Project Overview	
Project Title (in English): **HKCAAVQ IT Infrastructure Development Project (Phase 3)**	Project Title (in Chinese): 香港學術及職業資歷評審局資訊系統基建發展項目(第三期)

Executive Summary

(Please provide, within this page, an executive summary of the project.)

This application is for Phase 3 of the IT Infrastructure Development Project (the Project) that aims to strengthen and improve quality assurance and assessment services provided to education and training institutions, course providers and the general public by the Hong Kong Council for Accreditation of Academic and Vocational Qualifications (HKCAAVQ).

Phase 1 of this project was approved under the Quality Enhancement Support Scheme in 2013 with a targeted completion date of February 2015.

Phase 2 of this project was approved under the Quality Enhancement Support Scheme in 2014 with a targeted completion date of November 2016.

Background

The HKCAAVQ is the Accreditation Authority and Qualifications Register Authority under the Hong Kong Qualifications Framework. The HKCAAVQ provides quality assurance and assessment services to education and training institutions, course providers and the general public. In addition, the HKCAAVQ also provides advisory and consultancy services to government bureaux and professional organisations in Hong Kong.

Following the restructure of the HKCAAVQ, these related services are now grouped into functional areas. These functional areas serve a common set of clients. In order to obtain desired synergies and improve the delivery of services there is a need to improve efficiency and have better information technology support for these arrangements; a new IT system, incorporating an integrated database for capturing and storing operational data such as information on Specialists and operators is therefore needed to enhance work efficiency, communication and exchange of information both internally and externally.

The review of the HKCAAVQ Four-stage Quality Assurance Process has proposed the implementation of annual reporting and periodic monitoring of the performance of operators and their learning programmes so as to ensure that expected standards are maintained during the validity period. In practical terms, a Central Repository is essential to enable the Secretariat to perform such a role effectively and efficiently. Data collected from the operators will also be used in subsequent re-accreditation exercises to ease both the preparatory work of the operators and the accreditation panels. The Central Repository will also facilitate standardisation of data collection to facilitate analysis cross-sectorally and longitudinally and further inform the quality assurance model in the longer run.

The Project

The Project is divided into three phases and delivered over a period of 63 months.

After Phase 1 of the Project is implemented, the Customer Relationship Management (CRM) database systems and Document Management System (DMS) will capture and store the related business information for the accreditation functions. A reporting system will also be in place to provide statistical analysis and reporting functions for management review and decision making.

In Phase 2 of the Project the CRM and DMS application is further extended to the assessment of Continuing Education Fund (CEF) reimbursable courses, Continuing Professional Development (CPD) programmes, Non-local courses and individual qualifications awarded by granting bodies outside Hong Kong. The reporting system is extended for users to perform their own data analysis. The Internet service will be developed to provide a web interface connecting the CRM for communication and sharing of data between operators and the HKCAAVQ, as well as Specialists and the HKCAAVQ. The completion of Phase 2 will further enhance the efficiency in processing information related to Specialists and accreditation and assessment functions.

In Phase 3 of the project, the Internet service will be extended to qualification assessment functions by allowing individual applicants to submit applications and payments online. An interface will be provided to communicate with the existing QR system, QA booking system and Accounting system. Features in QMS will be further enhanced to match the changing needs of the stakeholders. Human Resource Information System will be developed to provide an e-learning platform to strengthen staff competency in quality assurance, and enhance employee information management. A Staff Intranet will be available to facilitate information sharing and improve internal communications. A time-recording function will be developed to support the fee charging process. This phase will take 14 months to implement.

Problems Identified
(Please provide your assessments to the problems / needs identified.)
After analysis of the user needs, the following broad requirements have been identified for the IT Infrastructure Development Project (Phase 3): • To enhance the effective collection of data and coverage of services. • To streamline business processes and improve collaboration among various systems. • To enhance communication and exchange of information between internal staff and external stakeholders in a secure environment. • To improve internal communications, work efficiency, staff development, and collaboration among various functional areas.

