

Project Overview

Project Title (in English):

**HKCAAVQ IT Infrastructure Development Project
(Phase 2)**

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(第二期)

Executive Summary

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

This application is for Phase 2 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 the last funding round with a targeted completion date of January 2015.

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 37 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 will be 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 will be 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. This phase will take 19 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 2):

- to facilitate the effective collection of data and create a Central Repository containing information on all operators and Specialists.
- to enhance communication and exchange of information between internal staff and external stakeholders (operators and Specialists) in a secure environment.
- to facilitate data analysis and reporting for all business processes.
- to improve quality of services, work efficiency and collaboration among various functional areas.

Project Objectives and Deliverables

Measurable Objectives	How it can be achieved
<p>1. To facilitate the effective collection of data and create a Central Repository containing information on all operators and Specialists.</p>	<ul style="list-style-type: none"> • Electronic submission of documents and applications will be available for operators. • Data can be collected from operators for monitoring purpose and to establish “track record”. • Specialists' data will be kept updated through the Internet

	<p>service.</p> <ul style="list-style-type: none"> • Digital storage of information. • Data integrity, confidentiality and availability will be enhanced.
<p>2. To enhance communication and exchange of information between internal staff and external stakeholders (operators and Specialists) in a secure environment.</p>	<ul style="list-style-type: none"> • Enhance external communication and data sharing with other organisations and individuals and internal communication within the HKCAAVQ. • Electronic submission of documents and applications will be available for individual applicants.
<p>3. To facilitate data analysis and reporting for all business processes.</p>	<ul style="list-style-type: none"> • Management statistics and preparation of regular and ad-hoc reports will be available to facilitate the making of management decisions.
<p>4. To improve quality of services, work efficiency and collaboration among various functional areas.</p>	<ul style="list-style-type: none"> • Efficiency of the IT infrastructure system will be enhanced with larger and faster system capacity that will increase the efficiency of the accreditation process. • Security will be enhanced through the upgrade of the IT infrastructure system. • Data will be shared among different functional areas. • Alerts will be generated as early reminders for overdue exercises or applications. • Applicants will be able to check the status of their applications online. • Electronic payment will be available to applicants. • HR data will be digitalized for better management of e-learning, recruitment 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. Extend the CRM, DMS and reporting system to CPD, CEF and Non-local course assessment functions.	Bringing together operators' information received from different services will allow accreditation to inform assessment activity and vice versa.
2. Extend the CRM, DMS and reporting system to individual qualification assessment function.	Aggregated information of individual qualification assessments such as qualification types and places of award of qualifications will be generated and shared among the public.
3. Provide a web interface connecting the CRM for communication and data sharing between operators and Council, and Specialists and Council.	The web interface will enable sharing of accreditation information with operators and specialists in a digital format.
4. Extend the Reporting System to provide flexibility to customise templates of reports for data analysis.	This function will allow for the preparation and sharing of 'track records' with operators prior to accreditation exercises and will lead to streamlining of revalidation exercises.
5. The data will be migrated from two existing applications: Data Management System (DMS) and Management Information System (MIS).	Information generated from the DMS and MIS will not be shared with external parties, however incorporating these applications in the new system will shorten the processing time for individual qualifications assessment.
6. Email communication services will be upgraded from MS Exchange 2003 to MS Exchange 2010 to enhance internal and external communication services.	This will allow easier and faster connection with operators, Specialists and staff as well as increased capacity for document exchange and setting up of network groups for accreditation exercises.

(Please indicate the information that can be uploaded onto relevant EDB websites during and after the project period.)

