

## **Legislative Council Panel on Commerce and Industry**

### **Road Cargo System**

#### **PURPOSE**

This paper invites Members to support the funding proposal to implement an electronic advance cargo information (e-ACI) system for customs clearance of road cargoes (hereinafter referred to as “the Road Cargo System” (ROCARS)).

#### **BACKGROUND**

2. We have consulted industry stakeholders involved in the handling of cross-boundary road cargoes on the proposal. The majority of the stakeholders consulted, including representatives of shippers, freight forwarders, express couriers and truck drivers, have pledged support for early implementation of the ROCARS.

3. At the meeting of the Legislative Council (LegCo) Panel on Commerce and Industry held on 16 January 2007, the Panel gave in-principle support for the Administration’s proposal. On 18 April 2007, we introduced into LegCo the Import and Export (Amendment) Bill 2007 which seeks to provide the necessary regulation making powers for implementing e-ACI. The Bill was passed in LegCo on 23 May 2007.

#### **PROPOSAL**

4. The Commissioner of Customs and Excise, with the support of the Secretary for Commerce and Economic Development, proposes to create a new commitment of \$178 million under the Capital Works Reserve Fund (CWRF) (Head 710: Computerisation) to implement the ROCARS.

## JUSTIFICATION

### *The electronic system*

5. Road cargoes are at present processed manually with limited automation provided by the Customs and Excise Department (C&ED)'s Land Boundary System (LBS)<sup>1</sup>. At existing land boundary control points (LBCPs), a truck driver has to stop first at an Immigration kiosk and then a Customs kiosk. At the latter kiosk, he delivers a paper manifest to a Customs officer who will, with the help of the LBS, determine on the spot whether physical inspection is necessary.

6. The major functions of the ROCARS are to –

- (a) enable shippers to submit cargo information via a web-based platform or other electronic means;
- (b) provide call centre support and registration services to shippers and truck drivers;
- (c) allow Customs officers to conduct computer-assisted risk assessment on a pre-shipment basis; and
- (d) facilitate the provision of one-stop Customs clearance arrangement for inter-modal transshipment cargoes through providing interface with other customs clearance systems.

7. In designing the ROCARS, we shall adopt a modular system configuration so that the system can be enhanced promptly to cater for the electronic submission of all data in a road cargo manifest, when the conditions are ripe.

### *Anticipated benefits*

#### Enhancing customs control and facilitating cargo movement

8. At present, we have the necessary electronic infrastructure for customs clearance of cargoes carried by different modes of transport, except for the road mode. By filling this gap in our electronic infrastructure, the ROCARS will enable us to keep abreast with global, regional and national developments in moving towards electronic customs clearance. This would help maintain Hong Kong's competitiveness as an international trading centre.

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<sup>1</sup> LBS is a computerized C&ED intelligence system used for targeting vehicles for examination.

9. With the ROCARS, Customs officers can conduct risk profiling on every cargo consignment in advance for determining whether a truck needs to be inspected. All cross-boundary trucks, except those selected for inspection, will enjoy seamless customs clearance at the land boundary. Moreover, C&ED will be able to introduce one-stop customs clearance arrangement to further facilitate the passage of transshipment cargoes which involve inter-modal transfer.

10. The ROCARS will also facilitate C&ED's further cooperation with the Mainland Customs in expediting cross-boundary cargo movement.

#### Savings in staff cost

11. Upon full implementation of the ROCARS in 2011-12, C&ED can deploy staff to patrol LBCPs on a need basis, without having to station officers at every customs kiosk. This will bring about annual savings of \$35 million in 2011-12 and \$61 million from 2012-13 onwards. C&ED will also be able to achieve cost avoidance of \$12 million in 2011-12, rising to \$31 million in 2015-16 (being the fifth year of full implementation), from not having to deploy staff otherwise required for manning customs kiosks at new LBCPs. Details of the estimated savings and cost avoidance are set out in **Annex A**.

