
**DANGEROUS GOODS MANIFEST SUBMISSION
WITH EBXML MESSAGE SERVICE
(XMLDG)**

for

The MARINE DEPARTMENT



IMPLEMENTATION INSTRUCTIONS

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1. INTRODUCTION

This document provides the instructions for shipping agents (agents) to implement their systems to use the XMLDG service provided by Hong Kong SAR Government through the Marine Department (MD). XMLDG facilitates agents to submit Dangerous Goods Manifest in XML format electronically through the Internet.

This implementation instructions document covers the following sections:

Networking Configuration. It describes how agents should implement their network connectivity to MD for transmission of electronic data in XML format.

ebXML Messaging. It describes how the XML documents for Dangerous Goods Manifest submission are packaged in ebXML messages and transmitted through the ebXML Message Service.

Schema Application. It describes the application of the XML Schema as defined in the HKSARG Dangerous Goods Manifest XML Schema Specification for using the XMLDG service in preparing and processing the involved XML documents.

1.1 PROJECT XMLDG

Under Section 4 of the Dangerous Goods (Shipping) Regulations, owners, agents or masters of any vessel arriving in the waters of Hong Kong and having on board any dangerous goods shall, not less than 48 hours before the estimated time of arrival of the vessel, furnish the Director of Marine a Dangerous Goods Manifest.

The manifests will be scrutinized and acknowledged by fax within the next working day of submission. Information on the manifests will be captured by the Dangerous Goods Information System (DGIS), which is being used by law-enforcing agencies and organizations responsible for dealing with emergencies involving dangerous goods in Hong Kong waters.

To enable computer systems in the shipping companies to directly generate Dangerous Goods Manifests and send them to MD through the Internet without manual data entry, MD launches the XMLDG Service, in pilot basis, to provide an additional submission channel to accept Dangerous Goods Manifest data in XML messages using the ebXML Message Service (ebMS) protocol. This could help to eliminate or reduce the manual data entry efforts required by agents.

2. NETWORKING CONFIGURATION

As shown in Figure 1, Agents and MD exchanged the ebXML messages for Dangerous Goods Manifest submission through the Internet using HTTPS over IPSec protocol.

An agent using the XMLDG service should set up an IPSec VPN server to establish a gateway-to-gateway tunnel with the IPSec server in the Marine Department.

The agent should also configure its application server to connect to the MD application server using the HTTPS (HTTP with SSL) protocol.

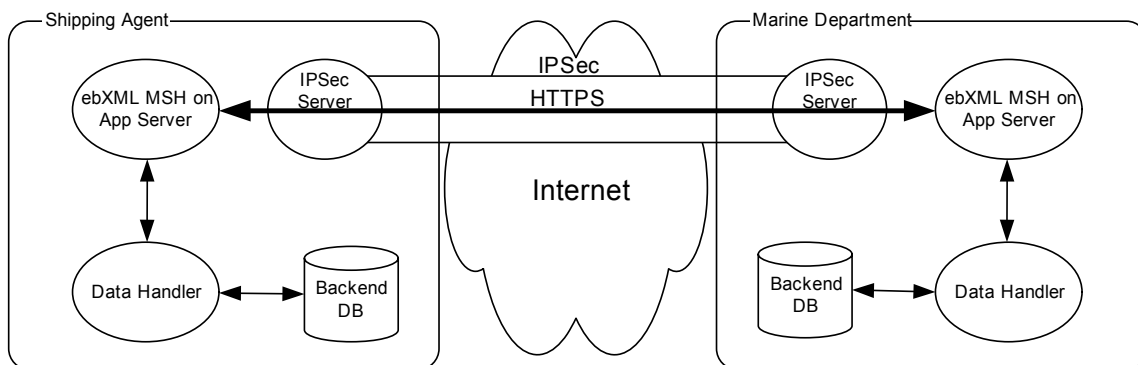


Figure 1: Networking Configuration for XMLDG.

The agent should install an ebXML Message Service Handler (MSH) that supports the ebXML Message Service V2.0 specification into the application server. This way, the agent can use the MSH to exchange data with the MSH in the MD.

The agent should develop a data handler to interact with the MSH and the backend database for sending and receiving data. To send data, the data handler composes the required XML documents (possibly from the backend database), packages them into an ebXML message, and submits the message to the MSH for sending to MD. To receive data, the data handler receives the ebXML message from the MSH, extracts the packaged XML documents, and process the data contained in the XML documents (possibly by storing the data into the backend database).

