

Information paper

**Panel on Security of the Legislative Council
Panel on Information Technology and Broadcasting of the Legislative
Council**

**HKSAR Identity Card Project –
Approval of the Main Tender**

INTRODUCTION

This paper informs Members that with the approval of the Central Tender Board (CTB), an international consortium led by PCCW Business e-Solutions Limited has won the contract for implementing the new generation of smart ID cards and its new supporting computer system. The consortium has a good mix of local and overseas companies with expertise in their respective field of business. It comprises local companies like SecureNet Asia Limited as well as reputable international companies like Trúb from Switzerland, Cogent System Inc. from USA, Keycorp Limited from Australia, ACI Worldwide from Singapore and Mondex International from UK (Annex A).

BACKGROUND

2. At the meeting on 7 November 2001, Members were informed vide LC Paper No. CB(2)243/01-02(02) that the tender for procurement of hardware, software and related services for the implementation of a new Registration of Persons (ROP) computer system [hereafter referred to as the Smart Identity Card System (SMARTICS)] and the purchase of 1.2 million blank smart cards was closed on 28 September 2001 and the tender proposals were being examined.

TENDERING APPROACH

3. The procurement of the SMARTICS is governed by the Stores and Procurement Regulations and the provisions of the World

Trade Organisation Agreement on Government Procurement (WTO GPA). Consistent with our international obligations, all tender proposals were handled in a non-discriminatory and fair manner.

4. A public tender was gazetted on 20 July 2001. Since the project required the seamless integration of different technologies, tenderers were required to provide a total solution which should be efficient, cost-effective and could be delivered on time and within budget. We allowed tenderers the free choice to decide whether they would wish to bid the project on their own or to team up with other local or foreign partners. We also allowed tenderers ten weeks instead of the usual six weeks to prepare their proposals.

5. To ensure that all tenderers would have sufficient understanding of our requirements, all relevant information pertaining to SMARTICS were published in the tender. For the sake of transparency, we also published the tender evaluation procedures and criteria (Annex B), the marking scheme and assessment criteria (Annex C), the mandatory requirements to be fulfilled by tenderers and the requirements for demonstration and benchmark test so that everyone would know clearly how the tender proposals would be assessed. In addition, a briefing session was held on 2 August 2001 to explain the key components of the tender document and to clarify any points of doubt raised by potential tenderers. All questions on the tender received were answered in writing and all recipients of the tender document were provided with a copy of the correspondences.

EVALUATION PROCEDURES AND CRITERIA

6. Upon the close of the tender on 28 September 2001, a total of 11 proposals were received.

7. The tender proposals were evaluated by an Inter-departmental Assessment Panel (Assessment Panel) in accordance with the procedures and criteria approved by the Central Tender Board. The Assessment Panel was chaired by the Deputy Director of Immigration and comprised senior officers of Security Bureau, Information Technology Services Department and Immigration

Department. The Assessment Panel was assisted by experts of the Printing Department (to give advice on the security printing of the smart cards), Government Laboratory (to conduct forensic tests on sample cards and to give advice on their quality), Department of Justice (to give advice on legal matters relating to the tender) and Government Supplies Department (to give advice on the tendering procedures).

8. Evaluation of the tender proposals was based on the information provided by the tenderers up till the close of tender on 28 September 2001 and the subsequent written explanations on issues which required clarifications. Changes to the original proposals or price adjustment were not permitted. Due consideration was given to the quality of the proposed solutions (i.e. tenderer's experience, composition of the project team, approach and methodology, ROP system and system infrastructure, the smart card, and card personalisation and management system – see Annex C) and the price quoted in the tender proposal. In normal circumstances, the quality score would attract a weight of 30%-40%, as against a weight of 60%-70% for the price score. However, in view that the new system would entail the use of advanced technologies and have very stringent requirements on data privacy and data security, it was decided to attach more weight to quality, by adopting a quality to price ratio of 60:40. The tender proposal with the highest combined quality and price score would be selected.

