THE CUSTOMS & EXCISE DEPARTMENT

THE GOVERNMENT OF

THE HONG KONG SPECIAL ADMINISTRATIVE REGION

IMPLEMENTATION INSTRUCTIONS

OF

THE ROAD CARGO SYSTEM (ROCARS)

SYSTEM-TO-SYSTEM INTERFACE FOR BULK SUBMISSION

[RT01]

Version 1.2

Jul 2019

Amendment History

The following amendment(s) has/have been made to this version:-

Change Request Ref.	Descripti	Section / Page	Version no. / Date	Effective Date
1	Update the URL for document schema and code list	Section B.2.5.7 Section B.3.6	1.1	April 2019
2	Remove the URL for doucment schema according to the advice from OGCIO security team	Section B.2.5.7	1.2	July 2019

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A. INTRODUCTION

A.1 Objective

These Implementation Instructions ("Instructions") consist of a Message Implementation Guide for the exchange of information through the system-to-system interface for bulk submission service with the Road Cargo System (ROCARS) of the Customs & Excise Department (C&ED).

The Message Implementation Guide is written to enable the bulk submission parties to exchange information with the Government in a standardized message structure using eXtensible Markup Language ("XML") techniques in relation to the processing of trade-related documents in various business scenarios described in later sections.

A.2 How to use the Instructions

These Instructions consist of the following sections:

SECTION A - **INTRODUCTION** provides the objective and maintenance procedures. It also provides an explanation of how to read these Instructions.

SECTION B – **MESSAGE IMPLEMENTATION GUIDE** covers the following sub-sections and it is written with the presumption that readers have a basic understanding of the concepts of XML and XML Schema Definition ("XSD"):

Sub-section B.1 – **XML** introduces general background information on XML.

Sub-section B.2 – **Message Envelope** describes the envelope used to send messages, including the core extension elements and security modules.

Sub-section B.3 – **Road Cargo System (ROCARS) Bulk Submission Transaction** includes an explanation of the business functions and business processes with message scenario diagrams. Implementation considerations are described and code tables used are listed. Each XML message is elaborated and the corresponding XML schema is defined for the message structure and data elements. Lists of data elements allowing Chinese characters are also provided in the information matrixes of the XML messages.

Sub-section B.4 – **Road Cargo System (ROCARS) Extraction of Data File for Data Inheritance (DI) in System-to-System Interface** describes the details of the Bulk Submission Party to request extraction of the submitted consignment information and the related bundling information via the System-to-System Interface from ROCARS for Data Inheritance (DI) purpose.

A.3 Maintenance and Updating Procedure

It is anticipated that the Instructions will need maintenance and enhancement in the light of experience in use although issue of amendments is not expected on a regular basis.

Consequently, the Instructions will be updated and the relevant implementation procedures would be followed for the update and release of a new version.

B. MESSAGE IMPLEMENTATION GUIDE

B.1 XML

B.1.1 The Formal Definition

XML (stands for “eXtensible Markup Language”) is a flexible way to create common information formats and share both the format and the data on the World Wide Web, intranets, and elsewhere. For example, computer producers might agree on a standard or common way to describe the information about a computer product (processor speed, memory size, and so forth) and then describe the product information format with XML. Such a standard way of describing data would enable a user to send an intelligent agent (a program) to each computer producer’s Web site, gather data, and then make a valid comparison. XML can be used by any individual or group of individuals or companies that wants to share information in a consistent way.

The base specifications are XML 1.0 Second Edition, W3C Recommendation Oct 2000.

XSD (stands for “XML Schema Definition”), a Recommendation of the World Wide Web Consortium (W3C), formally describes the elements in an XML document. This description can be used to verify that each item of content in a document adheres to the description of the element in which the content is to be placed.

In general, a schema is an abstract representation of an object's characteristics and relationship to other objects. An XML schema represents the interrelationship between the attributes and elements of an XML object (for example, a document or a portion of a document). To create a schema for a document, you analyze its structure, defining each structural element as you encounter it.

XML Schema was approved as a W3C Recommendation on 2 May 2001

B.1.2 A Simple Description

The XML is the universal format for structured documents and data on the Web.

XSD expresses shared vocabularies and allows machines to carry out rules made by people. It provides a means for defining the structure and content of XML documents.

CHARACTERS

[Definition: A parsed entity contains text, a sequence of characters, which may represent markup or character data.] [Definition: A character is an atomic unit of text as specified by ISO/IEC 10646 [ISO/IEC 10646] (see also [ISO/IEC 10646-1:2000]). Legal characters are tab, carriage return, line feed, and the legal characters of Unicode and ISO/IEC 10646.]

CHARACTER-SET ENCODING

The XML Declaration also contains the character-set encoding attribute. Unicode represents global standard character-sets and supports languages such as Chinese. All XML parsers support at least two Unicode standards, 'UTF-8' and 'UTF-16'. 'UTF-8' uses eight bits for English characters and sixteen/twenty-four bits for other character-sets. 'UTF-16' uses multiple of sixteen bits for all character-sets.

'UTF-8' is used in the schema of this XML Implementation.

ELEMENTS

Elements are the basic building blocks of an XML document. All XML data must be contained within elements.

Elements are delimited using tags, which consist of the element type name (a string literal) enclosed within a pair of angle brackets ("< >"). Every element must be delimited with a start-tag and an end-tag. In situations where the occurrence of a leaf element is optional (i.e. minimum occurrence is zero) and no data is applicable, the element (including the start-tag and the end-tag) should be omitted altogether.

ATTRIBUTES

Often there is some information about an element that we wish to attach to it, as opposed to the information that is contained within the element. This can be done using attributes, each of which is composed of name-value pair.

XML MESSAGE

An XML Message is that group of data that needs to be passed together to perform a discrete business function.

Normally compared to a document, an XML Message would commonly replace the function of the traditional piece of paper but it must be remembered that a document often has several uses and involves more than one party. In these cases it would be expected that separate XML Messages would be used for each function and between each party.

XML Messages adopted by ROCARS are identified both by a WCO metadata element and a message type code. For example, the Import Consignment XML Message of ROCARS is given a metadata element AgencyAssignedCustomizedDocumentName of value "AIM" and a ROCARS message type code "R01".

B.1.3 Adoption of XML

It has been decided that Government will support the introduction of XML based upon the Electronic Business using eXtensible Markup Language (ebXML) for data exchange. These messages have been designed following the World Customs Organisation (WCO) data model version 2.0.

B2 MESSAGE ENVELOPE

B.2.1 Overview

Electronic Business using eXtensible Markup Language (ebXML) is a joint initiative sponsored by Organization for the Advancement of Structured Information Standards (OASIS) and United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT) to enable efficient global eBusiness using the Internet. ebXML is a suite of standard specifications that define a robust infrastructure to conduct eBusiness between interested parties.

The ebXML Message Service (ebMS) component of the ebXML framework facilitates data exchange in the eBusiness framework by defining a standard protocol for the mechanics of the message exchange. The ebMS protocol is message payload and transport protocol independent and enables the secure and reliable exchange of messages between parties.

As there are various features and ways of implementation in the standard specifications, this document will only specify the appropriate features and ways of implementation that are relevant to the ROCARS implementers.

B.2.2 Caveats and Assumptions

It is assumed the reader has an understanding of the different techniques used for communications protocols, such as MIME, XML, SOAP and SOAP Messages with Attachments, and security technologies. It is also expected that the readers have a high level of understanding of the W3C XML Schema language.

B.2.3 Related Documents

The following sets of related guidelines are developed independent of this document. Having read them would be beneficial in the implementation of the guidelines in this document:

- **ebXML Technical Architecture specification v1.04 (ebTA):** Defines the overall technical architecture for ebXML
- **ebXML Message Service Specification v2.0 (ebMS)**: Defines the *ebXML Message Service Protocol* enabling the secure and reliable exchange of messages between two parties

B.2.4 Packaging Specification

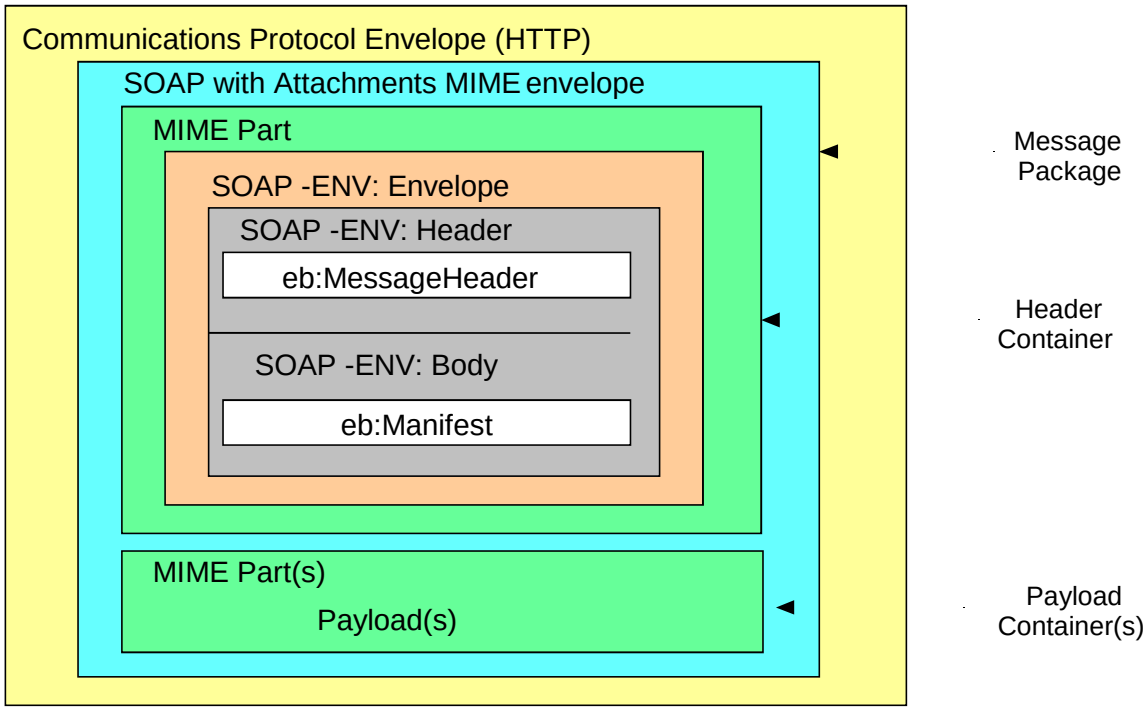
ebXML Transport, Routing and Packaging (TRP) is independent of the underlying Internet protocols used for messaging, which means that any underlying Internet protocol like HTTP, SMTP, FTP, etc. can be used for transport of messages. It extends the SOAP 1.1 XML protocol while also using SOAPATTACH to define the message packaging and exchange semantics. Security though optional is very well supported using newer protocols like XML Digital Signature. It also supports many other important features like Payload Description (using a Manifest).

ebXML TRP messages are essentially SOAP messages with ebXML Message Service extensions conforming to the SOAP 1.1 and SOAPATTACH specification. The packaging structure of ebXML TRP messages as defined by ebMS abstracts the message exchange protocol from the underlying communications protocol and the actual payload content of the message. The use of multipart MIME for encapsulating payload content, as per the SOAPATTACH specification, allows any electronic

data format to be included in the payload.

One or more *Payload Container* is allowed to use in this implementation. However, only one Payload is used in the current situation.

The general structure and composition of an ebXML Message with payload is described in the following figure.



B.2.4.1 Charset and Encoding Type

'UTF-8' MUST be used as the value for 'charset' and 'encoding' type for all ebXML messages. The 'charset' attribute occurs in the MIME header 'Content-Type' and the 'encoding' attribute occurs in the XML prologue of the SOAP message. 'UTF-8' is the choice for charset and encoding type for requirement and benefits of interoperability.

```
Content-Type: text/xml; charset=UTF-8
<?xml version="1.0" encoding="UTF-8"?>
```

B.2.5 Core Extensions Elements

B.2.5.1 MessageHeader Elements

The ***MessageHeader*** element is required in all ebXML Messages. It MUST be present as a child element of the SOAP Header element.

Attribute	Value
Id	An id attribute which is an XML ID that MAY be added to provide for the ability to uniquely identify the element within the SOAP Message. (Optional)
version	"2.0"
SOAP:mustUnderstand	"1"

B.2.5.1.1 From and To Elements

'***From'*** and '***To'*** required elements of '***MessageHeader'*** are used to identify the originator and recipient of the message.

Element	Sub-Element/ Attribute	Description	Value
From		Party sending the document	
	PartyId	Identification of the party sending the document	ebMS Sender Please refer to ZZ0036 of the I.M. It will be equivalent to the unique identifier assigned during the registration.
	type	Type of identification in PartyId element	"ROCARS_PARTY_ID".
	Role	This OPTIONAL element identifies the authorised role of the party	Not Used
To		Party receiving the document	
	PartyId	Identification of the party receiving the document	ebMS Receiver Please refer to ZZ0038 of the I.M. It will be equivalent to the unique identifier assigned during registration
	type	Type of identification in PartyId element	"ROCARS_PARTY_ID"
	Role	This OPTIONAL element identifies the authorised role of the party	Not Used

B.2.5.1.2 CPAId and ConversationId Elements

The REQUIRED ***CPAId*** element is a string that identifies the parameters governing the exchange of messages between the parties.

The REQUIRED ***ConversationId*** element is a string identifying the set of related messages that make up a conversation between two *Parties*. It MUST be unique within the context of the specified ***CPAId***. The *Party* initiating a conversation determines the value of the ***ConversationId*** element that SHALL be reflected in all messages pertaining to that conversation.

The ***ConversationId*** enables the recipient of a message to identify the instance of an application or process that generated or handled earlier messages within a conversation. It remains constant for all messages within a conversation.

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Element	Sub-Element/ Attribute	Description	Value
CPAId		String that identifies the parameters governing the exchange of messages between the parties.	CPA ID Please refer to ZZ0022 of the I.M.
ConversationId		String identifying the set of related messages that make up a conversation between two Parties	Conversation ID Please refer to ZZ0015 of the I.M.

B.2.5.1.3 Service and Action Elements

The REQUIRED ***Service*** element defines the service that acts on the message. The ***Action*** element defines a particular process within the service that processes the payload content of the message.

Element	Sub-Element/ Attribute	Description	Value
Service		Service that acts on the message	"ROCARS" or "TEST"
	type	Type of the Service	"ROCARS_SERVICE_ID"
Action		Process within a Service that processes the message	"MessageDelivery"

The "TEST" service will be used for the testing of ebMS connection between Government and the Bulk Submission Parties. There will not be any validation for messages for the "TEST" service.

B.2.5.1.4 Message Data Elements

The REQUIRED ***MessageData*** element provides a means of uniquely identifying an ebXML Message.

Element	Sub-Element/ Attribute	Description	Value
MessageData		Uniquely identifying an ebXML Message	
	MessageId	a globally unique identifier for each message conforming to MessageId	Automatically generated by ebMS software
	Timestamp	a value representing the time that the message header was created conforming to a dateTime [XMLSchema]	Automatically generated by ebMS software
	RefToMessageId		Not Used
	TimeToLive		Not Used

B.2.5.1.5 Duplicate Elimination

The ***DuplicateElimination*** element MUST be present to identify a request by the sender for the receiving MSH to check for duplicate messages.

B.2.5.1.6 Description

Description element is not used in this implementation.

B.2.5.2 SyncReply Element

The ***SyncReply*** element MUST be present as a direct child descendant of the SOAP Header element.

Element	Sub-Element/ Attribute	Description	Value
SyncReply			
	id	An id attribute which is an XML ID that MAY be added to provide for the ability to uniquely identify the element within the SOAP Message.	(Optional)
	version	It indicates the version of the ebXML Message Service Header Specification.	"2.0"
	actor	A SOAP attribute with the REQUIRED value.	"http://schemas.xmlsoap.org/soap/actor/next"
	mustUnderstand	It indicates whether the contents of the element must be understood by a receiving process.	"1"

B.2.5.3 AckRequested Element

The ***AckRequested*** element MUST exist in the SOAP Header used by the Sending MSH to request a Receiving MSH, acting in the role of the actor URI identified in the SOAP actor attribute, returns an Acknowledgment Message.

Element	Sub-Element/ Attribute	Description	Value
AckRequested			
	id	An id attribute which is an XML ID that MAY be added to provide for the ability to uniquely identify the element within the SOAP Message.	(Optional)
	version	It indicates the version of the ebXML Message Service Header Specification.	"2.0"
	mustUnderstand	It indicates whether the contents of the element must be understood by a receiving process.	"1"
	actor	The AckRequested element MUST be targeted at either the Next MSH or the To Party MSH (these are equivalent for single-hop routing).	"urn:oasis:names:tc:ebxml-msg:actor:toPartyMSH"
	signed	It is used by a From Party to indicate whether or not a message received by the To Party MSH should result in the To Party returning a signed Acknowledgment Message – containing a [XMLDSIG] Signature element	"false"

B.2.5.4 SOAP Header Example

The fragment shown below demonstrates the structure of SOAP Header of an incoming message.

```
<SOAP:Header
    xsi:schemaLocation="http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd
    http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd">
    <eb:MessageHeader eb:version="2.0"
        SOAP:mustUnderstand="1"
        xmlns:eb="http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd">
        <eb:From>
            <eb:PartyId eb:type="ROCARS_PARTY_ID">123456</eb:PartyId>
        </eb:From>
        <eb:To>
            <eb:PartyId eb:type="ROCARS_PARTY_ID">GV0000</eb:PartyId>
        </eb:To>
        <eb:CPAId>12345601</eb:CPAId>
        <eb:ConversationId>
            123456:GV0000:123456R91010000001
        </eb:ConversationId>
        <eb:Service eb:type="ROCARS_SERVICE_ID">ROCARS</eb:Service>
        <eb:Action>MessageDelivery</eb:Action>
        <eb:MessageData>
            <eb:MessageId>234200417071084302</eb:MessageId>
            <eb:Timestamp>2007-12-23T18:07:10.843+08:00</eb:Timestamp>
        </eb:MessageData>
        <eb:DuplicateElimination/>
    </eb:MessageHeader>
```

```
    <eb:SyncReply
        xmlns:eb="http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd"
        SOAP:actor="http://schemas.xmlsoap.org/soap/actor/next"
        SOAP:mustUnderstand="1" eb:version="2.0"/>
    <eb:AckRequested eb:signed="false" eb:version="2.0"
        SOAP:actor="urn:oasis:names:tc:ebxml-msg:actor:toPartyMSH"
        SOAP:mustUnderstand="1"
        xmlns:eb="http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd"/>
    <Signature>
        ......
     </Signature>
</SOAP:Header>
```

B.2.5.5 Manifest Element

The REQUIRED ***Manifest*** element presents a 'Topic of Contents' for the Payload of the message. The payload content of the message can be a combination of content in the Payload Containers section of the Message Package and resources on the Internet. The Manifest provides an index into the payload content which is very useful for pre-processing of the message by the receiving MSH (Message Service Handler).

Attribute	Value
id	Unique Identifier for the Manifest Element (optional)
version	"2.0"

B.2.5.5.1 Reference Element

The ***Reference*** element identifies each payload contents of the message.

Attribute	Value
id	Unique Identifier for the Reference Element (optional)
xlink:type	"simple"
xlink:href	URI of the payload object
xlink:role	Resource that describes purpose of payload (not used)

The ***Schema*** element MAY be optionally used in this Implmentation for reference only and not for validation against the XML content in the Payload. Since there can be more than one schema associated with the payload, all the schemas MAY be referenced using multiple ***Schema*** elements.

Element	Sub-Element/ Attribute	Description	Value
Reference			
	Schema	Reference to schema that describes the payload	
	location	Specifies the location of the schema	URI for the schema for future ebXML implementation Please refer to Section B.2.5.6 for a list of available schemas
	version	Version number of the schema if available	Version identifier of the schema for future ebXML implementation Please refer to Section B.2.5.6 for a list of available schemas

B.2.5.6 Manifest Example

The following fragment shows a ***Manifest*** describing a payload. The ***Schema*** element in *Italic* is optional in this Implementation.

```
<SOAP:Body
   xsi:schemaLocation="http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd
   http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd">
   <eb:Manifest eb:version="2.0"
      xmlns:eb="http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd">
      <eb:Reference eb:id="Payload-0" xlink:href="cid:Payload-0" xlink:type="simple">
         <eb:Schema
            eb:location=" http://www.rocars.gov.hk/schemas/AIM_1p0.xsd"
            eb:version="1.0"/>
      </eb:Reference>
   </eb:Manifest>
</SOAP:Body>
```

B.2.5.7 Schema List

B.2.5.7.1 Document Schema

The detail schema could be provided by ROCARS technical support team upon request.

General Document Schema (from WCO Data Model)

DocumentMetadata:	DocumentMetadata_1p0.xsd version="1.0"
Common:	DS_1p0.xsd version="1.0"

Document Schema for Import Consignment:

Import Consignment:	AIM_1p0.xsd version="1.0"

Document Schema for Export Consignment:

Export Consignment:	AEX_1p0.xsd version="1.0"

Document Schema for Import Bundling:

Import Bundling:	ACRID_1p0.xsd version="1.0"

Document Schema for Export Bundling:

Export Bundling:	ACRED_1p0.xsd version="1.0"

Document Schema for Quick Bundling:

Quick Bundling:	AIM_1p0.xsd version="1.0"
	AEX_1p0.xsd version="1.0"
	ACRID_1p0.xsd version="1.0"
	ACRED_1p0.xsd version="1.0"
	QB_1p0.xsd version="1.0"

Document Schema for Response:

Response:	RES_1p0.xsd version="1.0"

Document Schema for Data Inheritance:

Request DI Data File (Import):	IDR_1p0.xsd version="1.0"
Request DI Data File (Export):	EDR_1p0.xsd version="1.0"

DI Data File:
https://www.cedb.gov.hk/citb/doc/en/Policy_Responsibilities/Specification_for_DI_from_ROCARS_to_TDEC_(v1.0).pdf

Only the schema of the carried documents should be included in the corresponding <eb:Manifest><eb:Reference> of a payload if specified.

Reference Schemas:

UN/CEFACT	http://www.unece.org/cefact/xml_schemas/index.htm#2008A

The standard XML schemas D.08A version of UN/CEFACT are referenced by the common dataset. They can be found at the above URL.

B.2.6 Applying Security to ebXML Messages

This section is intended to introduce the ebXML Message level at which security must be managed.

B.2.6.1 ebXML Message

An ebXML Message can be digitally signed to provide security countermeasures. Signature elements, belong to the XML Signature [XMLDSIG] defined namespace, can be present as a child of the SOAP Header.

In the ROCARS Implementation, the digital signature is embedded within the SOAP Header, as well as the necessary information to validate the signature at the receiver side.

B.2.6.2 Digital Signature

This section provides the recommendation to include digital signature functionalities into ebXML Messages. It defines schemas as well as URIs and syntax specifications. An example is provided in Section B.2.6.13.

B.2.6.3 Objective

The objective of the digital signature is to ensure the integrity, origin authentication and non-repudiation of message responsibility by the sender in an ebXML Message exchange. To achieve these security solutions a public-private key cryptographic technique is used in combination with digital certificates provided by a third trusted party conforming to X.509v3 certificate recommendations. The submission party should follow section 4.1.3 of the ebXML Message Service Specification v2.0 (ebMS) to generate the signature unless other specified in this Implementation Instructions

B.2.6.4 General Considerations

The digital signature syntax and process complies with W3C specification for XML messages. The XML namespace URI that MUST be used is:

```
xmlns="http://www.w3.org/2000/09/xmldsig#"
```

The digital signature is embedded within the ebXML Message and it is managed at ebXML Messaging Service level. The messaging gateway MUST support this functionality.

A **detached signature** is a signature where the signed data is over content external to the Signature element, and can be identified via a URI or transform. Consequently, the signature is "detached" from the content it signs.

B.2.6.5 Canonical Representation of XML Messages

The canonical representation of an XML message allows a transformation to compare documents

from a logical point of view. It is possible for XML documents which are equivalent (in the sense of tree structure, content, …) for the purposes of many applications to differ in physical representation. For example, they may differ in their entity structure, attribute ordering, character encoding and white spaces. This is a major drawback for implementing the digital signature as many of these "physical representation" characteristics are parser dependents. Hence, signed documents could fail during the verification process due to "wrong" white space treatment.

A canonicalization of an XML document is a method for determining whether two documents are identical (in the sense of structure and contents). A *canonical form* of an XML document is a physical representation of the document where the following changes have been applied:

- The document is encoded in UTF-8
- Line breaks normalised to #xA on input, before parsing
- Attribute values are normalised
- Character and parsed entities are replaced
- CDATA sections are replaced by their character content
- XML declaration and document type declaration (DTD) are removed
- Empty elements are converted to start-end tag pairs
- White space outside of the document element and within start and end tags is normalised
- All white space within character content is retained
- Attribute value delimiters are set to quotation marks (double quotes)
- Special characters in attributes values and character content are replaced by character references
- Superfluous namespace declarations are removed from each element
- Default attributes are added to each element
- Lexicographic order is imposed on the namespace declarations and attributes of each element

A digital signature over the canonical form of an XML document or document subset would allow the signature digest calculations to be oblivious to changes in the original document's physical representation, provided that the changes are defined to be logically equivalent by the XML 1.0 or Namespaces in XML. During signature generation, the digest is computed over the canonical form of the document. The document is then transferred to the relying party, which validates the signature by reading the document and computing a digest of the canonical form of the received document. The equivalence of the digests computed by the signing and relying parties (and hence the equivalence of the canonical forms over which they were computed) ensures that the information content of the document has not been altered since it was signed.

B.2.6.6 XML Signature Specification (Tags and Formats)

XML signatures are applied to arbitrary digital content (data objects) via an indirection (reference). Data objects are digested, the resulting value placed in an element (with other information) and that element is then canonicalized, digested and digitally signed. XML digital signatures are represented by the ***Signature*** element which has the following structure[1]:

```
<Signature Id?>
  <SignedInfo>
      <CanonicalizationMethod/>
```

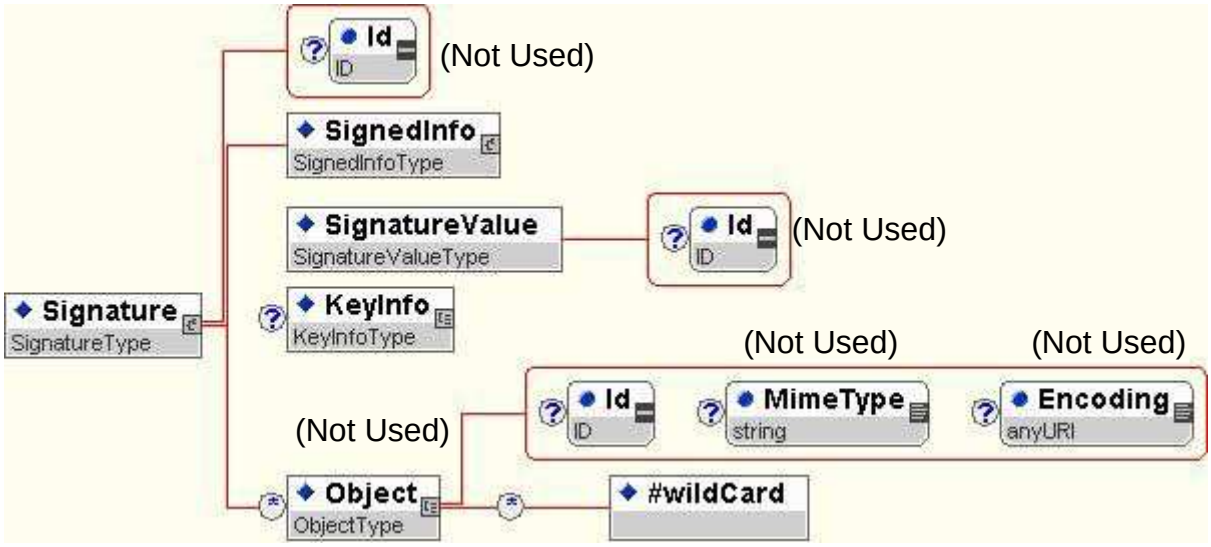
[1] where "?" denotes zero or one occurrence; "+" denotes one or more occurrences; and "*" denotes zero or more occurrences.

```
        <SignatureMethod/>
        (<Reference URI?>
           (<Transforms/>)?
           <DigestMethod/>
           <DigestValue/>
        </Reference>)+
     </SignedInfo>
     <SignatureValue/>
     (<KeyInfo/>)?
     (<Object Id?/>)*
</Signature>
```

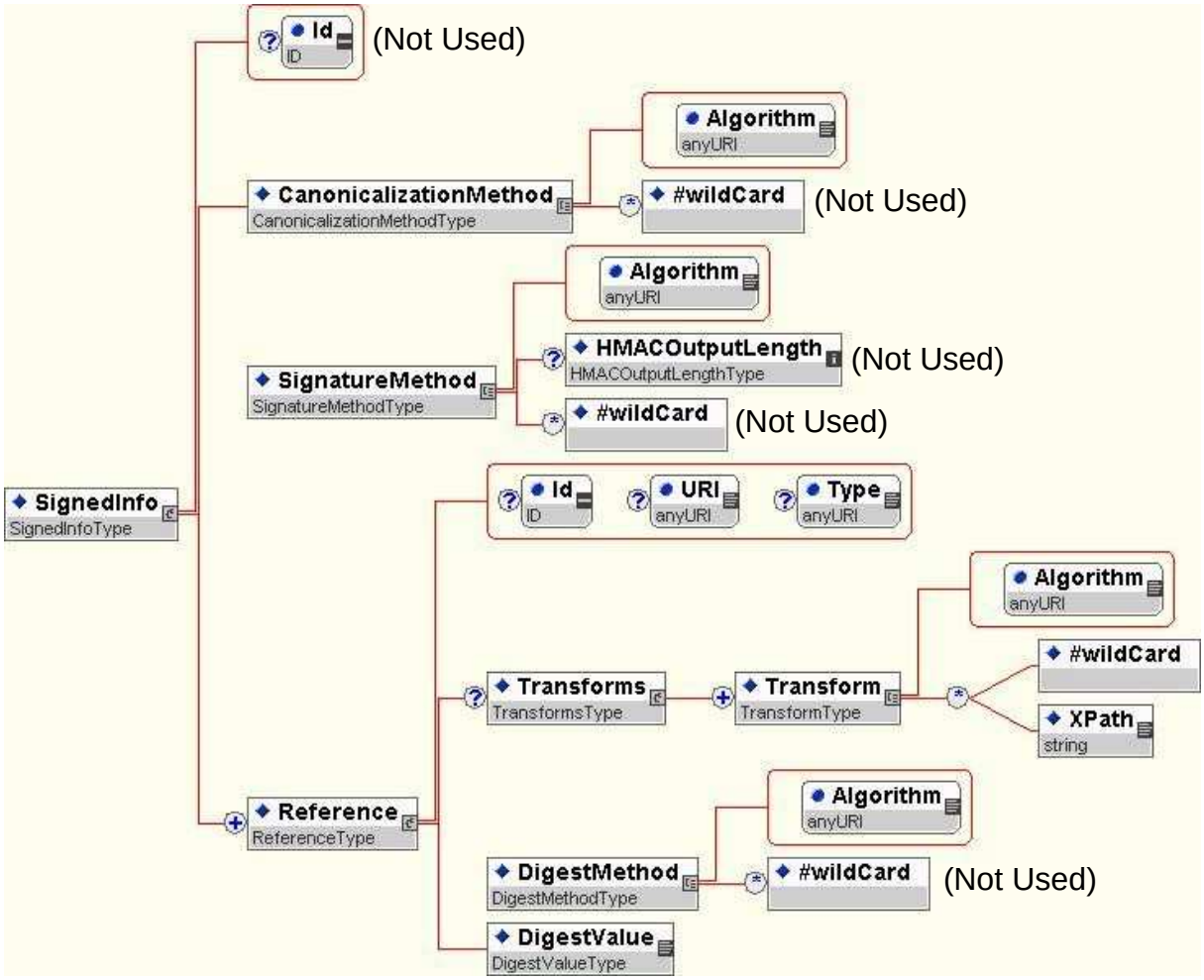
The ***Id*** attribute value/name may co-exist with other elements with ***Id*** attributes in a single XML document and should be chosen such that there are no subsequent collisions with other ***Id*** attributes: they must be unique.

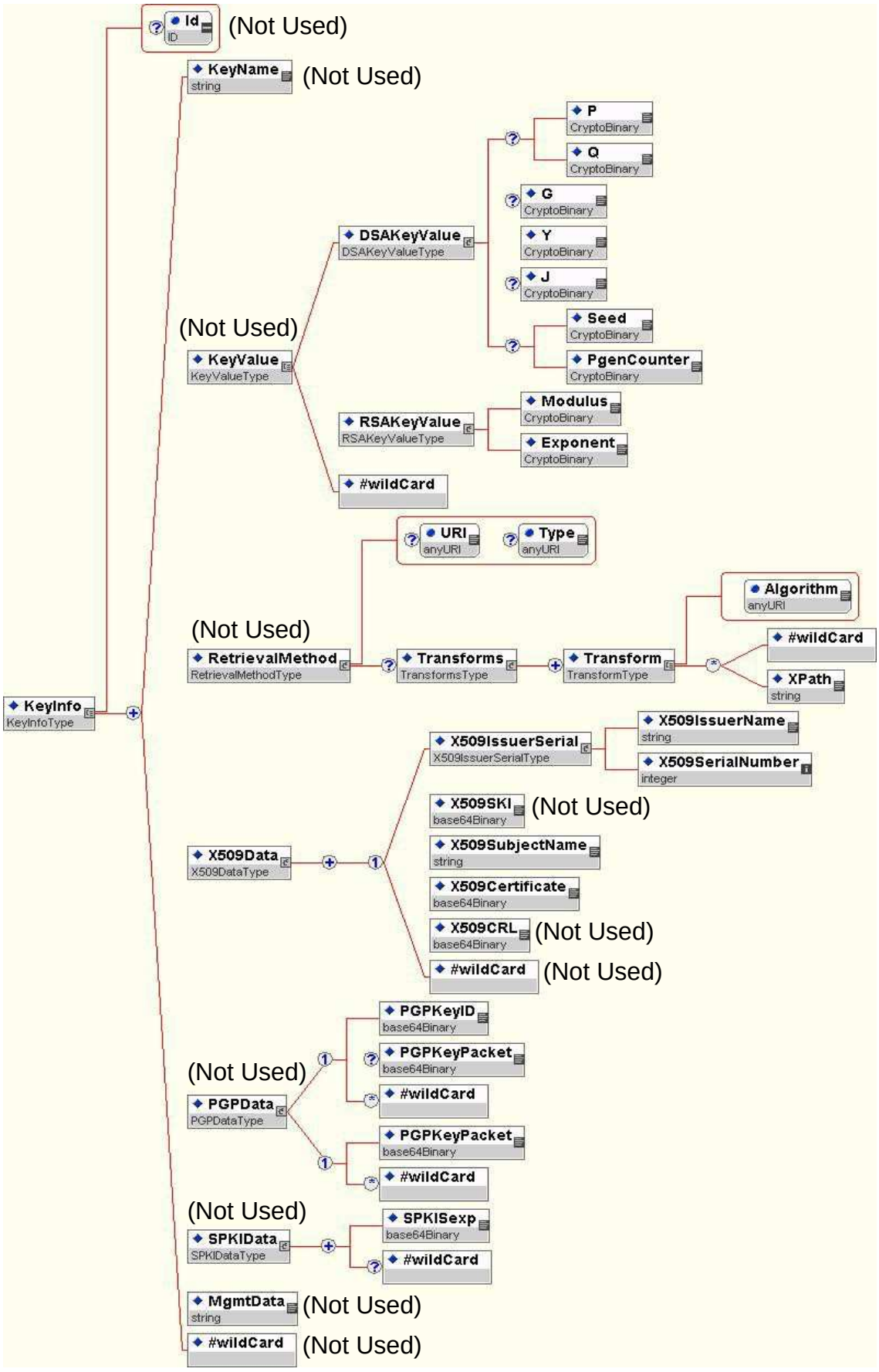
B.2.6.7 XML Signature Schema

The schema for the XML signature provided by the W3C Consortium is listed below. Note that this schema supports all signatures functionalities and capabilities, some of them are not used in this implementation. XML digital signatures are represented by the ***Signature*** element which has the following structure[2]:



[2] where "?" denotes zero or one occurrence; "+" denotes one or more occurrences; and "*" denotes zero or more occurrences.


Id
ID
(Not Used)
Algorithm
anyURI
CanonicalizationMethod
CanonicalizationMethodType
#wildCard
(Not Used)
Algorithm
anyURI
HMACOutputLength
HMACOutputLengthType
(Not Used)
SignatureMethod
SignatureMethodType
#wildCard
(Not Used)
SignedInfo
SignedInfoType
Id
ID
URI
anyURI
Type
anyURI
Algorithm
anyURI
#wildCard
Transforms
TransformsType
Transform
TransformType
XPath
string
Reference
ReferenceType
Algorithm
anyURI
DigestMethod
DigestMethodType
#wildCard
(Not Used)
DigestValue
DigestValueType


Id
ID
(Not Used)
KeyName
string
(Not Used)
P
CryptoBinary
Q
CryptoBinary
G
CryptoBinary
Y
CryptoBinary
J
CryptoBinary
Seed
CryptoBinary
PgenCounter
CryptoBinary
DSAKeyValue
DSAKeyValueType
(Not Used)
KeyValue
KeyValueType
Modulus
CryptoBinary
Exponent
CryptoBinary
RSAKeyValue
RSAKeyValueType
#wildCard
URI
anyURI
Type
anyURI
(Not Used)
RetrievalMethod
RetrievalMethodType
Transforms
TransformsType
Transform
TransformType
Algorithm
anyURI
#wildCard
XPath
string
KeyInfo
KeyInfoType
X509IssuerSerial
X509IssuerSerialType
X509IssuerName
string
X509SerialNumber
integer
X509SKI
base64Binary
(Not Used)
X509SubjectName
string
X509Certificate
base64Binary
X509CRL
base64Binary
(Not Used)
#wildCard
(Not Used)
X509Data
X509DataType
PGPKeyID
base64Binary
PGPKeyPacket
base64Binary
#wildCard
(Not Used)
PGPData
PGPDataType
PGPKeyPacket
base64Binary
#wildCard
SPKISexp
base64Binary
#wildCard
(Not Used)
SPKIData
SPKIDataType
MgmtData
string
(Not Used)
#wildCard
(Not Used)

B.2.6.8 The `SignedInfo` Element

The ***`SignedInfo`*** element contains the information that is actually signed. It includes the canonicalization algorithm, the signature algorithm and one or more references to the data objects that are signed.

A ***`SignedInfo`*** element can be signed.

B.2.6.8.1 The `CanonicalizationMethod` Element

This element specifies the algorithm used to canonicalize the ***`SignedInfo`*** element before it is digested during the signature generation operation.

The only accepted canonicalization method is:

- Canonical XML (omits comments)
  `Algorithm=http://www.w3.org/TR/2001/REC-xml-c14n-20010315`

B.2.6.8.2 The `SignatureMethod` Element

This element specifies the algorithm used to convert the canonicalized ***`SignedInfo`*** element into the ***`SignatureValue`***. The signature generation combines a digest algorithm and a key dependent algorithm.

As ROCARS accepts the digital certificates from Regonized Certificate Authorities of Hong Kong, the signature identifier that MUST be used is:

- RSA – SHA1
  `Algorithm=http://www.w3.org/2000/09/xmldsig#rsa-sha1`

This element is included within the ***`SignedInfo`*** element and hence it is also signed. By doing so, extra security is placed on the digital XML signature because the algorithm names can resist attacks on them.

B.2.6.8.3 The `Reference` element

The ***`Reference`*** elements specify the digest method and the digest value calculated over the referenced object data. The URI attribute is mandatory and it should point to the Id of the ***`Object`*** element.

In ROCARS Implementation, the [XMLDSIG] ***`Reference`*** element for the SOAP Envelope document SHALL have a URI attribute value of "" to provide for the signature to be applied to the document that contains the Signature element. The SOAP envelope and each payload object requiring signing must be represented by a [XMLDSIG] ***`Reference`*** element that must have a ***`URI`*** attribute resolving to the payload object.

B.2.6.8.3.1 The ***`Transform`*** element

This element specifies the digest algorithm applied to the data object referenced in the ***`Algorithm`*** attribute of the ***`Reference`*** element that must be used to compute the ***`DigestValue`***. The [XMLDSIG]

Reference element for the SOAP Envelope SHALL include a child Transforms element.

In this Implementation, the ***Transforms*** element SHALL include the 2 Transform child elements for the SOAP Envelope document SHALL have a URI attribute value of "". The algorithm and the XPath adopted are in reference to the Section 4.1.3 of ebMS 2.0 Specification.

For the Payload object, the ***Transforms*** element SHALL not exist in this Implementation.

The details of the content and the structure of the ***Reference*** elements and the ***Transforms*** elements in this Implementation are illustrated below:

```
<Reference URI="">
     <Transforms>
          <Transform
          Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-signature"/>
          <Transform Algorithm="http://www.w3.org/TR/1999/REC-xpath-19991116">
          <XPath>
               not(ancestor-or-self::node()[@SOAP:actor=
               &quot;urn:oasis:names:tc:ebxml-msg:actor:nextMSH&quot;]|
               ancestor-or-self::node()[@SOAP:actor=
               &quot;http://schemas.xmlsoap.org/soap/actor/next&quot;])
          </XPath>
     </Transform>
     <Transform Algorithm="http://www.w3.org/TR/2001/REC-xml-c14n-20010315"/>
     </Transforms>
     <DigestMethod Algorithm="http://www.w3.org/2000/09/xmldsig#sha1" />
     <DigestValue>……</DigestValue>
</Reference>
<Reference URI="cid:Payload-0">
     <DigestMethod Algorithm="http://www.w3.org/2000/09/xmldsig#sha1" />
     <DigestValue>……</DigestValue>
</Reference>
```

B.2.6.8.3.2 The *DigestMethod* element

This element specifies the digest algorithm applied to the data object referenced in the ***Algorithm*** attribute of the ***Reference*** element that must be used to compute the ***DigestValue***.

The digest algorithm used in this implementation is:

- SHA1 (URI defined in XML Signature Syntax and Processing)
  Algorithm=http://www.w3.org/2000/09/xmldsig#sha1

B.2.6.8.3.3 The *DigestValue* element

This element contains the encoded value of the digest. The digest is always encoded using base64.

B.2.6.9 The `SignatureValue` Element

This element contains the actual value of the digital signature. It is always encoded using base64. Please refer to W3C recommendation "XML-Signature Syntax and Processing" and reference contained therein (RFC2437) for additional information on the content of this element for RSA algorithms.

B.2.6.10 The `KeyInfo` Element

The ***KeyInfo*** element indicates the key to be used to validate the signature. It might include a certificate, a serial or reference number or key names. The usage of this element to include digital certificates is explained in detail in Section B.2.6.11 (element ***X509Data***).

B.2.6.10.1 The `X509Data` Element

It contains identifiers of keys or X509 certificates.

B.2.6.11 Using Certificates

The certificates information is conveyed in the ***X509Data*** element of the *KeyInfo* (parent) element. The following element must be present (multiple elements within an ***X509Data*** element are allowed if and only if each of them is related to the same certificate):

<***X509Certificate***> Contains a base64 encoded certificate.

The following elements are optional:

<***X509IssuerSerial***> Contains the issuer name and serial number of the X.509 certificate. The name is contained in the child element <***X509IssuerName***> and the serial number in the <***X509SerialNumber***>.

<***X509SubjectName***> Contains an X.509 subject name.

All information regarding a certificate must be grouped in a single ***X509Data*** element.

In ROCARS implementation, C&ED and the Bulk Submission Parties may have exchanged their public certificates for verification of signature before any transaction. Each user may maintain an updated list of the certificates associated to his partners in his local informatics' infrastructure.

B.2.6.12 Examples

Examples are provided in this section to clarify the use of the digital signature. As the detached signature approach is adopted in ROCARS, the same signature approach is used in the examples.

Note that all the examples contained herein are **not real**, that is: the certificates, digest values and signature values are not real values obtained from applying the corresponding algorithm to the data, and they should be understood as merely examples of ***Signature*** elements usage.

