



THE CUSTOMS & EXCISE DEPARTMENT
THE GOVERNMENT OF
THE HONG KONG SPECIAL ADMINISTRATIVE REGION

ROAD CARGO SYSTEM (ROCARS)
XML FILE SPECIFICATION FOR BATCH UPLOAD
FOR SHIPPERS AND AGENTS

[RT04]

Version 1.1

April 2019

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Amendment History

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

Reference	Description	Section / Page	Version no. / Date	Effective Date
1	Update the URL for other references, character code points and code list	Section 2.2 Section 3.3 Section 3.4	1.1	April 2019

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1. INTRODUCTION

1.1. Purpose

The purpose of this document is to provide the specification for the shippers and agents to prepare a data file, in XML format, of cargo information for uploading to the Batch Upload Portal.

The Batch Upload Portal is an extension of the Direct Input Portal with additional functions that allow the users to prepare the cargo information in eXtensible Markup Language (XML) format off-line and to upload it to the Portal by batch. All the on-line functions of the Direct Input Portal remain intact.

2. REFERENCES

2.1. Standards

- Implementation Instructions of the Road Cargo System (ROCARS) System-to-System Interface for Bulk Submission [RT01]
- Road Cargo System (ROCARS) Services Channel Selection Guide for Shippers and Agents [RT03]

2.2. Other References

- What is the ISO 10646 International Standard
https://www.ogcio.gov.hk/tc/our_work/business/tech_promotion/ccli/iso_10646/
- Government Electronic Trading Services (GETS) – Reference Materials
https://www.cedb.gov.hk/citb/en/Policy_Responsibilities/gets_rm.html

3. PREPARATION OF XML FILE

3.1. Business Processes

Shippers and agents shall submit the cargo information to ROCARS not more than 14 days prior to the expected date of the cargoes entering or exiting Hong Kong on trucks via the land boundary control points.

Beside direct inputting cargo information to the ROCARS Portal, shippers and agents can prepare a data file of cargo information, without accessing to the ROCARS Portal, in XML format according to this Specification. Users can prepare the XML data file in many ways, for example:

- Using tools such as a plain text editor or XML file editor / generator;
- Using the OpenOffice / Excel template provided by the C&ED; or
- Extracting and converting cargo information from their own IT system.

Once the XML data file is ready, the shippers and agents can login the ROCARS Portal with a web browser installed on a PC with Internet access to upload the file to ROCARS. The user can manipulate the uploaded consignment information in the same way as that in the Direct Input Portal. The user can amend the data, save the data, sign the data with digital certificates, submit the data to the Government and receive the corresponding CCRNs.

3.2. XML Message List

The list of XML messages is provided by C&ED as follows:

Message Name	XML Schema	AgencyAssignedCustomizedDocumentName
Batch Upload	BU_1p0.xsd	N/A
Import Consignment	AIM_1p0.xsd	AIM
Export Consignment	AEX_1p0.xsd	AEX

Common references in related to preparation of the XML messages, i.e. use of language and code values, are discussed in Sections 3.3 and 3.4. The details of preparing each of the XML messages are explained in the following Sections 3.5 to 3.9 with class diagrams, information matrixes and sample messages.

The schemas of these XML messages can be found in separate files.

3.3. Use of Language

USE OF LANGUAGE

ROCARS supports ISO/IEC 10646-1:2000. UTF-8 is used for character-set encoding for the XML messages. However, not all characters in ISO/IEC 10646-1:2000 are valid for entry. Attention shall 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 is 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” https://www.cedb.gov.hk/citb/en/Policy_Responsibilities/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 in above. These elements are marked ‘N’ in the ‘Bilingual Field’ column in information matrices in Section 3.7.

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

3.4. Code List

Data in message is frequently coded. Under 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 and can be found in the ROCARS Portal (<https://www.rocars.gov.hk/en/TechInfo.html>). The following table is a summary of these code lists applicable to Batch Upload:

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)
Land Boundary Control Point	The Government (C&ED)

3.5. Batch Upload

The schema used in the batch upload is BU_1p0.xsd. The batch upload data shall contain either import consignment(s) or export consignment(s) only.

