

Introduction of the Service Channels of Road Cargo System (ROCARS)

Nov 2009

Available Services

Shippers

- Submit cargo information and receive Customs Cargo Reference Number (CCRN)
- Enquire about and amend submitted cargo information
- Download cargo information for data inheritance purpose
- Print out cargo information with CCRN for transmission to truck drivers for their completion of paper manifest



Truck Drivers

- Submit bundling information of Vehicle Registration Number (VRN) and CCRN
- Enquire about and amend submitted bundling information

Agents

- Use the services for shippers and truck drivers





Design Objectives of Service Interfaces

Users Friendliness

- Provide user-friendly interfaces

System Security

- Provide system security measures, e.g., network transmission encryption, data encryption, username/password/2-factor authentication (digital certificate), and access control
- System data access control according to different user account privileges



Design Objectives of Service Interfaces (cont'd)

Character Support

- Support data input, storage, display and printing in Traditional and Simplified Chinese Characters, English and European Characters

Standard Adherence

- Follow prevalent international and industry standards
- Data Model of World Customs Organization, International Organization for Standardization ISO-10646
- TCP/IP communication protocol, Extensible Markup Language (XML) , Public Key Infrastructure (PKI)

ROCARS – Service Channels

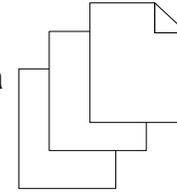
Shippers, Truck Drivers, Agents



Portal Site -
Direct Input

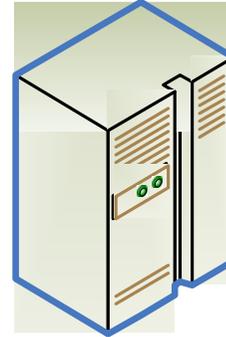
Shippers, Agents

Cargo Data



Portal Site -
Batch Upload

ROCARS

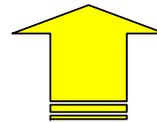


Truck Drivers



Phone - Interactive
Voice Response
System

Shippers, Truck Drivers, Agents



Self-help Kiosks

Shippers, Agents

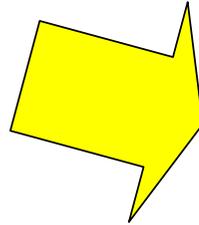


System-to-System
Interface

Portal Site – Direct Input



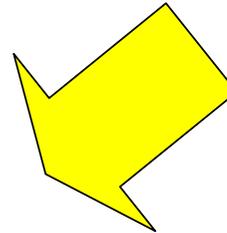
1: Log-in ROCARS portal



2: Enter the cargo data in the portal



3: Confirm the cargo information, apply digital signature and submit the information



Portal Site – Direct Input (cont'd)

Advantages:

- Self-help nature
- User-friendly
- Minimum investment on IT equipment

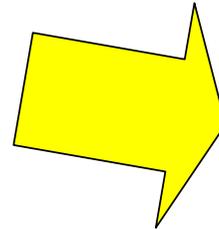
Requirements of IT Equipment:

- Computers with Internet access
- Digital certificate from Recognized Certification Authorities (Shippers and Agents)
- Browsers supporting Java Runtime Environment [e.g., Internet Explorer, Mozilla Firefox]

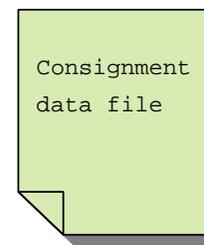
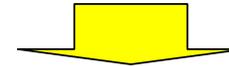
Portal Site – Batch Upload



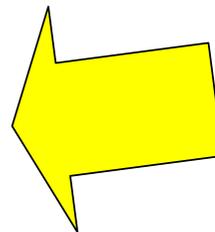
1: Prepare consignment data file in XML format according to the ROCARS specifications



2: Log-in ROCARS portal



3: Upload the prepared consignment data file in the portal



4: Confirm the cargo information, apply digital signature and submit the information



Portal Site – Batch Upload (cont'd)

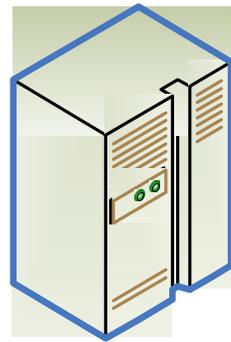
Advantages:

- Multiple consignments can be uploaded in one-go
- Relatively low investment on IT equipment

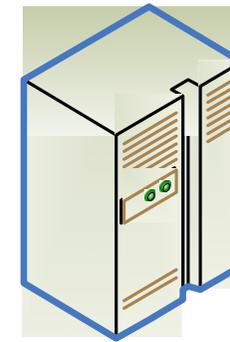
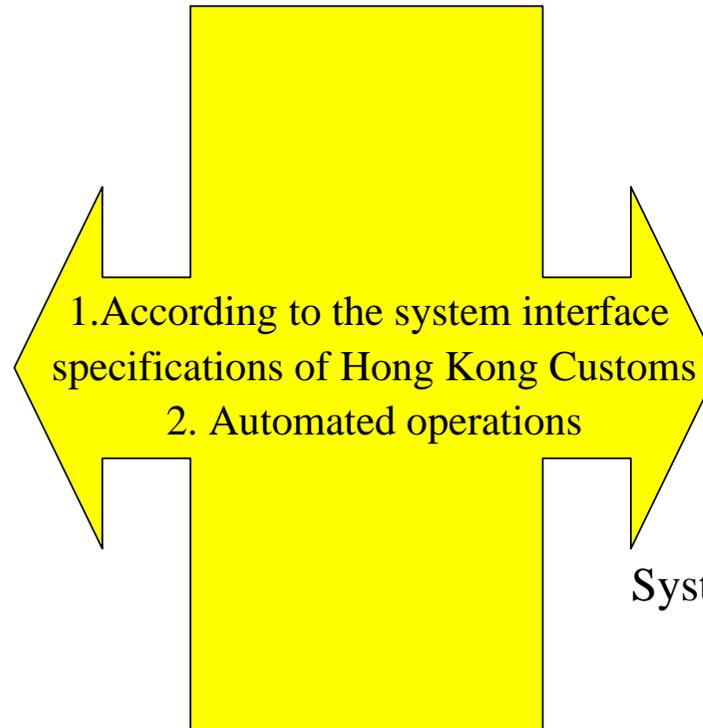
Requirements of IT Equipment:

- Computers with Internet access
- Digital certificate from Recognized Certification Authorities (Shippers and Agents)
- Browsers supporting Java Runtime Environment [e.g., Internet Explorer, Mozilla Firefox]
- Software tools for preparing data files in XML format

System-to-System Interface



ROCARS



System of users



System-to-System Interface **(cont'd)**

Advantages:

- Automated operations, efficient transmission of cargo data in bulk
- Avoid manual efforts for input of cargo data in the portal

Requirements of IT Equipment:

- Support e-business XML (ebXML), ebXML Messaging Services (ebMS) and Public Key Infrastructure (PKI)
- Establish System-to-System interface
- Dedicated communication link / Internet connection with Hong Kong Customs



Introduction of the Communication Infrastructure of the ROCARS Services

Communication Infrastructure

