
Message Acknowledgement Implementation Guide

XML



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Message Acknowledgment Implementation Guideline (XML Format)

Document Information

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Ver. No.	Ver. Date	Revised By	Description
3.0	25 Feb 2009	CargoSmart Professional Services	<ul style="list-style-type: none">- Section 2.3.1 correct the type for MessageID, FileName and Version- Section 2.3.1 update the maxlength of DateCreated/[TimeZone] from 10 to 30- Section 2.4.1 update the minlength of ReferenceNumber from 1 to 0- Section 2.4.2 update the minlength of Description from 1 to 0- Synchronize XSD and sample XML with IG Specification- Sec 3.4 Update sample XML
2.1	29 Oct 2008	CargoSmart Professional Services	<ul style="list-style-type: none">- Section 2.4.1 extend ReferenceNumber from 1/30 to 1/35
2.0	23 Oct 2008	CargoSmart Professional Services	<ul style="list-style-type: none">- Section 2.4.3(ADD) – Add element AckParties
1.1	6 Mar 2006	CargoSmart Professional Services	Minor revisions to data elements
1.0	21 Feb 2006	CargoSmart Professional Services	Initial creation

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1. XML Schema/Structure

[See Appendix B for the schema view.](#)

Notes:

1. Interpreting Diagrams – Dotted lines represent optional data elements while solid lines represent mandatory/required data elements.
2. fieldName/[child] is read as elementName/[attribute of the said elementName].
3. Min and Max refers to minimum and maximum lengths of the field it describes. N/A if the element does not have a value or a parent element.
4. Type describes what kind of data a certain element holds (e.g AN for Alpha Numeric). N/A if the element does have a value or a parent element.
5. Req describes if the element is optional (O) or mandatory (M).
6. Refer to Note/s of each section if any for any other additional information.

2. XML Schema/Structure Details

2.1 Ack_Root

- Acts as a root node.

DATA ELEMENTS:

Name	Type	Min/Max	Req	Description
Ack_Message	N/A	N/A	M	See Section 2.2.

DATA ATTRIBUTES:

N/A

2.2 Ack_Message

- Element representing information of each transaction.

DATA ELEMENTS:

Name	Type	Min/Max	Req	Description
GeneralInfo	N/A	N/A	M	See Section 2.3.
AckDetails	N/A	N/A	N/A	See Section 2.4

DATA ATTRIBUTES:

N/A

2.3 GeneralInfo

- As the name implies, describes the general information regarding the transaction including the file/transaction itself.

DATA ELEMENTS:

Name	Type	Min/Max	Req	Description
TransactionInfo	N/A	N/A	M	See Section 2.3.1.
CSReferenceNumber	AN	1/11	M	Reference number assigned by CargoSmart.
DataSource	AN	0/1	O	Indicates the source of data.
TransactionNumber	AN	1/14	M	Unique reference/control number of

Name	Type	Min/Max	Req	Description
				the message being acknowledged.
MessageStatus	AN	1/5	M	Status of the message being acknowledged.
MessageType	AN	0/10	O	Message id/type of the message being acknowledged.

DATA ATTRIBUTES:

N/A

Note/s:

MessageStatus should only be:

Code	Description
1	Received
A	Accepted
E	Accepted with errors/warnings noted
W	Rejected. Failed validation process
R	Rejected. Failed conversion process.

DataSource should only be:

Data Source	Description
0	EDI
1	Excel Upload
2	CS Online

MessageType should only be:

Message Type	Message
SIXML	Shipping Instructions in XML format
BRXML	Booking Request in XML format
BCXML	Booking Confirmation in XML format
BLXML	Bill of Lading Details in XML format
SSXML	Sailing schedule in XML format
CTXML	Cargo Tracking in XML format
X12 standard message	e.g. 310, 301, 300, 315, 323, 304
UN EDIFACT standard message	e.g. IFTMCS, IFTSTA, IFTMIN, IFTSAI, IFTMBF

2.3.1 TransactionInfo

- Gives the description of the file itself for identification.