B.2.6.13 Example of digitally signed ebXML SOAP Message

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP:Envelope    xmlns:SOAP="http://schemas.xmlsoap.org/soap/envelope/"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xmlns:xlink="http://www.w3.org/1999/xlink"
   xsi:schemaLocation="http://schemas.xmlsoap.org/soap/envelope/
                       http://www.oasis-open.org/committees/ebxml-msg/schema/envelope.xsd
                       http://www.w3.org/1999/xlink
                       http://www.oasis-open.org/committees/ebxml-msg/schema/xlink.xsd">
   <SOAP:Header
        xsi:schemaLocation="http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd
                  http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd">
        <eb:MessageHeader   eb:version="2.0"    SOAP:mustUnderstand="1"
             xmlns:eb="http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd">
        <eb:From>
             <eb:PartyId eb:type="ROCARS_PARTY_ID">123456</eb:PartyId>
        </eb:From>
        <eb:To>
             <eb:PartyId eb:type="ROCARS_PARTY_ID">GV0000</eb:PartyId>
```

```
</eb:To>
     <eb:CPAId>12345601</eb:CPAId>
<eb:ConversationId>123456:GV0000:123456R91010000001</eb:ConversationId>
<eb:Service eb:type="ROCARS_SERVICE_ID">ROCARS</eb:Service>
<eb:Action>MessageDelivery</eb:Action>
<eb:MessageData>
     <eb:MessageId>2342004170710843O2</eb:MessageId>
     <eb:Timestamp>2007-12-23T18:07:10.843+08:00</eb:Timestamp>
</eb:MessageData>
<eb:DuplicateElimination/>
</eb:MessageHeader>
<eb:SyncReply
     xmlns:eb="http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd"
     SOAP:actor="http://schemas.xmlsoap.org/soap/actor/next"
     SOAP:mustUnderstand="1" eb:version="2.0"/>
<eb:AckRequested eb:signed="false" eb:version="2.0"
          SOAP:actor="urn:oasis:names:tc:ebxml-msg:actor:toPartyMSH"
          SOAP:mustUnderstand="1"
     xmlns:eb="http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd"/>
     <Signature xmlns="http://www.w3.org/2000/09/xmldsig#"
               xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
               xsi:schemaLocation="http://www.w3.org/2000/09/xmldsig#
      http://www.w3.org/TR/xmldsig-core/xmldsig-core-schema.xsd">
          <SignedInfo>
               <CanonicalizationMethod
                 Algorithm="http://www.w3.org/TR/2001/REC-xml-c14n-20010315"/>
               <SignatureMethod Algorithm="http://www.w3.org/2000/09/xmldsig#rsa-sha1" />
               <Reference URI="">
               <Transforms>
                    <Transform
                     Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-signature"/>
                    <Transform Algorithm="http://www.w3.org/TR/1999/REC-xpath-19991116">
                                   <XPath> not(ancestor-or-self::node()[@SOAP:actor=
                                   &amp;quot;urn:oasis:names:tc:ebxml-msg:actor:nextMSH&amp;quot;]
                                   | ancestor-or-self::node()[@SOAP:actor=
                                   &amp;quot;http://schemas.xmlsoap.org/soap/actor/next&amp;quot;])
                                   </XPath>
                    </Transform>
                    <Transform Algorithm="http://www.w3.org/TR/2001/REC-xml-c14n-20010315"/>
               </Transforms>
                    <DigestMethod Algorithm="http://www.w3.org/2000/09/xmldsig#sha1" />
                    <DigestValue>ase50vt3338s7Uaposoyq27h4bs=</DigestValue>
               </Reference>
               <Reference URI="cid:Payload-0">
                    <DigestMethod Algorithm="http://www.w3.org/2000/09/xmldsig#sha1" />
                    <DigestValue>60NvZvtdTB+7UnlLp/H24p7h4bs=</DigestValue>
               </Reference>
          </SignedInfo>
          <SignatureValue>
               juS5RhJ884qoFR8flVXd/rbrSDVGn40CapgB7qeQiT+rr0NekEQ6BHhUA8dT3+BC
               TBUQI0dBjlml9lwzENXvS83zRECjzXbMRTUtVZiPZG2pqKPnL2YU3A9645UCjTXU
               +jgFumv7k78hieAGDzNci+PQ9KRmm//icT7JaYztgt4=
          </SignatureValue>
          <KeyInfo>
               <X509Data>
                    <X509Certificate>
                         MIIDbTCCAyygAwIBAgIGAOCdrKxkMAkGByqGSM44BAMwezELMAkGA1UEBhMCSUUx
                         DzANBgNVBAgTBkR1YmxpbjElMCMGA1UEChMcQmFsdGltb3JlIFRlY2hub2xvZ2ll
                         cywgTHRkLjERMA8GA1UECxMIWC9TZWN1cmUxITAfBgNVBAMTGFgvU2VjdXJlIDEw
                         MjQtYml0IERTQSBDQTAeFw0wMDA3MjcxNzEzMzNaFw0wMTA3MjcxNzEzMjZaMHwx
                         CzAJBgNVBAYTAklFMQ8wDQYDVQQIEwZEdWJsaW4xJTAjBgNVBAoTHEJhbHRpbW9y
                         ZSBUZWNobm9sb2dpZXMsIEx0ZC4xETAPBgNVBAsTCFgvU2VjdXJlMSIwIAYDVQQD
                         ExlYL1NlY3VyZSAxMDI0LWJpdCBEU0EgY3J0MIIBuDCCASwGByqGSM44BAEwggEf
                         AoGBAKxbaPLj0DOst+BSz5g4eNASyda1awvFXkarroT2eo2DRZELsMZ7v8AryADI
                         bpDwSxRE/GyX/29nn/qKsWWoxG/vPM5WaMhvIP8DHwwR08c/gp6MC2oZwgk2AaeZ
                         LexvKlKGybr48pcI9bLe1fS7LtN4lzF7W4q4lIxWuYFEWrDfAhUAkEjAFpCe4lcU
                         Odwphpzf+tBaUdsCgYEAoe14R2OtyKx+s+60O5BRNMOYpIg2TU/f15N3bsDErKOW
                         tKXeNK9FS7dWStreDxo2SSgOonqAd4FuJ/4uva7GgNL4ULIqY7E+mW5iwJ7n/WTE
                         Lh98mEocsLXkNh24HcH4BZfSCTruuzmCyjdV1KSqX/Eux04HfCWYmdxN3SQ/qqwD
                         gYUAAoGBAKQOTZ2b3Hee+FkV7jgO2Xwv+y6reHAdDES1rR7m7SaFTmqPYm+a8uK0
                         5NK+nXZzrwCBipLbrcyt8prypXktwzq8GUICfvwQ1g1vJDvUeuqOq3Y4kqGwYv9H
                         NldfnZKjoIxZis9/eZrwjmRoQu36gFYR2rdhIxjzH4EmcgAWu/tZozswOTAPBgNV
                         HQ8BAf8EBQMDAIAAMBEGA1UdDgQKBAiA4IML4dndEDATBgNVHSMEDDAKgAiHoMnY
                         nDxZUDAJBgcqhkjOOAQDAzAAMC0CFQCEXa1E2ueJ8WMX5nP1lCcBWhxC2wIUGUCB
                         b6M6Oj3NQAJbnZsdY63rKa0=
                    </X509Certificate>
               </X509Data>
```

```
                    </KeyInfo>
     </Signature>
     </SOAP:Header>
     <SOAP:Body
          xsi:schemaLocation="http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd
               http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd">
          <eb:Manifest   eb:version="2.0"
               xmlns:eb="http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd">
               <eb:Reference eb:id="Payload-0" xlink:href="cid:Payload-0" xlink:type="simple">
                    <eb:Schema
                         eb:location="http://www.rocars.gov.hk/schemas/AIM_1p0.xsd"
                         eb:version="1.0"/>
                    <eb:Schema
                         eb:location="http://www.rocars.gov.hk/schemas/ACRID_1p0.xsd"
                         eb:version="1.0"/>
                    <eb:Description xml:lang="en-US">1</eb:Description>
               </eb:Reference>
          </eb:Manifest>
     </SOAP:Body>
</SOAP:Envelope>
```

B.2.7 Payload Requirements

B.2.7.1 Content-Type, Charset and Encoding Type

The Content-Type in the Payload must be ‘application/xml’.

‘UTF-8’ MUST be used as the value for ‘charset’ and ‘encoding’ type in the Payload.

```
Content-Type: application/xml; charset=UTF-8
Content-ID: <Payload-0>

<?xml version="1.0" encoding="UTF-8"?>
```

B.2.8 Full Message Example with Envelope and Signature - Incoming Message from the Bulk Submission Party to the Government

Shown below is a sample incoming XML message to the Government. The example can be validated by Xerces 2.0.

Service Data:

Service:	ROCARS
Message Type:	Import Consignment
ROCARS Party ID of the Sender:	123456
Interchange Control Reference:	123456R91010000001
Message Reference Number:	1

```
MIME-Version: 1.0
SOAPAction: "ebXML"
Content-Type: multipart/related; type="text/xml"; boundary="----=_Part_210_18012078.1216972450671"

------=_Part_210_18012078.1216972450671
Content-Type: text/xml; charset=UTF-8
Content-Id:  <soappart>

<?xml version="1.0" encoding="UTF-8"?>
<SOAP:Envelope   xmlns:SOAP="http://schemas.xmlsoap.org/soap/envelope/"
                 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                 xmlns:xlink="http://www.w3.org/1999/xlink"
                 xsi:schemaLocation="http://schemas.xmlsoap.org/soap/envelope/
                 http://www.oasis-open.org/committees/ebxml-msg/schema/envelope.xsd
                 http://www.w3.org/1999/xlink
                 http://www.oasis-open.org/committees/ebxml-msg/schema/xlink.xsd">
   <SOAP:Header
            xsi:schemaLocation="http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd
            http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd">
      <eb:MessageHeader   eb:version="2.0"
                          SOAP:mustUnderstand="1"
                          xmlns:eb="http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd">
         <eb:From>
            <eb:PartyId eb:type="ROCARS_PARTY_ID">123456</eb:PartyId>
         </eb:From>
         <eb:To>
            <eb:PartyId eb:type="ROCARS_PARTY_ID">GV0000</eb:PartyId>
```

```
         </eb:To>
         <eb:CPAId>12345601</eb:CPAId>
         <eb:ConversationId>123456:GV0000:123456R91010000001</eb:ConversationId>
         <eb:Service eb:type="ROCARS_SERVICE_ID">ROCARS</eb:Service>
         <eb:Action>MessageDelivery</eb:Action>
         <eb:MessageData>
            <eb:MessageId>234200417071084302</eb:MessageId>
            <eb:Timestamp>2007-12-23T18:07:10.843+08:00</eb:Timestamp>
         </eb:MessageData>
         <eb:DuplicateElimination/>
      </eb:MessageHeader>
      <eb:SyncReply
            xmlns:eb="http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd"
            SOAP:actor="http://schemas.xmlsoap.org/soap/actor/next"
            SOAP:mustUnderstand="1" eb:version="2.0"/>
      <eb:AckRequested eb:signed="false" eb:version="2.0"
            SOAP:actor="urn:oasis:names:tc:ebxml-msg:actor:toPartyMSH"
            SOAP:mustUnderstand="1"
            xmlns:eb="http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd"/>
       <Signature xmlns="http://www.w3.org/2000/09/xmldsig#"
                  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                  xsi:schemaLocation="http://www.w3.org/2000/09/xmldsig# http://www.w3.org/TR/xmldsig-core/xmldsig-core-schema.xsd">
               <SignedInfo>
                  <CanonicalizationMethod Algorithm="http://www.w3.org/TR/2001/REC-xml-c14n-20010315" />
                  <SignatureMethod Algorithm="http://www.w3.org/2000/09/xmldsig#rsa-sha1" />
                  <Reference URI="">
                     <Transforms>
                        <Transform
                              Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-signature"/>
                        <Transform Algorithm="http://www.w3.org/TR/1999/REC-xpath-19991116">
                           <XPath> not(ancestor-or-self::node()[@SOAP:actor=
                           &amp;quot;urn:oasis:names:tc:ebxml-msg:actor:nextMSH&amp;quot;]
                           | ancestor-or-self::node()[@SOAP:actor="
                           &amp;quot;http://schemas.xmlsoap.org/soap/actor/next&amp;quot;])
                           </XPath>
                     </Transform>
                     <Transform Algorithm="http://www.w3.org/TR/2001/REC-xml-c14n-20010315"/>
                     </Transforms>
                        <DigestMethod Algorithm="http://www.w3.org/2000/09/xmldsig#sha1" />
                        <DigestValue>ase50vt3338s7Uaposoyq27h4bs=</DigestValue>
                  </Reference>
                  <Reference URI="cid:Payload-0">
                     <DigestMethod Algorithm="http://www.w3.org/2000/09/xmldsig#sha1" />
                     <DigestValue>60NvZvtdTB+7UnlLp/H24p7h4bs=</DigestValue>
                  </Reference>
               </SignedInfo>
```

```
            <SignatureValue>
                 juS5RhJ884qoFR8flVXd/rbrSDVGn40CapgB7qeQiT+rr0NekEQ6BHhUA8dT3+BC
                 TBUQI0dBjlml9lwzENXvS83zRECjzXbMRTUtVZiPZG2pqKPnL2YU3A9645UCjTXU
                 +jgFumv7k78hieAGDzNci+PQ9KRmm//icT7JaYztgt4=
            </SignatureValue>
            <KeyInfo>
               <X509Data>

                  <X509Certificate>
                     MIIDbTCCAyygAwIBAgIGAOCdrKxkMAkGByqGSM44BAMwezELMAkGA1UEBhMCSUUx
                     DzANBgNVBAgTBkR1YmxpbjElMCMGA1UEChMcQmFsdGltb3JlIFRlY2hub2xvZ2ll
                     cywgTHRkLjERMA8GA1UECxMIWC9TZWN1cmUxITAfBgNVBAMTGFgvU2VjdXJlIDEw
                     MjQtYml0IERTQSBDQTAeFw0wMDA3MjcxNzEzMzNaFw0wMTA3MjcxNzEzMjZaMHwx
                     CzAJBgNVBAYTAklFMQ8wDQYDVQQIEwZEdWJsaW4xJTAjBgNVBAoTHEJhbHRpbW9y
                     ZSBUZWNobm9sb2dpZXMsIEx0ZC4xETAPBgNVBAsTCFgvU2VjdXJlMSIwIAYDVQQD
                     ExlYL1NlY3VyZSAxMDI0LWJpdCBEU0EgY3J0MIIBuDCCASwGByqGSM44BAEwggEf
                     AoGBAKxbaPLj0DOst+BSz5g4eNASyda1awvFXkarroT2eo2DRZELsMZ7v8AryADI
                     bpDwSxRE/GyX/29nn/qKsWWoxG/vPM5WaMhvIP8DHwwR08c/gp6MC2oZwgk2AaeZ
                     LexvKlKGybr48pcI9bLe1fS7LtN4lzF7W4q4lIxWuYFEWrDfAhUAkEjAFpCe4lcU
                     Odwphpzf+tBaUdsCgYEAoe14R2OtyKx+s+60O5BRNMOYpIg2TU/f15N3bsDErKOW
                     tKXeNK9FS7dWStreDxo2SSgOonqAd4FuJ/4uva7GgNL4ULIqY7E+mW5iwJ7n/WTE
                     Lh98mEocsLXkNh24HcH4BZfSCTruuzmCyjdV1KSqX/Eux04HfCWYmdxN3SQ/qqwD
                     gYUAAoGBAKQOTZ2b3Hee+FkV7jgO2Xwv+y6reHAdDES1rR7m7SaFTmqPYm+a8uK0
                     5NK+nXZzrwCBipLbrcyt8prypXktwzq8GUICfvwQ1g1vJDvUeuqOq3Y4kqGwYv9H
                     NldfnZKjoIxZis9/eZrwjmRoQu36gFYR2rdhIxjzH4EmcgAWu/tZozswOTAPBgNV
                     HQ8BAf8EBQMDAIAAMBEGA1UdDgQKBAiA4IML4dndEDATBgNVHSMEDDAKgAiHoMnY
                     nDxZUDAJBgcqhkjOOAQDAzAAMC0CFQCEXa1E2ueJ8WMX5nP1lCcBWhxC2wIUGUCB
                     b6M6Oj3NQAJbnZsdY63rKa0=
                  </X509Certificate>
               </X509Data>
            </KeyInfo>
      </Signature>
   </SOAP:Header>
   <SOAP:Body
         xsi:schemaLocation="http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd
         http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd">
      <eb:Manifest  eb:version="2.0"
                    xmlns:eb="http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd">
         <eb:Reference eb:id="Payload-0" xlink:href="cid:Payload-0" xlink:type="simple">
rocars.gov
         </eb:Reference>
      </eb:Manifest>
   </SOAP:Body>
</SOAP:Envelope>

------=_Part_210_18012078.1216972450671
```

```
Content-ID: <Payload-0>
Content-Type: application/xml; charset=UTF-8

<?xml version="1.0" encoding="UTF-8"?>
          <DocumentMetadata>
              <WCODataModelVersion>2.0</WCODataModelVersion>
              <WCODocumentName>IM1</WCODocumentName>
              <CountryCode>HK</CountryCode>
              <AgencyName>C&amp;amp;ED</AgencyName>
              <AgencyAssignedCustomizedDocumentName>AIM</AgencyAssignedCustomizedDocumentName>
              <AgencyAssignedCustomizedDocumentVersion>1.0</AgencyAssignedCustomizedDocumentVersion>
              <Declaration>
                 <FunctionCode>2</FunctionCode>
                 <ID>40010900001D3B</ID>
                 <TypeCode>R01</TypeCode>
                 <VersionID>1</VersionID>
                 <Agent>
                    <ID>8000000001</ID>
                 </Agent>
              <GoodsShipment>
                  <SequenceNumeric>1</SequenceNumeric>
              <Consignee>
                 <Name languageID="en">ABC (Hong Kong) Company Limited</Name>
                 <Address>
                 <CityName>HONG KONG</CityName>
                 <CountryCode>HK</CountryCode>
                 <Line languageID="en">Room 9001, Harbour Building</Line>
                 <Line>38 Pier Road, Central</Line>
                 </Address>
              </Consignee>
              <Consignment>
                 <SequenceNumeric>1</SequenceNumeric>
                 <BorderTransportMeans>
                        <ArrivalDateTime>2008-10-01</ArrivalDateTime>
                 </BorderTransportMeans>
                 <TransportEquipment>
                  <CharacteristicCode>20</CharacteristicCode>
                  <EquipmentIdentification>
                    <ID>HJCU8038001</ID>
                  </EquipmentIdentification>
                 </TransportEquipment>
              </Consignment>
              <Consignor>
                 <Name languageID="zh">深圳贸易公司</Name>
                 <Address>
```

```
            <CountryCode>CN</CountryCode>
            <Line languageID="zh">深圳东门一三路九号二楼</Line>
            </Address>
         </Consignor>
         <CustomsGoodsItem>
            <SequenceNumeric>1</SequenceNumeric>
            <Commodity>
            <Description languageID="en">Men's woven cotton t-shirt</Description>
            </Commodity>
            <GoodsPackaging>
            <QuantityQuantity>1000</QuantityQuantity>
            <TypeCode>9E</TypeCode>
            </GoodsPackaging>
         </CustomsGoodsItem>
         <CustomsGoodsItem>
            <SequenceNumeric>2</SequenceNumeric>
            <Commodity>
            <Description languageID="zh">女装 100%绵质衬衫</Description>
            </Commodity>
            <GoodsPackaging>
            <QuantityQuantity>2000</QuantityQuantity>
            <TypeCode>9E</TypeCode>
            </GoodsPackaging>
         </CustomsGoodsItem>
         <CustomsGoodsItem>
            <SequenceNumeric>3</SequenceNumeric>
            <Commodity>
            <Description languageID="zh">100%绵花原料</Description>
            </Commodity>
            <GoodsMeasure>
            <GrossMassMeasure unitCode="KGM">50</GrossMassMeasure>
            <TariffQuantity>1</TariffQuantity>
            </GoodsMeasure>
         </CustomsGoodsItem>
      </GoodsShipment>
      <Importer>
         <ID schemeID="BR">12345678</ID>
         <Name languageID="en">Chan's Trading Company Limited</Name>
         <Address>
            <CityName>HONG KONG</CityName>
            <CountryCode>HK</CountryCode>
            <Line languageID="en">Room 7001,Central Building</Line>
            <Line>Hong Kong Road, Hong Kong</Line>
         </Address>
         <Contact>
```

```
                <Name>Chan Tai Man</Name>
                <Communication>
                 <ID>21234568</ID>
                 <TypeID>TE</TypeID>
                </Communication>
              </Contact>
            </Importer>
            </Declaration>
          </DocumentMetadata>

------=_Part_210_18012078.1216972450671--
```

B.2.9 Full Message Example with Envelope and Signature - Outgoing Message from the Government to the Bulk Submission Party

Shown below is a sample outgoing XML message to the Bulk Submission Party. The example can be validated by Xerces 2.0.

Service Data:

Service: ROCARS

Message Type: Response

ROCARS Party ID of the Receiver: 123456

Interchange Control Reference: GV0000R91010000002

Message Reference Number: 1

```
MIME-Version: 1.0
SOAPAction: "ebXML"
Content-Type: multipart/related; type="text/xml"; boundary="----=_Part_210_18012078.1216972450671"

------=_Part_210_18012078.1216972450671
Content-Type: text/xml; charset=UTF-8
Content-Id:  <soappart>

<?xml version="1.0" encoding="UTF-8"?>
<SOAP:Envelope   xmlns:SOAP="http://schemas.xmlsoap.org/soap/envelope/"
                 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                 xmlns:xlink="http://www.w3.org/1999/xlink"
                 xsi:schemaLocation="http://schemas.xmlsoap.org/soap/envelope/
                 http://www.oasis-open.org/committees/ebxml-msg/schema/envelope.xsd
                 http://www.w3.org/1999/xlink
                 http://www.oasis-open.org/committees/ebxml-msg/schema/xlink.xsd">
   <SOAP:Header
            xsi:schemaLocation="http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd
            http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd">
      <eb:MessageHeader   eb:version="2.0"
                          SOAP:mustUnderstand="1"
                          xmlns:eb="http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd">
         <eb:From>
            <eb:PartyId eb:type="ROCARS_PARTY_ID">GV0000</eb:PartyId>
         </eb:From>
         <eb:To>
            <eb:PartyId eb:type="ROCARS_PARTY_ID">123456</eb:PartyId>
         </eb:To>
```

```
      <eb:CPAId>12345601</eb:CPAId>
      <eb:ConversationId>123456:GV0000:123456R91010000001</eb:ConversationId>
      <eb:Service eb:type="ROCARS_SERVICE_ID">ROCARS</eb:Service>
      <eb:Action>MessageDelivery</eb:Action>
      <eb:MessageData>
         <eb:MessageId>234200417071084302</eb:MessageId>
         <eb:Timestamp>2007-12-23T18:07:10.843+08:00</eb:Timestamp>
      </eb:MessageData>
      <eb:DuplicateElimination/>
   </eb:MessageHeader>
   <eb:SyncReply
         xmlns:eb="http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd"
         SOAP:actor="http://schemas.xmlsoap.org/soap/actor/next"
         SOAP:mustUnderstand="1" eb:version="2.0"/>
   <eb:AckRequested eb:signed="false" eb:version="2.0"
         SOAP:actor="urn:oasis:names:tc:ebxml-msg:actor:toPartyMSH"
         SOAP:mustUnderstand="1"
         xmlns:eb="http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd"/>
    <Signature xmlns="http://www.w3.org/2000/09/xmldsig#"
              xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
              xsi:schemaLocation="http://www.w3.org/2000/09/xmldsig# http://www.w3.org/TR/xmldsig-core/xmldsig-core-schema.xsd">
           <SignedInfo>
              <CanonicalizationMethod Algorithm="http://www.w3.org/TR/2001/REC-xml-c14n-20010315" />
              <SignatureMethod Algorithm="http://www.w3.org/2000/09/xmldsig#rsa-sha1" />
              <Reference URI="">
                 <Transforms>
                    <Transform
                          Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-signature"/>
                    <Transform Algorithm="http://www.w3.org/TR/1999/REC-xpath-19991116">
                       <XPath> not(ancestor-or-self::node()[@SOAP:actor=
                       &amp;quot;urn:oasis:names:tc:ebxml-msg:actor:nextMSH&amp;quot;]
                       | ancestor-or-self::node()[@SOAP:actor=
                       &amp;quot;http://schemas.xmlsoap.org/soap/actor/next&amp;quot;])
                       </XPath>
                 </Transform>
                 <Transform Algorithm="http://www.w3.org/TR/2001/REC-xml-c14n-20010315"/>
                 </Transforms>
                    <DigestMethod Algorithm="http://www.w3.org/2000/09/xmldsig#sha1" />
                    <DigestValue>ase50vt3338s7Uaposoyq27h4bs=</DigestValue>
              </Reference>
              <Reference URI="cid:Payload-0">
                 <Transforms>
                    <Transform Algorithm="http://www.w3.org/TR/2001/REC-xml-c14n-20010315"/>
                 </Transforms>
                 <DigestMethod Algorithm="http://www.w3.org/2000/09/xmldsig#sha1" />
                 <DigestValue>60NvZvtdTB+7UnlLp/H24p7h4bs=</DigestValue>
```

```
               </Reference>
            </SignedInfo>
            <SignatureValue>
               juS5RhJ884qoFR8flVXd/rbrSDVGn40CapgB7qeQiT+rr0NekEQ6BHhUA8dT3+BC
               TBUQI0dBjlml9lwzENXvS83zRECjzXbMRTUtVZiPZG2pqKPnL2YU3A9645UCjTXU
               +jgFumv7k78hieAGDzNci+PQ9KRmm//icT7JaYztgt4=
            </SignatureValue>
            <KeyInfo>
               <X509Data>

                  <X509Certificate>
                     MIIDbTCCAyygAwIBAgIGAOCdrKxkMAkGByqGSM44BAMwezELMAkGA1UEBhMCSUUx
                     DzANBgNVBAgTBkR1YmxpbjElMCMGA1UEChMcQmFsdGltb3JlIFRlY2hub2xvZ2ll
                     cywgTHRkLjERMA8GA1UECxMIWC9TZWN1cmUxITAfBgNVBAMTGFgvU2VjdXJlIDEw
                     MjQtYml0IERTQSBDQTAeFw0wMDA3MjcxNzEzMzNaFw0wMTA3MjcxNzEzMjZaMHwx
                     CzAJBgNVBAYTAklFMQ8wDQYDVQQIEwZEdWJsaW4xJTAjBgNVBAoTHEJhbHRpbW9y
                     ZSBUZWNobm9sb2dpZXMsIEx0ZC4xETAPBgNVBAsTCFgvU2VjdXJlMSIwIAYDVQQD
                     ExlYL1NlY3VyZSAxMDI0LWJpdCBEU0EgY3J0MIIBuDCCASwGByqGSM44BAEwggEf
                     AoGBAKxbaPLj0DOst+BSz5g4eNASyda1awvFXkarroT2eo2DRZELsMZ7v8AryADI
                     bpDwSxRE/GyX/29nn/qKsWWoxG/vPM5WaMhvIP8DHwwR08c/gp6MC2oZwgk2AaeZ
                     LexvKlKGybr48pcI9bLe1fS7LtN4lzF7W4q4lIxWuYFEWrDfAhUAkEjAFpCe4lcU
                     Odwphpzf+tBaUdsCgYEAoe14R2OtyKx+s+60O5BRNMOYpIg2TU/f15N3bsDErKOW
                     tKXeNK9FS7dWStreDxo2SSgOonqAd4FuJ/4uva7GgNL4ULIqY7E+mW5iwJ7n/WTE
                     Lh98mEocsLXkNh24HcH4BZfSCTruuzmCyjdV1KSqX/Eux04HfCWYmdxN3SQ/qqwD
                     gYUAAoGBAKQOTZ2b3Hee+FkV7jgO2Xwv+y6reHAdDES1rR7m7SaFTmqPYm+a8uK0
                     5NK+nXZzrwCBipLbrcyt8prypXktwzq8GUICfvwQ1g1vJDvUeuqOq3Y4kqGwYv9H
                     NldfnZKjoIxZis9/eZrwjmRoQu36gFYR2rdhIxjzH4EmcgAWu/tZozswOTAPBgNV
                     HQ8BAf8EBQMDAIAAMBEGA1UdDgQKBAiA4IML4dndEDATBgNVHSMEDDAKgAiHoMnY
                     nDxZUDAJBgcqhkjOOAQDAzAAMC0CFQCEXa1E2ueJ8WMX5nP1lCcBWhxC2wIUGUCB
                     b6M6Oj3NQAJbnZsdY63rKa0=
                  </X509Certificate>
               </X509Data>
            </KeyInfo>
   </Signature>
</SOAP:Header>
<SOAP:Body
      xsi:schemaLocation="http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd
      http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd">
   <eb:Manifest  eb:version="2.0"
                 xmlns:eb="http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd">
      <eb:Reference eb:id="Payload-0" xlink:href="cid:Payload-0" xlink:type="simple">
         <eb:Schema
            eb:location="http://www.rocars.gov.hk/schemas/RES_1p0.xsd"
            eb:version="1.0"/>
         <eb:Description xml:lang="en-US">1</eb:Description>
      </eb:Reference>
```

```
      </eb:Manifest>
   </SOAP:Body>
</SOAP:Envelope>

------=_Part_210_18012078.1216972450671
Content-ID: <Payload-0>
Content-Type: application/xml; charset=UTF-8