9. The tender evaluation was conducted in five stages. Details of the evaluation are at Annex D.

SELECTION OF CONTRACTOR

10. Only four out of the eleven tenderers were able to meet all the mandatory requirements at Stage I and pass the technical evaluation at Stage II. They competed through the final round of assessment at Stage IV. Finally, on the recommendation of the Assessment Panel and the approval of the CTB, an international consortium led by PCCW Business e-Solutions Limited has been selected for award of contract, at a one-off value of HK\$162,689,356.

11. We believe that we have struck the most advantageous deal

available to the Government. PCCW Business e-Solutions Limited's proposal has met all the mandatory requirements in the tender (including security, data privacy, infrastructure and functional requirements), passed all the prescribed evaluation stages approved by the CTB and attained the highest combined quality and price score. It therefore fully merits winning the contract in accordance with the rules promulgated in the tender.

PROVISIONS TO ENSURE TIMELY COMPLETION AND COMPLIANCE OF CONTRACT

12. There are stringent provisions in the contract to ensure that PCCW Business e-Solutions Limited will fully discharge its contractual obligations. There are standard contractual conditions such as :

- (a) implementation plan on activities to be achieved at different stages of the project;
- (b) payment by stages upon successful completion of that stage of work.;
- (c) payment of liquidated damages for any loss or damages sustained by the Government resulting from the delay;
- (d) close monitoring through a vigilant quality assurance and review programme;
- (e) regular planning workshops and progress review meetings to ensure early identification or rectification of problems;
- (f) hardware and software testing and replacement requirements should the system or any part thereof fail to conform fully to the specification; and
- (g) in the event that the contract is terminated by the Government, PCCW Business e-Solutions Limited shall repay the Government any sums previously paid under the contract and indemnify the Government of any loss or damages sustained or incurred by the Government.

13. Furthermore, PCCW Business e-Solutions Limited has undertaken the following: -

- (a) to meet the schedule in the tender (a detailed plan has been provided to explain how it could be achieved);
- (b) to inject, at no additional cost to the Government, all the resources need to meet the implementation schedule should it appear that there is any danger of the schedule not being achieved; and
- (c) it fully understands the requirements of the tender and shall not be entitled to any additional payment nor be excused from any liability under the contract as a consequence of any misinterpretation on the part of the company.

14. In addition, other consortium partners acting as the sub-contractors of the company, namely, SecureNet Asia Limited, Trüb AG Switzerland, Cogent System Inc., Keycorp Limited, ACI Worldwide, Mondex International (Annex A) have also entered into Deeds of Undertaking with the Government which will ensure their satisfactory performance.

15. All these provisions will provide adequate safeguards to ensure the contractual obligations are fully discharged. Immigration Department with the support of Information Technology Services Department will closely monitor the performance of the consortium. We are of the view that the selected tenderer provides the best deal to the Government among all the tenders received and the project will result in a quality product which will meet the needs of Hong Kong for its new smart ID card.

**Sub-contractors Entering into
Deed of Undertaking with Government**

<u>Company</u>	<u>Country/Place of Origin</u>	<u>Responsibility</u>
SecureNet Asia Limited	Hong Kong	Applications on smart ID card and card receiving side
Trüb AG Switzerland	Switzerland	Smart cards, personalization and card production infrastructure
Cogent Systems, Inc.	USA	Fingerprint solutions
Keycorp Limited	Australia	Chip modules and card operating system
ACI Worldwide	Singapore	Card Management System, Application Management System and Key Management System
Mondex International	UK	Key Management Authority (KMA) solutions

Attachment 1 - Tender Evaluation Procedures and CriteriaAnnex B
(page 1 of 2)

1. For tender evaluation, an assessment panel will be formed.
2. The assessment panel will evaluate the tender proposals based on the following evaluation procedures and criteria:-