3.5.1. Batch Upload Schema

The schema BU_1p0.xsd.

```
<?xml version="1.0" encoding="UTF-8"?>
<xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema"
elementFormDefault="qualified" attributeFormDefault="unqualified">
  <xsd:element name="RocarsData">
    <xsd:complexType>
      <xsd:sequence>
        <xsd:element name="Object" maxOccurs="unbounded">
          <xsd:complexType>
            <xsd:sequence>
              <xsd:any namespace="##any" processContents="lax"
maxOccurs="unbounded" />
            </xsd:sequence>
            <xsd:attribute name="Id" type="xsd:string" />
          </xsd:complexType>
        </xsd:element>
      </xsd:sequence>
    </xsd:complexType>
  </xsd:element>
</xsd:schema>
```

The XML data file format is illustrated below:

```
<?xml version="1.0" encoding="UTF-8"?>
<RocarsData>
  <Object Id="Res1">
    <DocumentMetadata>
      ...
    </DocumentMetadata>
  </Object>
  <Object Id="Res2">
    <DocumentMetadata>
      ...
    </DocumentMetadata>
  </Object>
  ...
  <Object Id="Res999">
    <DocumentMetadata>
      ...
    </DocumentMetadata>
  </Object>
</RocarsData>
```

3.5.2. XML Data File Requirement

The XML data file for batch upload must meet all of the following requirements specified in this Specification:

- It conforms to the XML schema structure, occurrence and validation requirements of Batch Upload, Import Consignment and Export Consignment wherever applicable
- Use of Languages
- Use of code values and encoding
- It contains at least one consignment
- The total number of consignment within a single XML data file for uploading is limited to 999
- The total file size of a single XML data file is limited to 5 Mega Bytes (5MB)

The ROCARS will validate the above requirements after the XML data file has been uploaded to the ROCARS Portal. File violating any of the above requirements will not be processed.

3.6. Import Consignment (AIM)

3.6.1. Branching Diagram (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

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WCO ID	I.M. Index	Occurrence	XML Element Tag
241	AIM1110	0..1	____CityName
242	AIM1120	1	____CountryCode
244	AIM1130	0..1	____CountrySubEntityID
243	AIM1140	0..1	____CountrySubEntityName
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

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WCO ID	I.M. Index	Occurrence	XML Element Tag
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

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3.6.2. 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 alphanumeric 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 alphanumeric 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)

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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.

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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	The only allowable value in batch upload is 2= Fresh Submission
AIM0120	<ID>	ID	Unique Declaration Identification (UDI)	M	N	an..35	1	For batch upload, the value can be <ID/> for null value.
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	The sequence number must be 1.
AIM0200	<Agent>	-	-	C	-	-	1	Necessary if uploaded by an agent.
AIM0210	<ID>	AgentID	Agent Identification	C	N	an..17	1	It can be specified as <ID/> in batch upload. Since the value is not applicable to batch upload
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
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.

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MESSAGE TYPE : AIM IMPORT CONSIGNMENT									
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.	
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 does not exist Refer to code table " Equipment Size and Type (Container)" as specified in section B.3.4.	

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MESSAGE TYPE : AIM_IMPORT_CONSIGNMENT									
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.
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.3.4.
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.

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MESSAGE TYPE : AIM_IMPORT_CONSIGNMENT								
							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.3.4.
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 document type code Refer to code table "Document Type" as specified in section B.3.4.
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.

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MESSAGE TYPE : AIM_IMPORT_CONSIGNMENT								
AIM1611		unitCode	Gross Weight Unit	C	N	an..3	1	Must not exist if declaring cargo in packages Attribute of the Gross Weight Must be a code value Refer to code table "Unit of Measure Code (Weight)" as specified in section B.3.4.
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.
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.3.4.