DATA ELEMENTS:

Name	Type	Min/Max	Req	Description
BatchNumber	N	1/14	M	System generated running number, until 99999999999999 and will reset back to 1. Serves as a unique control number.
MessageSender	AN	1/15	M	Trading partner ID for incoming, "CARGOSMART" for outgoing

Name	Type	Min/Max	Req	Description
MessageRecipient	AN	1/15	M	Trading partner ID for outgoing, "CARGOSMART" for incoming
MessageID	AN	1/10	M	Type of message. Default to AKXML
DateCreated	N	0/14	O	Date the file was created. Format: ccyymmddHHmmss
FileName	AN	0/60	O	File name
Version	AN	0/5	O	schema version used

DATA ATTRIBUTES:

Name	Type	Min/Max	Req	Description
DateCreated/[TimeZone]	AN	0/30	O	Time Zone where the date it describes happened.

Note/s:

1. TimeZone can be set to LOCAL which refers to the local time zone where the file was processed or the event happened.

2.4 AckDetails

- Shows the detailed description of the error encountered if any, including the external references of the message being acknowledged.

DATA ELEMENTS:

Name	Type	Min/Max	Req	Description
ExternalReferences	N/A	N/A	O	See section 2.4.1.
Notes	N/A	N/A	C	See section 2.4.2.
AckParties	N/A	N/A	O	See section 2.4.3

DATA ATTRIBUTES:

N/A

2.4.1 ExternalReferences/References

- Describes the external references attached to the messaged being acknowledged.

DATA ELEMENTS:

Name	Type	Min/Max	Req	Description
ReferenceType	AN	0/5	C	Describes the type of Reference Number used to qualify/identify the reference number
ReferenceName	AN	0/60	C	Free-form description (reference name) of the reference data element. Required if Reference Type is ZZ or blank.
ReferenceNumber	AN	0/35	C	Reference numbers attached to a

Name	Type	Min/Max	Req	Description
				particular shipment. These numbers were used to identify the shipment as compared to other shipments submitted to the carrier.

DATA ATTRIBUTES:

N/A

Note/s:

Accepted ReferenceType and Reference Name are shown below.

Reference Type	Reference Name
SI	Shipper's Identifying Number For Shipment (SID)
CSI	Customer's SI Number
IV	Invoice Number
PO	Purchase Order
SO	Shipping Order Number
FW	Forwarder's Reference
SRN	Shipper's Reference Number
FCN	First Carrier B/L Number
BN	Booking Number
BM	Bill of Lading Number
ZZ	Others

2.4.2 Notes/Error

- Describes the error encountered when processing the message being acknowledged.

DATA ELEMENTS:

Name	Type	Min/Max	Req	Description
Code	AN	1/5	M	Error Code encountered when processing the message. See Appendix 3.1 for the code and description.
Description	AN	0/60	O	Description of the error encountered

DATA ATTRIBUTES:

N/A

Note/s:

Notes/Error is required if MessageStatus are E, W, or R.

2.4.3 AckParties/Party

- Describes the related parties, who acknowledged the message, and who request the acknowledgement.

DATA ELEMENTS:

Name	Type	Min/Max	Req	Description
PartyID	N/A	1/35	M	Fill with SCAC code if the party role is Carrier.
PartyName	N/A	0/35	O	

DATA ATTRIBUTES:

Name	Type	Min/Max	Req	Description
Party/[Role]	AN	1/15	M	Used to indentify the party role, carrier or requestor

Note/s:

Accepted value for Party/[Role].