<?xml version="1.0" encoding="UTF-8"?>
        <DocumentMetadata>
             <WCODataModelVersion>N/A</WCODataModelVersion>
             <WCODocumentName>N/A</WCODocumentName>
             <CountryCode>HK</CountryCode>
             <AgencyName>C&amp;ED</AgencyName>
             <AgencyAssignedCustomizedDocumentName>RES</AgencyAssignedCustomizedDocumentName>
             <AgencyAssignedCustomizedDocumentVersion>1.0</AgencyAssignedCustomizedDocumentVersion>
             <Response>
                <FunctionCode>11</FunctionCode>
                <ID>4000001000001U</ID>
                <TypeCode>R06</TypeCode>
                <AdditionalInformation>
                   <StatementCode>001</StatementCode>
                   <StatementDescription>1234567890</StatementDescription>
                </AdditionalInformation>
                <Declaration>
                   <AcceptanceDateTime>2008-11-01T11:22:33</AcceptanceDateTime>
                   <FunctionCode>2</FunctionCode>
                   <ID>40010900001D3B</ID>
                   <TypeCode>R01</TypeCode>
                   <VersionID>1</VersionID>
                </Declaration>
             </Response>
        </DocumentMetadata>
------=_Part_210_18012078.1216972450671--
```

B.2.10 Full Message Example with Envelope and Signature - Incoming “Quick Bundling Request” from the Bulk Submission Party to the Government

Please refer to B.3.7.6.4 for the example of ebXML Message for Quick Bundling Request.

B.2.11 Information Matrix

I.M. Index	<Data Element Tag> Attribute Tag	Field Name	Field Description	M/C/O	Bilingual Field (Y/N)	Format	Rpt	Validation Requirements
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

Heading Legend

(1) I.M. Index — Information Matrix Index

(2) <Data Element Tag> Attribute Tag — Identifies where the data item is mapped in a particular XML message specification as published in the Implementation Instructions of ROCARS

(3) Field Name — Business term for the data item

(4) Field Description — Description on the field

(5) M/C/O — Usage of the field to see whether the field is Mandatory (M), Conditional (C) or Optional (O).
Mandatory fields should be neither null nor space only;
Conditional fields, when condition is fulfilled (see validation requirement), should be neither null nor space only unless specified.

(6) Bilingual Field (Y/N) — Usage of the field to see if bilingual input is supported.
Y - support Chinese and English input
N - support English input only

(7) Format — Format of the data item. e.g.

a	alphabetic or ideographic (for bilingual field) characters
n	numeric characters
an	alphanumeric or ideographic (for bilingual field) characters
a3	3 alphabetic or ideographic (for bilingual field) characters, fixed length
n3	3 numerical characters, fixed length
n5.2	5 numeric characters including the decimal point, fixed length, e.g. n5.2 = 99.99
an3	3 alphanumerical or ideographic (for bilingual field) characters, fixed length
a..3	up to 3 alphabetic or ideographic (for bilingual field) characters
n..3	up to 3 numerical characters
an..3	up to 3 alphanumerical or ideographic (for bilingual field) characters
n..14,3	up to 14 numerical characters including maximum 3 decimals – delimiter is allowed to float and is not counted as a character (e.g. 12345678901.234 and 12345678901234 are valid values for n..14,3)
year	CCYY(CC=Century, YY=Year)
date	CCYY-MM-DD (CC=Century, YY=Year, MM=Month, DD=Day)
time	HH:MiMi:SS in international time format (HH=Hour, MiMi=Minute, SS=Second e.g. 23:59:59)
datetime	CCYY-MM-DDTHH:MiMi:SS (CC=Century, YY=Year, MM=Month, DD=Day, T=T, HH=Hour, MiMi=Minute, SS=Second e.g. 2002-08-01T23:59:59)
datetime-datetime	divided into 2 attributes, namely start and end, and the format of each is CCYY-MM-DDTHH:MiMi:SS (CC=Century, YY=Year, MM=Month, DD=Day, T=T, HH=Hour, MiMi=Minute, SS=Second)

		Boolean	true or false
(8)	Rpt	Number of repetition of the corresponding field. This should be interpreted together with the property on M/C/O (described at (5) above). Unless otherwise specified, the following examples should apply:	
		M 10	the field can repeat for a maximum of ten times, with the first occurrence being mandatory and subsequent occurrence optional
		C 5	the field can repeat for a maximum of five times, with the first occurrence being conditional and subsequent occurrence optional
		O 3	the field can repeat for a maximum of three times, with all occurrence optional
(9)	Validation Requirements	Specifies the individual validation rules for the data item	

Data Items in the ebMS Envelope

I.M. Index	<Data Element Tag> Attribute Tag	Field Name	Field Description	M/C/O	Bilingual Field (Y/N)	Format	Rpt	Validation Requirements

ZZ0015	<SOAP:Header><eb:MessageHeader><eb:ConversationId>	Conversation ID	Conversation ID	M	N	an..100	1	Conversation ID is a string which consists of 3 segments. It defines the set of related messages that make up a business conversation between C&ED and a external party. It must be unique within the context of the specified CPAId. The party initiating a conversation determines the value of the ConversationId element that shall be reflected in all messages pertaining to that conversation.
								
								For message from Bulk Submission Party to the Government to initiate a business transaction .eg. a new AIM message and waiting for the RES message. The amendment and cancellation messages shall have a new Conversation ID.
								
								The 3 segments are:
								ROCARS Bulk Submission Party ID of the sender + ":" + "GOVERNMENT(ROCARS)" + ":" + ICR assigned by the Bulk Submission Party
								`e.g. 123456:GV0000:SSSSSSR41220000001:`
								
								To response for a message (e.g. a new AIM message) sent by a party, the C&ED (Government) will use the same Conversation ID in the RES message.
								
								In the current design, all business transactions are initiated by Bulk Submission Parties. Thus, the Conversation ID should be prepared by Bulk Submission Parties.
								
								If the C&ED has a business needs to initiate a new business transaction, C&ED shall prepare the Conversation ID in the following format:For message from the Government to Bulk Submission Party (3 segments)
								"GOVERNMENT(ROCARS)" + ":"+ ROCARS Bulk Submission Party ID of the recipient + ":" + ICR assigned by the Government
								`e.g. GV0000:123456:GV0000R9101888888`
								
								Segment 1: ROCARS Party ID of the Sender
								
								ROCARS Party ID of the sender OR
								If the sender is the Government, input "GV0000"
								
								Segment 2: ROCARS Party ID of the Recipient
								
								ROCARS Party ID of the recipient OR
								If the recipient is the Government, input "GV0000"
								
								Segment 3: Interchange Control Reference (ICR)
								
								Unique reference within the sender.
								The format of this number is
								
								SSSSSSTYMDDXXXXXX where
								
								SSSSSS ROCARS Party ID of the Bulk Submission Party (for messages from Bulk Submission Party to Government) or "GV0000" (for messages from Government to Bulk Submission Party)
								
								T Service type: "R" for ROCARS
								
								YMDD The date when the message is prepared. *Y* is year in 0-9, A-Z starting with "4" for year 2004 and will reset to 0 after Z. *M* is month in 1-9, A-C and *DD* is day of the date.

I.M. Index	<Data Element Tag> Attribute Tag	Field Name	Field Description	M/C/O	Bilingual Field (Y/N)	Format	Rpt	Validation Requirements
								XXXXXXX A sequence no. with allowable characters 0-9, A-Z. It is in base 10 format and may expand to base 36 if need arises
ZZ0022	<SOAP:Header><eb:MessageHeader><eb:CPAId>	CPA ID	CPA ID	M	N	an..8	1	ROCARS Party ID + "nn" where "nn" is the sequence number. To be assigned by the Government. (e.g. SSSSSS01 *where SSSSSS is the ROCARS Party ID*)
ZZ0036	<SOAP:Header><eb:MessageHeader><eb:From><eb:PartyID>	EBMS Sender	EBMS Sender	M	N	an..6	1	ROCARS Party ID of the sending Bulk Submission Party or "GV0000" if the sender is the Government
ZZ0038	<SOAP:Header><eb:MessageHeader><eb:To><eb:PartyID>	EBMS Receiver	EBMS Receiver	M	N	an..6	1	ROCARS Party ID of the receiving Bulk Submission Party or "GV0000" if the receiver is the Government

B.3 Road Cargo System (ROCARS) Bulk Submission Transaction

B.3.1 Business Functions

This transaction is for the Bulk Submission Party to submit electronic advance cargo information that contains the consignment information and/or the bundling information to the Government relating to any cargo imported or exported from Hong Kong by a prescribed vehicle.

The transaction involves several major players, who are described below for reference only.

The BULK SUBMISSION PARTY is a party, who either acts as an AGENT to provide the value-added services to the trading community in Hong Kong for submitting the cargo information and/or vehicle information to the Government, or who has a specific arrangement with the Government for submitting one's own advance cargo information in bulk. Both types of party shall have their own systems for exchanging electronic messages electronically with the Government through a pre-arranged and pre-defined system-to-system interface.

The GOVERNMENT is the Government of the Hong Kong Special Administrative Region (Hong Kong SAR). Electronic advance cargo information is required to be submitted to Customs and Excise Department (C&ED) under the Import and Export (Electronic Cargo Information) Regulation which is still under the drafting stage.

The EXPORTER is an organisation or a party, who intends to export any cargo in or on a prescribed vehicle, who submits, or on whose behalf an Agent or other authorised person submits, the cargo information in compliance of the legal requirements.

The IMPORTER is an organisation or a party, who intends to import any cargo in or on a prescribed vehicle, who submits, or on whose behalf an Agent or other authorised person submits, the cargo information in compliance of the legal requirements.

The PERSON IN CHARGE OF THE PRESCRIBED VEHICLE (as described as the "DRIVER" in this document) is an organisation or a party who is primarily responsible for the submission of bundling information to the Government.

The AGENT is an organisation or a party, who is authorised by the IMPORTER / EXPORTER / PERSON IN CHARGE OF THE PRESCRIBED VEHICLE, to submit the cargo information and /or the bundling information on one's behalf. An AGENT provides value-added services to the trading community in Hong Kong. Under the bulk submission scenario, an AGENT has specific arrangement with the Government and has its own system to exchange messages with the Government through a pre-arranged and pre-defined bulk submission channel.

There are four types of electronic advance cargo information document:

Import Consignment

Export Consignment

Import Bundling

Export Bundling

Each document is a single-part document to provide the essential information to the Government. The document is identified as an original.

The above documents are presented in pre-defined XML message format as described in Section B.3.4 –XML Messages. The XML Messages shall be placed under the payload of the ebXML message described in Section B.2. The combination of the XML Messages of the payload will be according to the business functions required.

For full details of legal requirements related to ROCARS, one should refer to the Import and Export (Electronic Cargo Information) Regulation which is still under drafting stage.

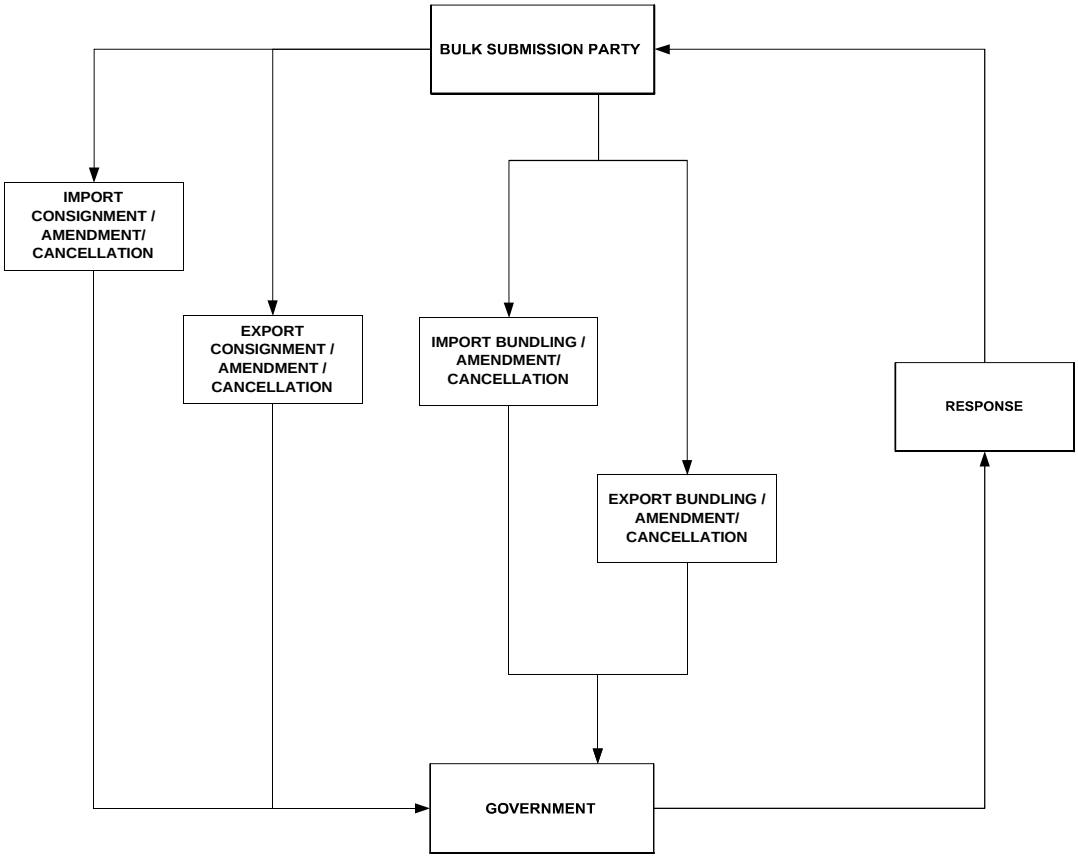
For bulk submission of electronic advance cargo information, Importer/Exporter will either lodge the cargo information via their Agents or directly through their own bulk submission channel to the Government. Importer/Exporter can also send amendment messages through the channel to Government to amend the messages already sent.

The Government will validate the message, ensure data completeness and consistency, and conduct message authentication checking against the registrant profile record before responding to the Bulk Submission Party. In case of any error identified, the Government will send an error message to the Bulk Submission Party for notification of the error.

If the message passes all the validation rules by the system of the Government, the Government will send a response message that contains a Customs Cargo Reference Number (CCRN) and/or a Unique Bundling Reference (UBR) to the Bulk Submission Party.

The diagram below shows the equivalent XML Message Flows.

Bulk Submission Transaction
XML Message Flows



B.3.2 Business Processes

Import/Export Consignment

Under ROCARS, an Importer/Exporter shall submit the cargo information to ROCARS no more than 14 days prior to the expected date of the cargoes entering or exiting Hong Kong on trucks via the land boundary. The Importer/Exporter may also authorise an Agent to submit cargo information on his/her behalf. ROCARS will reject the submission if it identifies errors in the information, otherwise, it will accept the submission and deliver a CCRN, that uniquely identifies the consignment record, back to the submission party. Then, the Importer/Exporter should pass the CCRN together with the cargo and consignment details to the appointed truck driver for performing bundling of the cargo consignment. With the system-to-system interface, the Bulk Submission Party (i.e. the Importer, Exporter or Agent) shall exchange the information with ROCARS in the standard message structure defined in the Instructions.

Import/Export Bundling

A Driver may conduct bundling when he obtains one or more CCRN(s) from the Importer/Exporter. He/she may authorise an Agent to perform bundling on his/her behalf.

A Driver, or his/her Agent, shall bundle the CCRN(s) of all cargoes on board with the Vehicle Registration Number(VRN). Such bundling act shall be done at least 30 minutes, or such lesser time as may be indicated by the ROCARS, before his/her truck arrives at the LBCP. A Unique Bundling Reference (UBR) will be returned to the Driver (or his/her Agent) to acknowledge receipt of the bundling, and to identify the specific one-way trip.

At any one time, a truck (i.e. VRN) can only be bundled with not more than two trips in ROCARS. The two trips shall not be heading for the same direction (i.e. they cannot be both northbound or both southbound trips). In other words, at any one time, at the most, a truck can only be bundled with one northbound and one southbound trip in ROCARS.

All the CCRN(s) submitted in a bundling request shall be correct and valid. ROCARS will validate the status of the CCRN(s). If a bundling request contains any invalid CCRN, the whole bundling request will be rejected.

With the system-to-system interface, the Bulk Submission Party (i.e. an Agent) shall exchange the information with ROCARS in the standard message structure defined in the Instructions.

Quick Bundling

If a Bulk Submission Party has selected to submit the bundling information together with the related cargo particulars in one go via the bulk submission channel to the Government, one can submit an XML messages combining all the information in a single ebXML Message Envelope to the Government through one's own bulk submission channel. The Bulk Submission Party will prepare a message combining all of the Import / Export Consignment messages and the Import / Export Bundling messages in one ebXML Message Envelope and ensure its compatibility before the whole ebXML Message is passed to the Government. If all the Consignment and Bundling messages pass

the validation rules and are accepted, the Government will feedback the UBR and the related CCRNs to the Bulk Submission Party in a group of Response XML messages in a single ebXML Message Envelope.

Consignment Amendment

After submitting the original cargo information, an Importer/Exporter, or his/her Agent, may submit amendments in the same channel as how it submits the original cargo information in the first place. The Bulk Submission Party will prepare the Consignment Amendment message and ensure its compatibility before the message is passed to the Government.

In the scenario of re-submission under the same Unique Declaration Identification, the Message VersionID will be incremented by one.

Bundling Amendment

After submitting the original bundling information, a Driver or his/her Agent, may submit amendments in the same channel as how he submits the original bundling information in the first place. The Bulk Submission Party will prepare the Bundling Amendment Message and ensure its compatibility before passing the message to the Government. The function of the Bundling Amendment Message includes amending the original bundling or cancelling the whole bundling.

In the scenario of re-submission under the same Unique Declaration Identification, the Message VersionID will be incremented by one.

Consignment Cancellation

An Importer/Exporter, or his/her Agent may submit cancellation through either an Agent or one's own bulk submission channel, depending on how he submits the original bundling information in the first place. The Bulk Submission Party will prepare the Consignment Cancellation message and ensure its compatibility before the message is passed to the Government. The CCRN assigned previously will then become invalid.

Bundling Cancellation

A Driver or his/her Agent, may submit cancellation through either an Agent's or one's own bulk submission channel, depending on how he submits the original bundling information in the first place. The Bulk Submission Party will prepare the Bundling Cancellation message and ensure its compatibility before the message is passed to the Government. The related consignment(s) will then all be de-bundled and can be bundled again in another bundling message.

Consignment Acknowledgement

If the submitted fresh Consignment message successfully passes all the validations of and is accepted by the system of the Government, a Response message with the CCRN of that consignment will be

generated by the Government's system and returned to the Bulk Submission Party. If the submitted Consignment Amendment/Consignment Cancellation message successfully passes all the validations of and is accepted by the system of the Government, a Response message to acknowledge the amendment/cancellation will be sent by the Government's system and returned to the Bulk Submission Party.

Bundling Acknowledgement

If the submitted fresh Bundling message successfully passes all the validations of and is accepted by the system of the Government, a Response message with the UBR of that bundling will be generated by the Government's system and returned to the Bulk Submission Party. If the submitted Bundling Amendment/Bundling Cancellation message successfully passes all the validation of and is accepted by the system of the Government, a Response message to acknowledge the amendment/cancellation will be generated by the Government's system and returned to the Bulk Submission Party.

Error

A series of validation will be done to ensure that the electronic signatures of the senders are correct and the basic information of the consignment/bundling message is valid.

During the validation process, if the message is found to contain application or syntax errors, a Response message with description and explanation of the error will be returned to the Bulk Submission Party. In such case, the message will not be accepted by the Government's system. The Bulk Submission Party should then amend and re-submit the message as a fresh submission.

Response to Quick Bundling

If all the Consignment message(s) and the Bundling message within the submitted Quick Bundling request successfully pass all the validations of and are accepted by the system of the Government, the Response messages with the CCRN(s) and UBR of each of the Consignment and Bundling messages under that Quick Bundling request will be generated by the Government's system and returned to the Bulk Submission Party.

If any of the Consignment message(s) or the Bundling message within the submitted Quick Bundling request is found to contain application or syntax errors, the Response messages with the CCRN of those accepted consignment(s), together with the Response messages with the description and the explanation of the error(s) of the rejected consignment(s) will be returned to the Bulk Submission Party. The Bundling message within the Quick Bundling request will not be accepted. The Bulk Submission Party shall amend the rejected Consignment message(s) for re-submission as a fresh submission individually, followed by submitting a Bundling message for all the CCRNs involved to complete the process.

Intermodal Transhipment

An Import/Exporter, or his/her Agent, of inter-modal transhipment goods may submit extra information about the inter-modal transport arrangement of the transhipment so that C&ED would be

aware of the transhipment nature of the cargo. Coupled with other customs clearance systems already in place, C&ED would facilitate the passage of transhipment cargoes through Hong Kong which involve inter-modal transfer, such as having “one-stop” customs clearance.

The extra information should include, flight number, flight date, Air Waybill Number and House-level Waybill Number, which should be specified as additional document information in an Import Consignment/Export Consignment message wherever appropriate.

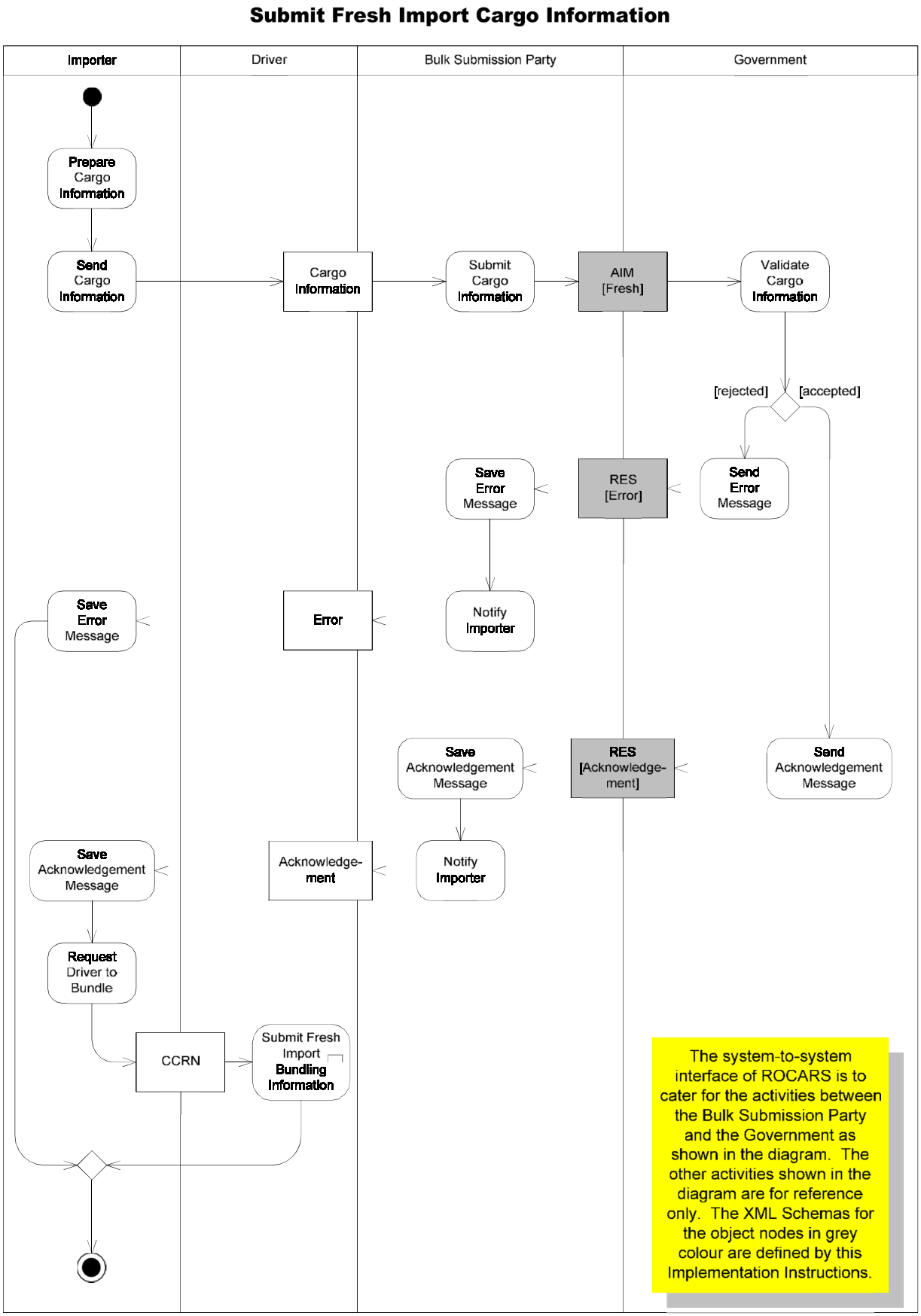
B.3.3 Activity Diagrams

The activity diagrams of bulk submissions are to aid people to understand the activities in bulk submissions. They supplement the textual descriptions of the Business Processes in Section B.3.2. The activity diagrams show how the following messages are used:

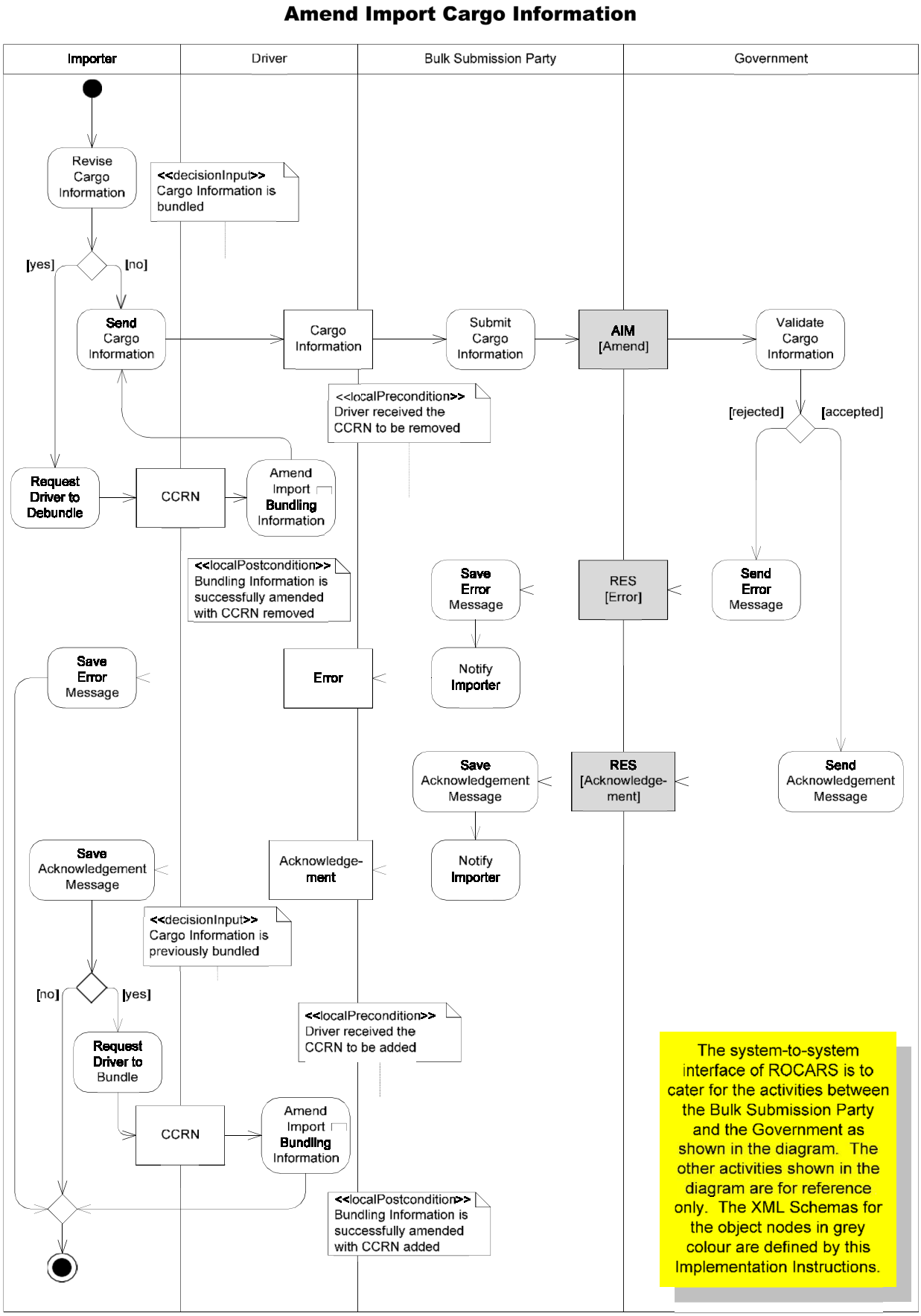
- Import Consignment
  - ➢ Fresh Submission
  - ➢ Amendment
  - ➢ Cancellation
- Export Consignment
  - ➢ Fresh Submission
  - ➢ Amendment
  - ➢ Cancellation
- Import Bundling
  - ➢ Fresh Submission
  - ➢ Amendment (Including add consignments, remove consignments)
  - ➢ Cancellation
- Export Bundling
  - ➢ Fresh Submission
  - ➢ Amendment (Including add consignments, remove consignments)
  - ➢ Cancellation
- Response

The activity diagrams for Quick Bundling Request, which involve a combination of the above messages inside an ebXML Message Envelope, are also illustrated.

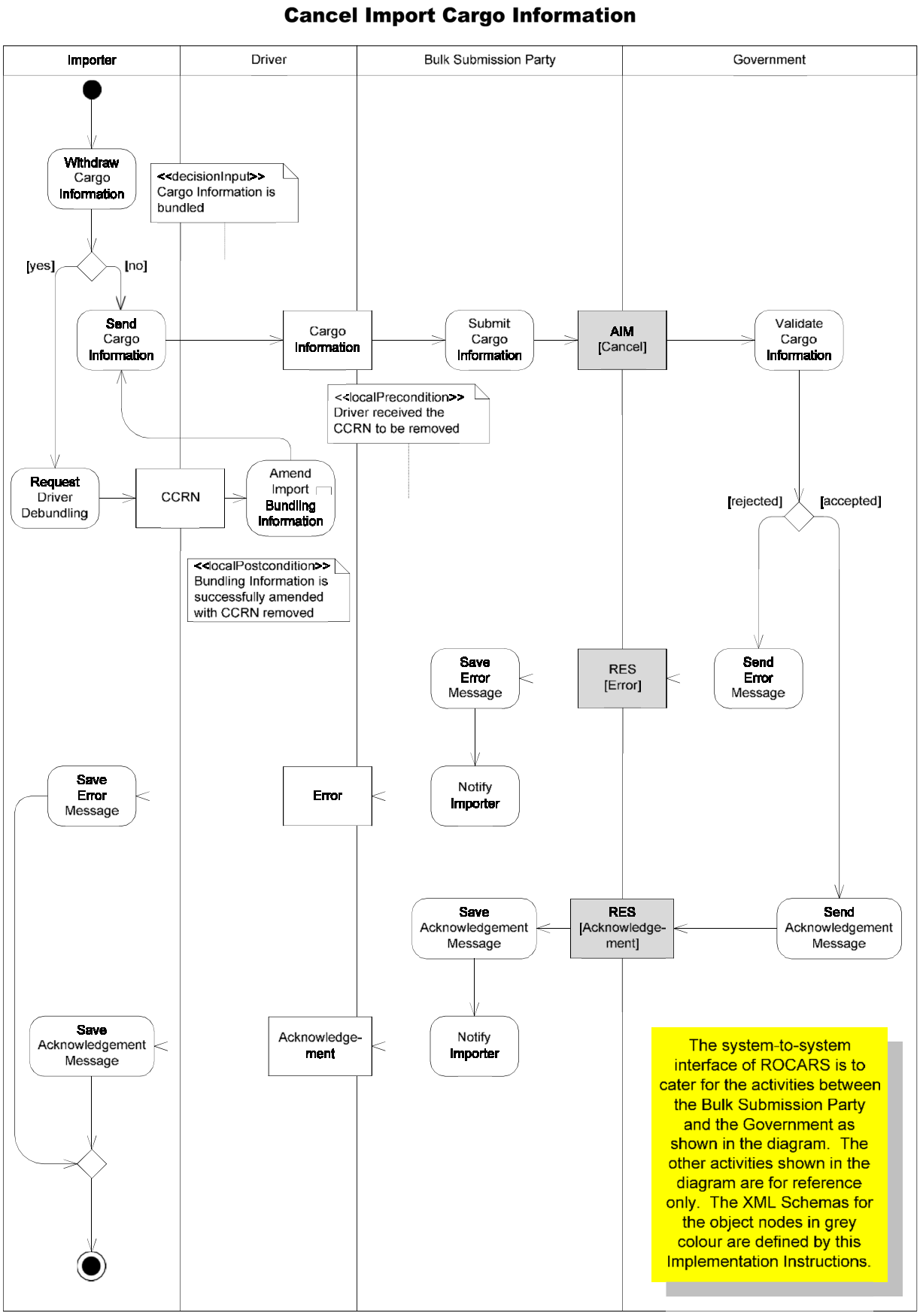
Activity 1a : Import Consignment (Fresh Submission)



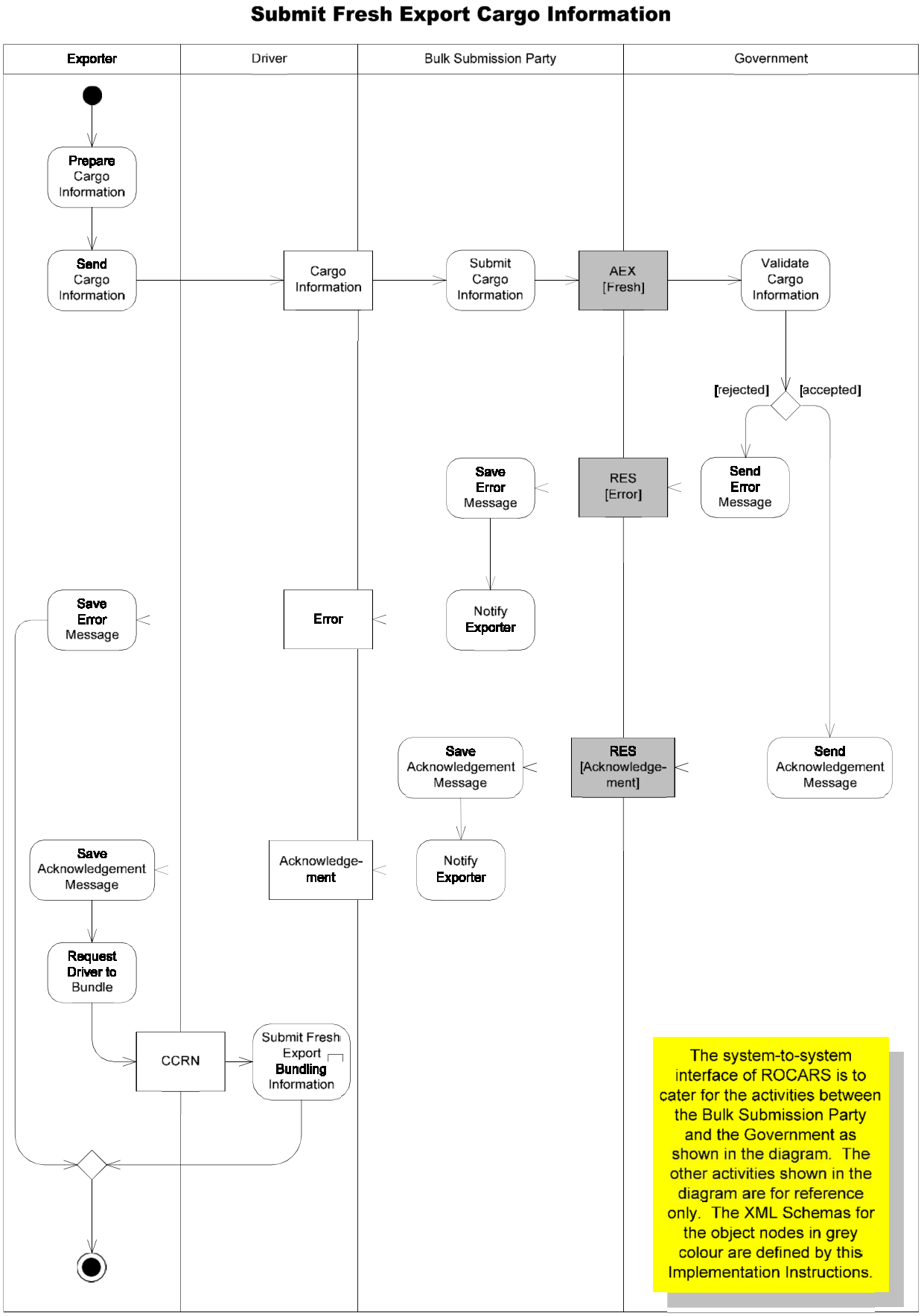
Activity 1b : Import Consignment (Amendment)



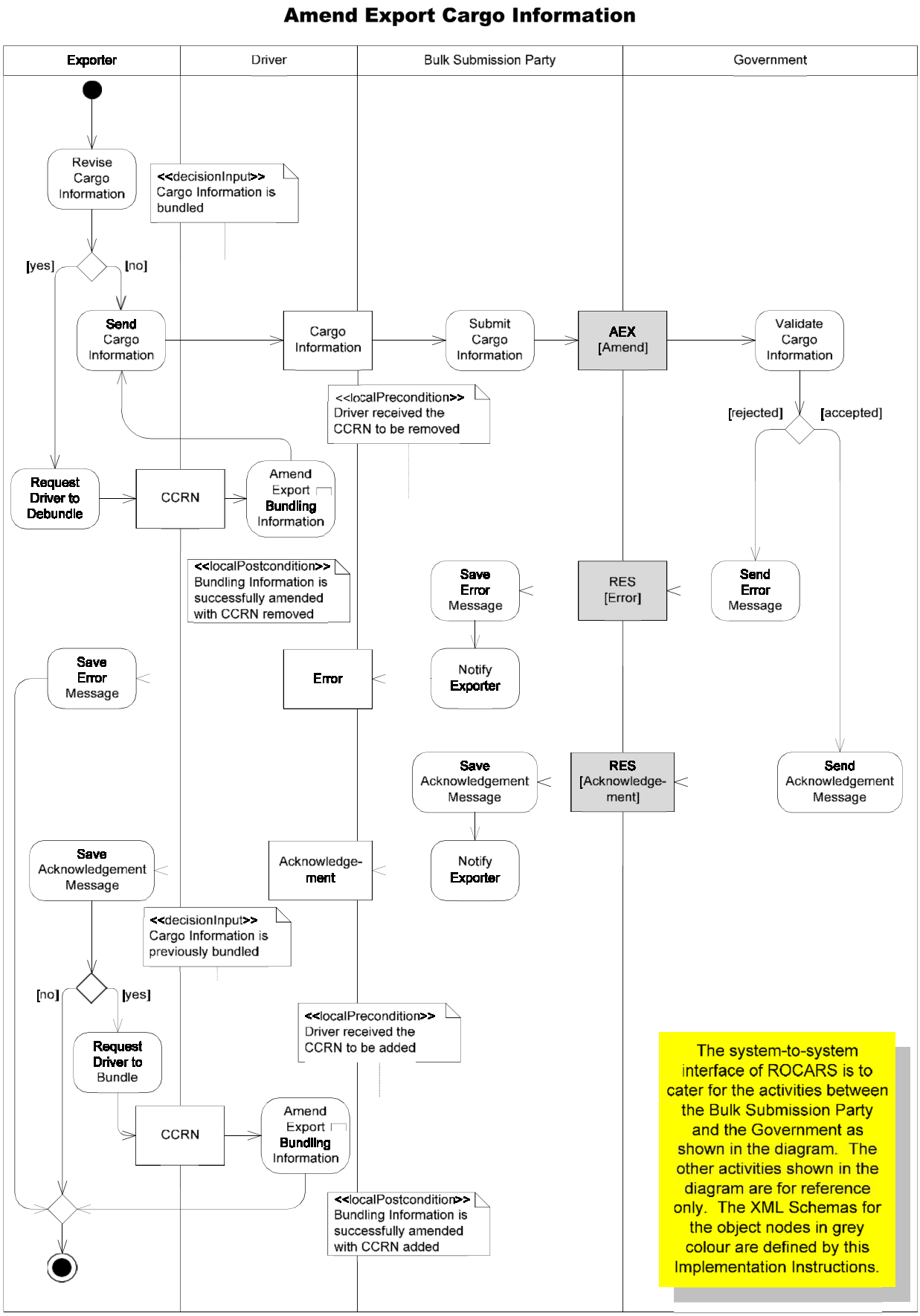
Activity 1c : Import Consignment (Cancellation)



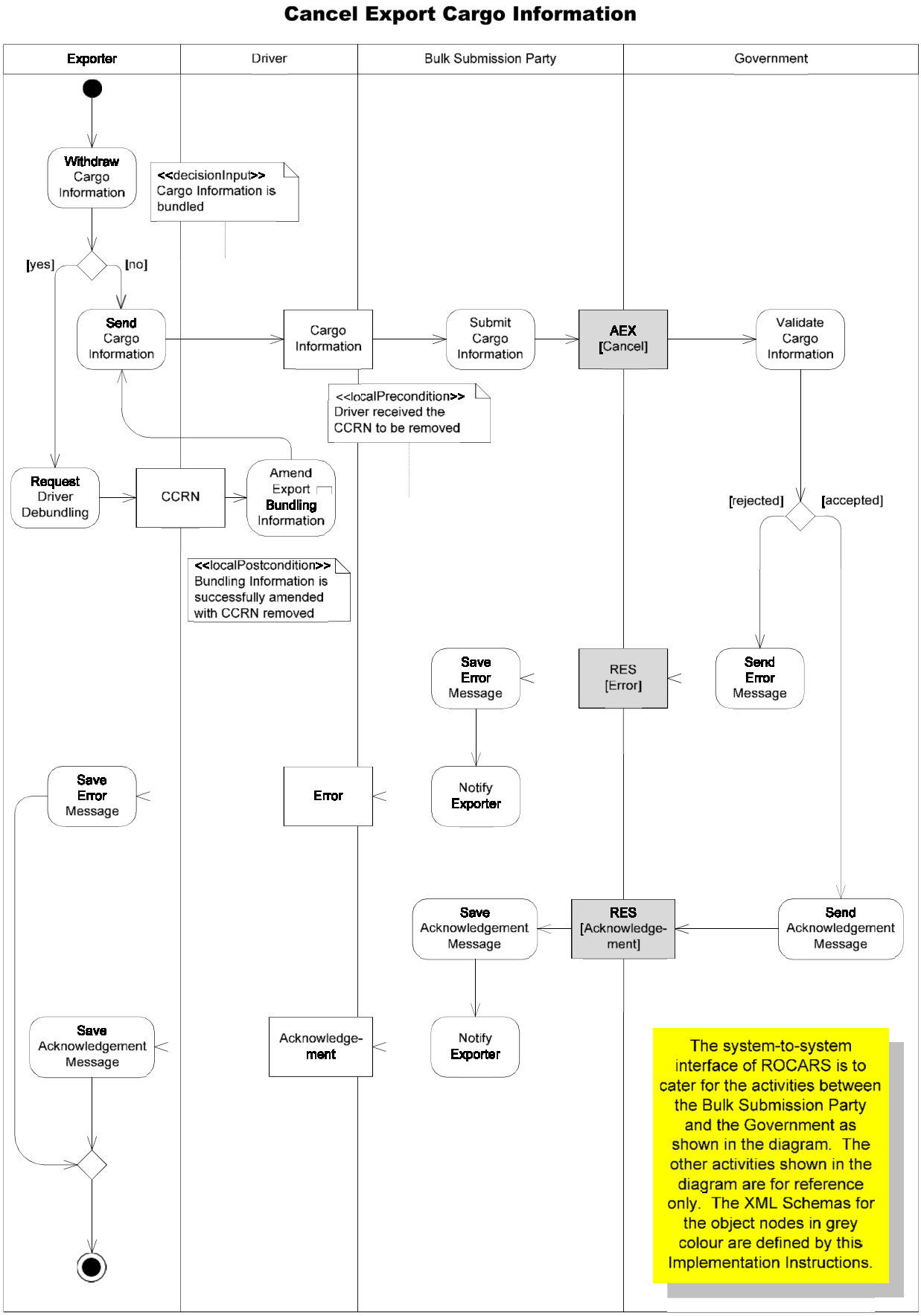
Activity 2a : Export Consignment (Fresh Submission)



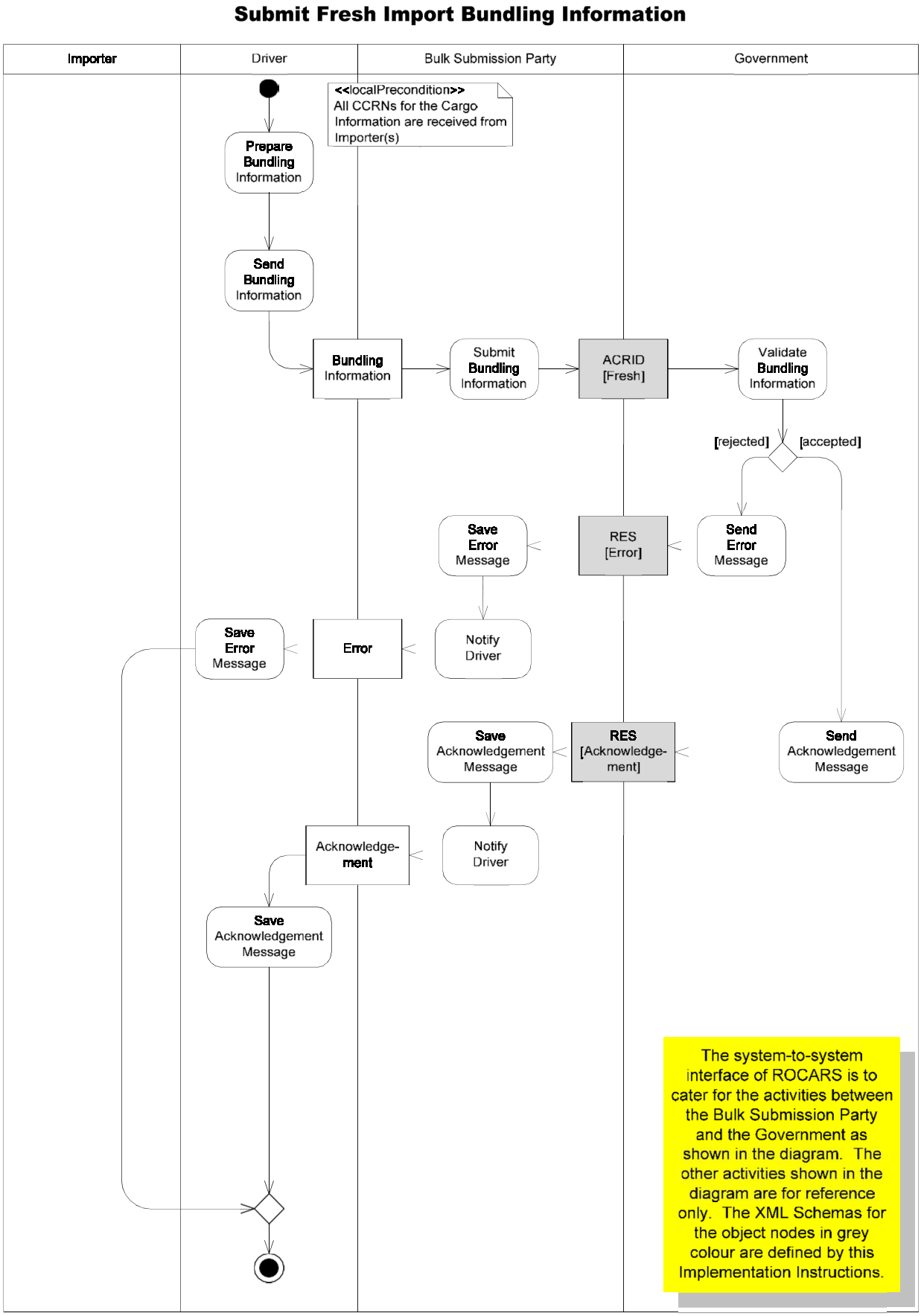
Activity 2b : Export Consignment (Amendment)



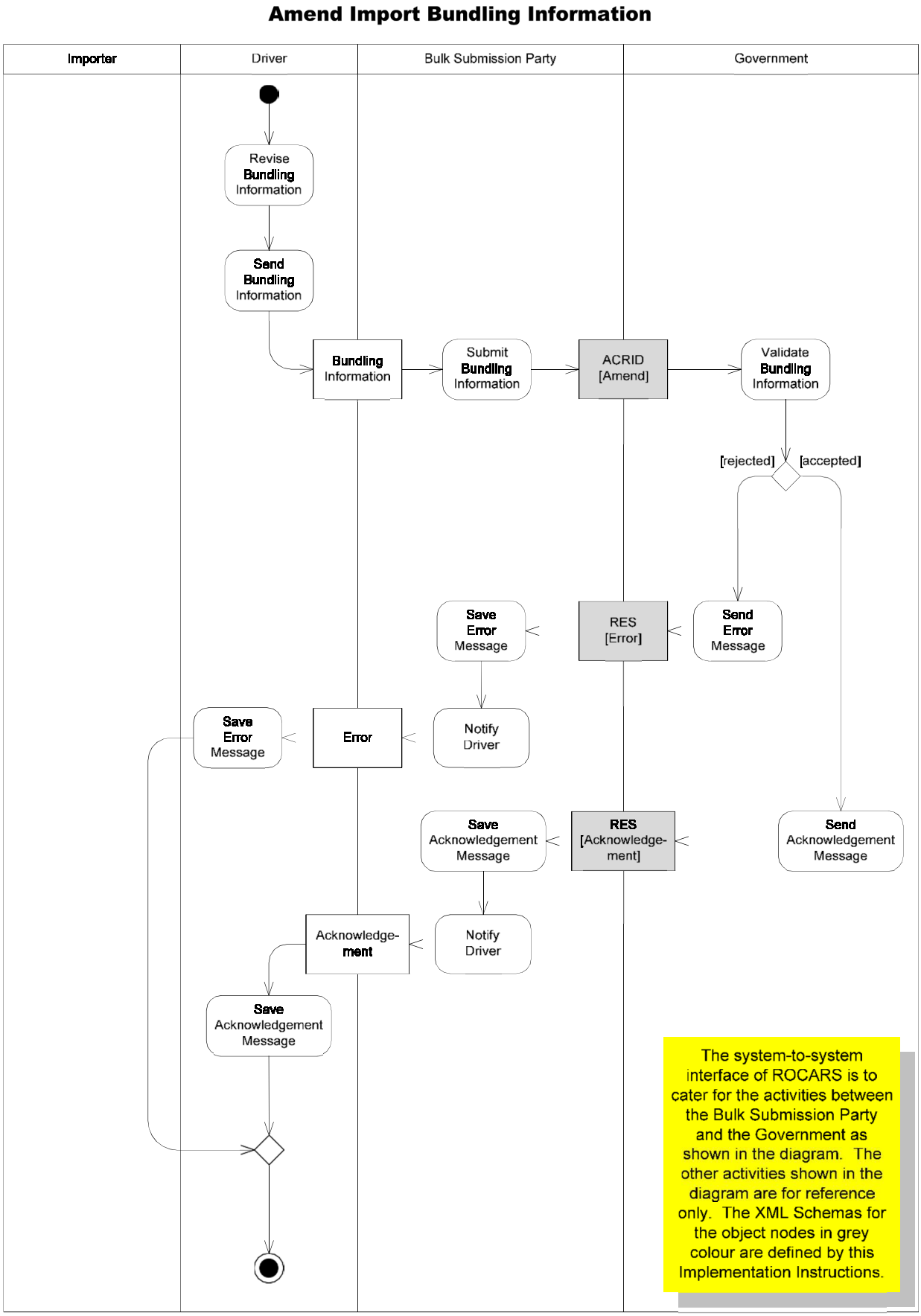
Activity 2c : Export Consignment (Cancellation)



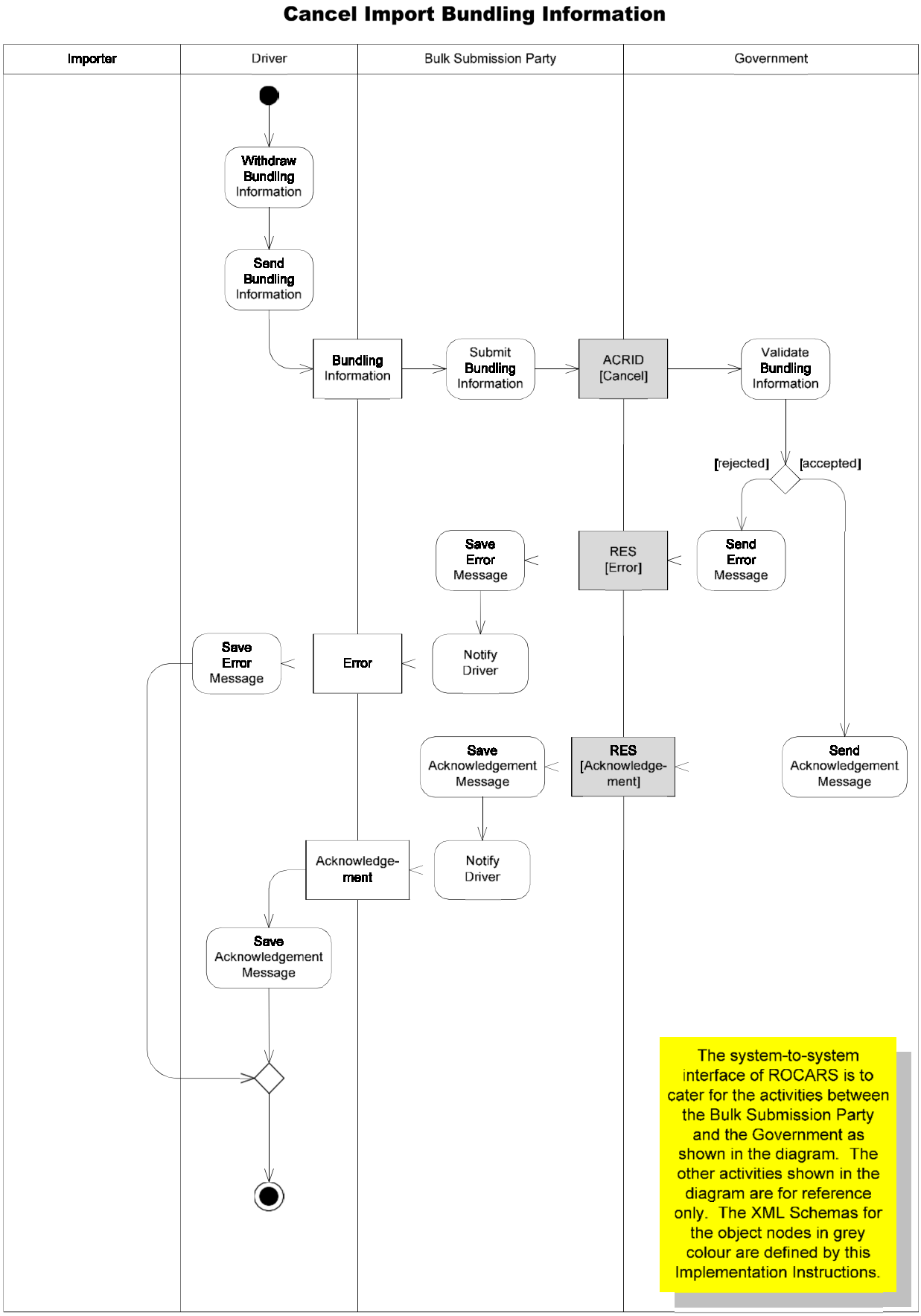
Activity 3a : Import Bundling (Fresh)



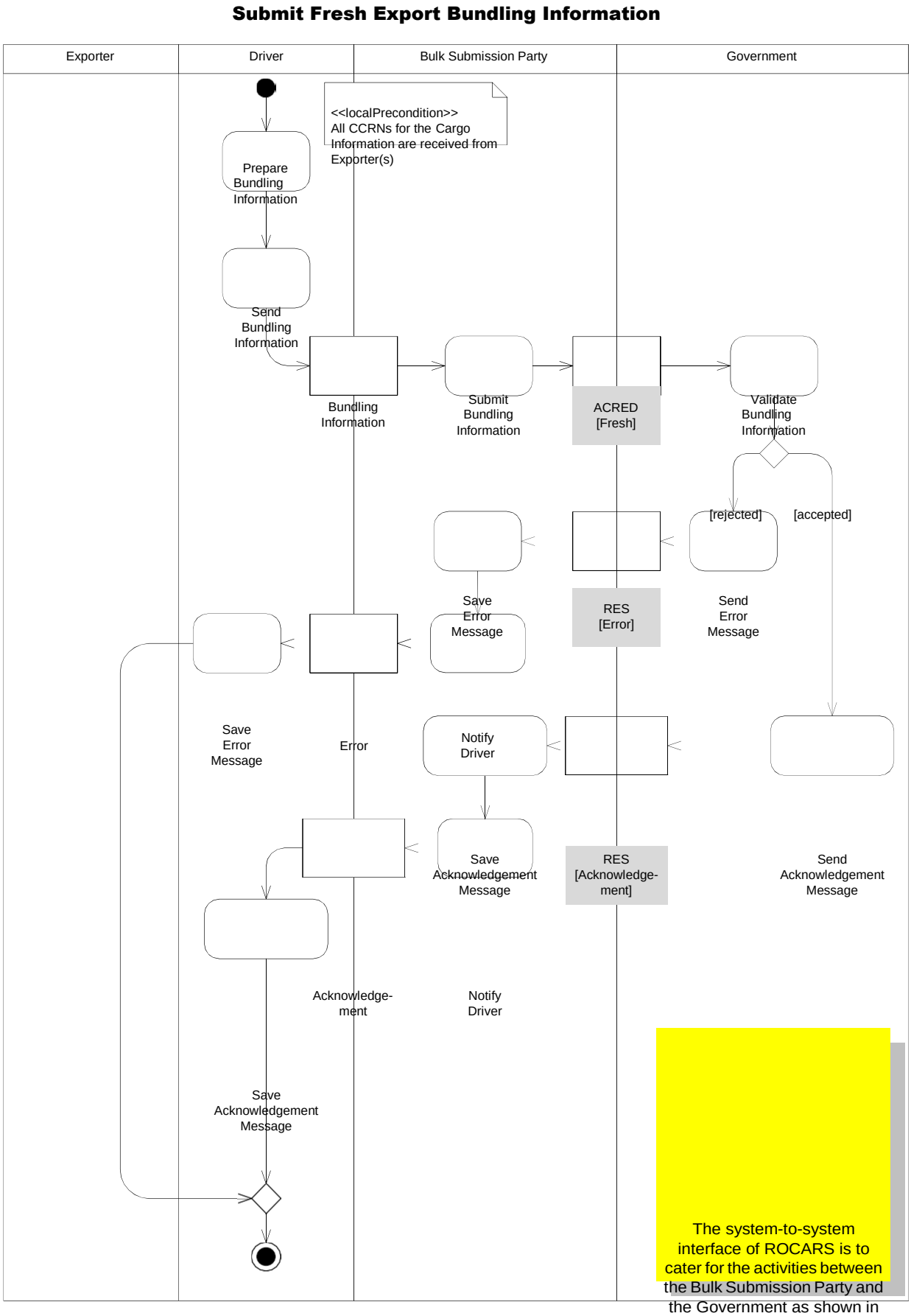
Activity 3b: Import Bundling (Amendment)



Activity 3c : Import Bundling (Cancellation)



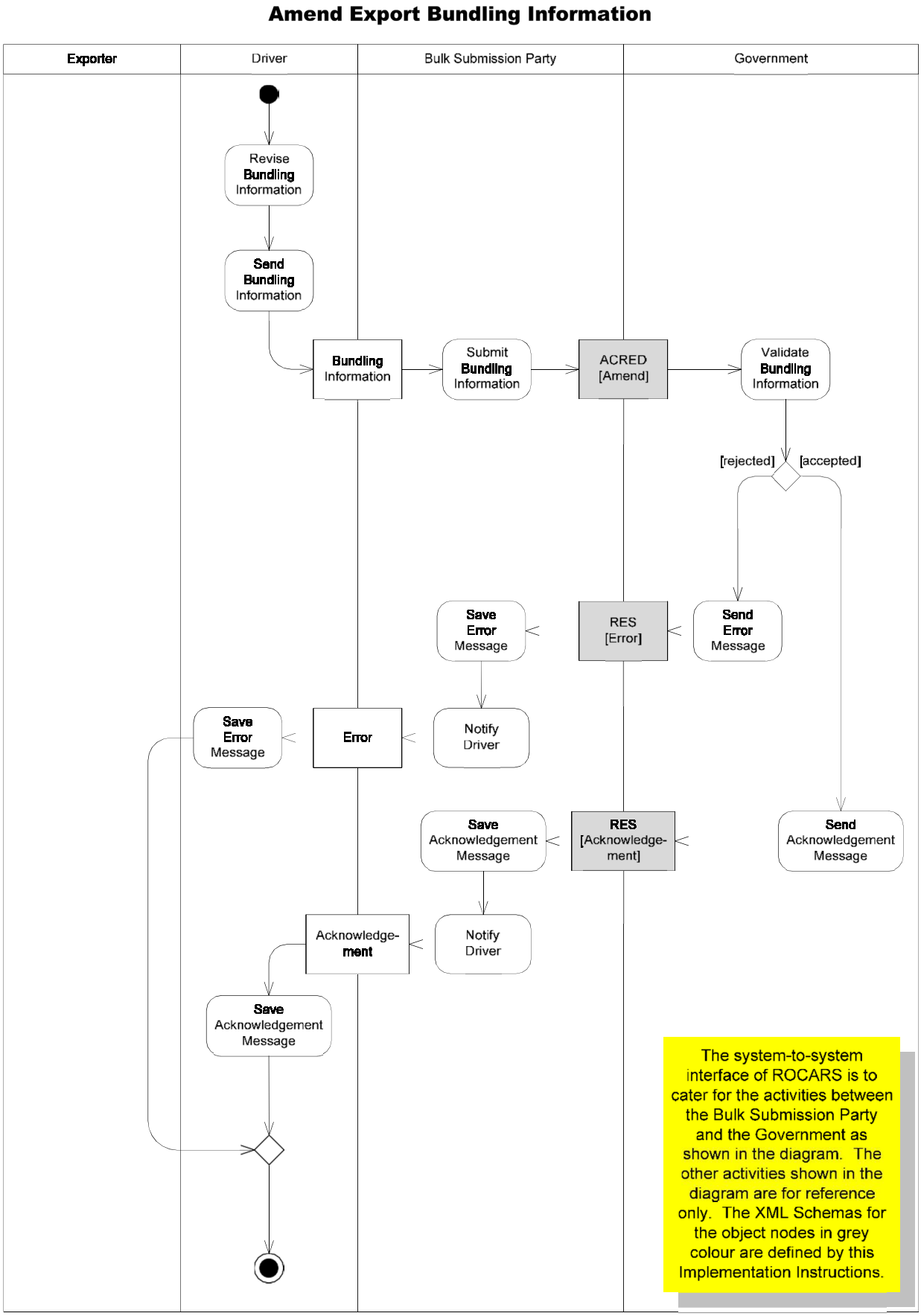
Activity 4a : Export Bundling (Fresh)



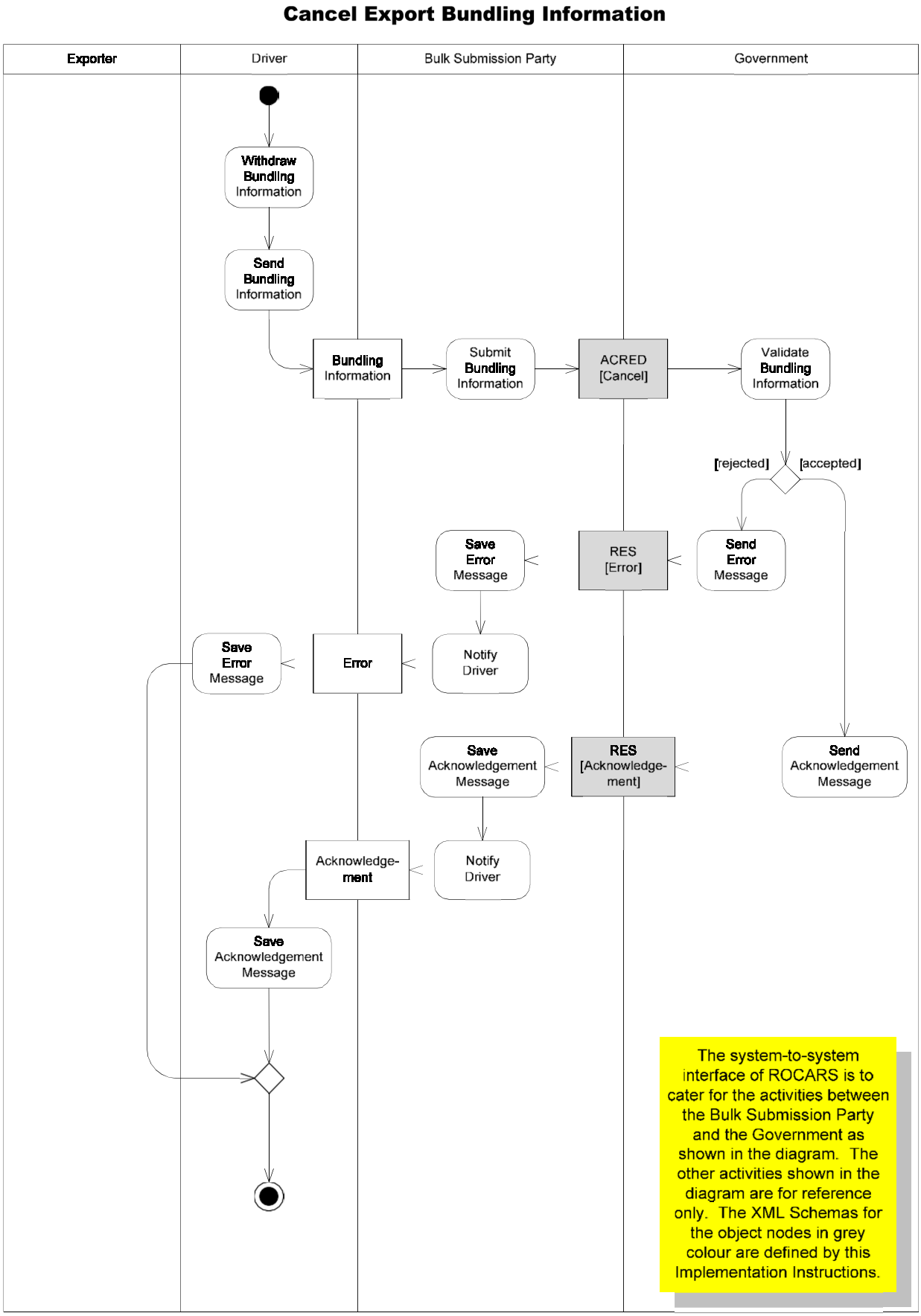
The system-to-system interface of ROCARS is to cater for the activities between the Bulk Submission Party and the Government as shown in the diagram. The other activities shown in the diagram are for reference only. The XML Schemas for

the object nodes in grey colour are defined by this Implementation Instructions.

Activity 4b : Export Bundling (Amendment)

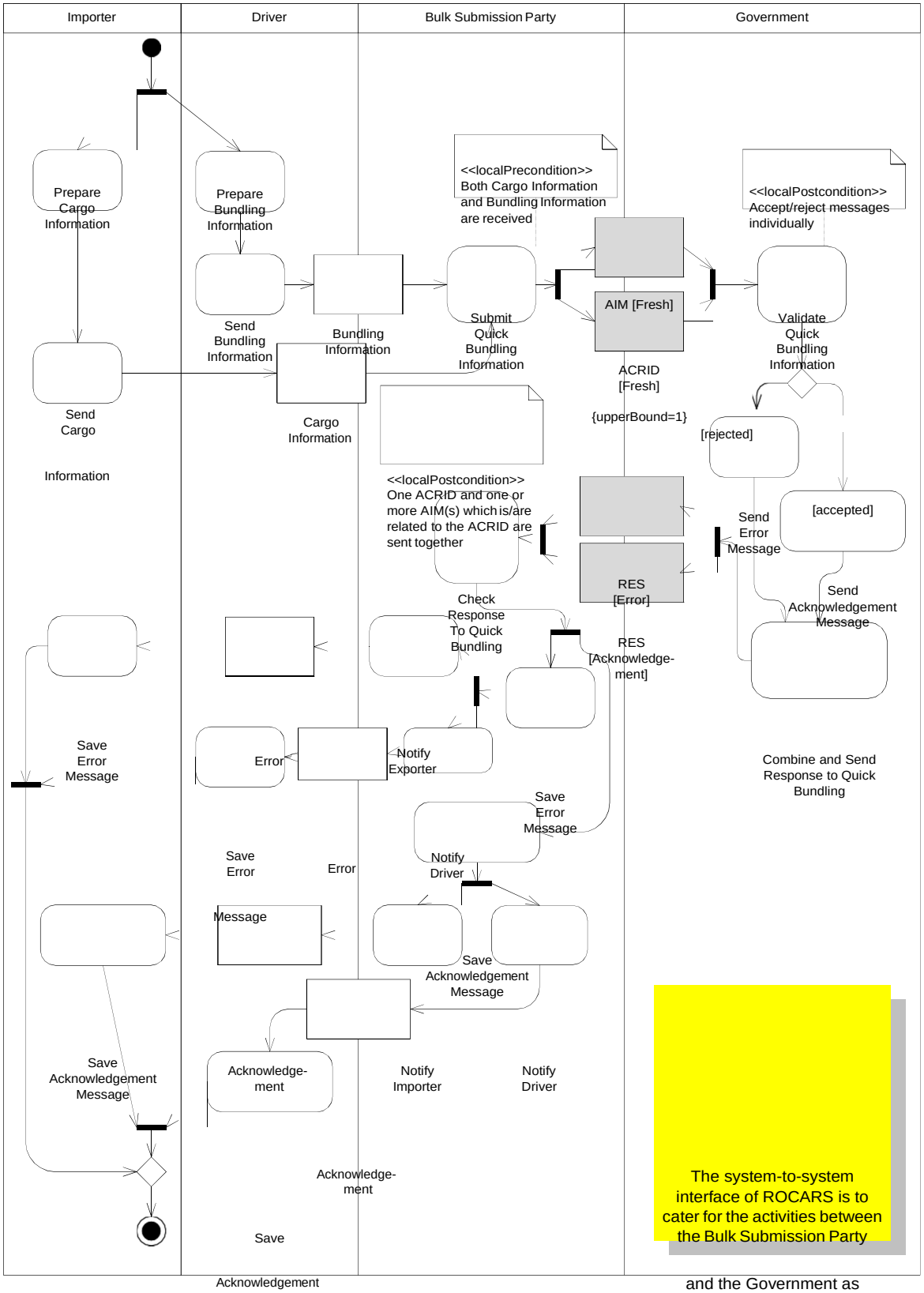


Activity 4c : Export Bundling (Cancellation)



Activity 5a : Quick Bundling Request (Import)

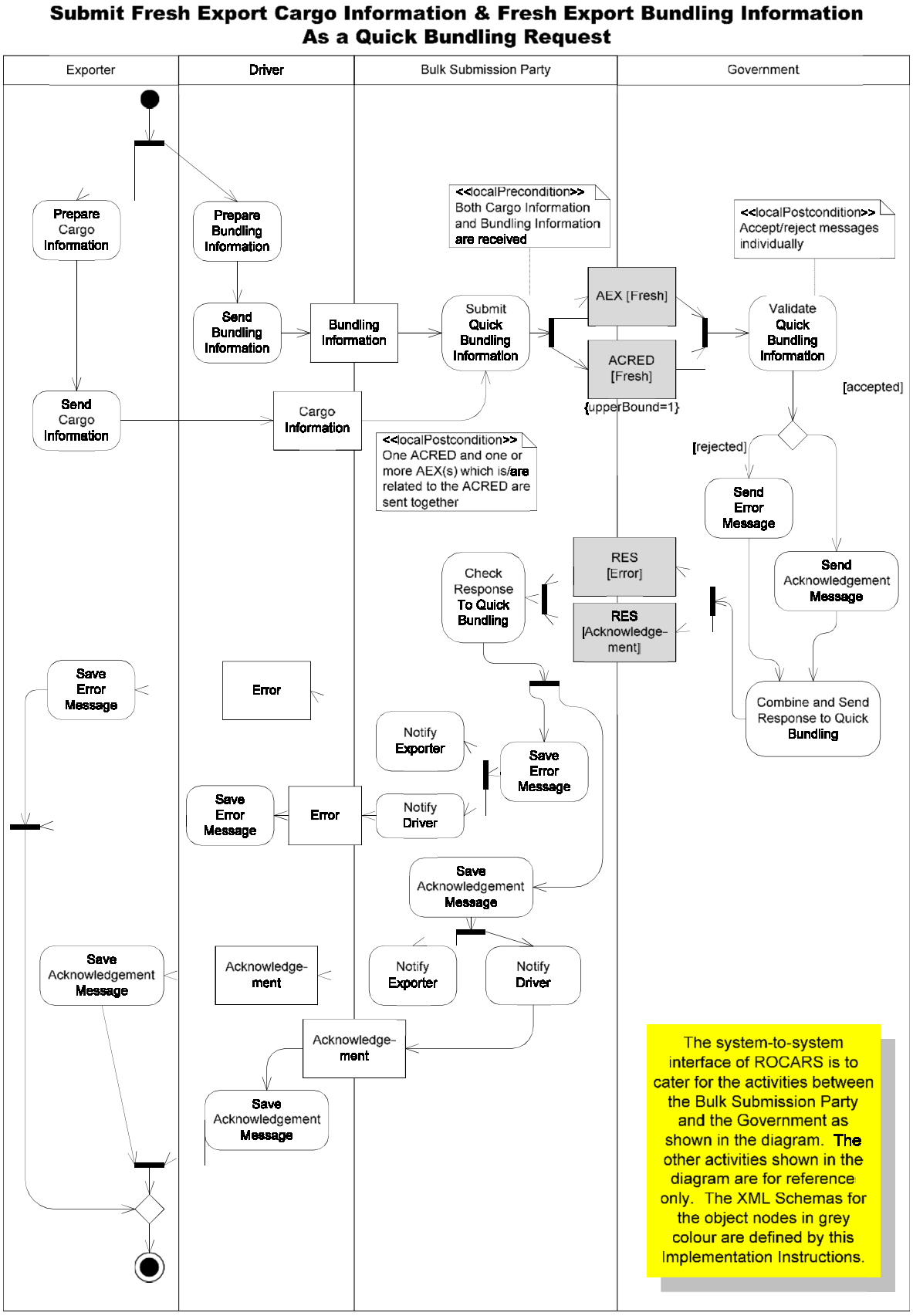
Submit Fresh Import Cargo Information & Fresh Import Bundling Information As a Quick Bundling Request



The system-to-system interface of ROCARS is to cater for the activities between the Bulk Submission Party and the Government as shown in the diagram. The other activities shown in the diagram are for reference only. The XML Schemas for the object nodes in grey colour are defined by this Implementation Instructions.

** {The proposed Quick Bundling Request is a combination of ACRID and multiple AIM messages, or ACRED and multiple AEX messages.*

Activity 5b : Quick Bundling Request (Export)



** {The proposed Quick Bundling Request is a combination of ACRID and multiple AIM messages, or ACRED and multiple AEX messages.*

B.3.4 XML Message List

Message is sent within an ebXML Envelope.

The list of XML messages is provided as follows:

Message Name	XML Schema	AgencyAssigned CustomizedDocumentName	Signature on Message Envelope	Section
Import Consignment	AIM_1p0.xsd	AIM	Required	B.3.7.1
Export Consignment	AEX_1p0.xsd	AEX	Required	B.3.7.2
Import Bundling	ACRID_1p0.xsd	ACRID	Required	B.3.7.3
Export Bundling	ACRED_1p0.xsd	ACRED	Required	B.3.7.4
Response	RES_1p0.xsd	RES	Required	B.3.7.5

Each of the messages will be explained in Section B.3.7, with the sub-sections of General Comments, Branching Diagram, Information Matrix and Sample Message. Schema of each message can be found in separate file.

These messages shall be contained in a XML Schema named DocumentMetadata_1p0.xsd for additional information on WCO mini-message. It is illustrated in the examples in Section B.2.

The list of request available for combination of XML messages is provided as follows:

Request Name	XML Schema	AgencyAssigned CustomizedDocumentName	Signature on Message Envelope	Section
Quick Bundling*	QB_1p0.xsd to contain a combination of AIM_1p0.xsd and ACRID_1p0.xsd; or AEX_1p0.xsd and ACRED_1p0.xsd	Nil	Required	B.3.7.6

The Quick Bundling Request will be explained in Section B.3.7.6, with the sub-sections of General Comments and Sample ebXML Message for Quick Bundling Request.

B.3.5 Implementation Considerations

In this section, some implementation considerations for the user of the bulk submission scenario are detailed.

USE OF UNIQUE DECLARATION IDENTIFICATION

Each new declaration message, i.e. a message cannot be referenced by a CCRN or an UBR, shall be assigned with a Unique Declaration Identification ("UDI") by the Bulk Submission Party in the standardized format specified below at the time of its first submission. This identification will be quoted for reference to the message in future communication between the Bulk Submission Party and the Government relating to that message, before the CCRN or UBR is assigned.

Y	T	Z1	Z2	Z3	Z4	M	R	S1	S2	S3	S4	S5	C

Y, Character 1 – Numeric	Year code – Last digit of current year (0-9). The current year of the message submission.
T, Character 2 – Alphanumeric	Must be "0". Reserved for future use.
Z1-Z4, Character 3 thru 6 – Alphanumeric	The compressed (using base-36) ROCARS_PARTY_ID used in the ebMS Header as assigned by C&ED to a Bulk Submission Party. Characters must be in the range of 0 to 9, A to Z. If the message is generated/prepared by the Government, Z1-Z4 will begin with "GV00" incrementally up to "GVZZ". If the message is generated/prepared in the online Portal, Z1-Z4 will begin with "Z000" incrementally up to "ZZZZ".
M, Character 7 – Alphanumeric	Month code –Characters must be in the range: 1-January to 9 – September; A- October to C- December The current month of the message submission.
R, Character 8 – Alphanumeric	Must be "0". Reserved for future use.
S1-S5, Character 9 thru 13 – Alphanumeric	Unique number allocated by the Bulk Submission Party (using base-36). Characters must be in the range of 0 to 9, A to Z. The number shall be assigned incrementally from 0 and reset in the 1st date of a month.
C, Character 14 - Alphanumeric	Check Digit (0-9, A-Z). Modulus 36 algorithm is used for the generation of the check digit.

The Check Digit (0-9, A-Z) is derived from all the other digits in the UDI using a modulus-36 calculation, via the following steps:

Step 1: Starting with the 2nd digit on the left, sum up all the alternate digits (i.e. all digits in even number position).

Step 2: Multiply the result of Step 1 by 7.

Step 3: Sum up all the remaining digits (i.e. all digits in odd number position)

Step 4: Add up the results of Step 2 and Step 3.

Step 5: The modulus-36 check digit, therefore, is the smallest number which, when added to the result of Step 4, produces a multiple of 36.

The following example calculates the check digit number for 4 0 0 1 0 9 1 0 0 0 0 D 3 **?**

			Base-36	Base-10
Step 1:	0 + 1 + 9 + 0 + 0 + D	=	N	23
Step 2:	N x 7	=	4H	161
Step 3:	4 + 0 + 0 + 1 + 0 + 0 + 3	=	8	8
Step 4:	4H + 8	=	4P	169
Step 5:	4P + **?**	=	50	180

The value of check digit, therefore, is “11” and the complete UDI is 40010910000D3B.

PROCESSING BY BULK SUBMISSION PARTY

All XML messages are sent between the Bulk Submission Party and the Government. The Bulk Submission Party shall ensure the messages comply with the structures, formats, validation requirements and code lists specified in this Instructions so as to enable successful information exchange with the Government. The requirements on the structures, formats, occurrence of data items and validation requirements of individual data items can be found in the Section 3.7.1 to 3.7.6.

The Bulk Submission Party will prepare the message, perform validation on the content and compatibility of the messages and conduct message authentication against the registrant profile record before the message is forwarded to the Government.

PROCESSING BY THE GOVERNMENT

All XML messages received by the Government will be validated against authentication and compatibility of the messages the structure, formats, validation requirements, code lists, and other business situation wherever appropriate.

In the case of any errors being identified in the message, the message will be rejected. A RESPONSE message with error indicator will be passed to the sender.

If the message is considered valid, a RESPONSE message with acknowledgement will be sent to the sender.

NUMBER OF MESSAGES WITHIN AN ENVELOPE

For system-to-system interface for bulk submission, all XML messages should be sent individually within an envelope, except the Quick Bundling scenario. In Quick Bundling Request, an ebXML