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MESSAGE TYPE : AIM_IMPORT_CONSIGNMENT									
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.3.4.	
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.3.4.	
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.	
AIM2000	<Importer>			M	-	-	1		
AIM2010	<ID schemeID="value">	ID	Importer HK Business Registration number/HKID/Passport/Travel Document / ROCARS Identification	C	N	an..17	1	If the message is submitted by the Importer/Exporter, the field can be empty or with a value of 'N/A' in the	

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MESSAGE TYPE : AIM IMPORT CONSIGNMENT							
			Number				<p>batch upload file.</p> <p>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.</p> <p>If this field is specified, for the Exporter in an exportconsignment 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.</p> <p>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.</p> <p>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.</p>
AIM2011		schemeID	ID Type Indicator	C	N		1 The attribute field to indicate the type of identifier: BR = Business Registration Number

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MESSAGE TYPE : AIM_IMPORT_CONSIGNMENT							
							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 If the XML file is submitted by the Importer/Exporter, it can be empty or filled with a value of 'N/A'. If the XML file is prepared by the agent on behalf of an Importer/Exporter, the name of the Importer must be specified 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.3.4.
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>			Ø	-	-	1

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MESSAGE TYPE : AIM_IMPORT_CONSIGNMENT								
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. Refer to code table "Contact Number Type" as specified in section B.3.4.