Role
Carrier
Requestor

Appendix

3.1 Error Codes

External Code	Description
89	THERE IS NO CONTAINER OR BOOKING ASSOCIATED WITH THE CARGO
88	TOTAL CARGO GROSS WEIGHT EXCEEDED THE CONTAINER GROSS WEIGHT
87	REQUESTED ON-BOARD DATE IS INVALID
86	CARGO DESCRIPTION MUST NOT CONTAIN NON-STANDARD KEYBOARD AND/OR CONTROL CHARACTERS
85	GIVEN CARRIER NOT SUPPORTED
84	REQUESTED ACTION NOT SUPPORTED
83	CARGO MARKS & NUMBERS MUST NOT CONSTAIN NON-STANDARD KEYBOARD AND/OR CONTROL CHARACTERS
82	UNSUPPORTED PARTY TYPE
81	MISSING LENGTH OR WIDTH OR HEIGHT
80	INCORRECT HEIGHT
79	INCORRECT LENGTH
78	UNSUPPORTED MEASUREMENT UNIT
77	MISSING MEASUREMENT UNIT
76	INCORRECT WIDTH
75	B/L CARGO SUMMARY DESCRIPTION CONSTAINS NON-STANDARD KEYBOARD AND/OR CONTROL CHARACTERS
74	INVALID DRAFT INDICATOR
73	UNSUPPORTED PAYMENT OPTION
72	REQUESTED DRAFT TRANSMISSION IS NOT SUPPORTED
71	UNSUPPORTED CARGO TYPE



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External Code	Description
70	NET WEIGHT IS NOT VALID
69	UNSUPPORTED NET WEIGHT UNIT
68	VOLUME IS NOT VALID
67	UNSUPPORTED VOLUME WEIGHT UNIT
66	UNSUPPORTED CERTIFICATION/CLAUSE CODE
65	CERTIFICATION/CLAUSE TEXT CONSTAINS NON-STANDARD KEYBOARD AND/OR CONTROL CHARACTERS
64	EMAIL HAS TO BE IN THE FORMAT OF xxx@xxxxxxx.xxxxx
63	UNSUPPORTED PAYABLE BY TYPE
62	GROSS WEIGHT IS NOT VALID
61	UNSUPPORTED GROSS WEIGHT UNIT
60	UNSUPPORTED CONTAINER REQUEST TYPE
59	UNRECOGNIZED STATUS INDICATOR
58	UNSUPPORTED HAZARDOUS CLASSIFICATION CODE
57	INVALID DG PACKAGING GROUP CODE
56	INVALID DOCUMENT TYPE CODE
55	FAX AREA CODE CAN ONLY CONTAIN NUMERIC CHARACTERS (0-9)
54	FAX COUNTRY CODE CAN ONLY CONTAIN NUMERIC CHARACTERS (0-9)
53	FAX NUMBER CAN ONLY CONTAIN NUMERIC CHARACTERS (0-9)
52	INVALID FREIGHT TYPE
51	NUMBER OF COPIES REQUESTED EXCEEDED THE LIMIT
50	REQUESTED TRANSMISSION MODE FOR THE REQUESTED DOCUMENT TYPE IS NOT SUPPORTED
49	PHONE AREA CODE CAN ONLY CONTAIN NUMERIC CHARACTERS (0-9)
48	PHONE COUNTRY CODE CAN ONLY CONTAIN NUMERIC CHARACTERS (0-9)
47	PHONE NUMBER CAN ONLY CONTAIN NUMERIC CHARACTERS (0-9)
46	UNSUPPORTED SCHEDULE TYPE CODE
45	INVALID TEMPERATURE
44	UNSUPPORTED TEMPERATURE UNIT
43	UNSUPPORTED VENT SETTING CODE
42	UNRECOGNIZED EXT. VESSEL CODE TYPE
41	UNRECOGNIZED LOCATION FUNCTION CODE
40	SI REMARKS CONSTAINS NON-STANDARD KEYBOARD AND/OR CONTROL CHARACTERS
39	SPECIAL B/L HANDLING INSTRUCTIONS CONSTAINS NON-STANDARD KEYBOARD AND/OR CONTROL CHARACTERS
38	THE CONTAINER INFORMATION IS DIFFERENT FROM THE CONTAINER INFORMATION IN THE BOOKING(S).
37	THE PARTY INFORMATION <PartyType> IS DIFFERENT FROM THE PARTY INFORMATION IN BOOKING(S).
36	NON-EXISTING BOOKING NUMBER
35	UNSUPPORTED PACKAGE TYPE
34	NON-ISO CONTAINER SIZE/TYPE
33	CONTAINER IS NOT ASSOCIATED WITH A BOOKING
32	OTHER INFORMATION REQUIRED FOR TRANSMISSION MODE "OT"
31	UNSUPPORTED CARRIER RATE REFERENCE TYPE
30	INVALID CARRIER'S CUSTOMER ID
29	INVALID CARGOSMART CUSTOMER ID
28	NON-EXISTING SCHEDULE K/D CODE
27	MISSING SCHEDULE K/D CODE
26	MISSING SCHEDULE TYPE CODE
25	NON-EXISTING UN/LOCATION CODE
24	REFERENCE NAME REQUIRED FOR REFERENCE TYPE "OTH"