All deliverables will be used in the accreditation and assessment activities for non-self-accrediting operators and for assessment of individual qualifications. Information on the revised and updated processes enabled by the enhanced IT infrastructure system will be shared among operators 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 (about 70) performing
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	<p>accreditation and assessment exercises, operators (about 200) and Specialists (about 1000).</p>
<p><i>(Please provide justification to support the above estimation and explain how they can be benefited from the project.)</i></p>	
<p>In the last financial year, 2012/13, the HKCAAVQ accredited 180 local and non local programmes, assessed over 3,000 non-local courses, 1,800 Continuing Education Fund (CEF) reimbursable courses and nearly 600 Continuing Professional Development (CPD) programmes. The HKCAAVQ also organised around 50 capacity building activities for our Specialists, panel members, operators and staff.</p> <p>These figures are not estimates but known quantities and this project has the capacity to impact positively on the activities of all of the identified beneficiaries.</p> <p>Through upgrading the IT infrastructure service, the efficiency of electronic communication will be improved with larger and faster system capacity. It will also allow for the creation of better communication platforms for all stakeholders.</p> <p>By extending the CRM, DMS and reporting systems to CPD, CEF and Non-local courses assessment and the individual qualification assessment function, it can further improve the operational efficiency of the accreditation and assessment processes. Data of operators can be collected for monitoring purposes and to establish "track record" for future accreditation exercises. The documents can be stored digitally and located easily, most of the data can also be shared among different functional areas. Besides, system alerts can be generated as early reminders for overdue exercises or all kinds of applications for responsible users. Management statistics and reports will be available to facilitate the making of management decisions. In addition, data integrity, confidentiality and availability will be enhanced.</p> <p>By introducing the new Internet services, the electronic submission of documents and applications will be available for operators. Specialists' data can be kept updated through the Internet service. Communication with other organisations and individuals will be enhanced.</p>	

<p>Implementation Schedule</p>	
<p><i>(Please list out the implementation schedule and key milestones to be achieved on a half-yearly basis.)</i></p>	
<p>Estimated start date of the project (month/year)</p>	<p>March 2015</p>
<p>Estimated end date of the project (month/year)</p>	<p>September 2016</p>
<p>Project duration (months)</p>	<p>19</p>

Month	Key milestones	
	In terms of project activities and deliverables	In terms of monitoring and evaluation
1-6	<ul style="list-style-type: none"> Email exchange upgrade Customer Relationship Management (CRM) and Document Management System (DMS) for CPD, CEF and Non-local course assessment Data Management System (DMS) and Management Information System (MIS) migration 	<p>The Project Team will monitor and evaluate the project progress to ensure:</p> <ul style="list-style-type: none"> The email system is operational with no errors found. The data for CPD, CEF and Non-local course assessment in the CRM database is operational with no errors found. The workflow for CPD, CEF and Non-local course assessment in the CRM is operational with no errors found. The system alerts for CPD, CEF and Non-local course assessment is generated and operational.
7-12	<ul style="list-style-type: none"> Customer Relationship Management and Document Management System for qualification assessment Internet Service for Accreditation Reporting system enhancement Data Management System (DMS) and Management Information System (MIS) migration 	<p>The Project Team will monitor and evaluate the project progress to ensure:</p> <ul style="list-style-type: none"> The data for qualifications assessment in the CRM database is operational with no errors found. The workflow for qualifications assessment in the CRM is operational with no errors found. The system alerts for qualification assessment is generated and operational. Internet service for accreditation should be operational with no errors found. The user query report is verified with no errors found.
13-18	<ul style="list-style-type: none"> Final acceptance of the system for production use 	<ul style="list-style-type: none"> User acceptance testing of the system for production use.
19-24	<ul style="list-style-type: none"> Retainage 	<ul style="list-style-type: none"> 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	992,438 (Funded by QESS)	0	0	992,438
Services	2,769,762 (Funded by QESS)	378,438 (14,300 Funded by QESS, 364,138 Funded by HKCAAVQ)	0	3,148,200
General Expenses	0	0	0	0
Others (e.g. auditor's fee)	223,500 (Funded by QESS)	149,000 (Funded by HKCAAVQ)	0	372,500
Total	3,985,700	527,438	0	4,513,138

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

	Amount in HK\$			
Period	Year 1	Year 2	Year 3	Total
Total	0	0	0	0

Grant Sought under the Quality Enhancement Support Scheme **4,000,000 (Phase 2)**

Funding from the Applicant **513,138**

Funding from Other Sources 0

Total Project Value 4,513,138

(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.)

Other funding for the project will come from the Hong Kong Council for Accreditation of Academic and Vocational Qualifications.

(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\$600,000 will be funded by the HKCAAVQ through the overhead charges in fee for service delivery.