and Child Care Centre Fee Remission Section
		TT	Textbook Assistance / Student Travel Subsidy Section
		SA	Scholarships, Grants & Loans & Authentication Section
D3	Division 3	PY	Payment Section
		NL	Non-means-tested Loan Scheme Section
D4	Division 4	DFA	Default Section
OCEF	Office of the Continuing Education Fund		

**Organisation Structure of SFAA after Implementation of ISFAST**  
 (each staff member in each division would be responsible for applications/cases across schemes)

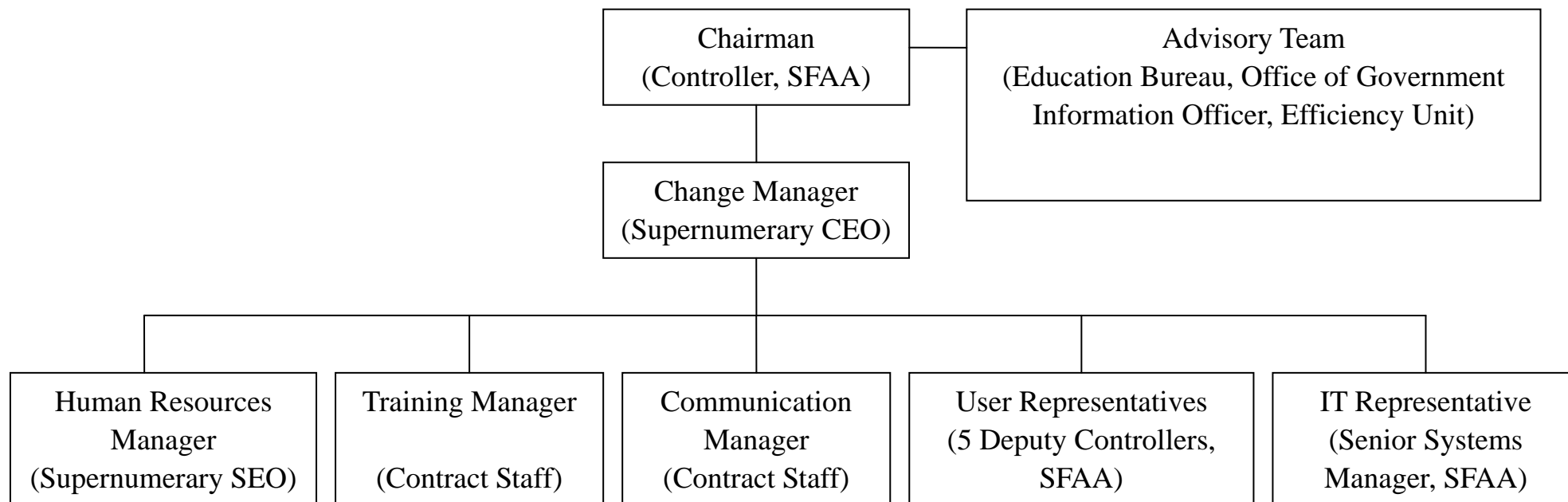
<b>Scheme</b>	<b>Receive Applications</b>	<b>Vet/Process Applications</b>	<b>Arrange Payment</b>	<b>Authenticate Cases</b>	<b>Administer Loan</b>
PEVS	Customer Relation Division	Vetting Division	Payment Control Division	Payment Control Division	Debt Management Division
KCFRS					
STSS					
STAS					
EFRS					
PYJ					
FAEAEC					
TSFS					
FASP					
NLSFT					
NLSPS	ENLS, OCEF & Administration Division <sup>1</sup>				
ENLS					
CEF					

<sup>1</sup> Applications under ENLS and CEF would continue to be made on an individual basis rather than on a family basis as they do not interrelate with other financial assistance schemes. In other words, operation of these two schemes would remain scheme-based. The new ISFAST would nevertheless cater for the requirements of ENLS and CEF.