External Code	Description
23	UNSUPPORTED REFERENCE TYPE
22	THE TRAFFIC MODE IS DIFFERENT FROM THE TRAFFIC MODE IN BOOKING(S).
21	UNSUPPORTED SEAL TYPE
20	SEAL TYPE NAME REQUIRED FOR SEAL TYPE "OT"

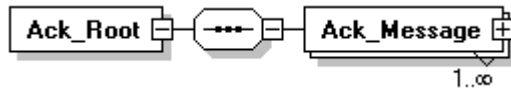
3.2 Schema Views

Elements
[Ack_Root](#)

Complex types
[DateTime](#)
[Party](#)

element Ack_Root

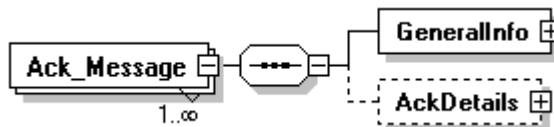
diagram



children [Ack_Message](#)

element Ack_Root/Ack_Message

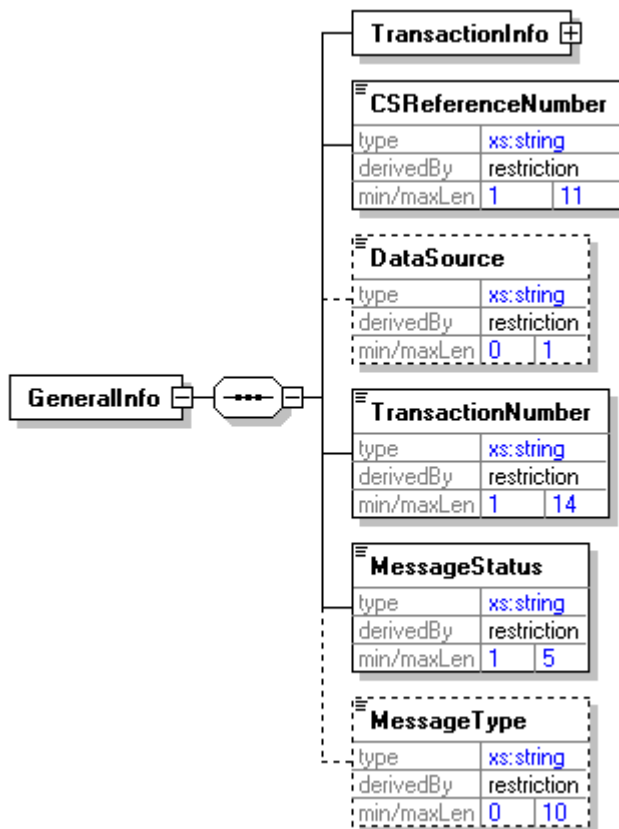
diagram



children [GeneralInfo](#) [AckDetails](#)