#### ***Implementation plan***

12. Taking into account the lead time required for securing the funds, calling tenders and developing the necessary IT infrastructure, we plan to roll out the ROCARS in the third quarter of 2009. After the system is rolled out, we shall commence an 18-month transitional period before mandating the use of electronic services in early 2011.

13. The transitional period seeks to provide a clear and achievable target upfront for all parties concerned to prepare themselves for migration to the electronic mode. C&ED will provide seminars on the new workflow before system roll-out and hands-on training throughout the transitional period and encourage the stakeholders concerned to try out e-ACI submissions early during the transitional period. C&ED will continue to station staff at customs kiosks during the first six months after mandating the use of the ROCARS.

## FINANCIAL IMPLICATIONS

### *Non-recurrent expenditure*

14. We estimate that implementation of the ROCARS will require a non-recurrent provision of \$178 million from 2007-08 to 2010-11 (under CWRP Head 710: Computerisation) for the purchase of computer hardware and software, procurement of services and engagement of contract staff for project implementation including system analysis, design and development, user acceptance testing, site preparation, installation of communication lines, facility management and start-up consumables. In addition, staff and accommodation costs to the order of \$18 million will be required for system development and implementation during the same period. C&ED will absorb these staff and accommodation costs within its existing resources. A detailed breakdown of the non-recurrent expenditure is at **Annex B**.

### *Recurrent expenditure*

15. We estimate that the proposal will entail a recurrent expenditure of about \$84 million upon full implementation in 2011-12. This includes \$44 million for the maintenance of computer hardware and software, procurement of services and engagement of contract staff for on-going system support and maintenance, rental of communication lines, procurement of services for facility management, registration offices and call centres; and \$40 million for the in-house staff costs for on-going project management and operating the Cargo Selectivity Centre where risk profiling is conducted. C&ED will explore absorbing part of the staff and accommodation costs within its existing resources. **Annex C** gives detailed breakdown of the recurrent expenditure before full implementation and that as projected up to 2015-16.

### *Cost and benefit analysis*

16. The project will entail net savings upon full implementation from 2013-14 onwards, as the savings from deletion of existing posts in C&ED and cost avoidance for new posts otherwise required for manning customs kiosks will exceed the recurrent costs for operating the ROCARS. A cost and benefit analysis for the implementation of the ROCARS is at **Annex D**.

## **ADVICE SOUGHT**

17. Subject to Members' views, we intend to put the funding proposal for the ROCARS to the Finance Committee for approval in November 2007.

Commerce, Industry and Tourism Branch  
Commerce and Economic Development Bureau  
October 2007

**Savings and Cost Avoidance from the implementation of the ROCARS**

|                        | <b>2011-12</b> | <b>2012-13</b> | <b>2013-14</b> | <b>2014-15</b> | <b>2015-16</b> |
|------------------------|----------------|----------------|----------------|----------------|----------------|
|                        | <b>\$'000</b>  | <b>\$'000</b>  | <b>\$'000</b>  | <b>\$'000</b>  | <b>\$'000</b>  |
| (a) Realisable Savings | 34,252         | 58,718         | 58,718         | 58,718         | 58,718         |
| (b) Notional Savings   | 1,072          | 1,838          | 1,838          | 1,838          | 1,838          |
| <b>Subtotal</b>        | <b>35,324</b>  | <b>60,556</b>  | <b>60,556</b>  | <b>60,556</b>  | <b>60,556</b>  |
| (c) Cost Avoidance     | 12,271         | 23,411         | 25,855         | 28,372         | 30,962         |
| <b>Total</b>           | <b>47,595</b>  | <b>83,967</b>  | <b>86,411</b>  | <b>88,928</b>  | <b>91,518</b>  |