Project Objectives and Deliverables	
Measurable Objectives	**How it can be achieved**
1. To enhance the effective collection of data and increase the coverage of services.	• Electronic submission of documents and applications will be extended to individual applicants of qualification assessment. • Applicants will be able to track application progress online. • Digital storage of information. • Data integrity, confidentiality and availability will be enhanced.
2. To streamline the business processes and improve collaboration among various systems.	• Online payment service will be available. • Interfaces will be built to communicate with existing systems (QR, QA booking, Accounting) to facilitate data sharing. • Electronic submission of documents and applications will be available for individual applicants.

3.	To enhance communication and exchange of information between internal staff and external stakeholders in a secure environment.	• Electronic submission of documents and applications will be extended to cover individual applicants of qualification assessment. • Web filtering appliance will be installed to protect internal users against various web-based threats.
4.	To improve internal communications, work efficiency, staff development, and collaboration among various functional areas.	• Users will work in a more secure environment via the implementation of the web filtering appliance. More controls will be applied. • Applicants will be able to check the status of their applications online. • Electronic payment will be available to applicants. • Data will be shared among different functional areas. • Intranet will be developed to enhance internal communication and work efficiency. • Human Resources data will be digitalized for better management of e-learning, recruitment, staff development, and resource planning. • The time recording functions will support the fee charging process.

Project Deliverables

(Please list out all the deliverables to be achieved and how they can be shared with, if possible, other institutions.)

	Deliverables	Sharing mechanism
1.	Enhance the functions in existing QMS.	By introducing more tailor-made functions, usability will be increased. Better reporting mechanisms would be available.
2.	Extend the web interface to qualification assessment for application and online	With direct online application and payment, the processing time will be streamlined. Individuals

payment.	can track the application progress efficiently.
3. Human Resources Information System with e-learning platform will be developed.	This system will enhance work efficiency and internal information management. The e-learning platform will allow better staff development in quality assurance.
4. Intranet site will be implemented.	This will allow effective and efficient sharing of information as well as to provide a better communication channel among staff.
5. The web filtering appliance will be installed.	Internal users will be protected against various web-based threats. Enhanced security measures would be applied.

(Please indicate the information that can be uploaded onto relevant EDB websites during and after the project period.)
The QMS deliverables will be used in the assessment activities for individual qualifications. Information on the revised and updated processes enabled by the enhanced IT infrastructure system will be shared among operators and public through regular updates on the HKCAAVQ website.   EDB websites can link to relevant sections of the HKCAAVQ website that contain updated guidelines and information of the project.

Beneficiaries	
Expected type and number of beneficiaries of the project	All staff performing assessment exercises, and accessing the Intranet and e-learning platform (about 90), and applicants of qualification assessment (over 3500 per year).

(Please provide justification to support the above estimation and explain how they can be benefited from the project.)
In the 2013/14 financial year, the HKCAAVQ processed over 3500 cases in qualifications assessment. HKCAAVQ predicts that the number of applications will be in increasing trend in the coming years. By extending the Internet services to qualification assessment, it can further improve the operational efficiency of the assessment processes. Electronic submission of documents and applications will be available for individuals. Besides, payment could be completed online as well. Processes will be streamlined. Individuals could also track the application progress via the online platform.

Through the implementation of the Intranet, information sharing will be centralized. Internal communications will be more effective and efficient. It will also facilitate the information dissemination within the Council. Searching of information becomes faster and easier.

By introducing the new Human Resources Information Systems (HRIS), human resources related information will be digitalized for better management in terms of resources planning and recruitment.

E-learning platform will be available to staff. This e-learning channel could strengthen staff competency in quality assurance and facilitate staff career development.

Through the implementation of the web filtering appliance, users will work in a more secure and stable environment. Internet access control will be applied to further strengthen the security control.

Implementation Schedule
(Please list out the implementation schedule and key milestones to be achieved on a half-yearly basis.)