element Ack_Root/Ack_Message/GeneralInfo

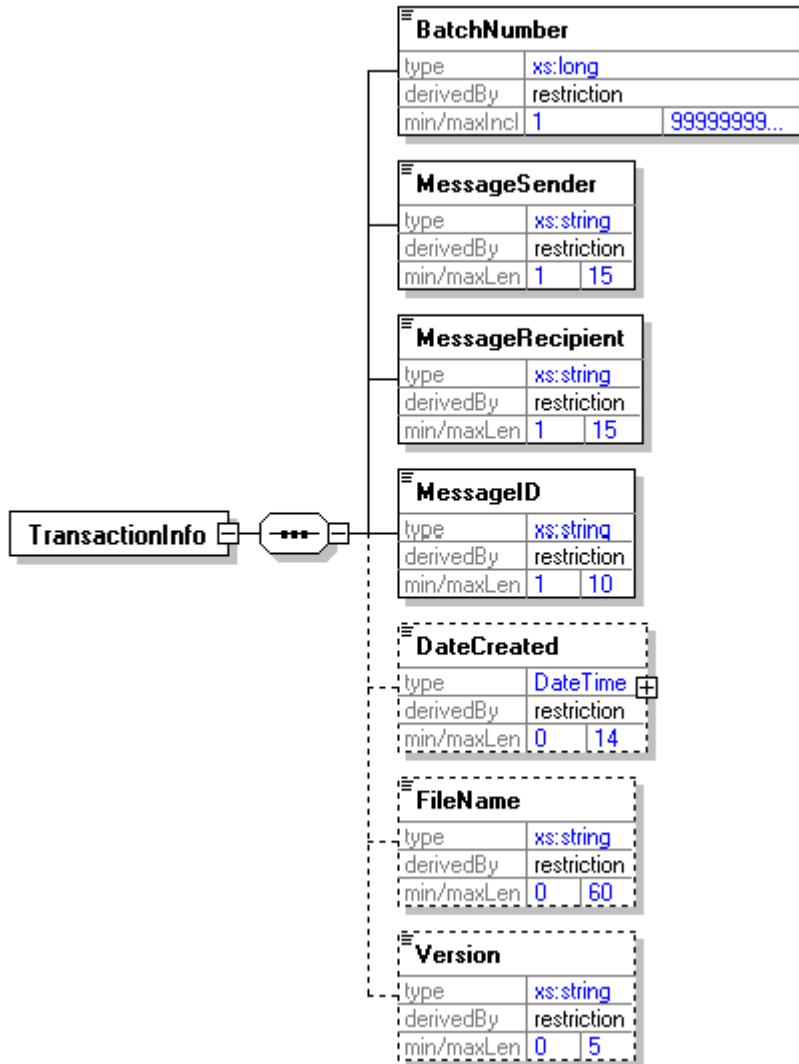
diagram



children [TransactionInfo](#) [CSReferenceNumber](#) [DataSource](#) [TransactionNumber](#) [MessageStatus](#) [MessageType](#)

element **Ack_Root/Ack_Message/GeneralInfo/TransactionInfo**

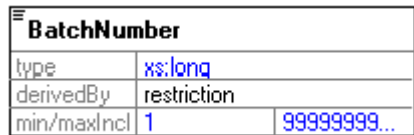
diagram



children [BatchNumber](#) [MessageSender](#) [MessageRecipient](#) [MessageID](#) [DateCreated](#) [FileName](#) [Version](#)

element **Ack_Root/Ack_Message/GeneralInfo/TransactionInfo/BatchNumber**

diagram



type restriction of **xs:long**

element **Ack_Root/Ack_Message/GeneralInfo/TransactionInfo/MessageSender**

diagram



type restriction of **xs:string**

element **Ack_Root/Ack_Message/GeneralInfo/TransactionInfo/MessageRecipient**

diagram



type restriction of **xs:string**

element **Ack_Root/Ack_Message/GeneralInfo/TransactionInfo/MessageID**

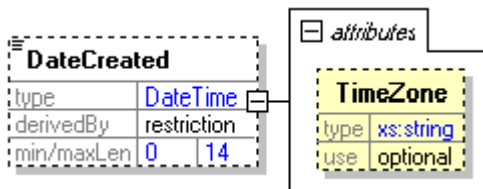
diagram



type restriction of **xs:string**

element **Ack_Root/Ack_Message/GeneralInfo/TransactionInfo/DateCreated**

diagram

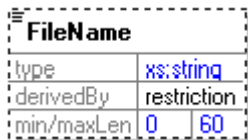


type restriction of **DateTime**

attributes	Name	Type	Use	Default	Fixed	Annotation
	Timezone	derived by: xs:string	optional			