message with multiple objects within a single payload will contain an Import/Export Bundling message and one or more Import/Export Consignment message(s). It is designed to be sent together within the same Envelope, as there is the business need for the receipt of the Import/Export Bundling and Import/Export Consignment messages at the same time. Other than Quick Bundling Request, if an envelope is transmitted through Bulk Submission Party with more than one message, the whole Envelope will be rejected and an error message will be passed to the sender.

PROOF OF DELIVERY

Additionally, all Bulk Submission Parties shall maintain an audit trail of all messages passing through their system. The audit trail report of a message shall provide adequate proof of the delivery of the messages to the recipient. The client of the Bulk Submission Party can request the audit trail report as a proof of delivery of a specific XML message which he had authorised the Bulk Submission Party to send to the Government. The client can further obtain proof of the content of the message he/she had authorised to be sent by requesting an archive copy of that message.

USE OF CODE

If code is used in a message, the textual representation of the code is deemed to have been conveyed by that message. For details of code list, please refer to Section B.3.6.

LICENCES/NOTIFICATIONS/SUPPORTING DOCUMENTS

Licences/ permits / supporting documents may be essential for the clearance of cargo by C&ED. Importers/Exporters can specify the licence / permits / supporting document numbers under the corresponding goods items in the cargo information submitted through the ROCARS via the Bulk Submission Party no matter the licence / permits / supporting document numbers are covered by other electronic services or in paper form.

Where the licences / permits / supporting documents are in paper form, the Driver may also need to present the copy of the required documents together with the corresponding goods items to C&ED when crossing the Land Boundary Control Points.

IMPLIED RESPONSIBILITIES OF MESSAGE RECIPIENTS

All messages have at least one specific function. These functions, which are detailed in Section B.3.7, specify a reason for the message being sent and give an implied responsibility to the recipient to act upon the message.

USE OF LANGUAGE

ROCARS supports ISO/IEC 10646-1:2000 and UTF-8 is used for character-set encoding for XML messages. However, not all characters in ISO/IEC 10646-1:2000 are valid for entry. Attention should be paid to the requirements listed below:

English

Whenever information is provided in English, only the following restricted set ranges are allowed:
0020 – 007E : Basic Latin
00A0 – 00FF : Latin-1 supplement

Chinese

For information provided in Chinese, the characters in Big 5, GB2312 and GBK having standard codes in ISO/IEC 10646-1:2000 together with the full set of HKSCS-2001 will be allowed. Validation on Chinese characters should be checked by character instead of by range. ROCARS supports the same list of character code points as the Government Electronic Trading Services (GETS). A full list of character code points is available in the webpage for "GETS – Reference Materials" (http://www.cedb.gov.hk/citb/ehtml/gets_rm.html).

BILINGUAL DATA ELEMENTS

Some data elements support English input only. The restricted range for English input should refer to 'USE OF LANGUAGE' sub-section. These elements will be marked 'N' in the 'Bilingual Field' column in information matrices in Section B.3.7.

Certain data elements support both Chinese and English input. Restricted ranges of which should refer to 'USE OF LANGUAGE' sub-section. These elements will be marked 'Y' in the 'Bilingual Field' column in information matrices in Section B.3.7.

SIGNATURES

All messages transmitted between Government and Bulk Submission Party in the system-to-system interface for bulk submission should be digitally signed by means of PKI (Public Key Infrastructure) technology. In case of failure in the verification of the electronic signature, the whole envelope will be rejected and an error message will be sent to the sender.

Each message signatory should apply for a unique digital certificate from a recognised Certification Authority for signing messages.

The Bulk Submission Party shall assign a message signatory, with his/her digital certificate to digitally sign all messages sent to the Government.

Further detailed technical information on the implementation of digital signatures is contained in the following Section B.2 of this document.

VERSION ID AND FUNCTION CODE IN BULK SUBMISSION

According to the XML message structure, there are the version ID data fields to serve as sequential numbering purpose and the function code to point out the changes in the information. The Bulk Submission Party shall use the version number to indicate the amendment sequence of the XML

message and use the function code to indicate the message is an amendment of a previously sent message.

B.3.6 Code List

Data in Message is frequently coded. Within the ROCARS scenario, a number of specific code lists are used and these are referenced in the individual Message Definitions. A reference of all valid codes and descriptions is available in the webpage for "ROCARS" (https://www.rocars.gov.hk/en/TechInfo.html). The following table is a summary of these code lists:

Code List	Maintenance Agency
Type of Package Code (Subset of UN/ECE Recommendation 21)	UN/ECE
Unit of Measure Code (Weight) (Subset of UN/ECE Recommendation 20)	UN/ECE
Unit of Measure Code (Volume) (Subset of UN/ECE Recommendation 20)	UN/ECE
Document Type	The Government (C&ED)
Document Issuer	The Government (C&ED)
Country/ Code (ISO 3166-1)	International Organization for Standardization ("ISO")
Equipment Size and Type (Container) (Reference to UN/TDED 8155)	The Government (C&ED)
Contact Number Type (Reference to UN/TDED 3153)	The Government (C&ED)
Response Information Code	The Government (C&ED)
Error Code	The Government (C&ED)
Land Boundary Control Point	The Government (C&ED)

B.3.7 XML MESSAGES

B.3.7.1 Import Consignment (AIM)

B.3.7.1.1 General Comments

Under ROCARS, an Importer shall submit the cargo information to ROCARS no more than 14 days prior to the expected date of the cargoes entering or exiting Hong Kong on trucks via the land boundary. The Importer may also authorise an Agent to submit cargo information on his/her behalf. ROCARS will reject the submission if it identifies errors in the information, otherwise, it will accept the submission and deliver a CCRN, that uniquely identifies the consignment record, back to the submission party. Then, the Importer should pass the CCRN together with the cargo and consignment details to the appointed truck driver for performing bundling of the cargo consignment. With the system-to-system interface, the Bulk Submission Party (i.e. the Importer or Agent) shall exchange the information with ROCARS in the standard message structure defined in the Instructions.

After submitting the original cargo information, an Importer, or his/her Agent, may submit

amendments in the same channel as how it submits the original cargo information in the first place. The Bulk Submission Party will prepare the Consignment Amendment message and ensure its compatibility before the message is passed to the Government.

In the scenario of re-submission under the same Unique Declaration Identification, the Message VersionID will be incremented by one.

An Importer, or his/her Agent may submit cancellation through either an Agent or one's own bulk submission channel, depending on how he submits the original bundling information in the first place. The Bulk Submission Party will prepare the Consignment Cancellation message and ensure its compatibility before the message is passed to the Government. The CCRN assigned previously will then become invalid.

B.3.7.1.2 Branching Diagram (Fresh and Amend AIM)

WCO ID	I.M. Index	Occurrence	XML Element Tag
	AIM0100	1	Declaration
017	AIM0110	1	|____FunctionCode
002	AIM0120	1	|____ID
001	AIM0130	1	|____TypeCode
N/A	AIM0140	1	|____VersionID
	AIM0200	0..1	|____Agent
061	AIM0210	1	| |____ID
102	AIM0220	0..1	| |____StatusCode
	AIM0300	1	|____GoodsShipment
006	AIM0310	1	| |____SequenceNumeric
	AIM0400	1	| |____Consignee
052	AIM0410	0..1	| | |____ID
051	AIM0420	1..2	| | |____Name
	AIM0500	1	| | |____Address
241	AIM0510	0..1	| | |____CityName
242	AIM0520	1	| | |____CountryCode
244	AIM0530	0..1	| | |____CountrySubEntityID
243	AIM0540	0..1	| | |____CountrySubEntityName
239	AIM0550	1..2	| | |____Line
245	AIM0560	0..1	| | |____PostcodeID
	AIM0600	1	| |____Consignment
006	AIM0610	1	| | |____SequenceNumeric
	AIM0700	1	| | |____BorderTransportMeans
172	AIM0710	1	| | | |____ArrivalDateTime
	AIM0800	0..1	| | |____TransportEquipment
152	AIM0810	0..1	| | |____CharacteristicCode
165	AIM0820	0..1	| | |____SealID
	AIM0900	0..1	| | |____EquipmentIdentification
159	AIM0910	0..1	| | |____ID
	AIM1000	1	| |____Consignor
072	AIM1010	0..1	| | |____ID
071	AIM1020	1..2	| | |____Name
	AIM1100	1	| | |____Address
241	AIM1110	0..1	| | |____CityName
242	AIM1120	1	| | |____CountryCode
244	AIM1130	0..1	| | |____CountrySubEntityID
243	AIM1140	0..1	| | |____ CountrySubEntityName

WCO ID	I.M. Index	Occurrence	XML Element Tag
239	AIM1150	1..2	| | |____Line
245	AIM1160	0..1	| | |____PostcodeID
	AIM1200	1..99	| |____CustomsGoodsItem
006	AIM1210	1	| | |____SequenceNumeric
	AIM1300	0..99	| | |____AdditionalDocument
003	AIM1310	0..1	| | | |____ID
262	AIM1320	0..1	| | | |____IssuerID
170	AIM1330	0..1	| | | |____TypeCode
	AIM1400	0..5	| | |____AdditionalInformation
105	AIM1410	1	| | | |____Content
	AIM1500	1	| | |____Commodity
137	AIM1510	1	| | | |____Description
	AIM1600	0..1	| | |____GoodsMeasure
126	AIM1610	0..1	| | | |____GrossMassMeasure
N/A	AIM1620	0..1	| | | |____GrossVolumeMeasure
128	AIM1630	0..1	| | | |____NetNetWeightMeasure
130	AIM1640	0..1	| | | |____TariffQuantity
	AIM1700	0..1	| | |____GoodsPackaging
144	AIM1710	0..1	| | |____QuantityQuantity
141	AIM1720	0..1	| | |____TypeCode
	AIM1800	0..1	| |____EntryCustomsOffice
046	AIM1810	1	| | |____ID
	AIM1900	0..1	| |____UCR
016	AIM1910	1	| |____ID
	AIM2000	1	|____Importer
040	AIM2010	0..1	|____ID
039	AIM2020	1..2	|____Name
	AIM2100	0..1	|____Address
241	AIM2110	0..1	| |____CityName
242	AIM2120	1	| |____CountryCode
244	AIM2130	0..1	| |____CountrySubEntityID
243	AIM2140	0..1	| |____CountrySubEntityName
239	AIM2150	1..2	| |____Line
245	AIM2160	0..1	| |____PostcodeID
	AIM2200	0..1	|____Contact
246	AIM2210	0..1	|____Name
	AIM2300	0..3	|____Communication
240	AIM2310	1	|____ ID

WCO ID	I.M. Index	Occurrence	XML Element Tag
253	AIM2320	1	|____TypeID

B.3.7.1.3 Branching Diagram (Cancel AIM)

WCO ID	I.M. Index	Occurrence	XML Element Tag
	AIM0100	1	Declaration
017	AIM0110	1	|____FunctionCode
002	AIM0120	1	|____ID
001	AIM0130	1	|____TypeCode
N/A	AIM0140	1	|____VersionID
	AIM0200	0..1	|____Agent
061	AIM0210	1	| |____ID
102	AIM0220	0..1	| |____StatusCode
	AIM2000	1	|____Importer
040	AIM2010	0..1	|____ID
039	AIM2020	1..2	|____Name
	AIM2100	0..1	|____Address
241	AIM2110	0..1	| |____CityName
242	AIM2120	1	| |____CountryCode
244	AIM2130	0..1	| |____CountrySubEntityID
243	AIM2140	0..1	| |____CountrySubEntityName
239	AIM2150	1..2	| |____Line
245	AIM2160	0..1	| |____PostcodeID
	AIM2200	0..1	|____Contact
246	AIM2210	0..1	|____Name
	AIM2300	0..3	|____Communication
240	AIM2310	1	|____ID
253	AIM2320	1	|____TypeID

B.3.7.1.4 Information Matrix

I.M. Index	<XML Element Tag> XML Attribute	Field Name	Field Description	M/C/O	Bilingual Field (Y/N)	Format	Rpt	Validation Requirements
(1)	**(2) (3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**	**(10)**

Common Heading Legend

(1) **I.M. Index** Information Matrix Index

(2) **<XML Element Tag>** Identifies where the data item is mapped in a particular XML message specification as published in the Implementation Instructions of ROCARS

(3) **XML Attribute** Name of the attribute and its value to describe a data element

(4) **Field Name** Business term for the data item

(5) **Field Description** Description on the field

(6) **M/C/O** Usage of the field to see whether the field is Mandatory (M), Conditional (C) or Optional (O).

Mandatory fields should be neither null nor space only;
Conditional fields, when condition is fulfilled (see validation requirement), should be neither null nor space only unless specified.

(7) **Bilingual Field (Y/N)** Usage of the field to see if bilingual input is supported.
Y - support Chinese and English input
N - support English input only

(8) **Format** Format of the data item. e.g.

a	alphabetic or ideographic (for bilingual field) characters
n	numeric characters
an	alphanumeric or ideographic (for bilingual field) characters
a3	3 alphabetic or ideographic (for bilingual field) characters, fixed length
n3	3 numerical characters, fixed length
an3	3 alphanumerical or ideographic (for bilingual field) characters, fixed length
a..3	up to 3 alphabetic or ideographic (for bilingual field) characters
n..3	up to 3 numerical characters
an..3	up to 3 alphanumerical or ideographic (for bilingual field) characters
n..14,3	up to 14 numerical characters including maximum 3 decimals – delimiter is allowed to float and is not counted as a character (e.g. 12345678901.234, 123456789012.34 and 12345678901234 are valid values for n..14,3)
year	CCYY(CC=Century, YY=Year)
date	CCYY-MM-DD (CC=Century, YY=Year, MM=Month, DD=Day)
time	HH:MiMi:SS in international time format (HH=Hour, MiMi=Minute, SS=Second e.g. 23:59:59)
datetime	CCYY-MM-DDTHH:MiMi:SS (CC=Century, YY=Year, MM=Month, DD=Day, T=T, HH=Hour, MiMi=Minute, SS=Second e.g. 2002-08-01T23:59:59)

(9)	**Rpt**	Number of repetition of the corresponding field. This should be interpreted together with the property on M/C/O (described at (6) above). Unless otherwise specified, the following examples should apply: M 10 the field can repeat for a maximum of ten times, with the first occurrence being mandatory and subsequent occurrence optional C 5 the field can repeat for a maximum of five times, with the first occurrence being conditional and subsequent occurrence optional O 3 the field can repeat for a maximum of three times, with all occurrence optional
(10)	**Validation Requirements**	Specifies the individual validation rules for the data item

Note: Please refer to the corresponding XSD file for the sequence of the data elements.

MESSAGE TYPE : AIM IMPORT CONSIGNMENT

I.M. Index	<XML Element Tag> XML Attribute	Field Name	Field Description	M /C /O	Bilingual Field (Y/N)	Format	Rpt	Validation Requirements
AIM0100	<Declaration>	-	-	M	-	-	1	
AIM0110	<FunctionCode>	FunctionCode	Function of the message	M	N	n..2	1	Fresh Submission / Amendment /Cancellation 1= Cancellation 2= Fresh Submission 4= Amendment
AIM0120	<ID>	ID	Unique Declaration Identification (UDI)	M	N	an..35	1	This is the unique reference assigned by the bulk submission party for each declaration and this number will be quoted in all future communications between the Government and the bulk submission party. The Unique Declaration Identification (UDI) is 14 characters long. For format of UDI, please see section B.3.5. If it is an original submission, UDI must not previously exist in the system of ROCARS. If it is an amendment or cancellation, UDI must be the same as the UDI of the fresh submission.
AIM0130	<TypeCode>	TypeCode	Type of the message	M	N	an..3	1	Must be “R01” for AIM
AIM0140	<VersionID>	VersionID	Individual transaction reference number	M	N	n..2	1	This is a sequence number, assigned by the sender, indicating that the message is a change of a previously sent AIM. It shall start at 1 if the Functioncode = “2” and shall be incremented by 1, for each amendment AIM with the same UDI. The number will ensure that multiple submissions of the same UDI are processed correctly. The receiving application should not process a message if it has the same UDI and the sequence number is not greater than that already received for the UDI.
AIM0200	<Agent>	-	-	C	-	-	1	-
AIM0210	<ID>	AgentID	Agent Identification	C	N	an..17	1	Must exist if the declaration is made through an Agent.

MESSAGE TYPE : AIM IMPORT CONSIGNMENT								
								Must not exist if the declaration is made by the Importer The value must be the Business Registration Number of a ROCARS registered Agent For format of Business Registration Number should be 99999999-X99 Characters 1-8 shall be numeric. Character 9 shall be the '-' (dash). Characters 10-12 represent the branch number where character 10 shall be alphanumeric and characters 11-12 shall be numeric. The Business Registration number must be valid.
AIM0220	<StatusCode>	Agent Role	The role of the agent in respect of the cargo in this submission	O	N	an..3	1	If specified, the allowed value can be: "DQ" - Owner/Manufacturer/Freight Forwarder"; or "OC" - "Data Entry".
AIM0300	<GoodsShipment>	-	-	C	-	-	1	Must exist if the declaration is a fresh application/amendment. Must not exist if the declaration is a cancellation.
AIM0310	<SequenceNumeric>	SequenceNumeric		M	N	n..5	1	Unique running sequence for identifying the line of the shipment. It will be reset for each declaration.
AIM0400	<Consignee>			M	-	-	1	
AIM0410	<ID>	ID	Consignee ID	O	N	an..17	1	Reserved for future use. The ROCARS Identification Number of the consignee.
AIM0420	<Name languageID = "value">	Name	Consignee Name	M	Y	an..35	2	The first line must not be blank or null
AIM0421		languageID	Language of the Consignee Name	O	N			Language of the Consignee Name. Must be "zh" or "en" if specified.
AIM0500	<Address>		Consignee Address	M	-	-	1	
AIM0510	<CityName>	CityName	Consignee Address - City Name	O	Y	an..35	1	
AIM0520	<CountryCode>	Country Code	Consignee Address – Country/Territory Code	M	N	a2	1	Must be a valid Country/Territory code. Refer to code table "Country/Territory code" as specified in section B.3.6.

MESSAGE TYPE : AIM_IMPORT CONSIGNMENT								
AIM0530	<CountrySubEntityID>	Country SubEntity ID	Consignee Address - SubEntity ID	O	Y	an..9	1	Users are suggested to specify value according to ISO-3166-2, if applicable. No validation will be applied on this optional field
AIM0540	<CountrySubEntityName>	Country SubEntity Name	Consignee Address - Country Sub-Entity Name	O	Y	an..35	1	
AIM0550	<Line languageID = “value”>	Line	Consignee Address – Detailed Location within City	M	Y	an..35	2	The first occurrence must not be blank or null. Word splitting is not allowed between lines.
AIM0551		languageID	Language of the Consignee Address	O	N			Language of the Consignee Address. Must be “zh” or “en” if specified All fields under Address, except the “Country Code”, must be the same language as the “Consignee Address – Detailed Location within City”
AIM0560	<PostcodeID>	PostCode	Consignee Address – Postcode identification	O	Y	an..9	1	
AIM0600	<Consignment>			M	-	-	1	
AIM0610	<SequenceNumeric>	Sequence		M	N	n..5	1	Unique number for identifying the line of consignment. Must be 1.
AIM0700	<BorderTransportMeans>			M	-	-	1	
AIM0710	<ArrivalDateTime>	Arrival DateTime	Estimated Date of Arrival at Customs Control Point	M	N	date	1	Must be in format of CCYY-MM-DD
AIM0800	<TransportEquipment>			O	-	-	1	
AIM0810	<CharacteristicCode>	Characteristic Code	Equipment size and type identification.	C	N	an..4	1	Must exist and be a valid code if the Equipment Identification Number exists Must not exist if the Equipment Identification Number doest not exist Refer to code table ” Equipment Size and Type (Container)” as specified in section B.3.6.
AIM0820	<SealID>	Seal ID	Seal Number	O	N	an..35	1	e-seal number. Reserved for future use.
AIM0900	<EquipmentIdentification>			O	-	-	1	
AIM0910	<ID>	Equipment Identification Number	Equipment Identification Number as the container number	O	N	an..17	1	Container Number
AIM1000	<Consignor>			M	-	-	1	
AIM1010	<ID>	ID	Consignor ID	O	N	an..17	1	Reserved for future use. The ROCARS identification Number of the consignor.

MESSAGE TYPE : AIM IMPORT CONSIGNMENT								
AIM1020	<Name languageID = “value”>	Name	Consignor Name	M	Y	an..35	2	The first line must not be blank or null
AIM1021		languageID	Language of the Consignor Name	O	N			Language of the ConsignorName. Must be “zh” or “en” if specified.
AIM1100	<Address>		Consignor Address	M	-	-	1	
AIM1110	<CityName>	CityName	Consignor Address - City Name	O	Y	an..35	1	
AIM1120	<CountryCode>	Country Code	Consignor Address – Country/Territory Code	M	N	a2	1	Must be a valid Country/Territory code. Refer to code table ”Country/Territory code” as specified in section B.3.6.
AIM1130	<CountrySubEntityID>	Country SubEntity ID	Consignor Address - SubEntity ID	O	Y	an..9	1	Users are suggested to specify value according to ISO-3166-2, if applicable. No validation will be applied on this optional field
AIM1140	<CountrySubEntityName>	Country SubEntity Name	Consignor Address - Country Sub-entity Name	O	Y	an..35	1	
AIM1150	<Line languageID = “value”>	Line	Consignor Address – Detailed Location within City	M	Y	an..35	2	The first occurrence must not be blank or null. Word splitting is not allowed between lines.
AIM1151		languageID	Language of the Consignor Address	O	N			Language of the Consignor Address. Must be “zh” or “en” if specified. All fields under Address, except the “Country/Territory Code”, must be the same language as the “Consignor Address – Detailed Location within City”
AIM1160	<PostcodeID>	PostCode	Consignor Address – Postcode identification	O	Y	an..9	1	
AIM1200	<CustomsGoodsItem>			M	-	-	99	
AIM1210	<SequenceNumeric>	Sequence		M	N	n..5	1	The sequence number of the goods item in this declaration. Starting from 1, up to 99.
AIM1300	<AdditionalDocument>			O	-	-	99	
AIM1310	<ID>	ID	Additional Document Reference Number	O	N	an..35	1	Licence/notification/supporting documents number
AIM1320	<IssuerID>	Issuer ID	Additional Document issuer code	C	N	an..17	1	Mandatory if Additional Document Reference Number is not null, otherwise must not exist Code value for the document issuer. Refer to code table ”Document Issuer” as specified in section B.3.6.
AIM1330	<TypeCode>	Type Code	Additional Document type	C	N	an..3	1	Mandatory if Additional Document Reference Number is not null, otherwise must not exist. Licence/notification/supporting

MESSAGE TYPE : AIM IMPORT CONSIGNMENT								
								document type code Refer to code table ”Document Type” as specified in section B.3.6.
AIM1400	<AdditionalInformation>			O	-	-	5	Only the first CustomsGoodsItem (the CustomsGoodsItem with SequenceNumeric = 1) can have AdditionalInformation with occurrence up to 5. Must not exist for the CustomsGoodsItem with SequenceNumeric > 1
AIM1410	<Content>	Free Text	Message Sender's Reference Free text field available to the message sender for information	M	Y	an..512	1	The business validation on the maximum length of this field is set to 35 characters, instead of 512 characters defined in WCO. Must not > 35 characters if exist
AIM1500	<Commodity>			M	-	-	1	
AIM1510	<Description languageID=”value”>	Description	Commodity Description	M	Y	an..256	1	”Description of articles in each package”/ ”Description of cargo”
AIM1511		languageID	Language of the Commodity Description	O	N			Language of the Commodity Description. Must be “zh” or “en” if specified.
AIM1600	:<GoodsMeasure>			C	-	-	1	
AIM1610	<GrossMassMeasure unitCode = “value”>	Gross Mass Measure	Gross Weight	C	N	n..11,3	1	Weight of line item including packaging but excluding the transport equipment. Either the Gross Mass Measure or the Gross Volume Measure shall be entered if declaring cargo in bulk. Must not exist if declaring cargo in packages
AIM1611		unitCode	Gross Weight Unit	C	N	an..3	1	Attribute of the Gross Weight Must be a code value Refer to code table ”Unit of Measure Code (Weight)” as specified in section B.3.6.
AIM1620	<GrossVolumeMeasure unitCode = ”value”>	GrossVolumeMeasure	Gross Volume	C	N	n..9	1	Volume of line item including packaging but excluding the transport equipment. Either the Gross Mass Measure or the Gross Volume Measure shall be entered if declaring cargo in bulk. Must not exist if declaring cargo in packages
AIM1621		unitCode	Gross Volume Unit	C	N	an..3	1	Attribute of the Gross Volume Must be a code value
AIM1630	<NetNetWeightMeasure unitCode = “value”>	Net net weight measure	Net Weight	O	N	n..11,3	1	Weight of line item without any packing.

MESSAGE TYPE : AIM_IMPORT CONSIGNMENT								
AIM1631		unitCode	Net Weight Unit	C	N	an..3	1	Attribute of the Net Weight Must be a code value if specified. Must be specified if the Net Weight is specified. Refer to code table "Unit of Measure Code (Weight)" as specified in section B.3.6.
AIM1640	<TariffQuantity>	TariffQuantity	Quantity Cargo	O	N	n..14,3	3	Quantity of cargo If declaring cargo in bulk, the quantity of cargo should be specified if applicable First line is mandatory, if needed to fill in this field. Must not exist if declaring cargo in packages
AIM1700	<GoodsPackaging>			C	-	-	1	
AIM1710	<QuantityQuantity>	Packing Quantity	Number of packages per commodity	C	N	n..8	1	Number of packages per consignment item packaged in such a way that they cannot be divided without first undoing the package. Required if declaring cargo in packages. Must not exist if declaring cargo in bulk
AIM1720	<TypeCode>	Packing TypeCode	Type of package identification	C	N	an..2	1	Code specifying the type of package of an item. Required if declaring cargo in packages. Must not exist if declaring cargo in bulk Refer to code table "Type of Package Code" as specified in section B.3.6.
AIM1800	<EntryCustomsOffice>			O	-	-	1	
AIM1810	< ID>	ID	The expected Customs Control Point of entry	M	N	an..11	1	The expected Customs Control Point of entry of this consignment. Must be a code value if specified Refer to code table "Land Boundary Control Point" as specified in section B.3.6.
AIM1900	<UCR>			O	-	-	1	
AIM1910	< ID>	ID	Unique Consignment Reference (UCR)	M	N	an..35	1	This is an identifier assigned by the trader for their own use. Not processed by ROCARS.

MESSAGE TYPE : AIM IMPORT CONSIGNMENT								
AIM2000	<Importer>			M	-	-	1	
AIM2010	<ID schemeID="value">	ID	Importer HK Business Registration number/HKID/Passport/Travel Document / ROCARS Identification Number	C	N	an..17	1	If the message is submitted by the Importer/Exporter, the Business Registration Number / HKID / Passport / Travel Document / ROCARS Identification Number of the Importer must be specified If the message is submitted by the agent on behalf of an Importer/Exporter, it is an optional data item. The field may not exist. If this field is specified, for the Exporter in an export consignment message, or the Importer in an import consignment message, either be the Business Registration Number / ROCARS Identification Number or Hong Kong Identity Card Number. Organizations without the Hong Kong Business Registration Number are allowed to use the ROCARS Identification Number (ROCARS ID) in the Import/Export consignment message. It must be in valid format for Business Registration Number /ROCARS Identification Number / Hong Kong Identity Card Number For format of Business Registration Number should be 99999999-X99 Characters 1-8 shall be numeric. Character 9 shall be the '-' (dash). Characters 10-12 represent the branch number where character 10 shall be alphanumeric and characters 11-12 shall be numeric. The Business Registration number must be valid. For format of Hong Kong Identity Card, (a) A999999X - 1 alpha, 6 digits, and a check digit (0-9, or A) A999999X should be used (b) AA999999X - 2 alphas, 6 digits, and a check digit (0-9, or A) AA999999X should be used.
AIM2011		schemeID	ID Type Indicator	C	N		1	The attribute field to indicate the

MESSAGE TYPE : AIM IMPORT CONSIGNMENT								
								type of identifier: BR = Business Registration Number HKID = Hong Kong Identity Card RIN = ROCARS Identification Number TD = Passport / Travel Document Number
AIM2020	<Name languageID = “value”>	Name	Importer Name	M	Y	an..35	2	The first occurrence must not be blank or null. Word splitting is not allowed between lines.
AIM2021		languageID	Language of the Importer Name	O	N			Language of the Importer Name. Must be “zh” or “en” if specified.
AIM2100	<Address>		Importer Address	O	-	-	1	
AIM2110	<CityName>	CityName	Importer Address - City Name	O	Y	an..35	1	
AIM2120	<CountryCode>	Country Code	Importer Address – Country/Territory Code	M	N	a2	1	Must be a valid Country/Territory code. Refer to code table ”Country/Territory code” as specified in section B.3.6.
AIM2130	<CountrySubEntityID>	Country SubEntity ID	Importer Address - SubEntity ID	O	Y	an..9	1	Users are suggested to specify value according to ISO-3166-2, if applicable. No validation will be applied on this optional field
AIM2140	<CountrySubEntityName>	Country SubEntity Name	Importer Address - Country Sub-entity Name	O	Y	an..35	1	
AIM2150	<Line languageID = “value”>	Line	Importer Address – Detailed Location within City	M	Y	an..35	2	The first occurrence must not be blank or null. Word splitting is not allowed between lines.
AIM2151		languageID	Language of the address	O	N			Language of the “Importer Address”. Must be “zh” or “en” if specified. All fields under Address, except the “Country/Territory Code”, must be the same language as the “Importer Address – Detailed Location within City”
AIM2160	<PostcodeID>	PostCode	Importer Address – Postcode identification	O	Y	an..9	1	
AIM2200	<Contact>			O	-	-	1	
AIM2210	<Name languageID = “value”>	Name	Importer Contact Name	O	Y	an..35	1	
AIM2211		languageID	Language of the Importer Contact Name	O	N			Language of the Importer Contact Name. Must be “zh” or “en” if specified.
AIM2300	<Communication>		Importer Contacts	O	-	-	3	
AIM2310	<ID>	ID	Importer Contact Number	O	N	an..50	1	
AIM2320	<TypeID>	Type ID	Importer Contact Number Type	C	N	an..3	1	Required if Import Contact Number is specified. Must be a valid code value.

MESSAGE TYPE : AIM IMPORT CONSIGNMENT								
								Refer to code table ”Contact Number Type” as specified in section B.3.6.

B.3.7.1.5 WCO Mini Message

In ROCARS implementation, a non-CCTS-compliant XML envelope <DocumentMetadata> will be used to encapsulate the required metadata as well as the standard procedure message or mini message itself.

The following example shows the structure and values of the ROCARS AIM XML message after encapsulating the metadata using the <DocumentMetadata> envelope:

```
<DocumentMetadata>
     <WCODataModelVersion>2.0</WCODataModelVersion>
     <WCODocumentName>IM1</WCODocumentName>
     <CountryCode>HK</CountryCode>
     <AgencyName>C&amp;amp;ED</AgencyName>
     <AgencyAssignedCustomizedDocumentName>AIM
     </AgencyAssignedCustomizedDocumentName>
     <AgencyAssignedCustomizedDocumentVersion>1.0
     </AgencyAssignedCustomizedDocumentVersion>
     <Declaration>
        ......
     </Declaration>
</DocumentMetadata>
```

B.3.7.1.6 Sample Message

A sample AIM message encapsulated with <DocumentMetadata> envelope as a WCO mini message is illustrated below.

```
<?xml version="1.0" encoding="UTF-8"?>
<DocumentMetadata>
    <WCODataModelVersion>2.0</WCODataModelVersion>
    <WCODocumentName>IM1</WCODocumentName>
    <CountryCode>HK</CountryCode>
    <AgencyName>C&amp;ED</AgencyName>
    <AgencyAssignedCustomizedDocumentName>AIM</AgencyAssignedCustomizedDocumentN
ame>
    <AgencyAssignedCustomizedDocumentVersion>1.0</AgencyAssignedCustomizedDocume
ntVersion>
<Declaration>
        <FunctionCode>2</FunctionCode>
        <ID>40010900001D4A</ID>
        <TypeCode>R01</TypeCode>
        <VersionID>1</VersionID>
        <Agent>
            <ID>99999999-X99</ID>
        </Agent>
        <GoodsShipment>
            <SequenceNumeric>1</SequenceNumeric>
            <Consignee>
                <Name languageID="en">ABC (Hong Kong) Company Limited</Name>
                <Address>
                    <CountryCode>HK</CountryCode>
                    <Line languageID="en">Room 9001, Harbour Building</Line>
                    <Line>38 Pier Road, Central</Line>
                </Address>
            </Consignee>
            <Consignment>
                <SequenceNumeric>1</SequenceNumeric>
                <BorderTransportMeans>
                    <ArrivalDateTime>2008-10-01</ArrivalDateTime>
                </BorderTransportMeans>
                <TransportEquipment>
                    <CharacteristicCode>20</CharacteristicCode>
                    <EquipmentIdentification>
                        <ID>HJCU8038001</ID>
                    </EquipmentIdentification>
                </TransportEquipment>
            </Consignment>
            <Consignor>
                <Name languageID="zh">深圳贸易公司</Name>
                <Address>
                    <CountryCode>CN</CountryCode>
                    <Line languageID="zh">深圳东门一三路九号二楼</Line>
                </Address>
            </Consignor>
            <CustomsGoodsItem>
                <SequenceNumeric>1</SequenceNumeric>
                <Commodity>
                    <Description languageID="en">Men's woven cotton
t-shirt</Description>
                </Commodity>
                <GoodsPackaging>
                    <QuantityQuantity>1000</QuantityQuantity>
```

```
                    <TypeCode>9E</TypeCode>
                </GoodsPackaging>
            </CustomsGoodsItem>
            <CustomsGoodsItem>
                <SequenceNumeric>2</SequenceNumeric>
                <Commodity>
                    <Description languageID="zh">女装100%绵质衬衫</Description>
                </Commodity>
                <GoodsPackaging>
                    <QuantityQuantity>2000</QuantityQuantity>
                    <TypeCode>9E</TypeCode>
                </GoodsPackaging>
            </CustomsGoodsItem>
            <CustomsGoodsItem>
                <SequenceNumeric>3</SequenceNumeric>
                <Commodity>
                    <Description languageID="zh">100%绵花原料</Description>
                </Commodity>
                <GoodsMeasure>
                    <GrossMassMeasure unitCode="KGM">50</GrossMassMeasure>
                    <TariffQuantity>1</TariffQuantity>
                </GoodsMeasure>
            </CustomsGoodsItem>
        </GoodsShipment>
        <Importer>
            <ID schemeID="BR">12349999-X01</ID>
            <Name languageID="en">Chan's Trading Company Limited</Name>
            <Address>
                <CountryCode>HK</CountryCode>
                <Line languageID="en">Room 9001, Harbour Building</Line>
                <Line>38 Pier Road, Central</Line>
            </Address>
            <Contact>
                <Name>Chan Tai Man</Name>
                <Communication>
                    <ID>21234568</ID>
                    <TypeID>TE</TypeID>
                </Communication>
            </Contact>
        </Importer>
</Declaration>
</DocumentMetadata>
```

B.3.7.2 Export Consignment (AEX)

B.3.7.2.1 General Comments

Under ROCARS, an Exporter shall submit the cargo information to ROCARS no more than 14 days prior to the expected date of the cargoes entering or exiting Hong Kong on trucks via the land boundary. The Exporter may also authorise an Agent to submit cargo information on his/her behalf. ROCARS will reject the submission if it identifies errors in the information, otherwise, it will accept the submission and deliver a CCRN, that uniquely identifies the consignment record, back to the submission party. Then, the Exporter should pass the CCRN together with the cargo and consignment details to the appointed truck driver for performing bundling of the cargo consignment. With the system-to-system interface, the Bulk Submission Party (i.e. the Exporter or Agent) shall exchange the information with ROCARS in the standard message structure defined in the Instructions.

After submitting the original cargo information, an Exporter, or his/her Agent, may submit amendments in the same channel as how it submits the original cargo information in the first place. The Bulk Submission Party will prepare the Consignment Amendment message and ensure its compatibility before the message is passed to the Government.

In the scenario of re-submission under the same Unique Declaration Identification, the Message VersionID will be incremented by one.

An Exporter, or his/her Agent may submit cancellation through either an Agent or one's own bulk submission channel, depending on how he submits the original bundling information in the first place. The Bulk Submission Party will prepare the Consignment Cancellation message and ensure its compatibility before the message is passed to the Government. The CCRN assigned previously will then become invalid.

B.3.7.2.2 Branching Diagram (Fresh and Amend AEX)

WCO ID	I.M. Index	Occurrence	XML Element Tag
	AEX0100	1	Declaration
017	AEX0110	1	|____FunctionCode
002	AEX0120	1	|____ID
001	AEX0130	1	|____TypeCode
N/A	AEX0140	1	|____VersionID
	AEX0200	0..1	|____Agent
061	AEX0210	1	| |____ID
102	AEX0220	0..1	| |____StatusCode
	AEX0300	1	|____Exporter
042	AEX0310	0..1	| |____ID
041	AEX0310	1..2	| |____Name
	AEX0400	0..1	| |____Address
241	AEX0410	0..1	| | |____CityName
242	AEX0420	1	| | |____CountryCode
244	AEX0430	0..1	| | |____CountrySubEntityID
243	AEX0440	0..1	| | |____CountrySubEntityName
239	AEX0450	1..2	| | |____Line
245	AEX0460	0..1	| | |____PostcodeID
	AEX0500	0..1	| |____Contact
246	AEX0510	0..1	| |____Name
	AEX0600	0..3	| |____Communication
240	AEX0610	1	| |____ID
253	AEX0620	1	| |____TypeID
	AEX0700	1	|____GoodsShipment
006	AEX0710	1	|____SequenceNumeric
	AEX0800	1	|____Consignee
052	AEX0810	0..1	| |____ID
051	AEX0820	1..2	| |____Name
	AEX0900	1	| |____Address
241	AEX0910	0..1	| |____CityName
242	AEX0920	1	| |____CountryCode
244	AEX0930	0..1	| |____CountrySubEntityID
243	AEX0940	0..1	| |____CountrySubEntityName
239	AEX0950	1..2	| |____Line
245	AEX0960	0..1	| |____PostcodeID
	AEX1000	1	|____Consignment
006	AEX1010	1	| |____ SequenceNumeric

WCO ID	I.M. Index	Occurrence	XML Element Tag
	AEX1100	1	|____BorderTransportMeans
156	AEX1110	1	|____DepartureDateTime
	AEX1200	0..1	|____TransportEquipment
152	AEX1210	0..1	|____CharacteristicCode
165	AEX1220	0..1	|____SealID
	AEX1300	0..1	|____EquipmentIdentification
159	AEX1310	0..1	|____ID
	AEX1400	1	|____Consignor
072	AEX1410	0..1	|____ID
071	AEX1420	1..2	|____Name
	AEX1500	1	|____Address
241	AEX1510	0..1	|____CityName
242	AEX1520	1	|____CountryCode
244	AEX1530	0..1	|____CountrySubEntityID
243	AEX1540	0..1	|____CountrySubEntityName
239	AEX1550	1..2	|____Line
245	AEX1560	0..1	|____PostcodeID
	AEX1600	1..99	|____CustomsGoodsItem
006	AEX1610	1	|____SequenceNumeric
	AEX1700	0..99	|____AdditionalDocument
003	AEX1710	0..1	|____ID
262	AEX1720	0..1	|____IssuerID
170	AEX1730	0..1	|____TypeCode
	AEX1800	0..5	|____AdditionalInformation
105	AEX1810	1	|____Content
	AEX1900	1	|____Commodity
137	AEX1910	1	|____Description
	AEX2000	0..1	|____GoodsMeasure
126	AEX2010	0..1	|____GrossMassMeasure
N/A	AEX2020	0..1	|____GrossVolumeMeasure
128	AEX2030	0..1	|____NetNetWeightMeasure
130	AEX2040	0..1	|____TariffQuantity
	AEX2100	0..1	|____GoodsPackaging
144	AEX2110	0..1	|____QuantityQuantity
141	AEX2120	0..1	|____TypeCode
	AEX2200	0..1	|____ExitCustomsOffice
047	AEX2210	1	|____ID
	AEX2300	0..1	|____ UCR

WCO ID	I.M. Index	Occurrence	XML Element Tag
016	AEX2310	1	|____ID

B.3.7.2.3 Branching Diagram (Cancel AEX)

WCO ID	I.M. Index	Occurrence	XML Element Tag
	AEX0100	1	Declaration
017	AEX0110	1	|____FunctionCode
002	AEX0120	1	|____ID
001	AEX0130	1	|____TypeCode
N/A	AEX0140	1	|____VersionID
	AEX0200	0..1	|____Agent
061	AEX0210	1	| |____ID
102	AEX0220	0..1	| |____StatusCode
	AEX0300	1	|____Exporter
042	AEX0310	0..1	|____ID
041	AEX0310	1..2	|____Name
	AEX0400	0..1	|____Address
241	AEX0410	0..1	| |____CityName
242	AEX0420	1	| |____CountryCode
244	AEX0430	0..1	| |____CountrySubEntityID
243	AEX0440	0..1	| |____CountrySubEntityName
239	AEX0450	1..2	| |____Line
245	AEX0460	0..1	| |____PostcodeID
	AEX0500	0..1	|____Contact
246	AEX0510	0..1	|____Name
	AEX0600	0..3	|____Communication
240	AEX0610	1	|____ID
253	AEX0620	1	|____TypeID

B.3.7.2.4 Information Matrix

Class Name (11)								
I.M. Index	**<XMLElement Tag> XML Attribute**	**Field Name**	**Field Description**	**M/C/O**	**Bilingual Field (Y/N)**	**Format**	**Rpt**	**Validation Requirements**
(1)	**(2) (3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**	**(10)**

Common Heading Legend

(1) **I.M. Index** Information Matrix Index

(2) **<XML Element Tag>** Identifies where the data item is mapped in a particular XML message specification as published in the Implementation Instructions of ROCARS

(3) **XML Attribute** Name of the attribute and its value to describe a data element

(4) **Field Name** Business term for the data item

(5) **Field Description** Description on the field

(6) **M/C/O** Usage of the field to see whether the field is Mandatory (M), Conditional (C) or Optional (O).

Mandatory fields should be neither null nor space only;
Conditional fields, when condition is fulfilled (see validation requirement), should be neither null nor space only unless specified.

(7) **Bilingual Field (Y/N)** Usage of the field to see if bilingual input is supported.
Y - support Chinese and English input
N - support English input only

(8) **Format** Format of the data item. e.g.

a	alphabetic or ideographic (for bilingual field) characters
n	numeric characters
an	alphanumeric or ideographic (for bilingual field) characters
a3	3 alphabetic or ideographic (for bilingual field) characters, fixed length
n3	3 numerical characters, fixed length
an3	3 alphanumerical or ideographic (for bilingual field) characters, fixed length
a..3	up to 3 alphabetic or ideographic (for bilingual field) characters
n..3	up to 3 numerical characters
an..3	up to 3 alphanumerical or ideographic (for bilingual field) characters
n..14,3	up to 14 numerical characters including maximum 3 decimals – delimiter is allowed to float and is not counted as a character (e.g. 12345678901.234, 123456789012.34 and 12345678901234 are valid values for n..14,3)
year	CCYY(CC=Century, YY=Year)
date	CCYY-MM-DD (CC=Century, YY=Year, MM=Month, DD=Day)
time	HH:MiMi:SS in international time format (HH=Hour, MiMi=Minute, SS=Second e.g. 23:59:59)

	datetime	CCYY-MM-DDTHH:MiMi:SS (CC=Century, YY=Year, MM=Month, DD=Day, T=T, HH=Hour, MiMi=Minute, SS=Second e.g. 2002-08-01T23:59:59)

(9) **Rpt**

Number of repetition of the corresponding field. This should be interpreted together with the property on M/C/O (described at (6) above). Unless otherwise specified, the following examples should apply:

M 10	the field can repeat for a maximum of ten times, with the first occurrence being mandatory and subsequent occurrence optional
C 5	the field can repeat for a maximum of five times, with the first occurrence being conditional and subsequent occurrence optional
O 3	the field can repeat for a maximum of three times, with all occurrence optional

(10) **Validation Requirements**

Specifies the individual validation rules for the data item

Note: Please refer to the corresponding XSD file for the sequence of the data elements.

MESSAGE TYPE : AEX EXPORT CONSIGNMENT								
Class Name								
I.M. Index	<XML Element Tag>XML Attribute	Field Name	Field Description	M /C /O	Bilingual Field (Y/N)	Format	Rpt	Validation Requirements
AEX0100	<Declaration>			M			1	
AEX0110	<FunctionCode>	FunctionCode	Function of the message	M	N	n..2	1	Fresh Submission / Amendment /Cancellation 1= Cancellation 2= Fresh Submission 4= Amendment
AEX0120	<ID>	ID	Unique Declaration Identification (UDI)	M	N	an..35	1	This is a unique reference assigned by the bulk submission party for each declaration and this number will be quoted in all future communications between the Government and the bulk submission party. The Unique Declaration Identification (UDI) is 14 characters long. For format of UDI, please see section B.3.5. If it is an original submission, UDI must not previously exist in the system of ROCARS. If it is an amendment or cancellation, UDI must be the same as the UDI of the fresh submission.
AEX0130	<TypeCode>	TypeCode	Type of the message	M	N	an..3	1	Must be “R02” for AEX
AEX0140	<VersionID>	VersionID	Individual transaction reference number	M	N	n..2	1	This is a sequence number, assigned by the sender, indicating that the message is a change of a previously sent AIM. It shall start at 1 if the Functioncode = “2” and shall be incremented by 1, for each amendment AIM with the same UDI. The number will ensure that multiple submissions of the same UDI are processed correctly. The receiving application should not process a message if it has the same UDI and the sequence number is not greater than that already received for the UDI.
AEX0200	<Agent>			C			1	

MESSAGE TYPE : AEX EXPORT CONSIGNMENT								
AEX0210	<ID>	AgentID	Agent Identification	C	N	an..17	1	Must exist if the declaration is made through an Agent. Must not exist if the declaration is made by the Importer The value must be the Business Registration Number of a ROCARS registered Agent For format of Business Registration Number should be 99999999-X99 Characters 1-8 shall be numeric. Character 9 shall be the '-' (dash). Characters 10-12 represent the branch number where character 10 shall be alphanumeric and characters 11-12 shall be numeric. The Business Registration number must be valid.
AEX0220	<StatusCode>	Agent Role	The role of the agent in respect of the cargo in this submission	O	N	an..3	1	If specified, the allowed value can be: "DQ" - Owner/Manufacturer/Freight Forwarder"; or "OC" - "Data Entry".
AEX0300	<Exporter>			M			1	
AEX0310	<ID>	ID	Exporter HK Business Registration number/HKID/Passport/Travel Document	C	N	an..17	1	If the message is submitted by the Importer/Exporter, the Business Registration Number / HKID / Passport / Travel Document / ROCARS Identification Number of the Importer must be specified If the message is submitted by the agent on behalf of an Importer/Exporter, it is an optional data item. The field may not exist. If this field is specified, for the Exporter in an export consignment message, or the importer in an import consignment message, either be the Business Registration Number / ROCARS Identification Number or Hong Kong Identity Card Number. Organizations without the Hong Kong Business Registration Number are allowed to use the ROCARS Identification Number (ROCARS ID) in the Import/Export consignment message

MESSAGE TYPE : AEX EXPORT CONSIGNMENT								
								It must be in valid format for Business Registration Number /ROCARS Identification Number / Hong Kong Identity Card Number For format of Business Registration Number should be 99999999-X99 Characters 1-8 shall be numeric. Character 9 shall be the '-' (dash). Characters 10-12 represent the branch number where character 10 shall be alphanumeric and characters 11-12 shall be numeric. The Business Registration number must be valid. For format of Hong Kong Identity Card, (a) A999999X - 1 alpha, 6 digits, and a check digit (0-9, or A) A999999X should be used (b) AA999999X - 2 alphas, 6 digits, and a check digit (0-9, or A) AA999999X should be used.
AEX0320		schemeID	ID Type Indicator	C	N		1	The attribute field to indicate the type of identifier: BR = Business Registration Number HKID = Hong Kong Identity Card RIN = ROCARS Identification Number TD = Passport / Travel Document Number
AEX0330	<Name languageID="value">	Name	Exporter Name	M	Y	an..35	2	The first occurrence must not be blank or null. Word splitting is not allowed between lines.
AEX0331		languageID	*Language of the ExporterName*	O	N		2	Language of the Exporter Name. Must be "zh" or "en" if specified.
AEX0400	<Address>			O			1	
AEX0410	<CityName>	CityName	Exporter Address - City name	O	Y	an..35	1	
AEX0420	<CountryCode>	Country Code	Exporter Address – Country/Territory Code	M	N	a2	1	Must be a valid Country/Territory code. Refer to code table "Country/Territory code" as specified in section B.3.6.
AEX0430	<CountrySubEntityID>	Country SubEntity ID	Exporter Address - SubEntity ID	O	Y	an..9	1	Users are suggested to specify value according to ISO-3166-2, if applicable. No validation will be applied on this optional field
AEX0440	<CountrySubEntityName>	Country SubEntity Name	Exporter Address - SubEntity	O	Y	an..35	1	

MESSAGE TYPE : AEX EXPORT CONSIGNMENT								
			Name					
AEX0450	<Line languageID = “value”>	Line	Exporter Address – Detailed Location within City	M	Y	an..35	2	The first occurrence must not be blank or null. Word splitting is not allowed between lines.
AEX0451		languageID	Language of the address	O	N			Language of the “Exporter Address”. Must be “zh” or “en” if specified. All fields under Address, except the “Country/Territory Code”, must be the same language as the “Exporter Address – Detailed Location within City”
AEX0460	<PostcodeID>	PostCode	Exporter Address – Postcode identification	O	Y	an..9	1	
AEX0500	<Contact>			O			1	
AEX0510	<Name languageID=”value”>	Name	Exporter Contact Name	O	Y	an..35	1	
AEX0511		languageID	Language of the Exporter’s Contact	O	N			Language of the Exporter Contact Name. Must be “zh” or “en” if specified.
AEX0600	<Communication>			O			1	
AEX0610	<ID>	ID	Exporter Contact Number	O	N	an..50	1	
AEX0620	<TypeID>	Type ID	Exporter Contact Number Type	O	N	an..3	1	Must be a valid code value. Refer to code table ”Contact Number Type” as specified in section B.3.6.
AEX0700	<GoodsShipment>			C	-	-	1	Must exist if the declaration is a fresh application/amendment. Must not exist if the declaration is a cancellation.
AEX0710	<SequenceNumeric>	SequenceNumeric		M	N	n..5	1	Unique running sequence for identifying the line of the shipment. It will be reset for each declaration.
AEX0800	<Consignee>			M			1	
AEX0810	<ID>	ID	Consignee ID	O	N	an..17	1	Reserved for future use. The ROCARS Identification Number of the consignee.
AEX0820	<Name languageID = “value”>	Name	Consignee Name	M	Y	an..35	2	The first line must not be blank or null
AEX0821		languageID	*Language of the Consignee Name*	O	Y	an..35	2	Language of the Consignee Name. Must be “zh” or “en” if specified.
AEX0900	<Address>		Consignee Address	M	-	-	1	
AEX0910	<CityName>	CityName	Consignee Address - City Name	O	Y	an..35	1	
AEX0920	<CountryCode>	Country Code	Consignee Address – Country/Territory Code	M	N	a2	1	Must be a valid country code. Refer to code table ”Country/Territory code” as

MESSAGE TYPE : AEX EXPORT CONSIGNMENT								
								specified in section B.3.6.
AEX0930	<CountrySubEntityID>	Country SubEntity ID	Consignee Address - SubEntity ID	O	Y	an..9	1	Users are suggested to specify value according to ISO-3166-2, if applicable. No validation will be applied on this optional field
AEX0940	<CountrySubEntityName>	Country SubEntity Name	Consignee Address - Country Sub-entity Name	O	Y	an..35	1	
AEX0950	<Line languageID = “value”>	Line	Consignee Address – Detailed Location within City	M	Y	an..35	2	The first occurrence must not be blank or null. Word splitting is not allowed between lines.
AEX0951		languageID	*Language of the Consignee Address*	O	Y			Language of the Consignee Address. Must be “zh” or “en” if specified. All fields under Address, except the “Country/Territory Code”, must be the same language as the “Consignee Address – Detailed Location within City”
AEX0960	<PostcodeID>	PostCode	Consignee Address – Postcode identification	O	Y	an..9	1	
AEX1000	<Consignment>			M			1	
AEX1010	<SequenceNumeric>	Sequence		M	N	n..5	1	Unique number for identifying the line of consignment. Must be 1.
AEX1100	< BorderTransportMeans >			M			1	
AEX1110	<DepartureDateTime>	Departure DateTime	Estimated Date of Departure at Customs Control Point	M	N	date	1	Must be in format of CCYY-MM-DD
AEX1200	< TransportEquipment >			O			1	
AEX1210	<CharacteristicCode>	Characteristic Code	Equipment size and type identification.	C	N	an..4	1	Must exist and be a valid code if the Equipment Identification Number exists Must not exist if the Equipment Identification Number doest not exist Refer to code table ” Equipment Size and Type (Container)” as specified in section B.3.6.
AEX1220	<SealID>	Seal ID	Seal Number	O	N	an..35	1	e-seal number. Reserved for future use.
AEX1300	< EquipmentIdentification >			O			1	
AEX1310	<ID>	ID	Equipment Identification Number as the container number	O	N	an..17	1	Container Number
AEX1400	<Consignor>			M			1	
AEX1410	<ID>	ID	Consignor ID	O	N	an..17	1	Reserved for future use. The ROCARS Identification Number of the consignor

MESSAGE TYPE : AEX EXPORT CONSIGNMENT								
AEX1420	<Name languageID="value">	Name	Consignor Name	M	Y	an..35	2	The first line must not be blank or null
AEX1421		languageID	Language of the Consignee Name	O	N		2	Language of the Consignor Name. Must be "zh" or "en" if specified.
AEX1500	< Address>			M			1	
AEX1510	<CityName>	CityName	Consignor Address - City Name	O	Y	an..35	1	
AEX1520	<CountryCode>	Country Code	Consignor Address – Country/Territory Code	M	N	a2	1	Must be a valid country code. Refer to code table "Country/Territory code" as specified in section B.3.6.
AEX1530	<CountrySubEntityID>	Country SubEntity ID	Consignor Address - SubEntity ID	O	Y	an..9	1	Users are suggested to specify value according to ISO-3166-2, if applicable. No validation will be applied on this optional field
AEX1540	<CountrySubEntityName>	Country SubEntity Name	Consignor Address - Country Sub-entity Name	O	Y	an..35	1	
AEX1550	<Line>	Line	Consignor Address – Detailed Location within City	M	Y	an..35	2	The first occurrence must not be blank or null. Word splitting is not allowed between lines.
AEX1551		languageID	Language of the Consignor Address	O	N		2	Language of the Consignor Address. Must be "zh" or "en" if specified. All fields under Address, except the "Country/Territory Code", must be the same language as the "Consignor Address – Detailed Location within City"
AEX1560	<PostcodeID>	PostCode	Consignor Address – Postcode identification	O	Y	an..9	1	
AEX1600	<CustomsGoodsItem>			M			99	
AEX1610	<SequenceNumeric>	Sequence		M	N	n..5	1	
AEX1700	<AdditionalDocument>			O			99	
AEX1710	<ID>	ID	Additional Document Reference Number	O	N	an..35	1	Licence/notification/supporting documents number
AEX1720	<IssuerID>	Issuer ID	Additional Document issuer code	C	N	an..17	1	Mandatory if Additional Document Reference Number is not null, otherwise must not exist. Code value for the document issuer. Refer to code table "Document Issuer" as specified in section B.3.6.
AEX1730	<TypeCode>	Type Code	Additional Document type	C	N	an..3	1	Mandatory if Additional Document Reference Number is not null, otherwise must not exist. Licence/notification/supporting document type code Refer to code table "Document Type" as specified in section B.3.6.

MESSAGE TYPE : AEX EXPORT CONSIGNMENT								
AEX1800	<AdditionalInformation>			O	-	-	5	Only the first CustomsGoodsItem (the CustomsGoodsItem with SequenceNumeric = 1) can have AdditionalInformation with occurrence up to 5. Must not exist for the CustomsGoodsItem with SequenceNumeric > 1
AEX1810	<Content>	Free Text	Message Sender's Reference Free text field available to the message sender for information	M	Y	an..512	1	The business validation on the maximum length of this field is set to 35 characters, instead of 512 characters defined in WCO. Must not > 35 characters if exist
AEX1900	<Commodity>			M			1	
AEX1910	<Description languageID="value">	Description	Commodity Description	M	Y	an..256	1	"Description of articles in each package"/ "Description of cargo"
AEX1911		languageID	Language of the Commodity Description	O	N			Language of the Commodity Description. Must be "zh" or "en" if specified.
AEX2000	<GoodsMeasure>			C			1	
AEX2010	<GrossMassMeasure unitCode="value">	Gross Mass Measure	Gross Weight	C	N	n..11,3	1	Weight of line item including packaging but excluding the transport equipment. Either the Gross Mass Measure or the Gross Volume Measure shall be entered if declaring cargo in bulk. Must not exist if declaring cargo in packages
AEX2011		weightUnit	Gross Weight Unit	C	N	an..3	1	Attribute of the Gross Weight Must be a code value Refer to code table "Unit of Measure Code (Weight)" as specified in section B.3.6.
AEX2020	<GrossVolumeMeasure unitCode ="value">	Gross Volume Measure	Gross Volume	C	N	n..9	1	Volume of line item including packaging but excluding the transport equipment. Either the Gross Mass Measure or the Gross Volume Measure shall be entered if declaring cargo in bulk. Must not exist if declaring cargo in packages
AEX2021		unitCode	Gross Volume Unit	C	N	an..3	1	Attribute of the Gross Volume Must be a code value Refer to code table "Unit of Measure Code (Volume)" as specified in section B.3.6.
AEX2030	<NetNetWeightMeasure unitCode = "value">	Net net weight measure	Net Weight	O	N	n..11,3	1	Weight of line item without any packing.

MESSAGE TYPE : AEX EXPORT CONSIGNMENT								
AEX2031		unitCode	Net Weight Unit	C	N	an..3	1	Attribute of the Net Weight Must be a code value if specified. Must be specified if the Net Weight is specified. Refer to code table "Unit of Measure Code (Weight)" as specified in section B.3.6.
AEX2040	<TariffQuantity>	TariffQuantity	Quantity Cargo	O	N	n..14,3	3	Quantity of cargo If declaring cargo in bulk, the quantity of cargo should be specified if applicable First line is mandatory, if needed to fill in this field. Must not exist if declaring cargo in packages
AEX2100	<GoodsPackaging>			C			1	
AEX2110	<QuantityQuantity>	PackingQuantity	Number of packages per commodity	C	N	n..8	1	Number of packages per consignment item packaged in such a way that they cannot be divided without first undoing the package. Required if declaring cargo in packages. Must not exist if declaring cargo in bulk
AEX2120	<TypeCode>	Packing TypeCode	Type of package identification	C	N	an..2	1	Code specifying the type of package of an item. Required if declaring cargo in packages. Must not exist if declaring cargo in bulk Refer to code table "Type of Package Code" as specified in section B.3.6.
AEX2200	<ExitCustomsOffice>			O	-	-	1	
AEX2210	<ID>	ID	The expected Land Customs Control Point of exit	M	N	an..11	1	The expected Customs Control Point of exit of this consignment. Must be a code value if specified Refer to code table "Land Boundary Control Point" as specified in section B.3.6.
AEX2300	<UCR>			O	-	-	1	
AEX2310	<ID>	ID	Unique Consignment Reference (UCR)	M	N	an..35	1	This is a identifier assigned by the trader for their own use. Not processed by ROCARS.

B.3.7.2.5 WCO Mini Message

In ROCARS implementation, a non-CCTS-compliant XML envelope <DocumentMetadata> will be used to encapsulate the required metadata as well as the standard procedure message or mini message itself.

The following example shows the structure and values of the ROCARS AEX XML message after encapsulating the metadata using the <DocumentMetadata> envelope:

```
<DocumentMetadata>
     <WCODataModelVersion>2.0</WCODataModelVersion>
     <WCODocumentName>EX1</WCODocumentName>
     <CountryCode>HK</CountryCode>
     <AgencyName>C&amp;amp;ED</AgencyName>
     <AgencyAssignedCustomizedDocumentName>AEX
     </AgencyAssignedCustomizedDocumentName>
     <AgencyAssignedCustomizedDocumentVersion>1.0
     </AgencyAssignedCustomizedDocumentVersion>
     <Declaration>
        ......
     </Declaration>
</DocumentMetadata>
```

B.3.7.2.6 Sample Message

A sample AEX message encapsulated with <DocumentMetadata> envelope as a WCO mini message is illustrated below.