3.6.3. 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&ED</AgencyName>
    <AgencyAssignedCustomizedDocumentName>AIM
  </AgencyAssignedCustomizedDocumentName>
  <AgencyAssignedCustomizedDocumentVersion>1.0
  </AgencyAssignedCustomizedDocumentVersion>
  <Declaration>
    .....
  </Declaration>
</DocumentMetadata>
```

3.7. Export Consignment (AEX)

3.7.1. Branching Diagram (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

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WCO ID	I.M. Index	Occurrence	XML Element Tag
239	AEX0950	1..2	____Line
245	AEX0960	0..1	____PostcodeID
	AEX1000	1	____Consignment
006	AEX1010	1	____SequenceNumeric
	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

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

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3.7.2. Information Matrix

Class Name (11)								
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 alphanumeric 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 alphanumeric 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)

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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.

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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	The only allowable value in batch upload is 2= Fresh Submission
AEX0120	<ID>	ID	Unique Declaration Identification (UDI)	M	N	an..35	1	For batch upload, the value can be <ID/> for null value.
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	The sequence number must be 1.
AEX0200	<Agent>			C			1	Necessary if uploaded by an agent.
AEX0210	<ID>	AgentID	Agent Identification	C	N	an..17	1	It can be specified as <ID/> in batch upload. Since the value is not applicable to batch upload
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 field can be empty or with a value of 'N/A' in the batch upload file. 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

**XML FILE SPECIFICATION FOR BATCH UPLOAD
FOR SHIPPERS AND AGENTS**

MESSAGE TYPE : AEX EXPORT CONSIGNMENT									
									<p>message</p> <p>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.</p> <p>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</p> <p>(b) AA999999X - 2 alphas, 6 digits, and a check digit (0-9, or A) AA999999X should be used.</p>
AEX0320		schemelD	ID Type Indicator	C	N			1	<p>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</p>
AEX0330	<Name languageID="value">	Name	Exporter Name	M	Y	an..35		2	<p>If the XML file is submitted by the Importer/Exporter, it can be empty or filled with a value of 'N/A'.</p> <p>If the XML file is prepared by the agent on behalf of an Importer/Exporter, the name of the Importer must be specified</p> <p>The first occurrence must not be blank or null. Word splitting is not allowed between lines.</p>
AEX0331		languageID	<i>Language of the ExporterName</i>	O	N			2	<p>Language of the Exporter Name. Must be "zh" or "en" if specified.</p>
AEX0400	<Address>			O				1	
AEX0410	<CityName>	CityName	Exporter Address - City name	O	Y	an..35		1	

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MESSAGE TYPE : AEX EXPORT CONSIGNMENT									
AEX0420	<CountryCode>	Country Code	Exporter Address – Country/Territory Code	M	N	a2	1	1	Must be a valid Country/Territory code. Refer to code table "Country/Territory code" as specified in section B.3.4.
AEX0430	<CountrySubEntityID>	Country SubEntity ID	Exporter Address - SubEntity ID	O	Y	an..9	1	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 Name	O	Y	an..35	1	1	
AEX0450	<Line languageID = "value">	Line	Exporter Address – Detailed Location within City	M	Y	an..35	2	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	1	
AEX0500	<Contact>			O				1	
AEX0510	<Name languageID="value">	Name	Exporter Contact Name	O	Y	an..35	1	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	1	
AEX0620	<TypeID>	Type ID	Exporter Contact Number Type	O	N	an..3	1	1	Must be a valid code value. Refer to code table "Contact Number Type" as specified in section B.3.4.
AEX0700	<GoodsShipment>			C	-	-	1	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	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	1	Reserved for future use. The ROCARS Identification Number of the consignee.

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MESSAGE TYPE : AEX EXPORT CONSIGNMENT									
AEX0820	<Name languageID = "value">	Name	Consignee Name	M	Y	an..35	2	The first line must not be blank or null	
AEX0821		languageID	<i>Language of the Consignee Name</i>	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 specified in section B.3.4.	
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	<i>Language of the Consignee Address</i>	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 does not exist Refer to code table " Equipment Size and Type (Container)" as specified in section B.3.4.	

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MESSAGE TYPE : AEX EXPORT CONSIGNMENT									
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	
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.3.4.	
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.	

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MESSAGE TYPE : AEX EXPORT CONSIGNMENT							
							Code value for the document issuer. Refer to code table "Document Issuer" as specified in section B.3.4.
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.3.4.
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		1 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.3.4.
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

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MESSAGE TYPE : AEX EXPORT CONSIGNMENT							
							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.3.4.
AEX2030	<NetNetWeightMeasure unitCode = "value">	Net net weight measure	Net Weight	O	N	n..11,3	1 Weight of line item without any packing.
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.3.4.
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.3.4.
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.

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MESSAGE TYPE : AEX EXPORT CONSIGNMENT							
							Must be a code value if specified Refer to code table "Land Boundary Control Point" as specified in section B.3.4.
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.

3.7.3. 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&ED</AgencyName>
  <AgencyAssignedCustomizedDocumentName>AEX
</AgencyAssignedCustomizedDocumentName>
  <AgencyAssignedCustomizedDocumentVersion>1.0
</AgencyAssignedCustomizedDocumentVersion>
  <Declaration>
    .....
  </Declaration>
</DocumentMetadata>
```

3.8. Notes on optional information provided to ROCARS

Users of batch upload may reference to the following notes on the optional information provided to ROCARS with business purpose.

3.8.1. Transhipment

For transhipment, the information will be treated as additional document. The transhipment information is repeated in each goods item. The set of transhipment information shall be the same under the same consignment.

WCO ID	I.M. Index	Occurrence	XML Element Tag
	AIM1300	0..99	___ AdditionalDocument
3	AIM1310	0..1	___ ID
262	AIM1320	0..1	___ IssuerID
170	AIM1330	0..1	___ TypeCode