element **Ack_Root/Ack_Message/GeneralInfo/TransactionInfo/FileName**

diagram



type restriction of **xs:string**

element **Ack_Root/Ack_Message/GeneralInfo/TransactionInfo/Version**

diagram

Version		
type	xs:string	
derivedBy	restriction	
min/maxLen	0	5

type restriction of **xs:string**

element **Ack_Root/Ack_Message/GeneralInfo/CSReferenceNumber**

diagram

CSReferenceNumber		
type	xs:string	
derivedBy	restriction	
min/maxLen	1	11

type restriction of **xs:string**

element **Ack_Root/Ack_Message/GeneralInfo/DataSource**

diagram

DataSource		
type	xs:string	
derivedBy	restriction	
min/maxLen	0	1

type restriction of **xs:string**

facets
 enumeration 0
 enumeration 1
 enumeration 2

element **Ack_Root/Ack_Message/GeneralInfo/TransactionNumber**

diagram

TransactionNumber		
type	xs:string	
derivedBy	restriction	
min/maxLen	1	14

type restriction of **xs:string**

element **Ack_Root/Ack_Message/GeneralInfo/MessageStatus**

diagram

MessageStatus		
type	xs:string	
derivedBy	restriction	
min/maxLen	1	5

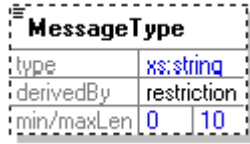
type restriction of **xs:string**

facets
 enumeration 1
 enumeration A

enumeration E
enumeration W
enumeration R

element Ack_Root/Ack_Message/GeneralInfo/MessageType

diagram



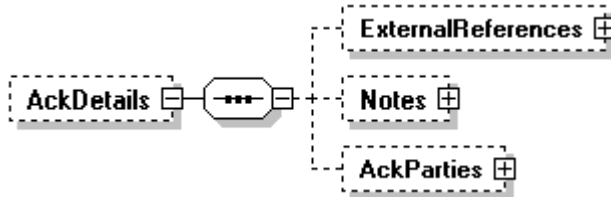
type restriction of **xs:string**

facets

- enumeration SIXML
- enumeration BRXML
- enumeration BCXML
- enumeration BLXML
- enumeration CTXML
- enumeration SSXML
- enumeration 310
- enumeration 301
- enumeration 300
- enumeration 315
- enumeration 323
- enumeration 304
- enumeration IFTMCS
- enumeration IFTSTA
- enumeration IFTMIN
- enumeration IFTSAI
- enumeration IFTMBF

element Ack_Root/Ack_Message/AckDetails

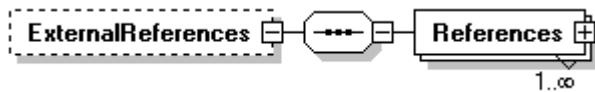
diagram



children [ExternalReferences](#) [Notes](#) [AckParties](#)

element Ack_Root/Ack_Message/AckDetails/ExternalReferences

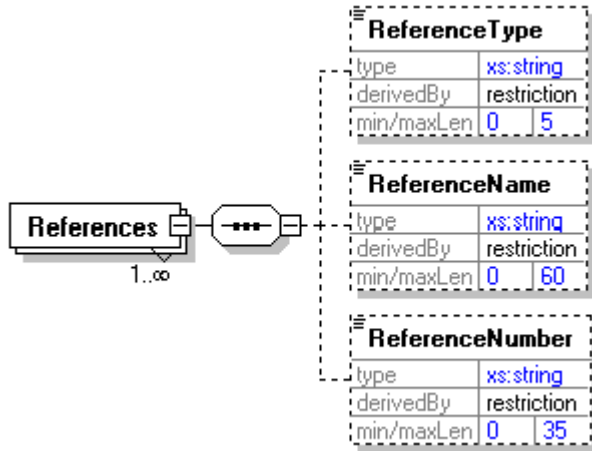
diagram



children [References](#)