```
<?xml version="1.0" encoding="UTF-8"?>
<DocumentMetadata>
    <WCODataModelVersion>2.0</WCODataModelVersion>
    <WCODocumentName>EX1</WCODocumentName>
    <CountryCode>HK</CountryCode>
    <AgencyName>C&amp;ED</AgencyName>
    <AgencyAssignedCustomizedDocumentName>AEX</AgencyAssignedCustomizedDocumentN
ame>
    <AgencyAssignedCustomizedDocumentVersion>1.0</AgencyAssignedCustomizedDocume
ntVersion>
<Declaration>
        <FunctionCode>2</FunctionCode>
        <ID>40010900001D59</ID>
        <TypeCode>R02</TypeCode>
        <VersionID>1</VersionID>
        <Exporter>
            <ID schemeID="HKID">K12345678</ID>
            <Name languageID="en">Chan Tai Man</Name>
            <Address>
                <CountryCode>HK</CountryCode>
                <Line languageID="en">Room 201, Harbour Building, Hong Kong</Line>
            </Address>
            <Contact>
                <Name>Chan Tai Man</Name>
                <Communication>
                    <ID>21112345</ID>
                    <TypeID>TE</TypeID>
                </Communication>
            </Contact>
        </Exporter>
        <GoodsShipment>
            <SequenceNumeric>1</SequenceNumeric>
            <Consignee>
                <ID/>
                <Name languageID="zh">廣東金好好公司</Name>
                <Address>
                    <CountryCode>CN</CountryCode>
                    <Line languageID="zh">東莞金好好鎮平安一路23號</Line>
                </Address>
            </Consignee>
            <Consignment>
                <SequenceNumeric>1</SequenceNumeric>
                <BorderTransportMeans>
                    <DepartureDateTime>2008-10-01</DepartureDateTime>
                </BorderTransportMeans>
            </Consignment>
            <Consignor>
                <ID/>
                <Name languageID="zh">金時代貿易公司</Name>
                <Address>
                    <CountryCode>HK</CountryCode>
                    <Line languageID="zh">荃灣大河道333號</Line>
                    <Line>好時大廈23樓2室</Line>
                </Address>
            </Consignor>
```

```
            <CustomsGoodsItem>
                <SequenceNumeric>1</SequenceNumeric>
                <AdditionalDocument>
                    <ID>12345678</ID>
                    <IssuerID>TID</IssuerID>
                    <TypeCode/>
                </AdditionalDocument>
                <AdditionalDocument>
                    <ID>33341234334</ID>
                    <IssuerID>C&amp;ED</IssuerID>
                    <TypeCode/>
                </AdditionalDocument>
                <Commodity>
                    <Description languageID="zh">中央處理器</Description>
                </Commodity>
                <GoodsPackaging>
                    <QuantityQuantity>1000</QuantityQuantity>
                    <TypeCode>PCE</TypeCode>
                </GoodsPackaging>
            </CustomsGoodsItem>
            <CustomsGoodsItem>
                <SequenceNumeric>2</SequenceNumeric>
                <Commodity>
                    <Description languageID="en">Happy Brand 2G RAM</Description>
                </Commodity>
                <GoodsPackaging>
                    <QuantityQuantity>1000</QuantityQuantity>
                    <TypeCode>PCE</TypeCode>
                </GoodsPackaging>
            </CustomsGoodsItem>
        </GoodsShipment>
</Declaration>
</DocumentMetadata>
```

B.3.7.3 Import Bundling (ACRID)

B.3.7.3.1 General Comments

A Driver may conduct bundling when he obtains one or more CCRN(s) from the Importer. He/she may authorise an Agent to perform bundling on his/her behalf.

A Driver, or his/her Agent, shall bundle the CCRN(s) of all cargoes on board with the Vehicle Registration Number(VRN). Such bundling act shall be done at least 30 minutes, or such lesser time as may be indicated by the ROCARS, before his/her truck arrives at the LBCP. A Unique Bundling Reference (UBR) shall be returned to the Driver (or his/her Agent) to acknowledge receipt of the bundling, and to identify the specific one-way trip.

At any one time, a truck (i.e. VRN) can only be bundled with not more than two trips in ROCARS. The two trips shall not be heading for the same direction (i.e. they cannot be both northbound or both southbound trips). In other words, at any one time, at the most, a truck can only be bundled with one northbound and one southbound trip in ROCARS.

All the CCRN(s) submitted in a bundling request shall be correct and valid. ROCARS will validate the status of the CCRN(s). If a bundling request contains any invalid CCRN, the whole bundling request will be rejected.

With the system-to-system interface, the Bulk Submission Party (i.e. an Agent) shall exchange the information with ROCARS in the standard message structure defined in the Instructions.

After submitting the original bundling information, a Driver or his/her Agent, may submit amendments in the same channel as how he submits the original bundling information in the first place. The Bulk Submission Party will prepare the Bundling Amendment Message and ensure its compatibility before passing the message to the Government. The function of the Bundling Amendment Message includes amending the original bundling or cancelling the whole bundling.

In the scenario of re-submission under the same Unique Declaration Identification, the Message VersionID will be incremented by one.

A Driver or his/her Agent, may submit cancellation through either an Agent's or one's own bulk submission channel, depending on how he submits the original bundling information in the first place. The Bulk Submission Party will prepare the Bundling Cancellation message and ensure its compatibility before the message is passed to the Government. The related consignment(s) will then all be de-bundled and can be bundled again in another bundling message.

B.3.7.3.2 Branching Diagram (Fresh and Amend ACRID)

WCO ID	I.M. Index	Occurrence	XML Element Tag
	ACRID0100	1	Declaration
017	ACRID0110	1	|____FunctionCode
002	ACRID0120	1	|____ID
001	ACRID0130	1	|____TypeCode
N/A	ACRID0140	1	|____VersionID
	ACRID0200	0..1	|____Agent
061	ACRID0210	1	| |____ID
	ACRID0300	1	|____BorderTransportMeans
172	ACRID0310	0..1	| |____ArrivalDateTime
167	ACRID0320	1	| |____ID
	ACRID0400	1	|____Carrier
050	ACRID0410	1	| |____ID
049	ACRID0420	1..2	| |____Name
	ACRID0500	0..1	| |____Address
241	ACRID0510	0..1	| |____CityName
242	ACRID0520	1	| |____CountryCode
244	ACRID0530	0..1	| |____CountrySubEntityID
243	ACRID0540	0..1	| |____CountrySubEntityName
239	ACRID0550	1..2	| |____Line
245	ACRID0560	0..1	| |____PostcodeID
	ACRID0600	0..9999	|____Consignment
006	ACRID0610	1	| |____SequenceNumeric
	ACRID0700	0..99	| |____ConsignmentItem
006	ACRID0710	1	| | |____SequenceNumeric
	ACRID0800	0..1	| | |____UCR
016	ACRID0810	1	| | |____ID
	ACRID0900	1	| |____TransportContractDocument
015	ACRID0910	1	| |____ID
250	ACRID0920	1	| |____TypeCode
	ACRID1000	0..1	|____EntryCustomsOffice
046	ACRID1010	1	|____ID

B.3.7.3.3 Branching Diagram (Cancel ACRID)

WCO ID	I.M. Index	Occurrence	XML Element Tag
	ACRID0100	1	Declaration
017	ACRID0110	1	|____FunctionCode
002	ACRID0120	1	|____ID
001	ACRID0130	1	|____TypeCode
N/A	ACRID0140	1	|____VersionID
	ACRID0200	0..1	|____Agent
061	ACRID0210	1	| |____ID
	ACRID0300	1	|____BorderTransportMeans
172	ACRID0310	0..1	| |____ArrivalDateTime
167	ACRID0320	1	| |____ID
	ACRID0400	1	|____Carrier
050	ACRID0410	1	|____ID
049	ACRID0420	1..2	|____Name
	ACRID0500	0..1	|____Address
241	ACRID0510	0..1	|____CityName
242	ACRID0520	1	|____CountryCode
244	ACRID0530	0..1	|____CountrySubEntityID
243	ACRID0540	0..1	|____CountrySubEntityName
239	ACRID0550	1..2	|____Line
245	ACRID0560	0..1	|____PostcodeID

B.3.7.3.4 Information Matrix

I.M. Index	<XML Element Tag> XML Attribute	Field Name	Field Description	M/C/O	Bilingual Field (Y/N)	Format	Rpt	Validation Requirements
(1)	**(2) (3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**	**(10)**

Common Heading Legend

(1) **I.M. Index** — Information Matrix Index

(2) **<XML Element Tag> Attribute Tag** — Identifies where the data item is mapped in a particular XML message specification as published in the Implementation Instructions of ROCARS

(3) **XML Attribute** — Name of the attribute and its value to describe a data element

(4) **Field Name** — Business term for the data item

(5) **Field Description** — Description on the field

(6) **M/C/O** — Usage of the field to see whether the field is Mandatory (M), Conditional (C) or Optional (O).

Mandatory fields should be neither null nor space only;
Conditional fields, when condition is fulfilled (see validation requirement), should be neither null nor space only unless specified.

(7) **Bilingual Field (Y/N)** — Usage of the field to see if bilingual input is supported.
Y - support Chinese and English input
N - support English input only

(8) **Format** — Format of the data item. e.g.

a	alphabetic or ideographic (for bilingual field) characters
n	numeric characters
an	alphanumeric or ideographic (for bilingual field) characters
a3	3 alphabetic or ideographic (for bilingual field) characters, fixed length
n3	3 numerical characters, fixed length
an3	3 alphanumerical or ideographic (for bilingual field) characters, fixed length
a..3	up to 3 alphabetic or ideographic (for bilingual field) characters
n..3	up to 3 numerical characters
an..3	up to 3 alphanumerical or ideographic (for bilingual field) characters
n..14,3	up to 14 numerical characters including maximum 3 decimals – delimiter is allowed to float and is not counted as a character (e.g. 12345678901.234, 123456789012.34 and 12345678901234 are valid values for n..14,3)
year	CCYY(CC=Century, YY=Year)
date	CCYY-MM-DD (CC=Century, YY=Year, MM=Month, DD=Day)
time	HH:MiMi:SS in international time format (HH=Hour, MiMi=Minute, SS=Second e.g. 23:59:59)
datetime	CCYY-MM-DDTHH:MiMi:SS (CC=Century, YY=Year, MM=Month, DD=Day, T=T, HH=Hour, MiMi=Minute, SS=Second

e.g. 2002-08-01T23:59:59)

(9) **Rpt** Number of repetition of the corresponding field. This should be interpreted together with the property on M/C/O (described at (6) above). Unless otherwise specified, the following examples should apply:

M 10	the field can repeat for a maximum of ten times, with the first occurrence being mandatory and subsequent occurrence optional
C 5	the field can repeat for a maximum of five times, with the first occurrence being conditional and subsequent occurrence optional
O 3	the field can repeat for a maximum of three times, with all occurrence optional

(10) Validation Requirements Specifies the individual validation rules for the data item

Note: Please refer to the corresponding XSD file for the sequence of the data elements.

MESSAGE TYPE : ACRID IMPORT BUNDLING

I.M. Index	<XML Element Tag> XML Attribute	Field Name	Field Description	M /C /O	Bilingual Field (Y/N)	Format	Rpt	Validation Requirements
ACRID0100	<Declaration>	Import Bundling Declaration		M	-	-	1	-
ACRID0110	<FunctionCode>	FunctionCode	Function of the message	M	N	an..3	1	Fresh Submission / Amendment /Cancellation 1= Cancellation 2= Fresh Submission 4= Amendment
ACRID0120	<ID>	ID	Unique Declaration Identification (UDI)	M	N	an..35	1	This is the unique reference assigned by the bulk submission party for each declaration and this number will be quoted in all future communications between the Government and the bulk submission party. The Unique Declaration Identification (UDI) is 14 characters long. For format of UDI, please see section B.3.5. If it is an original submission, UDI must not previously exist in the system of ROCARS. If it is an amendment or cancellation, UDI must be the same as the UDI of the fresh submission.
ACRID0130	<TypeCode>	TypeCode	Type of the message	M	N	an..3	1	Must be “R03” for ACRID
ACRID0140	<VersionID>	VersionID	Individual transaction reference number	M	N	n..2	1	This is a sequence number, assigned by the sender, indicating that the message is a change of a previously sent ACRID. It shall start at 1 if the FunctionCode = “1” and shall be incremented by 1, for each amendment ACRID with the same UDI. The number will ensure that multiple submissions of the same UDI are processed correctly. The receiving application should not process a message if it has the same UDI and the sequence number is not greater than that already received for the UDI.
ACRID0200	Agent			C	-	-	1	
ACRID0210	<ID>	AgentID	Agent Identification	C	N	an..17	1	Must exist if the declaration is made through an Agent.

MESSAGE TYPE : ACRID IMPORT BUNDLING

I.M. Index	<XML Element Tag> XML Attribute	Field Name	Field Description	M /C /O	Bilingual Field (Y/N)	Format	Rpt	Validation Requirements
								Must not exist if the declaration is made by the Driver The value must be the Business Registration Number of a ROCARS registered Agent For format of Business Registration Number should be 99999999-X99 Characters 1-8 shall be numeric. Character 9 shall be the '-' (dash). Characters 10-12 represent the branch number where character 10 shall be alphanumeric and characters 11-12 shall be numeric. The Business Registration number must be valid.
ACRID0300	BorderTransportMeans			C	N-	-	1	
ACRID0310	<ArrivalDateTime>	Arrival DateTime	Date of Arrival or Departure at Customs Control Point	C	N	date	1	Must not exist for fresh submission, amendment and cancellation. Reserve for future use e.g. extraction
ACRID0320	<ID>	ID	Vehicle Registration Number	M	N	an..25	1	It must be the VRN of a ROCARS registered vehicle
ACRID0400	<Carrier>			M	-	-	1	
ACRID0410	<ID schemeID="value">	ID	Driver ID	M	N	an..17	1	The ROCARS User ID of the Driver must be specified Must matched with the registered record of the ROCARS
ACRID0411		schemeID	ID Type Indicator	M	N		1	The attribute field to indicate the type of Driver ID: RUID = The ROCARS User ID of the Driver
ACRID0420	<Name languageID="value">	Name	Driver Name	M	Y	an..35	2	First line must not be blank. Must match with the Driver ID in the registered record of the ROCARS. Required to send the driver's name.
ACRID0421		languageID	Language of the Carrier Name	O	N			Language of the Carrier Name. Must be "zh" or "en" if specified.

MESSAGE TYPE : ACRID IMPORT BUNDLING

I.M. Index	<XML Element Tag> XML Attribute	Field Name	Field Description	M /C /O	Bilingual Field (Y/N)	Format	Rpt	Validation Requirements
ACRID0500	<Address>			O	-	-	1	
ACRID0510	<CityName>	CityName	Driver Address - City Name	O	Y	an..35	1	
ACRID0520	<CountryCode>	Country Code	Driver Address – Country/Territory Code	C	N	a2	1	If the Driver Address is specified, it must be a valid country/territory code Refer to code table ”Country/Territory code” as specified in section B.3.6.
ACRID0530	<CountrySubEntityID>	Country SubEntity ID	Driver Address - SubEntity ID	O	Y	an..9	1	Users are suggested to specify value according to ISO-3166-2, if applicable. No validation will be applied on this optional field
ACRID0540	<CountrySubEntityName>	Country SubEntity Name	Driver Address - Country Sub-entity Name	O	Y	an..35	1	
ACRID0550	<Line languageID=”value”>	Line	DriverAddress – Detailed Location within City	O	Y	an..35	2	If specified, the first occurrence must not be blank or null. Word splitting is not allowed between lines.
ACRID0551		languageID	Language of the Driver Address	O	N			Language of the Driver’s Address. Must be “zh” or “en” if specified
ACRID0560	<PostCodeID>	PostCode	Driver Address – Postcode identification	O	Y	an..9	1	
ACRID0600	<Consignment>			C	-	-	9999	Must exist if the declaration is a fresh application/amendment. Must not exist if the declaration is a cancellation. Must not exist if the declaration is made together with other consignment(s) in a Quick Bundling Request.
ACRID0610	<SequenceNumeric>	Sequence		M	N	n..5	1	Unique number for identifying the line of consignment.
ACRID0700	<ConsignmentItem>			O	-	-	99	
ACRID0710	<SequenceNumeric>	SequenceNumeric		M	N	n..5	1	Must be 1.
ACRID0800	<UCR>			O	-	-	1	
ACRID0810	<ID>	ID	Unique Consignment Reference (UCR)	M	N	an..35	1	This is an identifier assigned by the trader for their own use. Not processed by ROCARS.
ACRID0900	<TransportContractDocument>			M	-	-	1	
ACRID0910	<ID>	ID	Customs Cargo Reference Number (CCRN)	M	N	an..35	1	Must be a valid CCRN of a related consignment to be bundled with this trip.
ACRID0920	<TypeCode>	TypeCode	Type of Document	M	N	an..3	1	Must be “CRN”

MESSAGE TYPE : ACRID IMPORT BUNDLING								
I.M. Index	<XML Element Tag> XML Attribute	Field Name	Field Description	M /C /O	Bilingual Field (Y/N)	Format	Rpt	Validation Requirements
ACRID1000	<EntryCustomsOffice>			O	-	-	1	
ACRID1010	<ID>	ID	The expected Customs Control Point of entry	O	N	an..11	1	The expected Customs Control Point of entry of this consignment. Must be a code value if specified Refer to code table ”Land Boundary Control Point” as specified in section B.3.6.

B.3.7.3.5 WCO Mini Message

In ROCARS implementation, a non-CCTS-compliant XML envelope <DocumentMetadata> will be used to encapsulate the required metadata as well as the standard procedure message or mini message itself.

The following example shows the structure and values of the ROCARS ACRID XML message after encapsulating the metadata using the <DocumentMetadata> envelope:

```
<DocumentMetadata>
     <WCODataModelVersion>N/A</WCODataModelVersion>
     <WCODocumentName>N/A</WCODocumentName>
     <CountryCode>HK</CountryCode>
     <AgencyName>C&amp;amp;ED</AgencyName>
     <AgencyAssignedCustomizedDocumentName>RES
     </AgencyAssignedCustomizedDocumentName>
     <AgencyAssignedCustomizedDocumentVersion>1.0
     </AgencyAssignedCustomizedDocumentVersion>
     <Declaration>
        ......
     </Declaration>
</DocumentMetadata>
```

B.3.7.3.6 Sample Message

A sample ACRID message encapsulated with <DocumentMetadata> envelope as a WCO mini message is illustrated below.

```
<?xml version="1.0" encoding="UTF-8"?>
<DocumentMetadata>
    <WCODataModelVersion>2.0</WCODataModelVersion>
    <WCODocumentName>CRI</WCODocumentName>
    <CountryCode>HK</CountryCode>
    <AgencyName>C&amp;ED</AgencyName>
    <AgencyAssignedCustomizedDocumentName>ACRID</AgencyAssignedCustomizedDocumen
tName>
    <AgencyAssignedCustomizedDocumentVersion>1.0</AgencyAssignedCustomizedDocume
ntVersion>
<Declaration>
        <FunctionCode>2</FunctionCode>
        <ID>40010900001D68</ID>
        <TypeCode>R03</TypeCode>
        <VersionID>1</VersionID>
        <Agent>
            <ID>99999999-X99</ID>
        </Agent>
        <BorderTransportMeans>
            <ID>AA1234</ID>
        </BorderTransportMeans>
        <Carrier>
            <ID schemeID="RUID">123456</ID>
            <Name languageID="en">Chan Tai Man</Name>
        </Carrier>
        <Consignment>
            <SequenceNumeric>1</SequenceNumeric>
            <TransportContractDocument>
                <ID>9001234567</ID>
                <TypeCode>CRN</TypeCode>
            </TransportContractDocument>
        </Consignment>
        <Consignment>
            <SequenceNumeric>2</SequenceNumeric>

            <TransportContractDocument>
                <ID>8911220011</ID>
                <TypeCode>CRN</TypeCode>
            </TransportContractDocument>
        </Consignment>
</Declaration>
</DocumentMetadata>
```

B.3.7.4 Export Cargo Bundling (ACRED)

B.3.7.4.1 General Comments

A Driver may conduct bundling when he obtains one or more CCRN(s) from the Exporter. He/she may authorise an Agent to perform bundling on his/her behalf.

A Driver, or his/her Agent, shall bundle the CCRN(s) of all cargoes on board with the Vehicle Registration Number(VRN). Such bundling act shall be done at least 30 minutes, or such lesser time as may be indicated by the ROCARS, before his/her truck arrives at the LBCP. A Unique Bundling Reference (UBR) shall be returned to the Driver (or his/her Agent) to acknowledge receipt of the bundling, and to identify the specific one-way trip.

At any one time, a truck (i.e. VRN) can only be bundled with not more than two trips in ROCARS. The two trips shall not be heading for the same direction (i.e. they cannot be both northbound or both southbound trips). In other words, at any one time, at the most, a truck can only be bundled with one northbound and one southbound trip in ROCARS.

All the CCRN(s) submitted in a bundling request shall be correct and valid. ROCARS will validate the status of the CCRN(s). If a bundling request contains any invalid CCRN, the whole bundling request will be rejected.

With the system-to-system interface, the Bulk Submission Party (i.e. an Agent) shall exchange the information with ROCARS in the standard message structure defined in the Instructions.

After submitting the original bundling information, a Driver or his/her Agent, may submit amendments in the same channel as how he submits the original bundling information in the first place. The Bulk Submission Party will prepare the Bundling Amendment Message and ensure its compatibility before passing the message to the Government. The function of the Bundling Amendment Message includes amending the original bundling or cancelling the whole bundling.

In the scenario of re-submission under the same Unique Declaration Identification, the Message VersionID will be incremented by one.

A Driver or his/her Agent, may submit cancellation through either an Agent's or one's own bulk submission channel, depending on how he submits the original bundling information in the first place. The Bulk Submission Party will prepare the Bundling Cancellation message and ensure its compatibility before the message is passed to the Government. The related consignment(s) will then all be de-bundled and can be bundled again in another bundling message.

B.3.7.4.2 Branching Diagram (Fresh and Amend ACRED)

WCO ID	I.M. Index	Occurrence	XML Element Tag
	ACRED0100	1	Declaration
017	ACRED0110	1	|____FunctionCode
002	ACRED0120	1	|____ID
001	ACRED0130	1	|____TypeCode
N/A	ACRED0140	1	|____VersionID
	ACRED0200	0..1	|____Agent
061	ACRED0210	1	| |____ID
	ACRED0300	1	|____BorderTransportMeans
156	ACRED0310	0..1	| |____DepartureDateTime
167	ACRED0320	1	| |____ID
	ACRED0400	1	|____Carrier
050	ACRED0410	1	| |____ID
049	ACRED0420	1..2	| |____Name
	ACRED0500	0..1	| |____Address
241	ACRED0510	0..1	| |____CityName
242	ACRED0520	1	| |____CountryCode
244	ACRED0530	0..1	| |____CountrySubEntityID
243	ACRED0540	0..1	| |____CountrySubEntityName
239	ACRED0550	1..2	| |____Line
245	ACRED0560	0..1	| |____PostcodeID
	ACRED0600	0..9999	|____Consignment
006	ACRED0610	1	|____SequenceNumeric
	ACRED0700	0..99	|____ConsignmentItem
006	ACRED0710	1	| |____SequenceNumeric
	ACRED0800	0..1	| |____UCR
016	ACRED0810	1	| |____ID
	ACRED0900	1	|____TransportContractDocument
015	ACRED0910	1	|____ID
250	ACRED0920	1	|____TypeCode
	ACRED1000	0..1	|____ExitCustomsOffice
047	ACRED1010	1	|____ID

B.3.7.4.3 Branching Diagram (Cancel ACRED)

WCO ID	I.M. Index	Occurrence	XML Element Tag
	ACRED0100	1	Declaration
017	ACRED0110	1	|____FunctionCode
002	ACRED0120	1	|____ID
001	ACRED0130	1	|____TypeCode
N/A	ACRED0140	1	|____VersionID
	ACRED0200	0..1	|____Agent
061	ACRED0210	1	| |____ID
	ACRED0300	1	|____BorderTransportMeans
172	ACRED0310	0..1	| |____DepartureDateTime
167	ACRED0320	1	| |____ID
	ACRED0400	1	|____Carrier
050	ACRED0410	1	|____ID
049	ACRED0420	1..2	|____Name
	ACRED0500	0..1	|____Address
241	ACRED0510	0..1	|____CityName
242	ACRED0520	1	|____CountryCode
244	ACRED0530	0..1	|____CountrySubEntityID
243	ACRED0540	0..1	|____CountrySubEntityName
239	ACRED0550	1..2	|____Line
245	ACRED0560	0..1	|____PostcodeID

B.3.7.4.4 Information Matrix

I.M. Index	<XML Element Tag> XML Attribute	Field Name	Field Description	M/C/O	Bilingual Field (Y/N)	Format	Rpt	Validation Requirements
(1)	**(2) (3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**	**(10)**

Common Heading Legend

(1) **I.M. Index** — Information Matrix Index

(2) **<XML Element Tag> Attribute Tag** — Identifies where the data item is mapped in a particular XML message specification as published in the Implementation Instructions of ROCARS

(3) **XML Attribute** — Name of the attribute and its value to describe a data element

(4) **Field Name** — Business term for the data item

(5) **Field Description** — Description on the field

(6) **M/C/O** — Usage of the field to see whether the field is Mandatory (M), Conditional (C) or Optional (O).

Mandatory fields should be neither null nor space only;
Conditional fields, when condition is fulfilled (see validation requirement), should be neither null nor space only unless specified.

(7) **Bilingual Field (Y/N)** — Usage of the field to see if bilingual input is supported.
Y - support Chinese and English input
N - support English input only

(8) **Format** — Format of the data item. e.g.

a	alphabetic or ideographic (for bilingual field) characters
n	numeric characters
an	alphanumeric or ideographic (for bilingual field) characters
a3	3 alphabetic or ideographic (for bilingual field) characters, fixed length
n3	3 numerical characters, fixed length
an3	3 alphanumerical or ideographic (for bilingual field) characters, fixed length
a..3	up to 3 alphabetic or ideographic (for bilingual field) characters
n..3	up to 3 numerical characters
an..3	up to 3 alphanumerical or ideographic (for bilingual field) characters
n..14,3	up to 14 numerical characters including maximum 3 decimals – delimiter is allowed to float and is not counted as a character (e.g. 12345678901.234, 123456789012.34 and 12345678901234 are valid values for n..14,3)
year	CCYY(CC=Century, YY=Year)
date	CCYY-MM-DD (CC=Century, YY=Year, MM=Month, DD=Day)
time	HH:MiMi:SS in international time format (HH=Hour, MiMi=Minute, SS=Second e.g. 23:59:59)
datetime	CCYY-MM-DDTHH:MiMi:SS (CC=Century, YY=Year, MM=Month, DD=Day, T=T, HH=Hour, MiMi=Minute, SS=Second

e.g. 2002-08-01T23:59:59)

(9) **Rpt** Number of repetition of the corresponding field. This should be interpreted together with the property on M/C/O (described at (6) above). Unless otherwise specified, the following examples should apply:

M 10	the field can repeat for a maximum of ten times, with the first occurrence being mandatory and subsequent occurrence optional
C 5	the field can repeat for a maximum of five times, with the first occurrence being conditional and subsequent occurrence optional
O 3	the field can repeat for a maximum of three times, with all occurrence optional

(10) **Validation Requirements** Specifies the individual validation rules for the data item

Note: Please refer to the corresponding XSD file for the sequence of the data elements.

MESSAGE TYPE : ACRED EXPORT BUNDLING								
\								
I.M. Index	<XML Element Tag> XML Attribute	Field Name	Field Description	M /C /O	Bilingual Field (Y/N)	Format	Rpt	Validation Requirements
ACRED0100	<Declaration>	Export Bundling Declaration		M	-	-	1	-
ACRED0110	<FunctionCode>	FunctionCode	Function of the message	M	N	an..3		Fresh Submission / Amendment /Cancellation 1= Cancellation 2= Fresh Submission 4= Amendment
ACRED0120	<ID>	ID	Unique Declaration Identification (UDI)	M	N	an..35	1	This is the unique reference assigned by the bulk submission party for each declaration and this number will be quoted in all future communications between the Government and the bulk submission party. The Unique Declaration Identification (UDI) is 14 characters long. For format of UDI, please see section B.3.5. If it is an original submission, UDI must not previously exist in the system of ROCARS. If it is an amendment or cancellation, UDI must be the same as the UDI of the fresh submission.
ACRED0130	<TypeCode>	TypeCode	Type of the message	M	N	an..3		Must be “R04” for ACRED
ACRED0140	<VersionID>	VersionID	Individual transaction reference number	M	N	n..2	1	This is a sequence number, assigned by the sender, indicating that the message is a change of a previously sent ACRED. It shall start at 1 if the FunctionCode = “1” and shall be incremented by 1, for each amendment ACRED with the same UDI. The number will ensure that multiple submissions of the same UDI are processed correctly. The receiving application should not process a message if it has the same UDI and the sequence number is not greater than that already received for the UDI.
ACRED0200	Agent			C	-	-	1	
ACRED0210	<ID>	AgentID	Agent Identification	C	N	an..17		Must exist if the declaration is made through an Agent.

MESSAGE TYPE : ACRED EXPORT BUNDLING

\

I.M. Index	<XML Element Tag> XML Attribute	Field Name	Field Description	M /C /O	Bilingual Field (Y/N)	Format	Rpt	Validation Requirements
								Must not exist if the declaration is made by the Driver The value must be the Business Registration Number of a ROCARS registered Agent For format of Business Registration Number should be 99999999-X99 Characters 1-8 shall be numeric. Character 9 shall be the '-' (dash). Characters 10-12 represent the branch number where character 10 shall be alphanumeric and characters 11-12 shall be numeric. The Business Registration number must be valid.
ACRED0300	BorderTransportMeans			C	N-	-	1	
ACRED0310	<DepartureDateTime>	Departure DateTime	Date of Arrival or Departure at Customs Control Point	C	N	date		Must not exist for fresh submission, amendment and cancellation. Reserve for future use e.g. extraction.
ACRED0320	<ID>	Name	Vehicle Registration Number	M	N	an..25		It must be the VRN of a ROCARS registered vehicle
ACRED0400	<Carrier>			M	-	-	1	
ACRED0410	<ID schemeID="value">	ID	Driver ID	M	N	an..17		The ROCARS User ID of the Driver must be specified Must matched with the registered record of the ROCARS
ACRED0411		schemeID	ID Type Indicator	M	N		1	The attribute field to indicate the type of Driver ID: RUID = The ROCARS User ID of the Driver
ACRED0420	<Name languageID="value">	Name	Driver Name	M	Y	an..25	2	First line must not be blank. Must match with the Driver ID in the registered record of the System. Required to send the driver's name.
ACRED0421		languageID	Language of the Carrier Name	O	N			Language of the Carrier Name. Must be "zh" or "en" if specified.
ACRED0500	<Address>			O	-	-	1	
ACRED0510	<CityName>	CityName	Driver Address - City Name	O	Y	an..35	1	

MESSAGE TYPE : ACRED EXPORT BUNDLING

\

I.M. Index	<XML Element Tag> XML Attribute	Field Name	Field Description	M /C /O	Bilingual Field (Y/N)	Format	Rpt	Validation Requirements
ACRED0520	<CountryCode>	Country Code	Driver Address – Country/Territory Code	C	N	a2	1	If the Driver Address is specified, it must be a valid country/territory code Refer to code table "Country/Territory code" as specified in section B.3.6.
ACRED0530	<CountrySubEntityID>	Country SubEntity ID	Driver Address - SubEntity ID	O	Y	an..9	1	Users are suggested to specify value according to ISO-3166-2, if applicable. No validation will be applied on this optional field
ACRED0540	<CountrySubEntityName>	Country SubEntity Name	Driver Address - Country Sub-entity Name	O	Y	an..35	1	
ACRED0550	<Line languageID="value">	Line	DriverAddress – Detailed Location within City	O	Y	an..35	2	If specified, the first occurrence must not be blank or null. Word splitting is not allowed between lines.
ACRED0551		languageID	Language of the Driver Address	O	N			Language of the Driver's Address. Must be "zh" or "en" if specified.
ACRED0560	<PostCodeID>	PostCode	Driver Address – Postcode identification	O	Y	an..9	1	
ACRED0600	<Consignment>			C	-	-	9999	Must exist if the declaration is a fresh application/amendment. Must not exist if the declaration is a cancellation. Must not exist if the declaration is made together with other consignment(s) in a Quick Bundling Request.
ACRED0610	<SequenceNumeric>	Sequence		M	N	n..5	1	Unique number for identifying the line of consignment.
ACRED0700	<ConsignmentItem>			O	-	-	99	
ACRED0710	<SequenceNumeric>	SequenceNumeric		M	N	n..5	1	Must be 1.
ACRED0800	<UCR>			O	-	-	1	
ACRED0810	<ID>	ID	Unique Consignment Reference (UCR)	O	N	an..35	1	This is an identifier assigned by the trader for their own use. Not processed by ROCARS.
ACRED0900	<TransportContractDocument>			M	-	-	1	
ACRED0910	<ID>	ID	Customs Cargo Reference Number (CCRN)	M	N	an..35	1	Must be a valid CCRN of a related consignment to be bundled with this trip.
ACRED0920	<TypeCode>	TypeCode	Type of Document	M	N	an..3	1	Must be "CRN"
ACRED1000	<ExitCustomsOffice>			O	-	-	1	
ACRED1010	<ID>	ID	The expected Land Customs Control Point of exit	O	N	an..11	1	The expected Customs Control Point of exit of this consignment.

MESSAGE TYPE : ACRED EXPORT BUNDLING								
\								
I.M. Index	<XML Element Tag> XML Attribute	Field Name	Field Description	M /C /O	Bilingual Field (Y/N)	Format	Rpt	Validation Requirements
								Must be a code value if specified Refer to code table ”Land Boundary Control Point” as specified in section B.3.6.

B.3.7.4.5 WCO Mini Message

In ROCARS implementation, a non-CCTS-compliant XML envelope <DocumentMetadata> will be used to encapsulate the required metadata as well as the standard procedure message or mini message itself.

The following example shows the structure and values of the ROCARS ACRED XML message after encapsulating the metadata using the <DocumentMetadata> envelope:

```
<DocumentMetadata>
     <WCODataModelVersion>2.0</WCODataModelVersion>
     <WCODocumentName>CRE</WCODocumentName>
     <CountryCode>HK</CountryCode>
     <AgencyName>C&amp;ED</AgencyName>
     <AgencyAssignedCustomizedDocumentName>ACRED
     </AgencyAssignedCustomizedDocumentName>
     <AgencyAssignedCustomizedDocumentVersion>1.0
     </AgencyAssignedCustomizedDocumentVersion>
     <Declaration>
        ......
     </Declaration>
</DocumentMetadata>
```

B.3.7.4.6 Sample Message

A sample ACRED message encapsulated with <DocumentMetadata> envelope as a WCO mini message is illustrated below.

```
<?xml version="1.0" encoding="UTF-8"?>
<DocumentMetadata>
    <WCODataModelVersion>2.0</WCODataModelVersion>
    <WCODocumentName>CRE</WCODocumentName>
    <CountryCode>HK</CountryCode>
    <AgencyName>C&amp;ED</AgencyName>
    <AgencyAssignedCustomizedDocumentName>ACRED</AgencyAssignedCustomizedDocumen
tName>
    <AgencyAssignedCustomizedDocumentVersion>1.0</AgencyAssignedCustomizedDocume
ntVersion>
<Declaration>
        <FunctionCode>2</FunctionCode>
        <ID>40010900001D77</ID>
        <TypeCode>R04</TypeCode>
        <VersionID>1</VersionID>
        <Agent>
            <ID>99999999-X99</ID>
        </Agent>
        <BorderTransportMeans>
            <ID>AA1234</ID>
        </BorderTransportMeans>
        <Carrier>
            <ID schemeID="RUID">123456</ID>

            <Name languageID="en">Chan Tai Man</Name>
        </Carrier>
        <Consignment>
            <SequenceNumeric>1</SequenceNumeric>
            <TransportContractDocument>
                <ID>9100212345</ID>
                <TypeCode>CRN</TypeCode>
            </TransportContractDocument>
        </Consignment>
</Declaration>
</DocumentMetadata>
```

B.3.7.5 Response (RES)

B.3.7.5.1 General Comments

Response messages can be sent from the Government to the Bulk Submission Party in response to the various types of messages submitted by them. The Response message can serve the following purposes:

Consignment Acknowledgement

If the submitted fresh Consignment message successfully passes all the validations of and is accepted by the system of the Government, a Response message with the CCRN of that consignment will be generated by the Government's system and returned to the Bulk Submission Party. If the submitted Consignment Amendment/Consignment Cancellation message successfully passes all the validations of and is accepted by the system of the Government, a Response message to acknowledge the amendment/cancellation will be sent by the Government's system and returned to the Bulk Submission Party.

Bundling Acknowledgement

If the submitted fresh Bundling message successfully passes all the validations of and is accepted by the system of the Government, a Response message with the UBR of that bundling will be generated by the Government's system and returned to the Bulk Submission Party. If the submitted Bundling Amendment/Bundling Cancellation message successfully passes all the validation of and is accepted by the system of the Government, a Response message to acknowledge the amendment/cancellation will be generated by the Government's system and returned to the Bulk Submission Party.

Error

A series of validation will be done to ensure that the electronic signatures of the senders are correct and the basic information of the consignment/bundling message is valid.

During the validation process, if the message is found to contain application or syntax errors, a Response message with description and explanation of the error will be returned to the Bulk Submission Party. In such case, the message will not be accepted by the Government's system. The Bulk Submission Party should then amend and re-submit the message as a fresh submission.

Response to Quick Bundling

If all the Consignment message(s) and the Bundling message within the submitted Quick Bundling request successfully pass all the validations of and are accepted by the system of the Government, the Response messages with the CCRN(s) and UBR of each of the Consignment and Bundling messages under that Quick Bundling request will be generated by the Government's system and returned to the Bulk Submission Party.

If any of the Consignment message(s) or the Bundling message within the submitted Quick Bundling request is found to contain application or syntax errors, the Response messages with the CCRN of those accepted consignment(s), together with the Response messages with the description and the explanation of the error(s) of the rejected consignment(s) will be returned to the Bulk Submission Party. The Bundling message within the Quick Bundling request will not be accepted. The Bulk Submission Party shall amend the rejected Consignment message(s) for re-submission as a fresh submission individually, followed by submitting a Bundling message for all the CCRNs involved to complete the process.

The example for an ebXML Message containing multiple Response messages in return to a Quick Bundling Request can be found at Section B.3.7.6.6.

B.3.7.5.2 Branch Diagram

WCO ID	I.M. Index	Occurrence	
	RES0100	1	Response
017	RES0110	1	|____FunctionCode
002	RES0120	1	|____ID
001	RES0130	1	|____TypeCode
	RES0200	0..99	|____AdditionalInformation
226	RES0210	0..1	| |____StatementCode
225	RES0210	0..1	| |____StatementDescription
	RES0300	1	|____Declaration
N/A	RES0310	0..1	| |____AcceptanceDateTime
017	RES0320	1	| |____FunctionCode
002	RES0330	1	| |____ID
N/A	RES0340	0..1	| |____RejectionDateTime
001	RES0350	1	| |____TypeCode
N/A	RES0360	1	| |____VersionID
	RES0400	0..99	|____Error
N/A	RES0410	1	|____ValidationCode
	RES0500	1	|____Pointer
006	RES0510	0..1	|____SequenceNumeric
N/A	RES0520	1	|____TagID

B.3.7.5.3 Information Matrix

I.M. Index	<XML Element Tag> XML Attribute	Field Name	Field Description	M/C/O	Bilingual Field (Y/N)	Format	Rpt	Validation Requirements
(1)	(2) (3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)

Common Heading Legend

(1) **I.M. Index** Information Matrix Index

(2) **<XML Element Tag>** Identifies where the data item is mapped in a particular XML message specification as published in the Implementation Instructions of ROCARS

(3) **XML Attribute** Name of the attribute and its value to describe a data element

(4) **Field Name** Business term for the data item

(5) **Field Description** Description on the field

(6) **M/C/O** Usage of the field to see whether the field is Mandatory (M), Conditional (C) or Optional (O).

Mandatory fields should be neither null nor space only;
Conditional fields, when condition is fulfilled (see validation requirement), should be neither null nor space only unless specified.

(7) **Bilingual Field (Y/N)** Usage of the field to see if bilingual input is supported.
Y - support Chinese and English input (Please refer to Section B.3.8 for details)
N - support English input only

(8) **Format** Format of the data item. e.g.

a	alphabetic or ideographic (for bilingual field) characters
n	numeric characters
an	alphanumeric or ideographic (for bilingual field) characters
a3	3 alphabetic or ideographic (for bilingual field) characters, fixed length
n3	3 numerical characters, fixed length
an3	3 alphanumerical or ideographic (for bilingual field) characters, fixed length
a..3	up to 3 alphabetic or ideographic (for bilingual field) characters
n..3	up to 3 numerical characters
an..3	up to 3 alphanumerical or ideographic (for bilingual field) characters
n..14,3	up to 14 numerical characters including maximum 3 decimals – delimiter is allowed to float and is not counted as a character (e.g. 12345678901.234, 123456789012.34 and 12345678901234 are valid values for n..14,3)
date	CCYY-MM-DD (CC=Century, YY=Year, MM=Month, DD=Day)
time	HH:MiMi:SS (HH=Hour, MiMi=Minute, SS=Second)
datetime	CCYY-MM-DDTHH:MiMi:SS (CC=Century, YY=Year, MM=Month, DD=Day, T=Time, HH=Hour, MiMi=Minute,

SS=Second)

(9) **Rpt** Number of repetition of the corresponding field. This should be interpreted together with the property on M/C/O (described at (6) above). Unless otherwise specified, the following examples should apply:

M 10	the field can repeat for a maximum of ten times, with the first occurrence being mandatory and subsequent occurrence optional
C 5	the field can repeat for a maximum of five times, with the first occurrence being conditional and subsequent occurrence optional
O 3	the field can repeat for a maximum of three times, with all occurrence optional

(10) Validation Requirements Specifies the individual validation rules for the data item

Note: Please refer to the corresponding XSD file for the sequence of the data elements.

MESSAGE TYPE : RES RESPONSE								
I.M. Index	<XML Element Tag> XML Attribute	Field Name	Field Description	M /C /O	Bilingual Field (Y/N)	Format	Rpt	Validation Requirements
RES0100	<Response>			M			1	
RES0110	<FunctionCode>	FunctionCode	Function of the message	M	N	an..3		11 = Response
RES0120	<ID>	ID	Unique Declaration Identification (UDI)	M	N	an..35	1	The Unique Declaration Identification(UDI) (used as a message identification in RESPONSE) of this RESPONSE message.
RES0130	<TypeCode>	TypeCode	Type of the message	M	N	an..3	1	Must be R06 = RES
RES0200	<AdditionalInformation>			O			99	
RES0210	<StatementCode>	StatementCode	Additional code for the RESPONSE message	O	N	an..17		The value can be 'CCRN', in response to an accepted AIM/AEX. The value can be 'UBR', in response to an accepted ACRID/ACRED) Other possible values are listed in the code table "Response Information code" as specified in section B.3.6.
RES0220	<StatementDescription>	StatementDescription	Additional description for the RESPONSE message	O	N	an..512		Description and information of the message by C&ED. The value can be: The Customs Cargo Reference Number (CCRN) in response to a consignment (AIM/AEX), or the Unique Bundling Reference(UBR) Number in response to a bundling (ACRID/ACRED). The CCRN/UBR this RES assigned to a fully valid AIM/AEX/ACRID/ACRED message.
RES0300	<Declaration>			M			1	
RES0310	<AcceptanceDateTime>	AcceptanceDateTime		C	N	datetime	1	It exists if the message response to is accepted.
RES0320	<FunctionCode>	FunctionCode	Function of the original message response to	M	N	an..3	1	Fresh Submission / Amendment /Cancellation 1= Cancellation

MESSAGE TYPE : RES RESPONSE								
								2= Fresh Submission 4= Amendment
RES0330	<ID>	ID	Original declaration Unique Declaration Identification (UDI)	M	N	an..35	1	The UDI this RES response to. It can be the UDI of a AIM/AEX/ACRID/ACRED message.
RES0340	<RejectionDateTime>	RejectionDateTime		C	N	datetime	1	It exists if the message response to is rejected.
RES0350	<TypeCode>	TypeCode	Type of the original declaration message response to	M	N	an..3	1	Possible value: R01 = AIM R02 = AEX R03 = ACRID R04 = ACRED R07 = IDR R08 = EDR
RES0360	<VersionID>	VersionID		M	N	n..2	1	The message version of the original declaration this RES response to
RES0400	<Error>			C			99	Exist If the error code is applicable to indicate the error of the original message
RES0410	<ValidationCode>	ValidationCode	ValidationCode	M	N	an..8		Error code
RES0500	<Pointer>			M			1	
RES0510	<SequenceNumeric>	SequenceNumeric	Sequence number of the pointer	O	N	n..5	1	Unique running sequence for identifying the pointer.
RES0520	<TagID>	TagID	XML Path of the failed information tag	M	N		1	If <Pointer> exists, this is to specify the XPath of the failed tag.

B.3.7.5.4 WCO Mini Message

In ROCARS implementation, a non-CCTS-compliant XML envelope <DocumentMetadata> will be used to encapsulate the required metadata as well as the standard procedure message or mini message itself.

Although the ROCARS RES message is not mapped to any WCO 2.0 standard message, the tags shall be specified for information on document name and version used as well as for implementation consistency with other ROCARS messages.

The following example shows the structure and values of the ROCARS RES XML message after encapsulating the metadata using the <DocumentMetadata> envelope:

```
<DocumentMetadata>
     <WCODataModelVersion>N/A</WCODataModelVersion>
     <WCODocumentName>N/A</WCODocumentName>
     <CountryCode>HK</CountryCode>
     <AgencyName>C&amp;ED</AgencyName>
     <AgencyAssignedCustomizedDocumentName>RES
     </AgencyAssignedCustomizedDocumentName>
     <AgencyAssignedCustomizedDocumentVersion>1.0
     </AgencyAssignedCustomizedDocumentVersion>
     <Declaration>
        ......
     </Declaration>
</DocumentMetadata>
```

B.3.7.5.5 Sample Message

The following RESPONSE message encapsulated with <DocumentMetadata> envelope as a WCO mini message example illustrates a reply to an AIM message.

```
<?xml version="1.0" encoding="UTF-8"?>
<DocumentMetadata>
    <WCODataModelVersion>N/A</WCODataModelVersion>
    <WCODocumentName>N/A</WCODocumentName>
    <CountryCode>HK</CountryCode>
    <AgencyName>C&amp;ED</AgencyName>
    <AgencyAssignedCustomizedDocumentName>RES</AgencyAssignedCustomizedDocumentN
ame>
    <AgencyAssignedCustomizedDocumentVersion>1.0</AgencyAssignedCustomizedDocume
ntVersion>
<Response>
    <FunctionCode>11</FunctionCode>
    <ID>4000001000001U</ID>
    <TypeCode>R06</TypeCode>
    <AdditionalInformation>
        <StatementCode>001</StatementCode>
        <StatementDescription>1234567890</StatementDescription>
    </AdditionalInformation>
    <Declaration>
        <AcceptanceDateTime>2008-11-01T11:22:33</AcceptanceDateTime>
        <FunctionCode>2</FunctionCode>
        <ID>40010900001D3B</ID>
        <TypeCode>R01</TypeCode>
        <VersionID>1</VersionID>
    </Declaration>
</Response>
</DocumentMetadata>
```

B.3.7.6 Quick Bundling Request

B.3.7.6.1 General Comments

If a Bulk Submission Party has selected to submit the bundling information together with the related cargo particulars in one go via the bulk submission channel to the Government, one can submit an XML messages combining all the information in a single ebXML Message Envelope to the Government through one's own bulk submission channel. The Bulk Submission Party will prepare a message combining all of the Import / Export Consignment messages and the Import / Export Bundling messages in one ebXML Message Envelope and ensure its compatibility before the whole ebXML Message is passed to the Government. If all the Consignment and Bundling messages pass the validation rules and are accepted, the Government will feedback the UBR and the related CCRNs to the Bulk Submission Party in a group of Response XML messages in a single ebXML Message Envelope.

The Quick Bundling can be used to declare the type of FRESH SUBMISSION of a bundle of a single Import Bundling message and multiple Import Consignment messages, or a bundle of a single Export Bundling message and multiple Export Consignment messages only. If there is any type of AMENDMENT and CANCEL messages to be applied on the bundling and/or consignments previously declared within a Quick Bundling ebXML Message, the Bulk Submission Party is required to submit that type of messages for each individual bundling and consignment messages.

If all the Consignment message(s) and the Bundling message within the submitted Quick Bundling request successfully pass all the validations of and are accepted by the system of the Government, the Response messages with the CCRN(s) and UBR of each of the Consignment and Bundling messages under that Quick Bundling request will be generated by the Government's system and returned to the Bulk Submission Party.

If any of the Consignment message(s) or the Bundling message within the submitted Quick Bundling request is found to contain application or syntax errors, the Response messages with the CCRN of those accepted consignment(s), together with the Response messages with the description and the explanation of the error(s) of the rejected consignment(s) will be returned to the Bulk Submission Party. The Bundling message within the Quick Bundling request will not be accepted. The Bulk Submission Party shall amend the rejected Consignment message(s) for re-submission as a fresh submission individually, followed by submitting a Bundling message for all the CCRNs involved to complete the process.

B.3.7.6.2 Quick Bundling Request Structure in an ebXML Message

While only 1 payload is allowed in an ebXML Message for this implementation, for Quick Bundling Request, multiple objects are allowed in the payload of an ebXML Message.