Stage I - Assessment of Mandatory Requirements

- (a) Part I – The evaluation team will check the completeness of all the tender proposals to ensure that they meet all the mandatory requirements specified in Attachment 1(A) to Part II of the Tender. Those proposals which can pass the completeness check and meet all the mandatory requirements will be short-listed for Part II of Stage I evaluation. Any proposal which fails to fully meet the mandatory requirements will not be considered.
- (b) Part II – Assessment of the Compliance of the Proposals
Tenderers will be invited to conduct demonstrations and benchmark tests to prove their ability in meeting the requirements specified in the Project Specification. Only proposals which can pass the demonstration and benchmark tests will be short-listed for Stage II evaluation.

Stage II - Evaluation of the Quality of the Proposals of the Short-listed Tenderers

- (a) Further evaluation of the quality of the proposals, including the technical aspects, will be made in accordance with the criteria and marking scheme at Attachment 1(B) to Part II of the Tender.
- (b) Panel members will discuss the merits of the short-listed tender proposals. The mark to be given under each of the assessment items will be based on the marking scheme.
- (c) A maximum mark of 100 is assigned. Offers scoring less than the aggregate total of 50 marks or less than 50% in any of the following three assessment criteria items in the marking scheme at Attachment 1(B) will not be considered:

Item 4 - ROP System and System Infrastructure;

Item 5 - Card Personalization and Management System (CPMS); or

Item 6 - Smart Card (including the card, the chip and the card operating system)

- (d) The weighted quality score of the proposals which are able to pass the quality assessment will be worked out in accordance with the following formula:-

$$60 \times \frac{\text{Mark attained by the tender proposal being assessed}}{\text{Highest mark among the tender proposals that have passed both Stage I and Stage II above}}$$

Stage III - Calculation of Price Scores

- (a) Tenders which have passed the quality assessment will be short-listed for price evaluation.
- (b) The tender prices will be assessed on the basis of the total system capital costs on the minimum quantities (including the costs of the hardware, software and the related services to be provided by the Contractor as well as the costs of the other hardware and software to be drawn from the Government term contracts for the SMARTICS, the cost of the mainframe upgrade arising from the implementation of the SMARTICS and the additional mainframe software charge due to the increase of CPU capacity) plus the estimated recurrent costs (including maintenance service charges, licence fees, rental of communication network services, additional mainframe software charge due to the increase of CPU capacity and other charges) over a period of 10 years using the net present value methodology.
- (c) A maximum price score of 40 will be allocated to the proposal in which the lowest fee is charged. The score for the other proposals will be worked out in accordance with the following formula:-

$$40 \times \frac{\text{Lowest price among the tender proposals that have passed both Stage I and Stage II above}}{\text{Price of the tender proposal being assessed}}$$

Stage IV - Calculation of Combined Scores

The combined quality/price score for the short-listed proposals will be worked out. The tender proposal with the highest combined score will normally be selected, subject to financial vetting.

Stage V - Financial Vetting

Financial vetting of the Tenderer with the highest combined quality/price score will be conducted to ensure that he has the financial capability to undertake and fulfil the contractual obligations, before it could be considered for the award of the Contract.

Attachment 1(B) - Marking Scheme and Assessment Criteria for Evaluating the Tender

Assessment Criteria		Weighting
1	Tenderer's Experience	8
1.1	Experience in management of IT projects of similar scale (in terms of cost) and similar nature (in terms of implementation and maintenance of application and system infrastructure, etc) in the past ten years	4
1.2	Experience in management of Smart Card projects of similar scale (in terms of cost) and similar nature (in terms of supply of smart cards, card personalization and management system, implementation of multi-application smart cards, etc) in the past ten years	4
2	Project Team	10
2.1	Relevant qualification and experience of project team members	5
2.2	A balanced team structure and skills covering all relevant technical areas in the project	5
3	Approach and Methodology	6
3.1	Approach and methodology for project management and system integration	2
3.2	Approach and methodology for design and development	2
3.3	Approach and methodology for quality assurance	2
4	ROP System and System Infrastructure	28
4.1	Comprehensiveness, clearness and effectiveness of the overall implementation proposal and functionality of the ROP System	5
4.2	Comprehensiveness, clearness and effectiveness of the proposed technical design and architecture of the system infrastructure	5
4.3	System availability, resilience and disaster recovery	3
4.4	Effectiveness of the solutions to meet the security and data privacy requirements	3
4.5	Effectiveness and efficiency of the proposed system to meet the workload and performance requirements	3