The agent should contact MD to obtain the network settings and protocol parameters for configuring its IPSec server, application server and MSH and arrange interoperability test.

3. EBXML MESSAGING

The ebXML Message Service (ebMS) is used for MD and the agents to exchange XML documents required for dangerous goods manifest submission. The Version 2.0 of the ebMS is adopted. ebMS defines the header and the envelope for packaging one or multiple business documents, usually in XML format, into an ebXML message. The header and the envelope define the behaviour, such as reliable and secure messaging features, for the ebXML Message Service Handler (MSH) software used by two parties to send and receive the message. The ebMS is defined on a set of layered extensions to the base Simple Object Access Protocol (SOAP) and SOAP Messages with Attachments specifications. An ebXML message allows to package multiple XML documents or payloads as MIME attachments.

For technical details about ebXML message services, please refer to the OASIS ebXML Message Services Specification Version 2.0. (<http://www.ebxml.org/specs/ebMS2.pdf>)

Using the XMLDG service, an agent submits a Dangerous Goods Manifest by sending to MD an ebXML message through the MSH. The ebXML message for *Dangerous Goods Manifest Submission* packages the *Credential* document and the *Dangerous Goods Manifest* document. The *Credential* document contains the sender's identifier and its password for authentication. The *Dangerous Goods Manifest* document contains the actual data for declaring dangerous goods. The *Credential* document should be packaged as the first payload attachment after the ebXML message header and the *Dangerous Goods Manifest* as the second payload attachment.

MD validates the submitted manifest data and responds to the submission by sending to the agent another ebXML message through the MSH. The ebXML message contains one document—*Acknowledgement* document. The *Acknowledgement* document contains the validation result.

MD processes the validated manifest data and sends to the agent a notification on the submission by fax after processing.

The messaging process of the *Dangerous Goods Manifest submission* is illustrated in Figure 2.

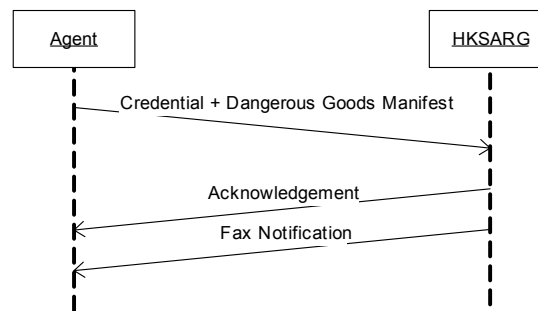


Figure 2: Message process for Dangerous Goods Manifest submission.

3.1 EBXML MESSAGE HEADER

Every ebXML message requires a message header to specify the properties of the message and the communication channel transferring it. This section defines the rules on setting the message header parameters to align the behaviours of the MSHs used by MD and the agents to exchange ebXML messages for dangerous goods manifest submission.

The message header is encapsulated by the **MessageHeader** XML element within the SOAP header. The **MessageHeader** consists of the following subordinate elements and the rules of setting these subordinate elements are specified in this section:

- **id** attribute
- **version** attribute
- SOAP **mustUnderstand** attribute
- **From** element
- **To** element
- **CPAId** element
- **ConversationId** element
- **Service** element
- **Action** element
- **MessageData** element
- **DuplicateElimination** element
- **Description** element

3.1.1 id Attribute

The **id** attribute is not used and will be ignored if it is included.

3.1.2 version Attribute

The **version** attribute must have a value of “2.0”.

3.1.3 SOAP mustUnderstand Attribute

The **mustUnderstand** attribute must have a value of “1”.

3.1.4 From Element and To Element

The **From** element and **To** element specify the information about the sender and recipient of the message respectively. The **From** and **To** elements are in the form of:

```
<eb:From>
  <eb:PartyId>fromPartyId</eb:PartyId>
</eb:From>
<eb:To>
  <eb:PartyId>toPartyId</eb:PartyId>
</eb:To>
```

The **PartyId** element under the **From** element or the **To** element is used to identify the sender or the recipient of the message. In the XMLDG Service, the **PartyId** element should use the MSH URL domain name of the party with a prefix “**uri:**” as a unique identifier. In the *Dangerous Goods Manifest Submission* message which packages the *Credential* document and the *Dangerous Goods Manifest* document, under the **From** element is the agent’s **PartyId** and under the **To** element is MD’s **PartyId**. In the *Acknowledgement* message, under the **From** element is MD’s **PartyId** and under the **To** element is the agent’s **PartyId**.