element **Ack_Root/Ack_Message/AckDetails/ExternalReferences/References**

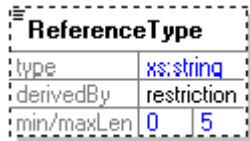
diagram



children [ReferenceType](#) [ReferenceName](#) [ReferenceNumber](#)

element **Ack_Root/Ack_Message/AckDetails/ExternalReferences/References/ReferenceType**

diagram



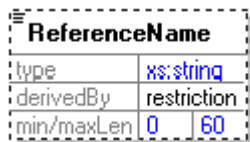
type restriction of **xs:string**

facets

- enumeration SI
- enumeration CSI
- enumeration IV
- enumeration PO
- enumeration SO
- enumeration FW
- enumeration SRN
- enumeration FCN
- enumeration BN
- enumeration BM
- enumeration ZZ

element **Ack_Root/Ack_Message/AckDetails/ExternalReferences/References/ReferenceName**

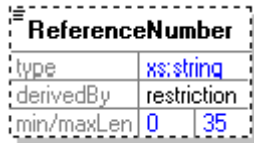
diagram



type restriction of **xs:string**

element **Ack_Root/Ack_Message/AckDetails/ExternalReferences/References/ReferenceNumber**

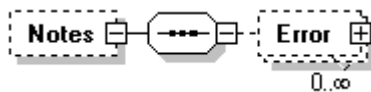
diagram



type restriction of **xs:string**

element **Ack_Root/Ack_Message/AckDetails/Notes**

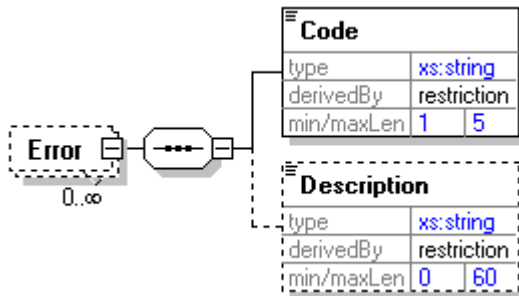
diagram



children [Error](#)

element **Ack_Root/Ack_Message/AckDetails/Notes/Error**

diagram



children [Code](#) [Description](#)

element **Ack_Root/Ack_Message/AckDetails/Notes/Error/Code**

diagram



type restriction of **xs:string**

element **Ack_Root/Ack_Message/AckDetails/Notes/Error/Description**

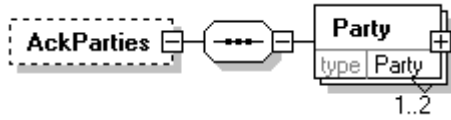
diagram



type restriction of **xs:string**

element `Ack_Root/Ack_Message/AckDetails/AckParties`

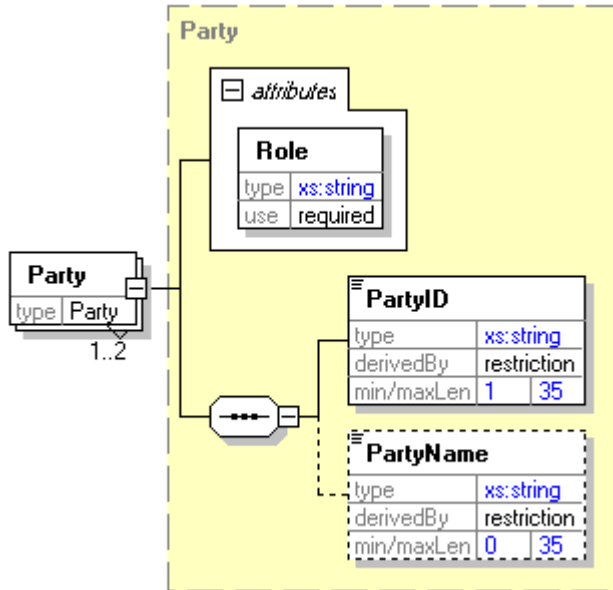
diagram



children [Party](#)