The required information for Flight Number, Air WayBill Number, House WayBill Number and Flight Date are illustrated in the example below. The IMTF Reference Number can also be specified if applicable.

```
...  
<Declaration>  
...  
<CustomsGoodsItem>  
  <SequenceNumeric>1</SequenceNumeric>  
  <AdditionalDocument>  
    <ID>CX888</ID>  
    <TypeCode>AF</TypeCode>  
  </AdditionalDocument>  
  <AdditionalDocument>  
    <ID>1040082352</ID>  
    <TypeCode>HWB</TypeCode>  
  </AdditionalDocument>  
  <AdditionalDocument>  
    <ID>615-91490136</ID>  
    <TypeCode>AWB</TypeCode>  
  </AdditionalDocument>  
  <AdditionalDocument>  
    <ID>2009-09-05</ID>  
    <TypeCode>ZDT</TypeCode>  
  </AdditionalDocument>  
  <AdditionalDocument>  
    <ID>IMR000CGO</ID>  
    <TypeCode>ZIT</TypeCode>  
  </AdditionalDocument>  
...  
</CustomsGoodsItem>  
...  
</Declaration>  
...
```

3.8.2. Message Sender Reference

The maximum number of message sender reference is limited to 5. The information is stored in Additional Information of the first goods item.

WCO ID	I.M. Index	Occurrence	XML Element Tag
	AIM1400	0..5	AdditionalInformation
105	AIM1410	1	Content

The information for Message Sender's Reference is illustrated in the example below.

```

...
<Declaration>
...
<CustomsGoodsItem>
  <SequenceNumeric>1</SequenceNumeric>
  ...
  <AdditionalInformation>
    <Content>MY REF 9812345</Content>
  </AdditionalInformation>
  <AdditionalInformation>
    <Content>SHIPPING ORDER 12345</Content>
  </AdditionalInformation>
  <AdditionalInformation>
    <Content>OTHER REF NO 8888123</Content>
  </AdditionalInformation>
  ...
</CustomsGoodsItem>
...
</Declaration>
...

```

3.9. Sample XML Files

3.9.1. Sample Import Consignments XML File for Batch Upload

```
<?xml version="1.0"?>
<RocarsData>
  <Object id="Res1">
    <DocumentMetaData>
      <WCODataModelVersion>2.0</WCODataModelVersion>
      <WCODocumentName>IM1</WCODocumentName>
      <CountryCode>HK</CountryCode>
      <AgencyName>C&amp; ED</AgencyName>
      <AgencyAssignedCustomizedDocumentName>AIM</AgencyAssignedCustomize
dDocumentName>
      <AgencyAssignedCustomizedDocumentVersion>1.0</AgencyAssignedCustom
izedDocumentVersion>
    <Declaration>
      <FunctionCode>2</FunctionCode>
      <ID/>
      <TypeCode>R01</TypeCode>
      <VersionID>1</VersionID>
      <Agent>
        <ID/>
      </Agent>
      <GoodsShipment>
        <SequenceNumeric>1</SequenceNumeric>
        <Consignee>
          <Name>Ming Kee Trading Company</Name>
          <Address>
            <CityName>Kowloon City</CityName>
            <CountryCode>HK</CountryCode>

<CountrySubEntityName>Kowloon</CountrySubEntityName>
            <Line>Block A, 10/F Junction Road</Line>
          </Address>
        </Consignee>
        <Consignment>
          <SequenceNumeric>1</SequenceNumeric>
          <BorderTransportMeans>
            <ArrivalDateTime>2009-08-29</ArrivalDateTime>
          </BorderTransportMeans>
        </Consignment>
        <Consignor>
          <Name>Zhu Xiang Trading Company</Name>
          <Address>
            <CountryCode>CN</CountryCode>
            <Line>Flat 111, Xiang Yang Building</Line>
            <Line>Zhong Weng Area, Dong Guan</Line>
          </Address>
        </Consignor>
        <CustomsGoodsItem>
          <SequenceNumeric>1</SequenceNumeric>
          <Commodity>
            <Description>Testing Sample Toy</Description>
          </Commodity>
          <GoodsPackaging>
            <QuantityQuantity>100</QuantityQuantity>
            <TypeCode>PC</TypeCode>
          </GoodsPackaging>
        </CustomsGoodsItem>
      </GoodsShipment>
    </Declaration>
  </Object>
</RocarsData>
```