**Annex E****Cost and Benefit Analysis of ISFAST**

	Cashflow (\$'000)												
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	Total
<b>Cost</b>													
Non-Recurrent													
- Expenditure	410	21,880	9,575	12,230	12,234	2,619	6,423	-	-	-	-	-	65,371
- Staff Cost	20	2,355	4,031	4,555	7,547	3,059	40	-	-	-	-	-	21,607
Sub-total	430	24,235	13,606	16,785	19,781	5,678	6,463	-	-	-	-	-	86,978
Recurrent													
- Expenditure	-	-	379	6,025	6,988	10,636	13,780	13,780	13,780	13,780	13,780	13,780	106,708
Sub-total	-	-	379	6,025	6,988	10,636	13,780	13,780	13,780	13,780	13,780	13,780	106,708
<b>Total cost</b>	<b>430</b>	<b>24,235</b>	<b>13,985</b>	<b>22,810</b>	<b>26,769</b>	<b>16,314</b>	<b>20,243</b>	<b>13,780</b>	<b>13,780</b>	<b>13,780</b>	<b>13,780</b>	<b>13,780</b>	<b>193,686</b>
<b>Savings</b>													
Realisable savings	-	-	318	3,819	5,261	11,279	15,667	15,667	15,667	15,667	15,667	15,667	114,679
Notional savings	-	-	207	2,482	3,482	7,216	9,640	9,640	9,640	9,640	9,640	9,640	71,227
<b>Total savings</b>	<b>-</b>	<b>-</b>	<b>525</b>	<b>6,301</b>	<b>8,743</b>	<b>18,495</b>	<b>25,307</b>	<b>25,307</b>	<b>25,307</b>	<b>25,307</b>	<b>25,307</b>	<b>25,307</b>	<b>185,906</b>
<b>Net Shortfall (Savings)</b>	<b>430</b>	<b>24,235</b>	<b>13,460</b>	<b>16,509</b>	<b>18,026</b>	<b>(2,181)</b>	<b>(5,064)</b>	<b>(11,527)</b>	<b>(11,527)</b>	<b>(11,527)</b>	<b>(11,527)</b>	<b>(11,527)</b>	<b>7,780</b>
<b>Net Present Value of Net Shortfall (Savings)</b>	<b>430</b>	<b>23,303</b>	<b>12,445</b>	<b>14,676</b>	<b>15,409</b>	<b>(1,793)</b>	<b>(4,002)</b>	<b>(8,760)</b>	<b>(8,423)</b>	<b>(8,099)</b>	<b>(7,787)</b>	<b>(7,488)</b>	<b>19,911</b>
<b>Net Present Value of Cumulative Shortfall (Savings)</b>	<b>430</b>	<b>23,733</b>	<b>36,178</b>	<b>50,854</b>	<b>66,263</b>	<b>64,470</b>	<b>60,468</b>	<b>51,708</b>	<b>43,285</b>	<b>35,186</b>	<b>27,399</b>	<b>19,911</b>	

**Structure of Change Management Team for Implementation of ISFAST**



**ISFAST Tentative Implementation Schedule**

<b>Phase</b>	<b>Tentative schedule</b>	<b>Schemes to be migrated to ISFAST</b>	<b>Applicants concerned</b>
<b>Tendering</b>	April 2010 – March 2011	NA	NA
<b>Phase 1</b>	April 2011 – January 2013	Means-tested financial assistance schemes involving income test only - <ul style="list-style-type: none"> <li>• KCFRS</li> <li>• PEVS<sup>2</sup></li> <li>• STAS</li> <li>• STSS</li> <li>• EFRS</li> <li>• PYJ</li> <li>• FAEAEC</li> <li>• Scholarship schemes</li> </ul>	<ul style="list-style-type: none"> <li>• Pre-primary pupils</li> <li>• Primary and secondary students</li> <li>• Adult learners</li> </ul>
<b>Phase 2</b>	February 2013 – October 2014	<p>(i) Means-tested financial assistance schemes involving both income test and asset test -</p> <ul style="list-style-type: none"> <li>• TSFS</li> <li>• FASP</li> </ul> <p>(ii) Non-means-tested schemes -</p> <ul style="list-style-type: none"> <li>• NLSFT</li> <li>• NLSPS</li> <li>• ENLS</li> </ul> <p>(iii) CEF</p>	<ul style="list-style-type: none"> <li>• Tertiary and post-secondary students</li> <li>• Persons pursuing continuing education</li> </ul>
<b>Phase 3</b>	November 2014 – January 2016	<ul style="list-style-type: none"> <li>• e-Services for all schemes</li> </ul>	<ul style="list-style-type: none"> <li>• All applicants</li> </ul>

<sup>2</sup> PEVS, albeit non-means-tested in nature, is included in the Phase 1 for its relation with KCFRS.



Legend :

KCFRS -	Kindergarten and Child Care Centre Fee Remission Scheme
PEVS -	Pre-primary Education Voucher Scheme
STAS -	School Textbook Assistance Scheme
STSS -	Student Travel Subsidy Scheme
EFRS -	Examination Fee Remission Scheme
PYJ -	Project Yi Jin
FAEAEC -	Financial Assistance Scheme for Designated Evening Adult Education Courses
TSFS -	Tertiary Student Finance Scheme - Publicly-funded Programmes
FASP -	Financial Assistance Scheme for Post-secondary Students
NLSFT -	Non-means-tested Loan Scheme for full-time tertiary students who are covered under TSFS
NLSPS -	Non-means-tested Loan Scheme for Post-Secondary Students
ENLS -	Extended Non-means-tested Loan Scheme
CEF -	Continuing Education Fund

### Organisation Re-structuring Plan with respect to ISFAST Implementation Plan

Year	2011-12	2012-13	2013-14	2014-15	2015-16
Phase					
ISFAST Implementation					
Phase 1					
Phase 2					
Phase 3					
Organisation Re-structuring/ Migration of Schemes					
Phase R1					
Phase R2a <sup>3</sup>					
Phase R2b					

<sup>3</sup> To reduce project risk, migration of schemes under Phase 2 would comprise two batches, with Phase R2a covering TSFS and NLSFT and Phase R2b covering FASP, NLSPS, ENLS and CEF.