```
Content-ID: <Payload-0>
Content-Type: application/xml; charset=UTF-8

<?xml version="1.0" encoding="UTF-8"?>
<RocarsData>
     <Object Id="Res1">
        <DocumentMetadata>
        ...
        </DocumentMetadata>
      </Object>
     <Object Id="Res2">
        <DocumentMetadata>
        ...
        </DocumentMetadata>
      </Object>
      ...
     <Object Id="Resn">
        <DocumentMetadata>
        ...
        </DocumentMetadata>
      </Object>
</RocarsData>
```

For import Quick Bundling Request, the payload of the ebXML message shall consist of 1 or multiple Import Consignment messages and only 1 Import Bundling message. For export Quick Bundling Request, the payload of the ebXML message shall consist of 1 or multiple Export Consignment messages and only 1 Export Bundling message.

Each of the messages shall be enclosed by an attribute Id to the object element with unique reference value assigned to the object.

For the 1st object of the payload, the value of the Id shall begin with the format "Res1 ". The last digit of the value shall be incremented by 1 for the next object.

All Consignment message(s) must be listed before the Bundling message.

The Bundling message must be the last object in the payload, indicating the end of the payload.

All Quick Bundling Requests not conforming to the above structure will be rejected in a whole.

B.3.7.6.3 XML Data validation for Quick Bundling Request

If all the Consignment and Bundling messages pass the validation and are accepted, the Government will feedback the UBR and the related CCRNs to the Bulk Submission Party in a group of Response XML messages in a single ebXML Message Envelope.

In case there is an error in any of the messages within a Quick Bundling Request, it will be handled as follows:

1) All of the Consignment message(s) pass the validation, but the Bundling message fails the validation.

   The consignment message(s) will be accepted and feedback with CCRN(s), while the Bundling message will be rejected. No UBR will be feedback.

2) One or more of the Consignment message(s) fail the validation, and the Bundling message passes the validation.

   The Consignment message(s) pass the validation will be feedback with CCRN(s). Error message(s) will be feedback to those failed Consignment message(s). The Bundling message will be failed and no UBR will be feedback, since not all of the Consignment message(s) submitted can be bundled.

3) One or more of the Consignment message(s) fail the validation, and the Bundling message fails the validation.

   The Consignment message(s) pass the validation will be feedback with CCRN(s). Error message(s) will be feedback to those failed Consignment message(s). The Bundling message will be failed and no UBR will be feedback.

To rectify the error, the submission party of the Quick Bundling Request shall re-submit the failed Consignment and Bundling messages as a fresh submission individually. No AMENDMENT is allowed in Quick Bundling Request.

For the structure of the ebXML Message containing multiple RESPONSE Messages to a Quick Bundling Request, please refer to Section 3.7.5.

B.3.7.6.4 Structure of Response to Quick Bundling Request in an ebXML Message

The Government will send an ebXML Message containing multiple Response XML messages, when replying to a Quick Bundling Request.

The Structure of the ebXML Message containing multiple Response XML messages will follow the structure of the Quick Bundling Request in Section B.3.7.6.2.

The Response message to Consignment message(s) must be listed first, while the Response to the Bundling message must be the last object in the payload, indicating the end of the payload.

B.3.7.6.5 WCO Mini Message

In ROCARS implementation, a non-CCTS-compliant XML envelope <DocumentMetadata> will be used to encapsulate the required metadata as well as the standard procedure message or mini message itself.

For each of the messages inside a Quick Bundling Request, the tags shall be specified according to the requirement of each type of messages.

The following example shows the structure and values of a Quick Bundling Request containing multiple AIM messages and an ACRID message after encapsulating the metadata using the <DocumentMetadata> envelope:

```
<RocarsData>
<Object Id="Res1">
     <DocumentMetadata>
     <WCODataModelVersion>2.0</WCODataModelVersion>
     <WCODocumentName>IM1</WCODocumentName>
     <CountryCode>HK</CountryCode>
     <AgencyName>C&amp;ED</AgencyName>
     <AgencyAssignedCustomizedDocumentName>AIM
     </AgencyAssignedCustomizedDocumentName>
     <AgencyAssignedCustomizedDocumentVersion>1.0
     </AgencyAssignedCustomizedDocumentVersion>
     <Declaration>
        ......
     </Declaration>
     </DocumentMetadata>
</Object>
<Object Id="Res2">
     ...
</Object>
<Object Id=”Res100”>
     <DocumentMetadata>
     <WCODataModelVersion>2.0</WCODataModelVersion>
     <WCODocumentName>CRI</WCODocumentName>
     <CountryCode>HK</CountryCode>
     <AgencyName>C&amp;ED</AgencyName>
     <AgencyAssignedCustomizedDocumentName>ACRID
     </AgencyAssignedCustomizedDocumentName>
     <AgencyAssignedCustomizedDocumentVersion>1.0
     </AgencyAssignedCustomizedDocumentVersion>
     <Declaration>
        ......
     </Declaration>
     </DocumentMetadata>
</Object>
</RocarsData>
```

B.3.7.6.6 Sample ebXML Message for Quick Bundling Request

The following Quick Bundling Request ebXML Message example illustrates a case of importing 3 consignments and a bundling consists of 3 AIM and an ACRID XML messages.

```
MIME-Version: 1.0
SOAPAction: "ebXML"
Content-Type: multipart/related; type="text/xml"; boundary="----=_Part_210_18012078.1216972450671"

------=_Part_210_18012078.1216972450671
Content-Type: text/xml; charset=UTF-8
Content-Id:  <soappart>

<?xml version="1.0" encoding="UTF-8"?>
<SOAP:Envelope   xmlns:SOAP="http://schemas.xmlsoap.org/soap/envelope/"
                 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                 xmlns:xlink="http://www.w3.org/1999/xlink"
                 xsi:schemaLocation="http://schemas.xmlsoap.org/soap/envelope/
                 http://www.oasis-open.org/committees/ebxml-msg/schema/envelope.xsd
                 http://www.w3.org/1999/xlink
                 http://www.oasis-open.org/committees/ebxml-msg/schema/xlink.xsd">
   <SOAP:Header
            xsi:schemaLocation="http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd
            http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd">
      <eb:MessageHeader   eb:version="2.0"
                          SOAP:mustUnderstand="1"
                          xmlns:eb="http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd">
         <eb:From>
            <eb:PartyId eb:type="ROCARS_PARTY_ID">123456</eb:PartyId>
         </eb:From>
         <eb:To>
            <eb:PartyId eb:type="ROCARS_PARTY_ID">GV0000</eb:PartyId>
         </eb:To>
         <eb:CPAId>12345601</eb:CPAId>
         <eb:ConversationId>123456:GV0000:123456R91010000001</eb:ConversationId>
         <eb:Service eb:type="ROCARS_SERVICE_ID">ROCARS</eb:Service>
         <eb:Action>MessageDelivery</eb:Action>
         <eb:MessageData>
            <eb:MessageId>234200417071084302</eb:MessageId>
            <eb:Timestamp>2007-12-23T18:07:10.843+08:00</eb:Timestamp>
         </eb:MessageData>
         <eb:DuplicateElimination/>
```

```
      </eb:MessageHeader>
      <eb:SyncReply
           xmlns:eb="http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd"
           SOAP:actor="http://schemas.xmlsoap.org/soap/actor/next"
           SOAP:mustUnderstand="1" eb:version="2.0"/>
      <eb:AckRequested eb:signed="false" eb:version="2.0"
           SOAP:actor="urn:oasis:names:tc:ebxml-msg:actor:toPartyMSH"
           SOAP:mustUnderstand="1"
           xmlns:eb="http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd"/>
         <Signature xmlns="http://www.w3.org/2000/09/xmldsig#"
                xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                xsi:schemaLocation="http://www.w3.org/2000/09/xmldsig#
             http://www.w3.org/TR/xmldsig-core/xmldsig-core-schema.xsd">
              <SignedInfo>
                 <CanonicalizationMethod Algorithm="http://www.w3.org/TR/2001/REC-xml-c14n-20010315"/>
                 <SignatureMethod Algorithm="http://www.w3.org/2000/09/xmldsig#rsa-sha1" />
                <Reference URI="">
                 <Transforms>
                    <Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-signature"/>
                    <Transform Algorithm="http://www.w3.org/TR/1999/REC-xpath-19991116">
                       <XPath> not(ancestor-or-self::node()[@SOAP:actor=
                          &amp;quot;urn:oasis:names:tc:ebxml-msg:actor:nextMSH&amp;quot;]
                                | ancestor-or-self::node()[@SOAP:actor=
                          &amp;quot;http://schemas.xmlsoap.org/soap/actor/next&amp;quot;])
                       </XPath>
                    </Transform>
                    <Transform Algorithm="http://www.w3.org/TR/2001/REC-xml-c14n-20010315"/>
                 </Transforms>
                    <DigestMethod Algorithm="http://www.w3.org/2000/09/xmldsig#sha1" />
                    <DigestValue>ase50vt3338s7Uaposoyq27h4bs=</DigestValue>
                </Reference>
                <Reference URI="cid:Payload-0">
                     <DigestMethod Algorithm="http://www.w3.org/2000/09/xmldsig#sha1" />
                     <DigestValue>60NvZvtdTB+7UnlLp/H24p7h4bs=</DigestValue>
                 </Reference>
              </SignedInfo>
              <SignatureValue>
                   juS5RhJ884qoFR8flVXd/rbrSDVGn40CapgB7qeQiT+rr0NekEQ6BHhUA8dT3+BC
                   TBUQI0dBjlml9lwzENXvS83zRECjzXbMRTUtVZiPZG2pqKPnL2YU3A9645UCjTXU
                   +jgFumv7k78hieAGDzNci+PQ9KRmm//icT7JaYztgt4=
              </SignatureValue>
              <KeyInfo>
                 <X509Data>

                    <X509Certificate>
                       MIIDbTCCAyygAwIBAgIGAOCdrKxkMAkGByqGSM44BAMwezELMAkGA1UEBhMCSUUx
```

```
                     DzANBgNVBAgTBkR1YmxpbjElMCMGA1UEChMcQmFsdGltb3JlIFRlY2hub2xvZ2ll
                     cywgTHRkLjERMA8GA1UECxMIWC9TZWN1cmUxITAfBgNVBAMTGFgvU2VjdXJlIDEw
                     MjQtYml0IERTQSBDQTAeFw0wMDA3MjcxNzEzMzNaFw0wMTA3MjcxNzEzMjZaMHwx
                     CzAJBgNVBAYTAklFMQ8wDQYDVQQIEwZEdWJsaW4xJTAjBgNVBAoTHEJhbHRpbW9y
                     ZSBUZWNobm9sb2dpZXMsIEx0ZC4xETAPBgNVBAsTCFgvU2VjdXJlMSIwIAYDVQQD
                     ExlYL1NlY3VyZSAxMDI0LWJpdCBEU0EgY3J0MIIBuDCCASwGByqGSM44BAEwggEf
                     AoGBAKxbaPLj0DOst+BSz5g4eNASyda1awvFXkarroT2eo2DRZELsMZ7v8AryADI
                     bpDwSxRE/GyX/29nn/qKsWWoxG/vPM5WaMhvIP8DHwwR08c/gp6MC2oZwgk2AaeZ
                     LexvKlKGybr48pcI9bLe1fS7LtN4lzF7W4q4lIxWuYFEWrDfAhUAkEjAFpCe4lcU
                     Odwphpzf+tBaUdsCgYEAoe14R2OtyKx+s+60O5BRNMOYpIg2TU/f15N3bsDErKOW
                     tKXeNK9FS7dWStreDxo2SSgOonqAd4FuJ/4uva7GgNL4ULIqY7E+mW5iwJ7n/WTE
                     Lh98mEocsLXkNh24HcH4BZfSCTruuzmCyjdV1KSqX/Eux04HfCWYmdxN3SQ/qqwD
                     gYUAAoGBAKQOTZ2b3Hee+FkV7jgO2Xwv+y6reHAdDES1rR7m7SaFTmqPYm+a8uK0
                     5NK+nXZzrwCBipLbrcyt8prypXktwzq8GUICfvwQ1g1vJDvUeuqOq3Y4kqGwYv9H
                     NldfnZKjoIxZis9/eZrwjmRoQu36gFYR2rdhIxjzH4EmcgAWu/tZozswOTAPBgNV
                     HQ8BAf8EBQMDAIAAMBEGA1UdDgQKBAiA4IML4dndEDATBgNVHSMEDDAKgAiHoMnY
                     nDxZUDAJBgcqhkjOOAQDAzAAMC0CFQCEXa1E2ueJ8WMX5nP1lCcBWhxC2wIUGUCB
                     b6M6Oj3NQAJbnZsdY63rKa0=
                  </X509Certificate>
               </X509Data>
            </KeyInfo>
         </Signature>
   </SOAP:Header>
   <SOAP:Body
         xsi:schemaLocation="http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd
         http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd">
      <eb:Manifest  eb:version="2.0"
                    xmlns:eb="http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd">
         <eb:Reference eb:id="Payload-0" xlink:href="cid:Payload-0" xlink:type="simple">
         </eb:Reference>
      </eb:Manifest>
   </SOAP:Body>
</SOAP:Envelope>

------=_Part_210_18012078.1216972450671
Content-ID: <Payload-0>
Content-Type: application/xml; charset=UTF-8

<?xml version="1.0" encoding="UTF-8"?>
<RocarsData>
           <Object Id="Res1">
              <DocumentMetadata>
              <WCODataModelVersion>2.0</WCODataModelVersion>
              <WCODocumentName>IM1</WCODocumentName>
              <CountryCode>HK</CountryCode>
              <AgencyName>C&amp;amp;ED</AgencyName>
```

```
<AgencyAssignedCustomizedDocumentName>AIM</AgencyAssignedCustomizedDocumentName>
<AgencyAssignedCustomizedDocumentVersion>1.0</AgencyAssignedCustomizedDocumentVersion>
<Declaration>
   <FunctionCode>2</FunctionCode>
   <ID>40010900001D3B</ID>
   <TypeCode>R01</TypeCode>
   <VersionID>1</VersionID>
   <Agent>
      <ID>99999999-X99</ID>
   </Agent>
<GoodsShipment>
   <SequenceNumeric>1</SequenceNumeric>
<Consignee>
   <Name languageID="en">ABC (Hong Kong) Company Limited</Name>
   <Address>
   <CityName>HONG KONG</CityName>
   <CountryCode>HK</CountryCode>
   <Line languageID="en">Room 9001, Harbour Building</Line>
   <Line>38 Pier Road, Central</Line>
   </Address>
</Consignee>
<Consignment>
   <SequenceNumeric>1</SequenceNumeric>
   <BorderTransportMeans>
         <ArrivalDateTime>2008-10-01</ArrivalDateTime>
   </BorderTransportMeans>
   <TransportEquipment>
   <CharacteristicCode>20</CharacteristicCode>
   <EquipmentIdentification>
      <ID>HJCU8038001</ID>
   </EquipmentIdentification>
   </TransportEquipment>
</Consignment>
<Consignor>
   <Name languageID="zh">深圳贸易公司</Name>
   <Address>
   <CountryCode>CN</CountryCode>
   <Line languageID="zh">深圳东门一三路九号二楼</Line>
   </Address>
</Consignor>
<CustomsGoodsItem>
   <SequenceNumeric>1</SequenceNumeric>
   <Commodity>
   <Description languageID="en">Men's woven cotton t-shirt</Description>
   </Commodity>
```

```
                <GoodsPackaging>
                 <QuantityQuantity>1000</QuantityQuantity>
                 <TypeCode>9E</TypeCode>
                </GoodsPackaging>
             </CustomsGoodsItem>
          </GoodsShipment>
          <Importer>
             <ID schemeID="BR">12345678</ID>
             <Name languageID="en">Chan's Trading Company Limited</Name>
             <Address>
                <CityName>HONG KONG</CityName>
                <CountryCode>HK</CountryCode>
                <Line languageID="en">Room 7001,Central Building</Line>
                <Line>Hong Kong Road, Hong Kong</Line>
             </Address>
             <Contact>
                <Name>Chan Tai Man</Name>
                <Communication>
                 <ID>21234568</ID>
                 <TypeID>TE</TypeID>
                </Communication>
             </Contact>
          </Importer>
          </Declaration>
          </DocumentMetadata>
       </Object>

       <Object Id="Res2">
            <DocumentMetadata>
            <WCODataModelVersion>2.0</WCODataModelVersion>
            <WCODocumentName>IM1</WCODocumentName>
            <CountryCode>HK</CountryCode>
            <AgencyName>C&amp;amp;ED</AgencyName>
            <AgencyAssignedCustomizedDocumentName>AIM</AgencyAssignedCustomizedDocumentName>
            <AgencyAssignedCustomizedDocumentVersion>1.0</AgencyAssignedCustomizedDocumentVersion>
            <Declaration>
               <FunctionCode>2</FunctionCode>
               <ID>40010900001D4A</ID>
               <TypeCode>R01</TypeCode>
               <VersionID>1</VersionID>
               <Agent>
                  <ID>99999999-X99</ID>
               </Agent>
            <GoodsShipment>
               <SequenceNumeric>1</SequenceNumeric>
            <Consignee>
```

```
                <Name languageID="en">ABC (Hong Kong) Company Limited</Name>
                <Address>
                <CityName>HONG KONG</CityName>
                <CountryCode>HK</CountryCode>
                <Line languageID="en">Room 9001, Harbour Building</Line>
                <Line>38 Pier Road, Central</Line>
                </Address>
             </Consignee>
             <Consignment>
                <SequenceNumeric>1</SequenceNumeric>
                <BorderTransportMeans>
                      <ArrivalDateTime>2008-10-01</ArrivalDateTime>
                </BorderTransportMeans>
                <TransportEquipment>
                <CharacteristicCode>20</CharacteristicCode>
                <EquipmentIdentification>
                   <ID>HJCU8038001</ID>
                </EquipmentIdentification>
                </TransportEquipment>
             </Consignment>
             <Consignor>
                <Name languageID="zh">深圳贸易公司</Name>
                <Address>
                <CountryCode>CN</CountryCode>
                <Line languageID="zh">深圳东门一三路九号二楼</Line>
                </Address>
             </Consignor>
             <CustomsGoodsItem>
                <SequenceNumeric>1</SequenceNumeric>
                <Commodity>
                <Description languageID="zh">女装 100%绵质衬衫</Description>
                </Commodity>
                <GoodsPackaging>
                <QuantityQuantity>2000</QuantityQuantity>
                <TypeCode>9E</TypeCode>
                </GoodsPackaging>
             </CustomsGoodsItem>
          </GoodsShipment>
          <Importer>
             <ID schemeID="BR">12345678</ID>
             <Name languageID="en">Chan's Trading Company Limited</Name>
             <Address>
                <CityName>HONG KONG</CityName>
                <CountryCode>HK</CountryCode>
                <Line languageID="en">Room 7001,Central Building</Line>
```

```
               <Line>Hong Kong Road, Hong Kong</Line>
            </Address>
            <Contact>
               <Name>Chan Tai Man</Name>
               <Communication>
                <ID>21234568</ID>
                <TypeID>TE</TypeID>
               </Communication>
            </Contact>
         </Importer>
         </Declaration>
         </DocumentMetadata>
      </Object>

      <Object Id="Res3">
            <DocumentMetadata>
            <WCODataModelVersion>2.0</WCODataModelVersion>
            <WCODocumentName>IM1</WCODocumentName>
            <CountryCode>HK</CountryCode>
            <AgencyName>C&amp;ED</AgencyName>
            <AgencyAssignedCustomizedDocumentName>AIM</AgencyAssignedCustomizedDocumentName>
            <AgencyAssignedCustomizedDocumentVersion>1.0</AgencyAssignedCustomizedDocumentVersion>
            <Declaration>
               <FunctionCode>2</FunctionCode>
               <ID>40010900001D59</ID>
               <TypeCode>R01</TypeCode>
               <VersionID>1</VersionID>
               <Agent>
                  <ID>99999999-X99</ID>
               </Agent>
            <GoodsShipment>
               <SequenceNumeric>1</SequenceNumeric>
            <Consignee>
               <Name languageID="en">ABC (Hong Kong) Company Limited</Name>
               <Address>
               <CityName>HONG KONG</CityName>
               <CountryCode>HK</CountryCode>
               <Line languageID="en">Room 9001, Harbour Building</Line>
               <Line>38 Pier Road, Central</Line>
               </Address>
            </Consignee>
            <Consignment>
               <SequenceNumeric>1</SequenceNumeric>
               <BorderTransportMeans>
                     <ArrivalDateTime>2008-10-01</ArrivalDateTime>
               </BorderTransportMeans>
```

```
                <TransportEquipment>
                 <CharacteristicCode>20</CharacteristicCode>
                 <EquipmentIdentification>
                    <ID>HJCU8038001</ID>
                 </EquipmentIdentification>
                </TransportEquipment>
             </Consignment>
             <Consignor>
                <Name languageID="zh">深圳贸易公司</Name>
                <Address>
                 <CountryCode>CN</CountryCode>
                 <Line languageID="zh">深圳东门一三路九号二楼</Line>
                </Address>
             </Consignor>
             <CustomsGoodsItem>
                <SequenceNumeric>1</SequenceNumeric>
                <Commodity>
                 <Description languageID="zh">100%绵花原料</Description>
                </Commodity>
                <GoodsMeasure>
                 <GrossMassMeasure unitCode="KGM">50</GrossMassMeasure>
                 <TariffQuantity>1</TariffQuantity>
                </GoodsMeasure>
             </CustomsGoodsItem>
          </GoodsShipment>
          <Importer>
             <ID schemeID="BR">12345678</ID>
             <Name languageID="en">Chan's Trading Company Limited</Name>
             <Address>
                <CityName>HONG KONG</CityName>
                <CountryCode>HK</CountryCode>
                <Line languageID="en">Room 7001,Central Building</Line>
                <Line>Hong Kong Road, Hong Kong</Line>
             </Address>
             <Contact>
                <Name>Chan Tai Man</Name>
                <Communication>
                 <ID>21234568</ID>
                 <TypeID>TE</TypeID>
                </Communication>
             </Contact>
          </Importer>
          </Declaration>
          </DocumentMetadata>
       </Object>
```

```
        <Object Id="Res4">
             <DocumentMetadata>
             <WCODataModelVersion>2.0</WCODataModelVersion>
             <WCODocumentName>CRI</WCODocumentName>
             <CountryCode>HK</CountryCode>
             <AgencyName>C&amp;amp;ED</AgencyName>
             <AgencyAssignedCustomizedDocumentName>ACRID</AgencyAssignedCustomizedDocumentName>
             <AgencyAssignedCustomizedDocumentVersion>1.0</AgencyAssignedCustomizedDocumentVersion>
          <Declaration>
             <FunctionCode>2</FunctionCode>
             <ID>40010900001D68</ID>
             <TypeCode>R03</TypeCode>
             <VersionID>1</VersionID>
             <Agent>
                <ID>99999999-X99</ID>
             </Agent>
             <BorderTransportMeans>
                <ID>AA1234</ID>
             </BorderTransportMeans>
             <Carrier>
                <ID schemeID="RUID">123456</ID>
                <Name languageID="en">Chan Tai Man</Name>
             </Carrier>
          </Declaration>
          </DocumentMetadata>
        </Object>
</RocarsData>

------=_Part_210_18012078.1216972450671--
```

B.3.7.6.7 Sample ebXML Message for RESPONSE to Quick Bundling

The following ebXML Message example illustrates a case of RESPONSE messages in reply to a Quick Bundling Request, which consists of 3 AIM and an ACRID XML messages.

```
MIME-Version: 1.0
SOAPAction: "ebXML"
Content-Type: multipart/related; type="text/xml"; boundary="----=_Part_210_18012078.1216972450671"

------=_Part_210_18012078.1216972450671
Content-Type: text/xml; charset=UTF-8
Content-Id:  <soappart>

<?xml version="1.0" encoding="UTF-8"?>
<SOAP:Envelope   xmlns:SOAP="http://schemas.xmlsoap.org/soap/envelope/"
                 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                 xmlns:xlink="http://www.w3.org/1999/xlink"
                 xsi:schemaLocation="http://schemas.xmlsoap.org/soap/envelope/
                 http://www.oasis-open.org/committees/ebxml-msg/schema/envelope.xsd
                 http://www.w3.org/1999/xlink
                 http://www.oasis-open.org/committees/ebxml-msg/schema/xlink.xsd">
   <SOAP:Header
          xsi:schemaLocation="http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd
          http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd">
      <eb:MessageHeader   eb:version="2.0"
                          SOAP:mustUnderstand="1"
                          xmlns:eb="http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd">
         <eb:From>
            <eb:PartyId eb:type="ROCARS_PARTY_ID">GV0000</eb:PartyId>
         </eb:From>
         <eb:To>
            <eb:PartyId eb:type="ROCARS_PARTY_ID">123456</eb:PartyId>
         </eb:To>
         <eb:CPAId>12345601</eb:CPAId>
         <eb:ConversationId>123456:GV0000:123456R91010000001</eb:ConversationId>
         <eb:Service eb:type="ROCARS_SERVICE_ID">ROCARS</eb:Service>
         <eb:Action>MessageDelivery</eb:Action>
         <eb:MessageData>
            <eb:MessageId>234200417071084302</eb:MessageId>
```

```
            <eb:Timestamp>2007-12-23T18:07:10.843+08:00</eb:Timestamp>
         </eb:MessageData>
         <eb:DuplicateElimination/>
      </eb:MessageHeader>
      <eb:SyncReply
            xmlns:eb="http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd"
            SOAP:actor="http://schemas.xmlsoap.org/soap/actor/next"
            SOAP:mustUnderstand="1" eb:version="2.0"/>
      <eb:AckRequested eb:signed="false" eb:version="2.0"
            SOAP:actor="urn:oasis:names:tc:ebxml-msg:actor:toPartyMSH"
            SOAP:mustUnderstand="1"
            xmlns:eb="http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd"/>
      <Signature xmlns="http://www.w3.org/2000/09/xmldsig#"
                  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                  xsi:schemaLocation="http://www.w3.org/2000/09/xmldsig#
                        http://www.w3.org/TR/xmldsig-core/xmldsig-core-schema.xsd">
            <SignedInfo>
               <CanonicalizationMethod Algorithm="http://www.w3.org/TR/2001/REC-xml-c14n-20010315"/>
               <SignatureMethod Algorithm="http://www.w3.org/2000/09/xmldsig#rsa-sha1" />
              <Reference URI="">
               <Transforms>
                  <Transform Algorithm="http://www.w3.org/2000/09/xmldsig#enveloped-signature"/>
                  <Transform Algorithm="http://www.w3.org/TR/1999/REC-xpath-19991116">
                     <XPath> not(ancestor-or-self::node()[@SOAP:actor=
                        &amp;quot;urn:oasis:names:tc:ebxml-msg:actor:nextMSH&amp;quot;]
                              | ancestor-or-self::node()[@SOAP:actor=
                        &amp;quot;http://schemas.xmlsoap.org/soap/actor/next&amp;quot;])
                     </XPath>
                  </Transform>
                  <Transform Algorithm="http://www.w3.org/TR/2001/REC-xml-c14n-20010315"/>
               </Transforms>
                  <DigestMethod Algorithm="http://www.w3.org/2000/09/xmldsig#sha1" />
                  <DigestValue>ase50vt3338s7Uaposoyq27h4bs=</DigestValue>
              </Reference>
               <Reference URI="cid:Payload-0">
                  <DigestMethod Algorithm="http://www.w3.org/2000/09/xmldsig#sha1" />
                  <DigestValue>60NvZvtdTB+7UnlLp/H24p7h4bs=</DigestValue>
               </Reference>
            </SignedInfo>
            <SignatureValue>
               juS5RhJ884qoFR8flVXd/rbrSDVGn40CapgB7qeQiT+rr0NekEQ6BHhUA8dT3+BC
               TBUQI0dBjlml9lwzENXvS83zRECjzXbMRTUtVZiPZG2pqKPnL2YU3A9645UCjTXU
               +jgFumv7k78hieAGDzNci+PQ9KRmm//icT7JaYztgt4=
            </SignatureValue>
            <KeyInfo>
               <X509Data>
```

```
                  <X509Certificate>
                     MIIDbTCCAyygAwIBAgIGAOCdrKxkMAkGByqGSM44BAMwezELMAkGA1UEBhMCSUUx
                     DzANBgNVBAgTBkR1YmxpbjElMCMGA1UEChMcQmFsdGltb3JlIFRlY2hub2xvZ2ll
                     cywgTHRkLjERMA8GA1UECxMIWC9TZWN1cmUxITAfBgNVBAMTGFgvU2VjdXJlIDEw
                     MjQtYml0IERTQSBDQTAeFw0wMDA3MjcxNzEzMzNaFw0wMTA3MjcxNzEzMjZaMHwx
                     CzAJBgNVBAYTAklFMQ8wDQYDVQQIEwZEdWJsaW4xJTAjBgNVBAoTHEJhbHRpbW9y
                     ZSBUZWNobm9sb2dpZXMsIEx0ZC4xETAPBgNVBAsTCFgvU2VjdXJlMSIwIAYDVQQD
                     ExlYL1NlY3VyZSAxMDI0LWJpdCBEU0EgY3J0MIIBuDCCASwGByqGSM44BAEwggEf
                     AoGBAKxbaPLj0DOst+BSz5g4eNASyda1awvFXkarroT2eo2DRZELsMZ7v8AryADI
                     bpDwSxRE/GyX/29nn/qKsWWoxG/vPM5WaMhvIP8DHwwR08c/gp6MC2oZwgk2AaeZ
                     LexvKlKGybr48pcI9bLe1fS7LtN4lzF7W4q4lIxWuYFEWrDfAhUAkEjAFpCe4lcU
                     Odwphpzf+tBaUdsCgYEAoe14R2OtyKx+s+60O5BRNMOYpIg2TU/f15N3bsDErKOW
                     tKXeNK9FS7dWStreDxo2SSgOonqAd4FuJ/4uva7GgNL4ULIqY7E+mW5iwJ7n/WTE
                     Lh98mEocsLXkNh24HcH4BZfSCTruuzmCyjdV1KSqX/Eux04HfCWYmdxN3SQ/qqwD
                     gYUAAoGBAKQOTZ2b3Hee+FkV7jgO2Xwv+y6reHAdDES1rR7m7SaFTmqPYm+a8uK0
                     5NK+nXZzrwCBipLbrcyt8prypXktwzq8GUICfvwQ1g1vJDvUeuqOq3Y4kqGwYv9H
                     NldfnZKjoIxZis9/eZrwjmRoQu36gFYR2rdhIxjzH4EmcgAWu/tZozswOTAPBgNV
                     HQ8BAf8EBQMDAIAAMBEGA1UdDgQKBAiA4IML4dndEDATBgNVHSMEDDAKgAiHoMnY
                     nDxZUDAJBgcqhkjOOAQDAzAAMC0CFQCEXa1E2ueJ8WMX5nP1lCcBWhxC2wIUGUCB
                     b6M6Oj3NQAJbnZsdY63rKa0=
                  </X509Certificate>
               </X509Data>
            </KeyInfo>
      </Signature>
   </SOAP:Header>
   <SOAP:Body
        xsi:schemaLocation="http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd
        http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd">
      <eb:Manifest  eb:version="2.0"
                  xmlns:eb="http://www.oasis-open.org/committees/ebxml-msg/schema/msg-header-2_0.xsd">
        <eb:Reference eb:id="Payload-0" xlink:href="cid:Payload-0" xlink:type="simple">
        </eb:Reference>
      </eb:Manifest>
   </SOAP:Body>
</SOAP:Envelope>

------=_Part_210_18012078.1216972450671
Content-ID: <Payload-0>
Content-Type: application/xml; charset=UTF-8

<?xml version="1.0" encoding="UTF-8"?>
<RocarsData>
        <Object Id="Res1">
             <DocumentMetadata>
             <WCODataModelVersion>N/A</WCODataModelVersion>
```

```
            <WCODocumentName>N/A</WCODocumentName>
            <CountryCode>HK</CountryCode>
            <AgencyName>C&amp;ED</AgencyName>
            <AgencyAssignedCustomizedDocumentName>RES</AgencyAssignedCustomizedDocumentName>
            <AgencyAssignedCustomizedDocumentVersion>1.0</AgencyAssignedCustomizedDocumentVersion>
            <Response>
               <FunctionCode>11</FunctionCode>
               <ID>12345678901234</ID>
               <VersionID>1</VersionID>
               <AdditionalInformation>
                  <StatementCode>001</StatementCode>
                  <StatementDescription>1234567890</StatementDescription>
               </AdditionalInformation>
               <Declaration>
                  <AcceptanceDateTime>2008-11-01T11:22:33</AcceptanceDateTime>
                  <FunctionCode>2</FunctionCode>
                  <ID>40010900001D3B</ID>
                  <TypeCode>R01</TypeCode>
                  <VersionID>1</VersionID>
               </Declaration>
            </Response>
         </DocumentMetadata>
      </Object>
      <Object Id="Res2">
            <DocumentMetadata>
            <WCODataModelVersion>N/A</WCODataModelVersion>
            <WCODocumentName>N/A</WCODocumentName>
            <CountryCode>HK</CountryCode>
            <AgencyName>C&amp;ED</AgencyName>
            <AgencyAssignedCustomizedDocumentName>RES</AgencyAssignedCustomizedDocumentName>
            <AgencyAssignedCustomizedDocumentVersion>1.0</AgencyAssignedCustomizedDocumentVersion>
            <Response>
               <FunctionCode>11</FunctionCode>
               <ID>12345678901243</ID>
               <VersionID>1</VersionID>
               <AdditionalInformation>
                  <StatementCode>001</StatementCode>
                  <StatementDescription>1234567909</StatementDescription>
               </AdditionalInformation>
               <Declaration>
                  <AcceptanceDateTime>2008-11-01T11:22:33</AcceptanceDateTime>
                  <FunctionCode>2</FunctionCode>
                  <ID>40010900001D4A</ID>
                  <TypeCode>R01</TypeCode>
                  <VersionID>1</VersionID>
               </Declaration>
```

```
            </Response>
         </DocumentMetadata>
      </Object>
      <Object Id="Res3">
            <DocumentMetadata>
            <WCODataModelVersion>N/A</WCODataModelVersion>
            <WCODocumentName>N/A</WCODocumentName>
            <CountryCode>HK</CountryCode>
            <AgencyName>C&amp;ED</AgencyName>
            <AgencyAssignedCustomizedDocumentName>RES</AgencyAssignedCustomizedDocumentName>
            <AgencyAssignedCustomizedDocumentVersion>1.0</AgencyAssignedCustomizedDocumentVersion>
            <Response>
               <FunctionCode>11</FunctionCode>
               <ID>12345678901252</ID>
               <VersionID>1</VersionID>
               <AdditionalInformation>
                  <StatementCode>001</StatementCode>
                  <StatementDescription>1234567918</StatementDescription>
               </AdditionalInformation>
               <Declaration>
                  <AcceptanceDateTime>2008-11-01T11:22:33</AcceptanceDateTime>
                  <FunctionCode>2</FunctionCode>
                  <ID>40010900001D59</ID>
                  <TypeCode>R01</TypeCode>
                  <VersionID>1</VersionID>
               </Declaration>
            </Response>
         </DocumentMetadata>
      </Object>
      <Object Id="Res4">
            <DocumentMetadata>
            <WCODataModelVersion>N/A</WCODataModelVersion>
            <WCODocumentName>N/A</WCODocumentName>
            <CountryCode>HK</CountryCode>
            <AgencyName>C&amp;ED</AgencyName>
            <AgencyAssignedCustomizedDocumentName>RES</AgencyAssignedCustomizedDocumentName>
            <AgencyAssignedCustomizedDocumentVersion>1.0</AgencyAssignedCustomizedDocumentVersion>
            <Response>
               <FunctionCode>11</FunctionCode>
               <ID>12345678901234</ID>
               <VersionID>1</VersionID>
               <AdditionalInformation>
                  <StatementCode>003</StatementCode>
                  <StatementDescription>345678</StatementDescription>
               </AdditionalInformation>
               <Declaration>
```