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```
        </CustomsGoodsItem>
        <EntryCustomsOffice>
            <ID>LMC</ID>
        </EntryCustomsOffice>
    </GoodsShipment>
    <Importer>
        <ID/>
        <Name/>
    </Importer>
    </Declaration>
</DocumentMetaData>
</Object>
<Object Id="Res2">
    <DocumentMetadata>
        <WCODataModelVersion>2.0</WCODataModelVersion>
        <WCODocumentName>IM1</WCODocumentName>
        <CountryCode>HK</CountryCode>
        <AgencyName>C&ED</AgencyName>
        <AgencyAssignedCustomizedDocumentName>AIM</AgencyAssignedCustomize
dDocumentName>
        <AgencyAssignedCustomizedDocumentVersion>1.0</AgencyAssignedCustom
izedDocumentVersion>
        <Declaration>
            <FunctionCode>2</FunctionCode>
            <ID/>
            <TypeCode>R01</TypeCode>
            <VersionID>1</VersionID>
            <GoodsShipment>
                <SequenceNumeric>1</SequenceNumeric>
                <Consignee>
                    <Name>Ming Kee Trading Company</Name>
                    <Address>
                        <CityName>Kowloon City</CityName>
                        <CountryCode>HK</CountryCode>
                    </Address>
                </Consignee>
                <CountrySubEntityName>Kowloon</CountrySubEntityName>
                <Line>Block A, 10/F Junction Road</Line>
                </Address>
            </Consignee>
            <Consignment>
                <SequenceNumeric>1</SequenceNumeric>
                <BorderTransportMeans>
                    <ArrivalDateTime>2009-08-29</ArrivalDateTime>
                </BorderTransportMeans>
            </Consignment>
            <Consignor>
                <Name>Zhu Xiang Trading Company</Name>
                <Address>
                    <CountryCode>CN</CountryCode>
                    <Line>Flat 111, Xiang Yang Building</Line>
                    <Line>Zhong Weng Area, Dong Guan</Line>
                </Address>
            </Consignor>
            <CustomsGoodsItem>
                <SequenceNumeric>1</SequenceNumeric>
                <Commodity>
                    <Description>Testing Sample Bulk Submissoin
Toy</Description>
                </Commodity>
            </GoodsPackaging>
```

**XML FILE SPECIFICATION FOR BATCH UPLOAD
FOR SHIPPERS AND AGENTS**

```
                <QuantityQuantity>100</QuantityQuantity>
                <TypeCode>PC</TypeCode>
            </GoodsPackaging>
        </CustomsGoodsItem>
        <EntryCustomsOffice>
            <ID>LMC</ID>
        </EntryCustomsOffice>
    </GoodsShipment>
    <Importer>
        <ID/>
        <Name/>
    </Importer>
</Declaration>
</DocumentMetadata>
</Object>
<Object Id="Res3">
    <DocumentMetadata>
        <WCODataModelVersion>2.0</WCODataModelVersion>
        <WCODocumentName>IM1</WCODocumentName>
        <CountryCode>HK</CountryCode>
        <AgencyName>C& ED</AgencyName>
        <AgencyAssignedCustomizedDocumentName>AIM</AgencyAssignedCustomizedDocumentName>
        <AgencyAssignedCustomizedDocumentVersion>1.0</AgencyAssignedCustomizedDocumentVersion>
        <Declaration>
            <FunctionCode>2</FunctionCode>
            <ID/>
            <TypeCode>R01</TypeCode>
            <VersionID>1</VersionID>
            <GoodsShipment>
                <SequenceNumeric>1</SequenceNumeric>
                <Consignee>
                    <Name>Ming Kee Trading Company</Name>
                    <Address>
                        <CountryCode>HK</CountryCode>
                        <Line>Block A, 10/F Junction Road</Line>
                    </Address>
                </Consignee>
                <Consignment>
                    <SequenceNumeric>1</SequenceNumeric>
                    <BorderTransportMeans>
                        <ArrivalDateTime>2009-08-29</ArrivalDateTime>
                    </BorderTransportMeans>
                </Consignment>
                <Consignor>
                    <Name>Zhu Xiang Trading Company</Name>
                    <Address>
                        <CountryCode>CN</CountryCode>
                        <Line>Flat 111, Xiang Yang Building</Line>
                        <Line>Zhong Weng Area, Dong Guan</Line>
                    </Address>
                </Consignor>
            <CustomsGoodsItem>
                <SequenceNumeric>1</SequenceNumeric>
                <Commodity>
                    <Description>Testing Sample Bulk Submissoin
Toy</Description>
                </Commodity>
            </GoodsPackaging>
```

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FOR SHIPPERS AND AGENTS**