**Non-recurrent Expenditure for the implementation of the ROCARS**

|  | <b>2007-08</b> | <b>2008-09</b> | <b>2009-10</b> | <b>2010-11</b> | <b>Total</b>   |
|--|----------------|----------------|----------------|----------------|----------------|
| <b>Non-recurrent expenditure</b>                 | <b>\$'000</b>  | <b>\$'000</b>  | <b>\$'000</b>  | <b>\$'000</b>  | <b>\$'000</b>  |
| (a) Hardware and software                        |                | 33,889         | 79,075         |                | 112,964        |
| (b) System design and implementation services    | 90             | 7,457          | 22,724         | 10,502         | 40,773         |
| (c) Site preparation                             |                | 3,260          | 1,397          |                | 4,657          |
| (d) Communication lines                          |                | 1,602          | 1,602          |                | 3,204          |
| (e) Facility management and start-up consumables |                | 777            | 6,995          |                | 7,772          |
| (f) Contingency                                  | 5              | 2,349          | 5,590          | 525            | 8,469          |
| <b>Total</b>                                     | <b>95</b>      | <b>49,334</b>  | <b>117,383</b> | <b>11,027</b>  | <b>177,839</b> |
| <b>Other non-recurrent expenditure</b>           |                |                |                |                |                |
| (g) Staff cost <sup>Note</sup>                   | 2,578          | 8,649          | 6,400          | 238            | 17,865         |
| (h) Accommodation cost <sup>Note</sup>           | 53             | 185            | 140            | 7              | 385            |
| <b>Total</b>                                     | <b>2,631</b>   | <b>8,834</b>   | <b>6,540</b>   | <b>245</b>     | <b>18,250</b>  |

**Note:** C&ED will absorb in full the staff and accommodation costs required for system development and implementation within its existing resources.

### Recurrent Expenditure for the implementation of the ROCARS

|   | 2009-10       | 2010-11       | 2011-12       | 2012-13       | 2013-14       | 2014-15       | 2015-16       |
|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
|   | \$'000        | \$'000        | \$'000        | \$'000        | \$'000        | \$'000        | \$'000        |
| (a) Hardware and software maintenance                                       |               | 17,301        | 17,301        | 17,301        | 17,301        | 17,301        | 17,301        |
| (b) System support and maintenance services                                 | 1,024         | 6,597         | 6,597         | 6,597         | 6,597         | 6,597         | 6,597         |
| (c) Communication lines rental  | 2,001         | 4,899         | 4,899         | 4,899         | 4,899         | 4,899         | 4,899         |
| (d) Facility management and consumables                                     | 3,220         | 5,520         | 5,520         | 5,520         | 5,520         | 5,520         | 5,520         |
| (e) Public interface services   | 4,982         | 11,886        | 9,563         | 9,563         | 9,563         | 9,563         | 9,563         |
| <b>Subtotal</b>   | <b>11,227</b> | <b>46,203</b> | <b>43,880</b> | <b>43,880</b> | <b>43,880</b> | <b>43,880</b> | <b>43,880</b> |
| (f) Staff cost for ongoing project management <sup>Note</sup>               | 2,045         | 4,274         | 4,274         | 4,274         | 4,274         | 4,274         | 4,274         |
| (g) Accommodation cost for ongoing project management <sup>Note</sup>       | 41            | 84            | 84            | 84            | 84            | 84            | 84            |
| (h) Staff cost for operating Cargo Selectivity Centre (CSC) <sup>Note</sup> | 16,068        | 33,303        | 35,056        | 35,932        | 36,809        | 37,685        | 38,562        |
| (i) Accommodation cost for operating CSC <sup>Note</sup>                    | 259           | 538           | 566           | 580           | 595           | 609           | 623           |
| <b>Subtotal</b>   | <b>18,413</b> | <b>38,199</b> | <b>39,980</b> | <b>40,870</b> | <b>41,762</b> | <b>42,652</b> | <b>43,543</b> |
| <b>Total</b>  | <b>29,640</b> | <b>84,402</b> | <b>83,860</b> | <b>84,750</b> | <b>85,642</b> | <b>86,532</b> | <b>87,423</b> |

Note : C&ED will explore absorbing, within its existing resources, part of the staff and accommodation costs.