```
                    <AcceptanceDateTime>2008-11-01T11:22:33</AcceptanceDateTime>
                    <FunctionCode>2</FunctionCode>
                    <ID>40010900001D68</ID>
                    <TypeCode>R03</TypeCode>
                    <VersionID>1</VersionID>
                 </Declaration>
              </Response>
           </DocumentMetadata>
        </Object>
<RocarsData>
------=_Part_210_18012078.1216972450671--
```

B4 Road Cargo System (ROCARS) Extraction of Data File for Data Inheritance (DI) in System-to-System Interface

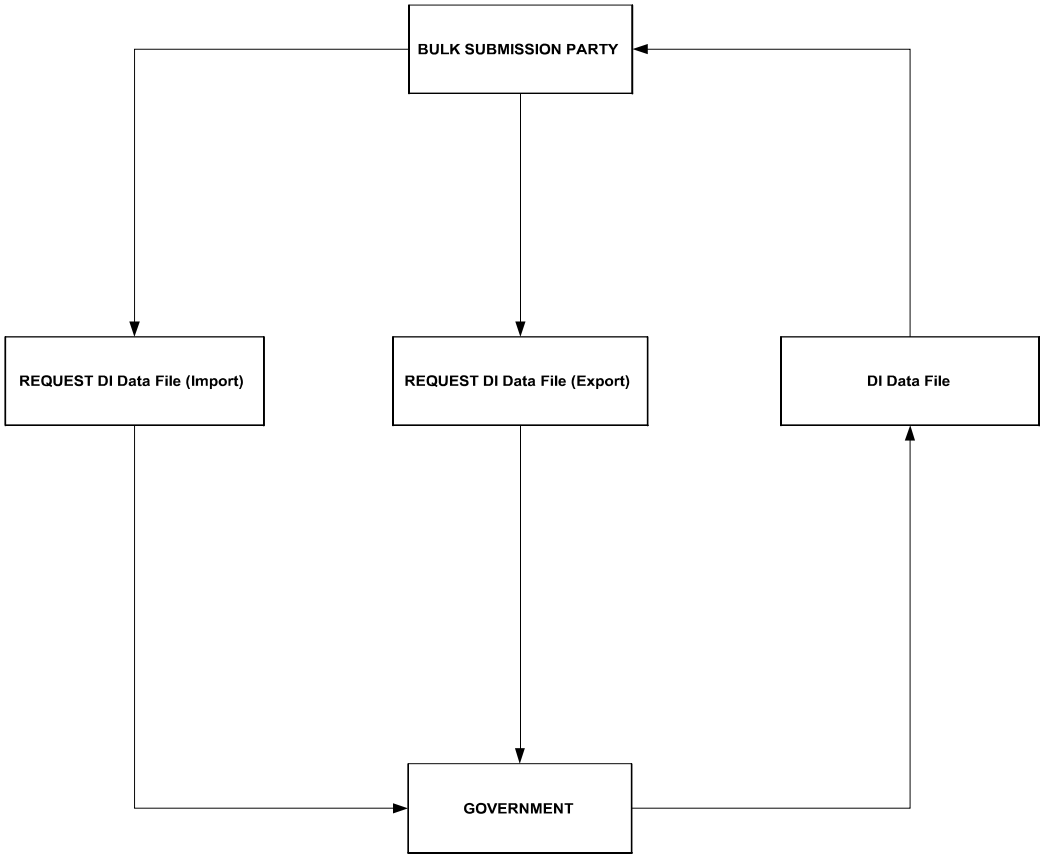
B.4.1 Data Inheritance Function in System-to-System Interface

This function is for the Bulk Submission Party to request extraction of the submitted consignment information and the related bundling information via the System-to-System Interface from ROCARS for Data Inheritance (DI) purpose.

This Section only covers the extraction of the data file for Data Inheritance in the ROCARS System-to-System Interface. For the details of the Data Inheritance from ROCARS to TDEC, please refer to "Specification for Data Inheritance from ROCARS to TDEC of Government Electronic Trading Services (GETS) System" (TDEC DI Specification) issued by Commerce and Economic Development Bureau. This Section shall be read together with the TDEC DI Specification.

The diagram below shows the equivalent XML Message Flows.

Extraction of Date File for Data Inheritance in System-to-System Interface
XML Message Flows



B.4.2 Business Processes

DI Data File Request

With the System-to-System Interface, the Bulk Submission Party (i.e. the Importer, Exporter or Agent) can extract the data file for DI purpose from ROCARS in the standard message structure defined in the Instructions.

A series of validation will be done to ensure that the electronic signatures of the senders are correct and the basic information of the consignment/bundling message is valid.

During the validation process, if the message is found to contain application or syntax errors, a Response message with description and explanation of the error will be returned to the Bulk Submission Party. In such case, no DI Data File will be sent to the Bulk Submission Party. The Bulk Submission Party should then amend and re-submit DI Data File Request in a new message.

Response with DI Data File

If all the CCRN or selection criteria within the DI Data File Request successfully pass all the validations of and are accepted by the system of the Government, an ebXML Message containing the DI Data File of the requested data will be generated by the Government's system and returned to the Bulk Submission Party.

If any of the CCRN or selection criteria within the submitted DI Data File Request is found to contain application, syntax errors, or not available for extraction, an ebXML Message containing a DI Data File message with only the available consignment and bundling pair, will be returned to the Bulk Submission Party.

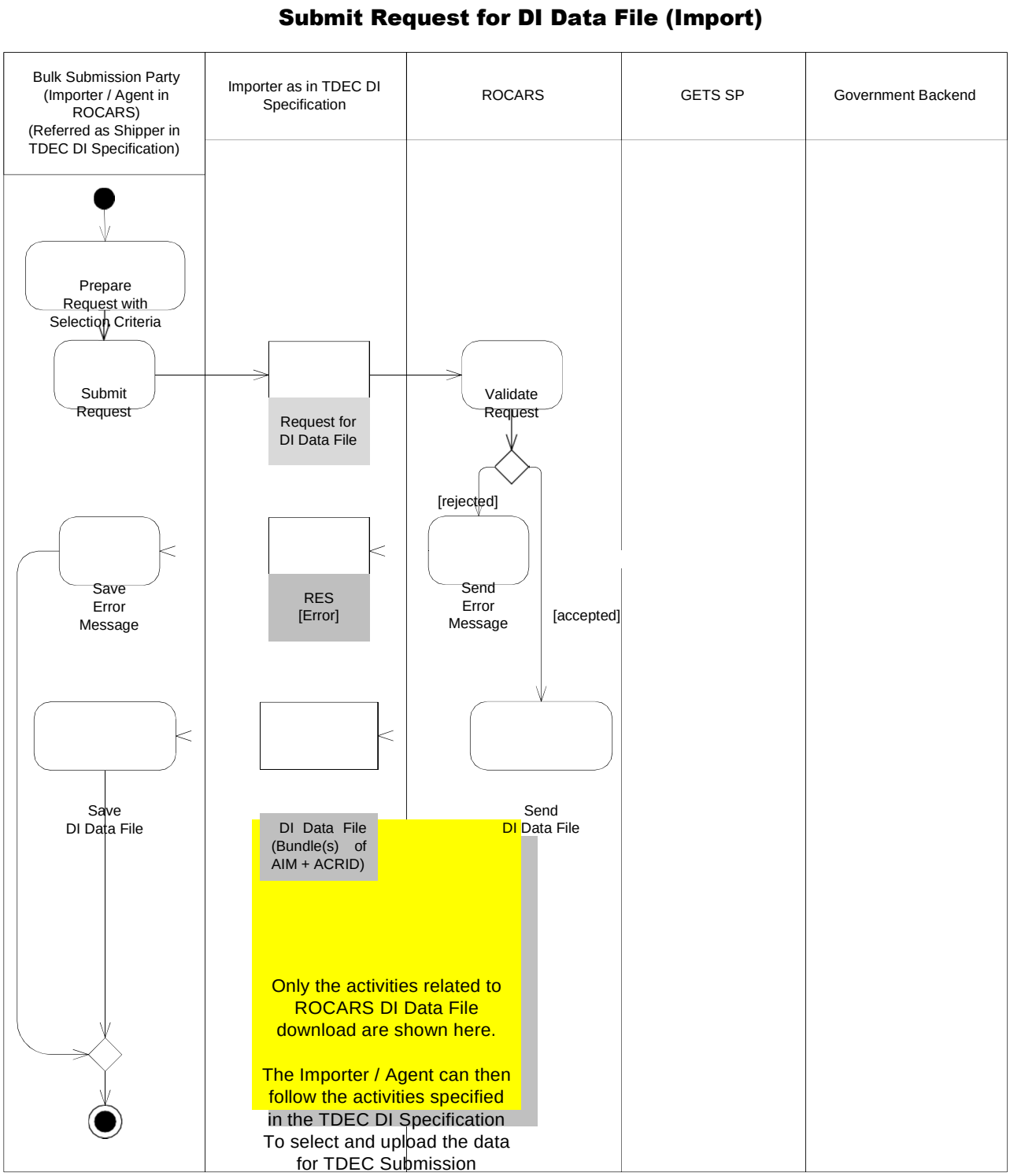
B.4.3 Activity Diagrams

The activity diagrams of extraction DI data file in System-to-System Interface are to aid people to understand the activities. They supplement the textual descriptions of the Business Processes in Section B.4.2. The activity diagrams show how the following messages are used:

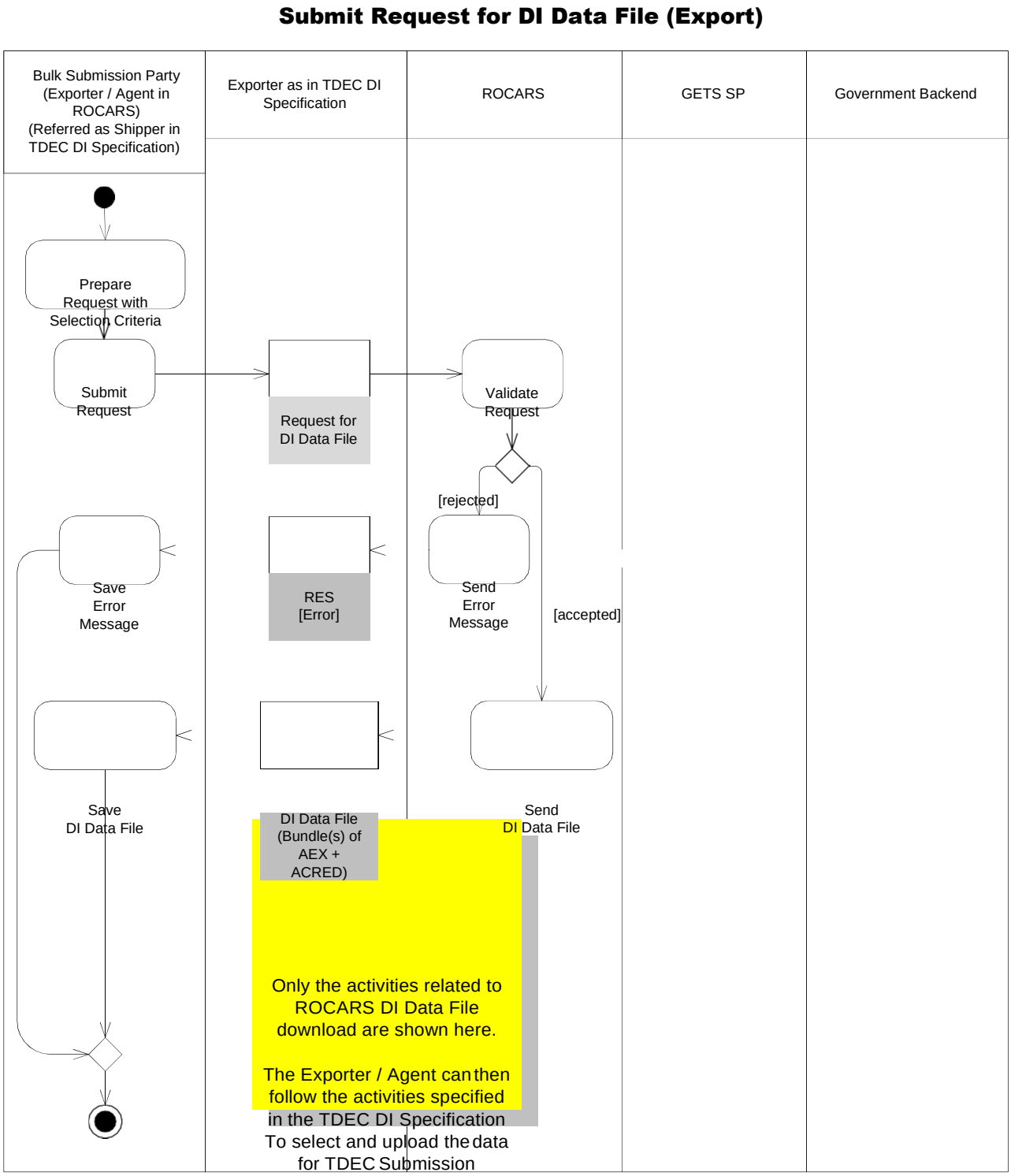
- Request DI Data File (Import)
- Request DI Data File (Export)
- Response with DI Data File

The activity diagrams below only illustrate the extraction part of DI Data File from ROCARS in the System-to-System Interface. The reader shall refer to TDEC DI Specification document for the full activity diagrams for Data Inheritance from ROCARS to TDEC.

Activity D1 : Request DI Data File (Import)



Activity D2 : Request DI Data File (Export)



B.4.4 XML Message List

Message is sent within an ebXML Envelope.

The list of XML messages is provided as follows:

Message Name	XML Schema	AgencyAssigned CustomizedDocumentName	Signature on Message	Section
Request DI Data File (Import)	IDR_1p0.xsd	IDR	Required	B.4
Request DI Data File (Export)	EDR_1p0.xsd	EDR	Required	B.4
DI Data File	http://www.gets.gov.hk/tdecBundle.xsd	N/A	Required	N/A

The Request DI Data File (Import) and (Export) messages will be explained in the following sections, with the sub-sections of General Comments, Class Diagram, Information Matrix, Element Table and Sample Message. Schema of each message can be found in separate file.

For the DI Data File, the structure is specified in the TDEC DI Specification.

B.4.5 Implementation Considerations

The requirement for the Request DI Data File (Import) and Request DI Data File (Export) messages will be the same as those messages in Bulk Submission Transaction. Please refer to B.3.5 for details.

B.4.6 Notes for DI Data File Extraction

B.4.6.1 Period available for DI Data File Extraction

The ROCARS allows the Bulk Submission Party to extract the DI Data File for all the ROCARS mandatory and optional consignment information submitted by his/her own, the CCRN, and the VRN performed in the bundling act, after the consignment(s) was bundled and crossed the LBCP as recorded in ROCARS.

The data availability for extraction by the Bulk Submission Party starts from the bundled consignment crossed the LBCP up to 1 month. After the period, the data cannot be extracted by the Bulk Submission Party.

B.4.6.2 Selection Criteria for Request of DI Data File

In the Request of DI Data File messages, the Bulk Submission Party must specify one of the following selection criteria in a single message:

1) The CCRN(s) of one or multiple consignment(s) of the same mode (either Import or Export), which were already bundled and crossed the LBCP as recorded in the ROCARS.

2) The Message Sender's Reference(s) of one or multiple consignment(s) of the same mode (either Import or Export), which were already bundled and crossed the LBCP as recorded in the ROCARS. In case that multiple Message Sender's References were specified in the original consignment submission, any of the Message Sender's Reference within the consignment can be used as the selection criteria.

3) The Unique Bundling Reference (UBR) having already crossed the LBCP as recorded in ROCARS. The related CCRN(s) and the consignments will be returned in the DI Data File if available.

B.4.6.3 Response to the Request of DI Data File

Based on the selection criteria specified, ROCARS will validate if the request data is available for extraction.

Only those available consignment(s) will be put into the DI Data File in the response message and returned to the Bulk Submission Party. All the consignment(s) cannot be retrieved will not be put into the DI Data File.

If all the requested CCRN(s) cannot be extracted, a Response message with error code will be returned to the Bulk Submission Party.

To rectify the error, the Bulk Submission Party shall review and amend the selection criteria and re-submit a Request for DI Data File message as a fresh submission. No AMENDMENT is allowed in Request for DI Data File messages.

B.4.6.4 Structure of Response to Request for DI Data File in an ebXML Message

The Government will send an ebXML Message containing a DI Data File in the predefined XML Format, when replying to a Request for DI Data File.

The Format of the DI Data File will follow the TDEC DI Specification.

B.4.7 Request for DI Data File and Response with DI Data File Messages

B.4.7.1 Request DI Data File (Import)

B.4.7.1.1 General Comments

With the System-to-System Interface, the Bulk Submission Party as an Importer/Agent can extract the data file for DI purpose from ROCARS in the standard message structure defined in the Instructions.

A series of validation will be done to ensure that the electronic signatures of the senders are correct and the basic information of the consignment/bundling message is valid.

During the validation process, if the message is found to contain application or syntax errors, a Response message with description and explanation of the error will be returned to the Bulk Submission Party. In such case, no DI Data File will be sent to the Bulk Submission Party. The Bulk Submission Party should then amend and re-submit DI Data File Request in a new message.

B.4.7.1.2 Branching Diagram

WCO ID	I.M. Index	Occurrence	XML Element Tag
N/A	IDR0100	1	Declaration
N/A	IDR0110	1	|____FunctionCode
N/A	IDR0120	1	|____ID
N/A	IDR0130	1	|____TypeCode
N/A	IDR0140	1	|____VersionID
N/A	IDR0200	0..1	|____Agent
N/A	IDR0210	1	| |____ID
N/A	IDR0300	1..9999	|____GoodsShipment
N/A	IDR0310	1	| |____SequenceNumeric
N/A	IDR0400	0..1	| |____Consignment
N/A	IDR0410	1	| | |____SequenceNumeric
N/A	IDR0500	0..1	| | |____BorderTransportMeans
N/A	IDR0510	1	| | | |____JourneyID
N/A	IDR0600	0..1	| | |____TransportContractDocument
N/A	IDR0610	1	| | |____ID
N/A	IDR0620	1	| | |____TypeCode
N/A	IDR0700	0..1	| |____CustomsGoodsItem
N/A	IDR0710	1	| |____SequenceNumeric
N/A	IDR0800	1	| |____AdditionalInformation
N/A	IDR0810	1	| |____Content
N/A	IDR0900	0..1	|____Importer
N/A	IDR0910	1	|____ID

B.4.7.1.3 Information Matrix

I.M. Index	<XML Element Tag> XML Attribute	Field Name	Field Description	M/C/O	Bilingual Field (Y/N)	Format	Rpt	Validation Requirements
(1)	**(2) (3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**	**(10)**

Common Heading Legend

(1) **I.M. Index** Information Matrix Index

(2) **<XML Element Tag>** Identifies where the data item is mapped in a particular XML message specification as published in the Implementation Instructions of ROCARS

(3) **XML Attribute** Name of the attribute and its value to describe a data element

(4) **Field Name** Business term for the data item

(5) **Field Description** Description on the field

(6) **M/C/O** Usage of the field to see whether the field is Mandatory (M), Conditional (C) or Optional (O).

Mandatory fields should be neither null nor space only;
Conditional fields, when condition is fulfilled (see validation requirement), should be neither null nor space only unless specified.

(7) **Bilingual Field (Y/N)** Usage of the field to see if bilingual input is supported.
Y - support Chinese and English input
N - support English input only

(8) **Format** Format of the data item. e.g.

a	alphabetic or ideographic (for bilingual field) characters
n	numeric characters
an	alphanumeric or ideographic (for bilingual field) characters
a3	3 alphabetic or ideographic (for bilingual field) characters, fixed length
n3	3 numerical characters, fixed length
an3	3 alphanumerical or ideographic (for bilingual field) characters, fixed length
a..3	up to 3 alphabetic or ideographic (for bilingual field) characters
n..3	up to 3 numerical characters
an..3	up to 3 alphanumerical or ideographic (for bilingual field) characters
n..14,3	up to 14 numerical characters including maximum 3 decimals – delimiter is allowed to float and is not counted as a character (e.g. 12345678901.234, 123456789012.34 and 12345678901234 are valid values for n..14,3)
year	CCYY(CC=Century, YY=Year)
date	CCYY-MM-DD (CC=Century, YY=Year, MM=Month, DD=Day)
time	HH:MiMi:SS in international time format (HH=Hour, MiMi=Minute, SS=Second e.g. 23:59:59)
datetime	CCYY-MM-DDTHH:MiMi:SS (CC=Century, YY=Year, MM=Month, DD=Day, T=T, HH=Hour, MiMi=Minute, SS=Second e.g. 2002-08-01T23:59:59)

(9)	**Rpt**	Number of repetition of the corresponding field. This should be interpreted together with the property on M/C/O (described at (6) above). Unless otherwise specified, the following examples should apply: M 10 the field can repeat for a maximum of ten times, with the first occurrence being mandatory and subsequent occurrence optional C 5 the field can repeat for a maximum of five times, with the first occurrence being conditional and subsequent occurrence optional O 3 the field can repeat for a maximum of three times, with all occurrence optional
(10)	**Validation Requirements**	Specifies the individual validation rules for the data item

Note: Please refer to the corresponding XSD file for the sequence of the data elements.

MESSAGE TYPE : IDR REQUEST FOR DI DATA FILE (IMPORT)

I.M. Index	<XML Element Tag> XML Attribute	Field Name	Field Description	M /C /O	Bilingual Field (Y/N)	Format	Rpt	Validation Requirements
IDR0100	<Declaration>	-	-	M	-	-	1	
IDR0110	<FunctionCode>	FunctionCode	Function of the message	M	N	n..2	1	Must be “4” for IDR Fresh Submission / Amendment /Cancellation 1= Cancellation 2= Fresh Submission 4= Amendment
IDR0120	<ID>	ID	Unique Declaration Identification (UDI)	M	N	an..35	1	This is the unique reference assigned by the bulk submission party for each declaration and this number will be quoted in all future communications between the Government and the bulk submission party. The Unique Declaration Identification (UDI) is 14 characters long. For format of UDI, please see section B.3.5. If it is an original submission, UDI must not previously exist in the system of ROCARS. If it is an amendment or cancellation, UDI must be the same as the UDI of the fresh submission.
IDR0130	<TypeCode>	TypeCode	Type of the message	M	N	an..3	1	Must be “R07” for IDR
IDR0140	<VersionID>	VersionID	Individual transaction reference number	M	N	n..2	1	Must be “1” for IDR
IDR0200	<Agent>	-	-	C	-	-	1	Exists if the IDR is submitted by an Agent for extracting DI Data File for the previous consignment(s) submitted by the same Agent. Must not exist if the IDR is submitted by an Importer.
IDR0210	<ID>	AgentID	Agent Identification	C	N	an..17	1	Must exist if the IDR is made through an Agent. Must not exist if the IDR is made by the Importer The value must be the Business Registration Number of a ROCARS registered Agent For format of Business Registration Number should be 99999999-X99 Characters 1-8 shall be numeric. Character 9 shall be the '-' (dash). Characters 10-12 represent the

MESSAGE TYPE : IDR REQUEST FOR DI DATA FILE (IMPORT)								
								branch number where character 10 shall be alphanumeric and characters 11-12 shall be numeric. The Business Registration number must be valid.
IDR0300	<GoodsShipment>	-	-	M	-	-	9999	Must exist. The maximum occurrence will be 1 if the selection criterion is UBR The maximum occurrence will be 9999 if the selection criterion is CCRN or Message Sender's Reference.
IDR0310	<SequenceNumeric>	SequenceNumeric		M	N	n..5	1	Unique running sequence for identifying the line of the shipment..
IDR0400	<Consignment>			C	-	-	1	Exists if the selection criteria specified is UBR or CCRN. Must not exist if the selection criteria specified is Message Sender's Reference.
IDR0410	<SequenceNumeric>	Sequence		M	N	n..5	1	Must be 1.
IDR0500	<BorderTransportMeans>			C	-	-	1	Exists if the selection criterion is UBR.
IDR0510	<JourneyID>	Journey ID	The Unique Bundling Reference to be specified as the selection criterion	M	N		1	Selection criterion - Unique Bundling Reference (UBR). Only 1 UBR can be specified in a IDR message.
IDR0600	<TransportContractDocument>			C	-	-	1	Exists if the selection criterion is CCRN
IDR0610	<ID>	ID	Customs Cargo Reference Number (CCRN)	M	N	an..35	1	Must be a valid CCRN of a related consignment to be bundled with this trip.
IDR0620	<TypeCode>	TypeCode	Type of Document	M	N	an..3	1	Must be "CRN"
IDR0700	<CustomsGoodsItem>			C	-	-	1	Exists if the selection criterion is Message Sender's Reference
IDR0710	<SequenceNumeric>	Sequence		M	N	n..5	1	Must be "1" for IDR
IDR0800	<AdditionalInformation>			C	-	-	1	Exists if the selection criterion is Message Sender's Reference
IDR0810	<Content>	Free Text	Message Sender's Reference Free text field available to the message sender for information	M	Y	an..512	1	The business validation on the maximum length of this field is set to 35 characters, instead of 512 characters defined in WCO. Must not > 35 characters if exist

MESSAGE TYPE : IDR REQUEST FOR DI DATA FILE (IMPORT)								
IDR0900	<Importer>			C	-	-	1	Exists if the IDR is submitted by an Importer for extracting DI Data File for the previous consignment(s) submitted by the same Importer. Must not exist if the IDR is submitted by an Agent.
IDR0910	<ID schemeID="value">	ID	Importer HK Business Registration number/HKID/Passport/Travel Document / ROCARS Identification Number	M	N	an..17	1	The Business Registration Number / HKID / Passport / Travel Document / ROCARS Identification Number of the Importer must be specified For the Exporter in an export consignment message, or the Importer in an import consignment message, either be the Business Registration Number / ROCARS Identification Number or Hong Kong Identity Card Number. Organizations without the Hong Kong Business Registration Number are allowed to use the ROCARS Identification Number (ROCARS ID) in the Import/Export consignment message. It must be in valid format for Business Registration Number /ROCARS Identification Number / Hong Kong Identity Card Number For format of Business Registration Number should be 99999999-X99 Characters 1-8 shall be numeric. Character 9 shall be the '-' (dash). Characters 10-12 represent the branch number where character 10 shall be alphanumeric and characters 11-12 shall be numeric. The Business Registration number must be valid. For format of Hong Kong Identity Card, (a) A999999X - 1 alpha, 6 digits, and a check digit (0-9, or A) A999999X should be used (b) AA999999X - 2 alphas, 6 digits, and a check digit (0-9, or A) AA999999X should be used.
IDR0911		schemeID	ID Type Indicator	M	N		1	The attribute field to indicate the type of identifier: BR = Business Registration Number HKID = Hong Kong Identity Card RIN = ROCARS Identification Number

MESSAGE TYPE : IDR REQUEST FOR DI DATA FILE (IMPORT)								
								TD = Passport / Travel Document Number

B.4.7.1.4 WCO Mini Message

In ROCARS implementation, a non-CCTS-compliant XML envelope <DocumentMetadata> will be used to encapsulate the required metadata as well as the standard procedure message or mini message itself.

Although the ROCARS IDR message is not mapped to any WCO 2.0 standard message, the tags shall be specified for information on document name and version used as well as for implementation consistency with other ROCARS messages.

The following example shows the structure and values of the ROCARS IDR XML message after encapsulating the metadata using the <DocumentMetadata> envelope:

```
<DocumentMetadata>
     <WCODataModelVersion>N/A</WCODataModelVersion>
     <WCODocumentName>N/A</WCODocumentName>
     <CountryCode>HK</CountryCode>
     <AgencyName>C&amp;amp;ED</AgencyName>
     <AgencyAssignedCustomizedDocumentName>IDR
     </AgencyAssignedCustomizedDocumentName>
     <AgencyAssignedCustomizedDocumentVersion>1.0
     </AgencyAssignedCustomizedDocumentVersion>
     <Declaration>
        ......
     </Declaration>
</DocumentMetadata>
```

B.4.7.1.5 Sample Message

```
<?xml version="1.0" encoding="UTF-8"?>
<DocumentMetadata>
    <WCODataModelVersion>N/A</WCODataModelVersion>
    <WCODocumentName>N/A</WCODocumentName>
    <CountryCode>HK</CountryCode>
    <AgencyName>C&amp;ED</AgencyName>
    <AgencyAssignedCustomizedDocumentName>IDR</AgencyAssignedCustomizedDocumentN
ame>
    <AgencyAssignedCustomizedDocumentVersion>1.0</AgencyAssignedCustomizedDocume
ntVersion>
<Declaration>
        <FunctionCode>1</FunctionCode>
        <ID>40010900001D4A</ID>
        <TypeCode>R07</TypeCode>
        <VersionID>1</VersionID>
        <Agent>
            <ID>99999999-X99</ID>
        </Agent>
        <GoodsShipment>
            <SequenceNumeric>1</SequenceNumeric>
            <Consignment>
                <SequenceNumeric>1</SequenceNumeric>
                <TransportContractDocument>
                    <ID>3000123451</ID>
                    <Type>CRN</Type>
                </TransportContractDocument>
            </Consignment>
        </GoodsShipment>
        <GoodsShipment>
            <SequenceNumeric>2</SequenceNumeric>
            <Consignment>
                <SequenceNumeric>1</SequenceNumeric>
                <TransportContractDocument>
                    <ID>3000123460</ID>
                    <Type>CRN</Type>
                </TransportContractDocument>
            </Consignment>
        </GoodsShipment>
        <GoodsShipment>
            <SequenceNumeric>3</SequenceNumeric>
            <Consignment>
                <SequenceNumeric>1</SequenceNumeric>
                <TransportContractDocument>
                    <ID>3000123479</ID>
                    <Type>CRN</Type>
                </TransportContractDocument>
            </Consignment>
        </GoodsShipment>
</Declaration>
</DocumentMetadata>
```

B.4.7.2 Request DI Data File (Export)

B.4.7.2.1 General Comments

With the System-to-System Interface, the Bulk Submission Party as an Exporter/Agent can extract the data file for DI purpose from ROCARS in the standard message structure defined in the Instructions.

A series of validation will be done to ensure that the electronic signatures of the senders are correct and the basic information of the consignment/bundling message is valid.

During the validation process, if the message is found to contain application or syntax errors, a Response message with description and explanation of the error will be returned to the Bulk Submission Party. In such case, no DI Data File will be sent to the Bulk Submission Party. The Bulk Submission Party should then amend and re-submit DI Data File Request in a new message.

B.4.7.2.2 Branching Diagram

WCO ID	I.M. Index	Occurrence	XML Element Tag
N/A	EDR0100	1	Declaration
N/A	EDR0110	1	|____FunctionCode
N/A	EDR0120	1	|____ID
N/A	EDR0130	1	|____TypeCode
N/A	EDR0140	1	|____VersionID
N/A	EDR0200	0..1	|____Agent
N/A	EDR0210	1	| |____ID
N/A	EDR0300	0..1	|____Exporter
N/A	EDR0310	1	|____ID
N/A	EDR0400	1..9999	|____GoodsShipment
N/A	EDR0410	1	| |____SequenceNumeric
N/A	EDR0500	0..1	| |____Consignment
N/A	EDR0510	1	| | |____SequenceNumeric
N/A	EDR0600	0..1	| | |____BorderTransportMeans
N/A	EDR0610	1	| | | |____JourneyID
N/A	EDR0700	0..1	| | |____TransportContractDocument
N/A	EDR0710	1	| | |____ID
N/A	EDR0720	1	| | |____TypeCode
N/A	EDR0800	0..1	| |____CustomsGoodsItem
N/A	EDR0810	1	| |____SequenceNumeric
N/A	EDR0900	1	| |____AdditionalInformation
N/A	EDR0910	1	| |____Content

B.4.7.2.3 Information Matrix

I.M. Index	<XML Element Tag> XML Attribute	Field Name	Field Description	M/C/O	Bilingual Field (Y/N)	Format	Rpt	Validation Requirements
(1)	**(2) (3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**	**(10)**

Common Heading Legend

(11) **I.M. Index** Information Matrix Index

(12) **<XML Element Tag>** Identifies where the data item is mapped in a particular XML message specification as published in the Implementation Instructions of ROCARS

(13) **XML Attribute** Name of the attribute and its value to describe a data element

(14) **Field Name** Business term for the data item

(15) **Field Description** Description on the field

(16) **M/C/O** Usage of the field to see whether the field is Mandatory (M), Conditional (C) or Optional (O).

Mandatory fields should be neither null nor space only;
Conditional fields, when condition is fulfilled (see validation requirement), should be neither null nor space only unless specified.

(17) **Bilingual Field (Y/N)** Usage of the field to see if bilingual input is supported.
Y - support Chinese and English input
N - support English input only

(18) **Format** Format of the data item. e.g.

a	alphabetic or ideographic (for bilingual field) characters
n	numeric characters
an	alphanumeric or ideographic (for bilingual field) characters
a3	3 alphabetic or ideographic (for bilingual field) characters, fixed length
n3	3 numerical characters, fixed length
an3	3 alphanumerical or ideographic (for bilingual field) characters, fixed length
a..3	up to 3 alphabetic or ideographic (for bilingual field) characters
n..3	up to 3 numerical characters
an..3	up to 3 alphanumerical or ideographic (for bilingual field) characters
n..14,3	up to 14 numerical characters including maximum 3 decimals – delimiter is allowed to float and is not counted as a character (e.g. 12345678901.234, 123456789012.34 and 12345678901234 are valid values for n..14,3)
year	CCYY(CC=Century, YY=Year)
date	CCYY-MM-DD (CC=Century, YY=Year, MM=Month, DD=Day)
time	HH:MiMi:SS in international time format (HH=Hour, MiMi=Minute, SS=Second e.g. 23:59:59)
datetime	CCYY-MM-DDTHH:MiMi:SS (CC=Century, YY=Year, MM=Month, DD=Day, T=T, HH=Hour, MiMi=Minute, SS=Second e.g. 2002-08-01T23:59:59)

(19)	**Rpt**	Number of repetition of the corresponding field. This should be interpreted together with the property on M/C/O (described at (6) above). Unless otherwise specified, the following examples should apply: M 10 the field can repeat for a maximum of ten times, with the first occurrence being mandatory and subsequent occurrence optional C 5 the field can repeat for a maximum of five times, with the first occurrence being conditional and subsequent occurrence optional O 3 the field can repeat for a maximum of three times, with all occurrence optional
(20)	**Validation Requirements**	Specifies the individual validation rules for the data item

Note: Please refer to the corresponding XSD file for the sequence of the data elements.

MESSAGE TYPE : EDR REQUEST FOR DI DATA FILE (EXPORT)

I.M. Index	<XML Element Tag> XML Attribute	Field Name	Field Description	M /C /O	Bilingual Field (Y/N)	Format	Rpt	Validation Requirements
EDR0100	<Declaration>	-	-	M	-	-	1	
EDR0110	<FunctionCode>	FunctionCode	Function of the message	M	N	n..2	1	Must be “4” for EDR Fresh Submission / Amendment /Cancellation 1= Cancellation 2= Fresh Submission 4= Amendment
EDR0120	<ID>	ID	Unique Declaration Identification (UDI)	M	N	an..35	1	This is the unique reference assigned by the bulk submission party for each declaration and this number will be quoted in all future communications between the Government and the bulk submission party. The Unique Declaration Identification (UDI) is 14 characters long. For format of UDI, please see section B.3.5. If it is an original submission, UDI must not previously exist in the system of ROCARS. If it is an amendment or cancellation, UDI must be the same as the UDI of the fresh submission.
EDR0130	<TypeCode>	TypeCode	Type of the message	M	N	an..3	1	Must be “R08” for EDR
EDR0140	<VersionID>	VersionID	Individual transaction reference number	M	N	n..2	1	Must be “1” for EDR
EDR0200	<Agent>	-	-	C	-	-	1	Exists if the EDR is submitted by an Agent for extracting DI Data File for the previous consignment(s) submitted by the same Agent. Must not exist if the EDR is submitted by an Exporter.
EDR0210	<ID>	AgentID	Agent Identification	C	N	an..17	1	Must exist if the EDR is made through an Agent. Must not exist if the EDR is made by the Exporter The value must be the Business Registration Number of a ROCARS registered Agent For format of Business Registration Number should be 99999999-X99 Characters 1-8 shall be numeric. Character 9 shall be the '-' (dash).

MESSAGE TYPE : EDR REQUEST FOR DI DATA FILE (EXPORT)								
								Characters 10-12 represent the branch number where character 10 shall be alphanumeric and characters 11-12 shall be numeric. The Business Registration number must be valid.
EDR0300	<Exporter>			C	-	-	1	Exists if the EDR is submitted by an Exporter for extracting DI Data File for the previous consignment(s) submitted by the same Exporter. Must not exist if the EDR is submitted by an Agent.
EDR0310	<ID schemeID="value">	ID	Exporter HK Business Registration number/HKID/Passport/Travel Document / ROCARS Identification Number	M	N	an..17	1	The Business Registration Number / HKID / Passport / Travel Document / ROCARS Identification Number of the Exporter must be specified For the Exporter in an export consignment message, or the Exporter in an Export consignment message, either be the Business Registration Number / ROCARS Identification Number or Hong Kong Identity Card Number. Organizations without the Hong Kong Business Registration Number are allowed to use the ROCARS Identification Number (ROCARS ID) in the Export/Export consignment message. It must be in valid format for Business Registration Number /ROCARS Identification Number / Hong Kong Identity Card Number For format of Business Registration Number should be 99999999-X99 Characters 1-8 shall be numeric. Character 9 shall be the '-' (dash). Characters 10-12 represent the branch number where character 10 shall be alphanumeric and characters 11-12 shall be numeric. The Business Registration number must be valid. For format of Hong Kong Identity Card, (a) A999999X - 1 alpha, 6 digits, and a check digit (0-9, or A) A999999X should be used (b) AA999999X - 2 alphas, 6 digits,

MESSAGE TYPE : EDR REQUEST FOR DI DATA FILE (EXPORT)								
								and a check digit (0-9, or A) AA999999X should be used.
EDR0311		schemeID	ID Type Indicator	M	N		1	The attribute field to indicate the type of identifier: BR = Business Registration Number HKID = Hong Kong Identity Card RIN = ROCARS Identification Number TD = Passport / Travel Document Number
EDR0400	<GoodsShipment>	-	-	M	-	-	9999	Must exist. The maximum occurrence will be 1 if the selection criterion is UBR The maximum occurrence will be 9999 if the selection criterion is CCRN or Message Sender's Reference.
EDR0410	<SequenceNumeric>	SequenceNumeric		M	N	n..5	1	Unique running sequence for identifying the line of the shipment..
EDR0500	<Consignment>			C	-	-	1	Exists if the selection criteria specified is UBR or CCRN. Must not exist if the selection criteria specified is Message Sender's Reference.
EDR0510	<SequenceNumeric>	Sequence		M	N	n..5	1	Must be 1.
EDR0600	<BorderTransportMeans>			C	-	-	1	Exists if the selection criterion is UBR.
EDR0610	<JourneyID>	Journey ID	The Unique Bundling Reference to be specified as the selection criterion	M	N		1	Selection criterion - Unique Bundling Reference (UBR). Only 1 UBR can be specified in a EDR message.
EDR0700	<TransportContractDocument>			C	-	-	1	Exists if the selection criterion is CCRN
EDR0710	<ID>	ID	Customs Cargo Reference Number (CCRN)	M	N	an..35	1	Must be a valid CCRN of a related consignment to be bundled with this trip.
EDR0720	<TypeCode>	TypeCode	Type of Document	M	N	an..3	1	Must be "CRN"
EDR0800	<CustomsGoodsItem>			C	-	-	1	Exists if the selection criterion is Message Sender's Reference
EDR0810	<SequenceNumeric>	Sequence		M	N	n..5	1	Must be "1" for EDR
EDR0900	<AdditionalInformation>			C	-	-	1	Exists if the selection criterion is Message Sender's Reference

MESSAGE TYPE : EDR REQUEST FOR DI DATA FILE (EXPORT)								
EDR0910	<Content>	Free Text	Message Sender's Reference Free text field available to the message sender for information	M	Y	an..512	1	The business validation on the maximum length of this field is set to 35 characters, instead of 512 characters defined in WCO. Must not > 35 characters if exist

B.4.7.2.4 WCO Mini Message

In ROCARS implementation, a non-CCTS-compliant XML envelope <DocumentMetadata> will be used to encapsulate the required metadata as well as the standard procedure message or mini message itself.

Although the ROCARS EDR message is not mapped to any WCO 2.0 standard message, the tags shall be specified for information on document name and version used as well as for implementation consistency with other ROCARS messages.

The following example shows the structure and values of the ROCARS EDR XML message after encapsulating the metadata using the <DocumentMetadata> envelope:

```
<DocumentMetadata>
     <WCODataModelVersion>N/A</WCODataModelVersion>
     <WCODocumentName>N/A</WCODocumentName>
     <CountryCode>HK</CountryCode>
     <AgencyName>C&amp;ED</AgencyName>
     <AgencyAssignedCustomizedDocumentName>EDR
     </AgencyAssignedCustomizedDocumentName>
     <AgencyAssignedCustomizedDocumentVersion>1.0
     </AgencyAssignedCustomizedDocumentVersion>
     <Declaration>
        ......
     </Declaration>
</DocumentMetadata>
```

B.4.7.2.5 Sample Message

```
<?xml version="1.0" encoding="UTF-8"?>
<DocumentMetadata>
    <WCODataModelVersion>N/A</WCODataModelVersion>
    <WCODocumentName>N/A</WCODocumentName>
    <CountryCode>HK</CountryCode>
    <AgencyName>C&amp;ED</AgencyName>
    <AgencyAssignedCustomizedDocumentName>EDR</AgencyAssignedCustomizedDocumentN
ame>
    <AgencyAssignedCustomizedDocumentVersion>1.0</AgencyAssignedCustomizedDocume
ntVersion>
<Declaration>
        <FunctionCode>1</FunctionCode>
        <ID>40010900001D4A</ID>
        <TypeCode>R08</TypeCode>
        <VersionID>1</VersionID>
        <Agent>
            <ID>99999999-X99</ID>
        </Agent>
        <GoodsShipment>
            <SequenceNumeric>1</SequenceNumeric>
            <Consignment>
                <SequenceNumeric>1</SequenceNumeric>
                <TransportContractDocument>
                    <ID>4000123451</ID>
                    <Type>CRN</Type>
                </TransportContractDocument>
            </Consignment>
        </GoodsShipment>
        <GoodsShipment>
            <SequenceNumeric>2</SequenceNumeric>
            <Consignment>
                <SequenceNumeric>1</SequenceNumeric>
                <TransportContractDocument>
                    <ID>4000123460</ID>
                    <Type>CRN</Type>
                </TransportContractDocument>
            </Consignment>
        </GoodsShipment>
        <GoodsShipment>
            <SequenceNumeric>3</SequenceNumeric>
            <Consignment>
                <SequenceNumeric>1</SequenceNumeric>
                <TransportContractDocument>
                    <ID>4000123479</ID>
                    <Type>CRN</Type>
                </TransportContractDocument>
            </Consignment>
        </GoodsShipment>
</Declaration>
</DocumentMetadata>
```

B.4.7.3 DI Data File

B.4.7.3.1 General Comments

If all the CCRN or selection criteria within the submitted DI Data File Request successfully pass all the validations of and are accepted by the system of the Government, a Response with DI Data File message with the requested data will be generated by the Government's system and returned to the Bulk Submission Party.

If any of the CCRN or selection criteria within the submitted DI Data File Request is found to contain application, syntax errors, or not available for extraction, the Response with DI Data File message with only the available consignment and bundling pair, will be returned to the Bulk Submission Party.

Please refer to the TDEC DI Specification for the details of the data schema.

The WCO Mini Message is not applicable to the DI Data File.

B.4.7.3.2 Sample Message

```
<?xml version="1.0" encoding="UTF-8"?>
<bd:BundleList xmlns:bd="http://www.gets.gov.hk/tdec"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://www.gets.gov.hk/tdec Bundle.xsd">
    <bd:SingleBundle>
        <AIM>
            <Declaration>
                <FunctionCode>2</FunctionCode>
                <ID>40010900001D4A</ID>
                <TypeCode>R01</TypeCode>
                <VersionID>1</VersionID>
                <Agent>
                    <ID>99999999-X99</ID>
                </Agent>
                <GoodsShipment>
                    <SequenceNumeric>1</SequenceNumeric>
                    <Consignee>
                        <Name>ABC (Hong Kong) Company Limited</Name>
                        <Address>
                            <CountryCode>HK</CountryCode>
                            <Line>Room 9001, Harbour Building</Line>
                            <Line>38 Pier Road, Central</Line>
                        </Address>
                    </Consignee>
                    <Consignment>
                        <SequenceNumeric>1</SequenceNumeric>
                        <BorderTransportMeans>
                            <ArrivalDateTime>2008-10-01</ArrivalDateTime>
                        </BorderTransportMeans>
                        <TransportEquipment>
                            <CharacteristicCode>20</CharacteristicCode>
                            <EquipmentIdentification>
                                <ID>HJCU8038001</ID>
                            </EquipmentIdentification>
                        </TransportEquipment>
                    </Consignment>
                    <Consignor>
                        <Name>深圳贸易公司</Name>
                        <Address>
                            <CountryCode>CN</CountryCode>
                            <Line>深圳东门一三路九号二楼</Line>
                        </Address>
                    </Consignor>
                    <CustomsGoodsItem>
                        <SequenceNumeric>1</SequenceNumeric>
                        <Commodity>
                            <Description>Men's woven cotton t-shirt</Description>
                        </Commodity>
                        <GoodsPackaging>
                            <QuantityQuantity>1000</QuantityQuantity>
                            <TypeCode>9E</TypeCode>
                        </GoodsPackaging>
                    </CustomsGoodsItem>
                    <CustomsGoodsItem>
                        <SequenceNumeric>2</SequenceNumeric>
                        <Commodity>
                            <Description>女装100%绵质衬衫</Description>
                        </Commodity>
```

```
                        <GoodsPackaging>
                            <QuantityQuantity>2000</QuantityQuantity>
                            <TypeCode>9E</TypeCode>
                        </GoodsPackaging>
                    </CustomsGoodsItem>
                    <CustomsGoodsItem>
                        <SequenceNumeric>3</SequenceNumeric>
                        <Commodity>
                            <Description>100%绵花原料</Description>
                        </Commodity>
                        <GoodsMeasure>
                            <GrossMassMeasure
unitCode="KGM">50</GrossMassMeasure>
                            <TariffQuantity>1</TariffQuantity>
                        </GoodsMeasure>
                    </CustomsGoodsItem>
                </GoodsShipment>
                <Importer>
                    <ID schemeID="BR">12349999-X01</ID>
                    <Name>Chan's Trading Company Limited</Name>
                    <Address>
                        <CountryCode>HK</CountryCode>
                        <Line>Room 9001, Harbour Building</Line>
                        <Line>38 Pier Road, Central</Line>
                    </Address>
                    <Contact>
                        <Name>Chan Tai Man</Name>
                        <Communication>
                            <ID>21234568</ID>
                            <TypeID>TE</TypeID>
                        </Communication>
                    </Contact>
                </Importer>
            </Declaration>
        </AIM>
        <ACRID>
            <Declaration>
                <TypeCode>R03</TypeCode>
                <BorderTransportMeans>
                    <ID>AA1234</ID>
                </BorderTransportMeans>
                <Consignment>
                    <SequenceNumeric>1</SequenceNumeric>
                    <TransportContractDocument>
                        <ID>3001234567</ID>
                        <TypeCode>CRN</TypeCode>
                    </TransportContractDocument>
                </Consignment>
            </Declaration>
        </ACRID>
    </bd:SingleBundle>
    <bd:SingleBundle>
        <AIM>
            <Declaration>
                <FunctionCode>2</FunctionCode>
                <ID>30010900001D59</ID>
                <TypeCode>R01</TypeCode>
                <VersionID>1</VersionID>
                <Agent>
                    <ID>99999999-X99</ID>
                </Agent>
```

```
            <GoodsShipment>
                <SequenceNumeric>1</SequenceNumeric>
                <Consignee>
                    <Name>ABC (Hong Kong) Company Limited</Name>
                    <Address>
                        <CityName>HONG KONG</CityName>
                        <CountryCode>HK</CountryCode>
                        <Line>Room 9001, Harbour Building</Line>
                        <Line>38 Pier Road, Central</Line>
                    </Address>
                </Consignee>
                <Consignment>
                    <SequenceNumeric>1</SequenceNumeric>
                    <BorderTransportMeans>
                        <ArrivalDateTime>2008-10-01</ArrivalDateTime>
                    </BorderTransportMeans>
                    <TransportEquipment>
                        <CharacteristicCode>20</CharacteristicCode>
                        <EquipmentIdentification>
                            <ID>HJCU8038001</ID>
                        </EquipmentIdentification>
                    </TransportEquipment>
                </Consignment>
                <Consignor>
                    <Name>ShenZhen Trading Company</Name>
                    <Address>
                        <CountryCode>CN</CountryCode>
                        <Line>236, RenMenLu, Futian, ShenZhen</Line>
                    </Address>
                </Consignor>
                <CustomsGoodsItem>
                    <SequenceNumeric>1</SequenceNumeric>
                    <Commodity>
                        <Description>T-Shirt</Description>
                    </Commodity>
                    <GoodsPackaging>
                        <QuantityQuantity>500</QuantityQuantity>
                        <TypeCode>9E</TypeCode>
                    </GoodsPackaging>
                </CustomsGoodsItem>
            </GoodsShipment>
            <Importer>
                <ID schemeID="BR">12349999-X01</ID>
                <Name>Chan's Trading Company Limited</Name>
                <Address>
                    <CountryCode>HK</CountryCode>
                    <Line>Room 9001, Harbour Building</Line>
                    <Line>38 Pier Road, Central</Line>
                </Address>
                <Contact>
                    <Name>Chan Tai Man</Name>
                    <Communication>
                        <ID>21234568</ID>
                        <TypeID>TE</TypeID>
                    </Communication>
                </Contact>
            </Importer>
        </Declaration>
    </AIM>
    <ACRID>
        <Declaration>
```

```
                <TypeCode>R03</TypeCode>
                <BorderTransportMeans>
                    <ID>AA1234</ID>
                </BorderTransportMeans>
                <Consignment>
                    <SequenceNumeric>1</SequenceNumeric>
                    <TransportContractDocument>
                        <ID>3001234576</ID>
                        <TypeCode>CRN</TypeCode>
                    </TransportContractDocument>
                </Consignment>
            </Declaration>
        </ACRID>
    </bd:SingleBundle>
    <bd:SingleBundle>
        <AIM>
            <Declaration>
                <FunctionCode>2</FunctionCode>
                <ID>30010900001D9A</ID>
                <TypeCode>R01</TypeCode>
                <VersionID>1</VersionID>
                <Agent>
                    <ID>99999999-X99</ID>
                </Agent>
                <GoodsShipment>
                    <SequenceNumeric>1</SequenceNumeric>
                    <Consignee>
                        <Name>BIG Company Limited</Name>
                        <Address>
                            <CountryCode>HK</CountryCode>
                            <Line>Room 101, Harbour Building</Line>
                            <Line>38 Pier Road, Central</Line>
                        </Address>
                    </Consignee>
                    <Consignment>
                        <SequenceNumeric>1</SequenceNumeric>
                        <BorderTransportMeans>
                            <ArrivalDateTime>2008-10-03</ArrivalDateTime>
                        </BorderTransportMeans>
                    </Consignment>
                    <Consignor>
                        <Name>廣州貿易公司</Name>
                        <Address>
                            <CountryCode>CN</CountryCode>
                            <Line>廣州一二三路四号</Line>
                        </Address>
                    </Consignor>
                    <CustomsGoodsItem>
                        <SequenceNumeric>1</SequenceNumeric>
                        <Commodity>
                            <Description>Plastic Toys</Description>
                        </Commodity>
                        <GoodsPackaging>
                            <QuantityQuantity>1000</QuantityQuantity>
                            <TypeCode>9E</TypeCode>
                        </GoodsPackaging>
                    </CustomsGoodsItem>
                </GoodsShipment>
                <Importer>
                    <ID schemeID="BR">12342222-X01</ID>
                    <Name>Toy LU Limited</Name>
```

```
                    <Address>
                        <CountryCode>HK</CountryCode>
                        <Line>Room 1, Kowloon Building</Line>
                        <Line>38 Kowloon Road, Kowloon</Line>
                    </Address>
                    <Contact>
                        <Name>Chan Tai Tai</Name>
                        <Communication>
                            <ID>21212344</ID>
                            <TypeID>TE</TypeID>
                        </Communication>
                    </Contact>
                </Importer>
            </Declaration>
        </AIM>
        <ACRID>
            <Declaration>
                <TypeCode>R03</TypeCode>
                <BorderTransportMeans>
                    <ID>GG8877</ID>
                </BorderTransportMeans>
                <Consignment>
                    <SequenceNumeric>1</SequenceNumeric>
                    <TransportContractDocument>
                        <ID>3001288888</ID>
                        <TypeCode>CRN</TypeCode>
                    </TransportContractDocument>
                </Consignment>
            </Declaration>
        </ACRID>
    </bd:SingleBundle>
</bd:BundleList>
```

- END -