```
                <QuantityQuantity>200</QuantityQuantity>
                <TypeCode>PC</TypeCode>
            </GoodsPackaging>
        </CustomsGoodsItem>
        <EntryCustomsOffice>
            <ID>LMC</ID>
        </EntryCustomsOffice>
    </GoodsShipment>
    <Importer>
        <ID/> schemeID="BR">12345678-001</ID>
        <Name/>
    </Importer>
</Declaration>
</DocumentMetadata>
</Object>
</RocarsData>
```

3.9.2. Sample Export Consignments XML File for Batch Upload

```
<?xml version="1.0"?>
<RocarsData>
  <Object Id="Res1">
    <DocumentMetadata>
      <WCODataModelVersion>2.0</WCODataModelVersion>
      <WCODocumentName>EX1</WCODocumentName>
      <CountryCode>HK</CountryCode>
      <AgencyName>C&ED</AgencyName>
      <AgencyAssignedCustomizedDocumentName>AEX</AgencyAssignedCustomize
dDocumentName>
      <AgencyAssignedCustomizedDocumentVersion>1.0</AgencyAssignedCustom
izedDocumentVersion>
      <Declaration>
        <FunctionCode>2</FunctionCode>
        <ID/>
        <TypeCode>R02</TypeCode>
        <VersionID>1</VersionID>
        <Exporter>
          <ID/>
          <Name/>
        </Exporter>
        <GoodsShipment>
          <SequenceNumeric>1</SequenceNumeric>
          <Consignee>
            <Name>Zhu Xiang Trading Company</Name>
            <Address>
              <CountryCode>CN</CountryCode>
              <Line>Flat 111, Xiang Yang Building</Line>
              <Line>Zhong Weng Area, Dong Guan</Line>
            </Address>
          </Consignee>
          <Consignment>
            <SequenceNumeric>1</SequenceNumeric>
            <BorderTransportMeans>
              <DepartureDateTime>2009-09-05
            </DepartureDateTime>
            </BorderTransportMeans>
          </Consignment>
          <Consignor>
            <Name>ABC FOOD INTERNATIONAL</Name>
            <Address>
              <CountryCode>US</CountryCode>
              <Line>38 Hollywood & Vine</Line>
              <Line>Los Angeles, CA</Line>
            </Address>
          </Consignor>
          <CustomsGoodsItem>
            <SequenceNumeric>1</SequenceNumeric>
            <AdditionalDocument>
              <ID>CX888</ID>
              <TypeCode>AF</TypeCode>
            </AdditionalDocument>
            <AdditionalDocument>
              <ID>1040082352</ID>
              <TypeCode>HWB</TypeCode>
            </AdditionalDocument>
            <AdditionalDocument>
              <ID>615-91490136</ID>
            </AdditionalDocument>
          </CustomsGoodsItem>
        </GoodsShipment>
      </Declaration>
    </DocumentMetadata>
  </Object>
</RocarsData>
```


**XML FILE SPECIFICATION FOR BATCH UPLOAD
FOR SHIPPERS AND AGENTS**