Assessment Criteria		Weighting
4.6	Effectiveness and efficiency of the fingerprint scanning and verification solution	3
4.7	Ease of expansion and upgrade	3
4.8	Ease of operation, management and maintenance of the system	2
4.9	Effectiveness and efficiency of the photo capturing solution	1
5	Card Personalization and Management System (CPMS)	28
5.1	Card Management, Key Management System and Card Applications	14
5.1.1	Comprehensiveness, clearness and effectiveness of the overall technical proposal and functionality	5
5.1.2	System availability, resilience and disaster recovery	3
5.1.3	Effectiveness of the solutions to meet the security and data privacy requirements	3
5.1.4	Effectiveness and efficiency of the proposed systems to meet the performance requirements	3
5.2	Card Personalization System	8
5.2.1	Printing quality of the personalized card	4
5.2.2	Effectiveness and efficiency of the proposed system	4
5.3	Smart Card Receiving Device	6
5.3.1	Features, functionality and performance	3
5.3.2	Ease of upgrade, openness and conformance to industry standards	3
6	Smart Card (including the card, the chip and the card operating system)	20
6.1	Physical card	10
6.1.1	Durability	4
6.1.2	Security design	4

Assessment Criteria		Weighting
6.1.3	Bonding of the chip to the card body	2
6.2	Chip and card operating system	10
6.2.1	Technical design and architecture of the chip and card operating system	4
6.2.2	Ease of upgrade and interoperability	2
6.2.3	Performance, durability and reliability	2
6.2.4	Ease of acquiring multiple chip suppliers	1
6.2.5	Openness and conformance to industry standards	1

Five Stages of Evaluation

Stage I – Assessment of Mandatory Requirements

Firstly, the tender proposals were examined to ensure that the necessary information had been provided and all the mandatory requirements had been met. Tenderers who had passed the initial checks were then given the same period of time to arrange the demonstration and benchmark tests. Invitation for demonstration was served on each tenderer in writing 2 weeks prior to the date of demonstration. Using the same set of published data provided by Immigration Department, the tenderers were required to show in the demonstration and benchmark tests the application processing flow, the essential functions and features of the proposed system and their abilities to fulfill the requirements stipulated in the Project Specification. Tenderers who failed in this process were not selected for Stage II evaluation.

Stage II – Evaluation of the Quality of the Proposals of the Short-listed Tenderers

The technical competence of the tenderers and the effectiveness of the proposed solutions were studied in detail. Results of the laboratory tests on the smart card and the chip by Government Laboratory were taken into account for

assessment. Marks were then allocated by the Assessment Panel in accordance with the published marking scheme. At this stage, the Assessment Panel had not been given sight of the price proposal of the tenderers.

Stage III – Calculation of Price Scores

The Assessment Panel then obtained the price proposals from the Government Supplies Department for price evaluation. The tender prices were assessed on the basis of the total system capital costs plus the estimated recurrent costs over a period of 10 years. Again, marks were allocated by the Assessment Panel in accordance with the formula published in the tender.

Stage IV – Calculation of Combined Scores

The combined quality and price score for the short-listed proposals was then worked out based on the results of the technical evaluation and cost comparison.

Stage V – Financial Vetting

Financial vetting of the tenderer with the highest combined quality and price score was conducted by the Director of Accounting Services to ensure that the selected tenderer had the financial capability to undertake and fulfill the contractual obligations.