Estimated start date of the project (month/year)	November 2016
Estimated end date of the project (month/year)	June 2018
Project duration (months)	20

Month	Key milestones	
	In terms of project activities and deliverables	**In terms of monitoring and evaluation**
1-6	• **Web filtering appliance implementation** • Activity: Quality Management System (QMS) enhancement • Activity: Internet service for qualification assessment • Activity: Interface to communicate with QR, QA booking and Accounting systems • Activity: Human Resource Information System (HRIS) implementation • Activity: Intranet implementation	The Project Team will monitor and evaluate the project progress to ensure: • The web filtering appliance is operational with no errors found. • System analysis and design schedule is on track. • System analysis and design documentations are completed.
7-12	• Activity: Quality Management System (QMS) enhancement • Activity: Internet service for qualification assessment • Activity: Interface to communicate with QR, QA booking and Accounting systems • Activity: Human Resource Information System (HRIS) implementation • Activity: Intranet implementation	The Project Team will monitor and evaluate the project progress to ensure: • Implementation is completed. • Testing with trial run is completed. • User acceptance testing (HRIS) is completed for production use.
13-18	• **Deliverables: Quality Management System (QMS) enhancement** • **Deliverables: Internet service for qualification assessment** • **Deliverables: Interface to communicate with QR, QA booking and Accounting systems** • **Deliverables: Human Resource Information System (HRIS)** • **Deliverables: Intranet**	The Project Team will monitor and evaluate the project progress to ensure: • User acceptance testing (QMS, Internet service for qualification assessment, Interface with QR, QA booking and Accounting system, Staff Intranet) is completed for production use. • The enhanced functions in QMS are operational with no errors found. • The Internet service for qualification

	• Final acceptance of the system for production use • Retainage (HRIS, Staff Intranet)	assessment is operational with no errors found. • The information exchange between QMS and various systems is operational with no errors found. • The HRIS is operational with no errors found. • The Intranet service is available to staff with no errors found. • User acceptance testing of the system for production use. • The Project Team will report system performance during the warranty period.
19-24	• Retainage (QMS, Internet service for qualification assessment, Interface with QR, QA booking and Accounting system)	• The Project Team will report system performance during the warranty period.

Publicity Plan

(Please describe all the publicity activities to be organised and materials to be produced to acknowledge the support of Quality Enhancement Support Scheme. Please suitably reflect the publicity activities as key milestones in the implementation schedule above.)

Recognition will be given to the Quality Enhancement Support Scheme through publications, training programmes and other communications with operators on the developments brought about through the IT Infrastructure Development Project.

Cash Flow and Budget				
Project Expenditure				
	Amount in HK$			
Period	**Year 1**	**Year 2**	**Year 3**	**Total**
Manpower	0	0	0	0
Equipment / Facilities	590,000	0	0	590,000
Services	2,150,000	1,960,000	0	4,110,000
General Expenses	0	0	0	0
Others (e.g. auditor's fee)	210,000	140,000	0	350,000
Total	2,950,000	2,100,000	0	5,050,000

Project Income *(if any, e.g. fees received)*

	Amount in HK$			
Period	**Year 1**	**Year 2**	**Year 3**	**Total**
Total				

(Please provide a detailed breakdown of the project budget by completing the following Excel file.)

Grant Sought under the Quality Enhancement Support Scheme	4,000,000 (Phase 3)
Funding from the Applicant	1,050,000
Funding from Other Sources	0
Total Project Value	5,050,000

(Please specify the amount to be funded by each funding source (e.g. donations, contributions from applicant / its parent organisation) and whether the funding has been secured. If not, please provide the plan to obtain the funding.)

(Please provide the duty lists of manpower to be funded by this project.)

Post	**Duties**

Project Sustainability

(Please estimate the amount of recurrent expenditure and describe how you will commit the resources to ensure sustainability of the project. Please put supplementary information (e.g. proof of financial support) at appendix.)

The project will be sustained by the HKCAAVQ IT staff and supported through the budget of the HKCAAVQ. Recurrent expenditure for maintenance of the system of around HK$757,500 will be funded by the HKCAAVQ through the overhead charges in fee for service delivery.