```
        <TypeCode>AWB</TypeCode>
    </AdditionalDocument>
    <AdditionalDocument>
        <ID>2009-09-05</ID>
        <TypeCode>ZDT</TypeCode>
    </AdditionalDocument>
    <AdditionalDocument>
        <ID>IMR000CGO</ID>
        <TypeCode>ZIT</TypeCode>
    </AdditionalDocument>
    <AdditionalInformation>
        <Content>MY REF 9812345</Content>
    </AdditionalInformation>
    <Commodity>
        <Description>BALANCED OLIVE OIL</Description>
    </Commodity>
    <GoodsPackaging>
        <QuantityQuantity>100</QuantityQuantity>
        <TypeCode>AP</TypeCode>
    </GoodsPackaging>
</CustomsGoodsItem>
<ExitCustomsOffice>
    <ID>LMC</ID>
</ExitCustomsOffice>
</GoodsShipment>
</Declaration>
</DocumentMetadata>
</Object>
<Object Id="Res2">
    <DocumentMetadata>
        <WCODataModelVersion>2.0</WCODataModelVersion>
        <WCODocumentName>EX1</WCODocumentName>
        <CountryCode>HK</CountryCode>
        <AgencyName>C&ED</AgencyName>
        <AgencyAssignedCustomizedDocumentName>AEX</AgencyAssignedCustomize
dDocumentName>
        <AgencyAssignedCustomizedDocumentVersion>1.0</AgencyAssignedCustom
izedDocumentVersion>
    <Declaration>
        <FunctionCode>2</FunctionCode>
        <ID/>
        <TypeCode>R02</TypeCode>
        <VersionID>1</VersionID>
        <Exporter>
            <ID/>
            <Name/>
        </Exporter>
        <GoodsShipment>
            <SequenceNumeric>1</SequenceNumeric>
            <Consignee>
                <Name>Zhu Xiang Trading Company</Name>
                <Address>
                    <CountryCode>CN</CountryCode>
                    <Line>Flat 111, Xiang Yang Building</Line>
                    <Line>Zhong Weng Area, Dong Guan</Line>
                </Address>
            </Consignee>
        <Consignment>
            <SequenceNumeric>1</SequenceNumeric>
            <BorderTransportMeans>
```

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```
                <DepartureDateTime>2009-09-05
                </DepartureDateTime>
            </BorderTransportMeans>
        </Consignment>
        <Consignor>
            <Name>Blue Art Inc</Name>
            <Address>
                <CountryCode>US</CountryCode>
                <Line>55 Mission & Valencia Sts</Line>
                <Line>San Francisco CA</Line>
            </Address>
        </Consignor>
        <CustomsGoodsItem>
            <SequenceNumeric>1</SequenceNumeric>
            <AdditionalDocument>
                <ID>CX888</ID>
                <TypeCode>AF</TypeCode>
            </AdditionalDocument>
            <AdditionalDocument>
                <ID>1040083586</ID>
                <TypeCode>HWB</TypeCode>
            </AdditionalDocument>
            <AdditionalDocument>
                <ID>615-91490136</ID>
                <TypeCode>AWB</TypeCode>
            </AdditionalDocument>
            <AdditionalDocument>
                <ID>2009-09-05</ID>
                <TypeCode>ZDT</TypeCode>
            </AdditionalDocument>
            <AdditionalDocument>
                <ID>IMR000CGO</ID>
                <TypeCode>ZIT</TypeCode>
            </AdditionalDocument>
            <AdditionalInformation>
                <Content>MY REF 9812346</Content>
            </AdditionalInformation>
            <Commodity>
                <Description>TOWEL</Description>
            </Commodity>
            <GoodsPackaging>
                <QuantityQuantity>100</QuantityQuantity>
                <TypeCode>AT</TypeCode>
            </GoodsPackaging>
        </CustomsGoodsItem>
        <ExitCustomsOffice>
            <ID>LMC</ID>
        </ExitCustomsOffice>
    </GoodsShipment>
</Declaration>
</DocumentMetadata>
</Object>
</RocarsData>
```

< END >