**Annex D****Cost and Benefit Analysis for the implementation of the ROCARS**

Cashflow (\$'000)

|                               | 2007-08       | 2008-09        | 2009-10         | 2010-11         | 2011-12         | 2012-13         | 2013-14         | 2014-15         | 2015-16         | Total          |
|-------------------------------|---------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|----------------|
| <b>Cost</b>                   |               |                |                 |                 |                 |                 |                 |                 |                 |                |
| Non-Recurrent                 |               |                |                 |                 |                 |                 |                 |                 |                 |                |
| Expenditure                   | 95            | 49,334         | 117,383         | 11,027          |                 |                 |                 |                 |                 | 177,839        |
| Staff Cost                    | 2,578         | 8,649          | 6,400           | 238             |                 |                 |                 |                 |                 | 17,865         |
| Accommodation Cost            | 53            | 185            | 140             | 7               |                 |                 |                 |                 |                 | 385            |
| <b>Total non-recurrent</b>    | <b>2,726</b>  | <b>58,168</b>  | <b>123,923</b>  | <b>11,272</b>   |                 |                 |                 |                 |                 | <b>196,089</b> |
| Recurrent                     |               |                |                 |                 |                 |                 |                 |                 |                 |                |
| Expenditure                   |               |                | 11,227          | 46,203          | 43,880          | 43,880          | 43,880          | 43,880          | 43,880          |                |
| Staff Cost                    |               |                | 18,113          | 37,577          | 39,330          | 40,206          | 41,083          | 41,959          | 42,836          |                |
| Accommodation Cost            |               |                | 300             | 622             | 650             | 664             | 679             | 693             | 707             |                |
| <b>Total recurrent</b>        |               |                | <b>29,640</b>   | <b>84,402</b>   | <b>83,860</b>   | <b>84,750</b>   | <b>85,642</b>   | <b>86,532</b>   | <b>87,423</b>   |                |
| <b>Total Cost</b>             | <b>2,726</b>  | <b>58,168</b>  | <b>153,563</b>  | <b>95,674</b>   | <b>83,860</b>   | <b>84,750</b>   | <b>85,642</b>   | <b>86,532</b>   | <b>87,423</b>   |                |
| <b>Savings</b>                |               |                |                 |                 |                 |                 |                 |                 |                 |                |
| Realisable Savings            |               |                |                 |                 | 34,252          | 58,718          | 58,718          | 58,718          | 58,718          |                |
| Notional Savings              |               |                |                 |                 | 1,072           | 1,838           | 1,838           | 1,838           | 1,838           |                |
| Cost Avoidance                |               |                |                 |                 | 12,271          | 23,411          | 25,855          | 28,372          | 30,962          |                |
| <b>Total Savings</b>          |               |                |                 |                 | <b>47,595</b>   | <b>83,967</b>   | <b>86,411</b>   | <b>88,928</b>   | <b>91,518</b>   |                |
| <b>Net Savings</b>            | <b>-2,726</b> | <b>-58,168</b> | <b>-153,563</b> | <b>-95,674</b>  | <b>-36,265</b>  | <b>-783</b>     | <b>769</b>      | <b>2,396</b>    | <b>4,095</b>    |                |
| <b>Net Cumulative Savings</b> | <b>-2,726</b> | <b>-60,894</b> | <b>-214,457</b> | <b>-310,131</b> | <b>-346,396</b> | <b>-347,179</b> | <b>-346,410</b> | <b>-344,014</b> | <b>-339,919</b> |                |

**Note:** The figures in the cost and benefit analysis have included the non-recurrent staff and accommodation costs required for system development and implementation (\$18.25 million as shown in Annex B) to be absorbed by C&ED within its existing resources. C&ED will also explore absorbing, within its existing resources, part of the recurrent staff and accommodation costs.