element `Ack_Root/Ack_Message/AckDetails/AckParties/Party`

diagram



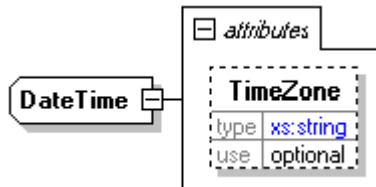
type [Party](#)

children [PartyID](#) [PartyName](#)

attributes	Name	Type	derived by:	Use	Default	Fixed	Annotation
	Role	<code>xs:string</code>	required				

complexType `DateTime`

diagram



type extension of `xs:string`

used by element [Ack_Root/Ack_Message/GeneralInfo/TransactionInfo/DateCreated](#)

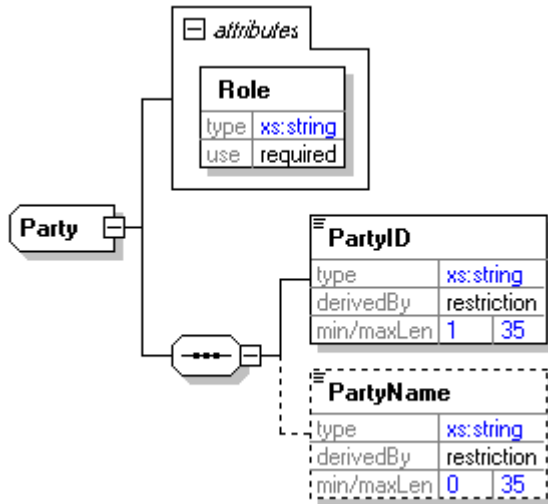
attributes	Name	Type	derived by:	Use	Default	Fixed	Annotation
	TimeZone	<code>xs:string</code>	optional				

attribute DateTime/@TimeZone

type restriction of **xs:string**

complexType Party

diagram



children [PartyID](#) [PartyName](#)

used by element [Ack_Root/Ack_Message/AckDetails/AckParties/Party](#)

attributes	Name	Type	Use	Default	Fixed	Annotation
	Role	derived by: xs:string	required			

attribute Party/@Role

type restriction of **xs:string**

facets enumeration Carrier
enumeration Requestor

element Party/PartyID

diagram



type restriction of **xs:string**

element **Party/PartyName**

diagram

PartyName	
type	xs:string
derivedBy	restriction
min/maxLen	0 35

type restriction of **xs:string**

3.3 Sample XML

```
<?xml version="1.0" encoding="UTF-8"?>
<Ack_Root xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:noNamespaceSchemaLocation="CS-SYSINT-
STD-IG-AK.xsd">
  <Ack_Message>
    <GeneralInfo>
      <TransactionInfo>
        <BatchNumber>1</BatchNumber>
        <MessageSender>CARGOSMART</MessageSender>
        <MessageRecipient>RECIPIENT</MessageRecipient>
        <MessageID>AKXML</MessageID>
        <DateCreated TimeZone="HKT">20060222024700</DateCreated>
        <FileName>sample_ack.xml</FileName>
        <Version>1.1</Version>
      </TransactionInfo>
      <CSReferenceNumber>CSREFNUM</CSReferenceNumber>
      <DataSource>0</DataSource>
      <TransactionNumber>1</TransactionNumber>
      <MessageStatus>W</MessageStatus>
      <MessageType>SIXML</MessageType>
    </GeneralInfo>
    <AckDetails>
      <ExternalReferences>
        <References>
          <ReferenceType>BN</ReferenceType>
          <ReferenceName>Booking Number</ReferenceName>
          <ReferenceNumber>SZHG24048</ReferenceNumber>
        </References>
      </ExternalReferences>
      <Notes>
        <Error>
          <Code>89</Code>
          <Description>THERE IS NO CONTAINER OR BOOKING ASSOCIATED WITH THE CARGO</Description>
        </Error>
      </Notes>
    </AckDetails>
  </Ack_Message>
</Ack_Root>
```