3.1.5 CPAId Element

The **CPAId** element is a string that identifies the parameters governing the exchange of messages between two parties. In the XMLDG Service, the **CPAId** is:

```
http://www.info.gov.hk/mardep/xmldg/cpas/abcshippingagent.com
```

where *abcshippingagent.com* should be replaced by the domain name of the agent.

3.1.6 ConversationId Element

The **ConversationId** identifies the set of related messages that make up a conversation between two parties. Therefore, the Dangerous Goods Manifest Submission message and the following Acknowledgement messages that acknowledge that Submission message must use an identical **ConversationId**. The **ConversationId** is assigned by the agent, who submits the manifest, should be a concatenation of a unique identifier, an "@" sign, and the domain name of the agent, for example:

2002110815361029493@abcshippingagent.com

3.1.7 Service Element

The **Service** element identifies the service that acts on the message. In the XMLDG service, it uses a constant string as follows:

urn:mardep.gov.hk:service:XmldgManifest

3.1.8 Action Element

The **Action** element identifies a process within a **Service** that processes the Message. The **Action** element in a *Dangerous Goods Manifest Submission message* uses the following value:

DangerousGoodsManifestSubmission

The Action element in an *Acknowledgement message* uses the following value:

DangerousGoodsManifestAcknowledgement

3.1.9 MessageData Element

The **MessageData** element provides a means to uniquely identify an ebXML message. It contains the **MessageId** element, the **Timestamp** element, the **RefToMessageId** element and the **TimeToLive** element.

3.1.9.1 MessageId Element

The **MessageId** element is a globally unique identifier for each message.

For instance, it can be generated based on the following items:

- system time (up to millisecond)
- CPAId element
- Service element
- Action element
- host IP address of sender

- sequence number (maintained by sender)

3.1.9.2 Timestamp element

The **Timestamp** element contains a value representing the time that the message header was created. It is predefined in XML Schema 1.0, its format is:

CCYY-MM-DDThh:mm:ss. Please refer to <http://www.w3.org/TR/2001/REC-xmlschema-2-20010502/#dateTime> for more details.

3.1.9.3 RefToMessageId element

The **RefToMessageId** element has a cardinality of zero or one. When present, it must contain the **MessageId** value of an earlier ebXML message to which this message relates. If there is no earlier related message, the element must not be present. For error message, the value of the **RefToMessageId** element is the **MessageId** value of the message in error.

In XMLDG Service, there should be no **RefToMessageId** element in a *Dangerous Goods Manifest Submission message*.

In an *Acknowledgement message*, MD generates the **RefToMessageId** element which uses the **MessageId** value of the respective *Dangerous Goods Manifest Submission message*.

The **RefToMessageId** element of error message is handled by MSH.

3.1.9.4 TimeToLive Element

The **TimeToLive** element is used to indicate the time by which a message should be delivered to the To Party MSH.

In XMLDG Service, there should be no **TimeToLive** element.

3.1.10 DuplicateElimination Element

The **DuplicateElimination** element, if present, identifies a request by the sender for the receiving MSH to check for duplicate messages.

In XMLDG Service, the **DuplicateElimination** element is present.

3.1.11 Description Element

The **Description** element is to provide a human readable description of the purpose or intent of the message.

In XMLDG Service, there is no **Description** element.

4. SCHEMA APPLICATION

This section provides the necessary instructions for agents to implement the data handler to prepare and process the required XML documents for the XMLDG service. They are additional instructions are based on the XML schema defined in the HKSARG Dangerous Goods Manifest XML Schema Specification. The additional instructions cover the following aspects:

1. supplementary information on how the data semantics should be interpreted by the systems; and
2. additional constraints on the data formats, lengths, contents, and occurrences of the elements and attributes that the systems should process.

4.1 DANGEROUS GOODS MANIFEST SCHEMA APPLICATION

/DangerousGoodsManifest/DocumentHeader			
Occurrence:	1		
/DangerousGoodsManifest/DocumentHeader/DocumentId			
Occurrence:	1		
Type:	String	Length:	1-35
See:	Section 4.4.2		
/DangerousGoodsManifest/DocumentHeader/DocumentTypeCode			
Occurrence:	1		
Type:	String	Content:	DGM
Description:	Indication of a Dangerous Goods Manifest document.		
/DangerousGoodsManifest/DocumentHeader/DocumentFunctionCode			
Occurrence:	1		
Type:	String	Content:	ORIGINAL
Description:	Indication of the original version of the Dangerous Goods Manifest. XMLDG only support original submission but not replacement and cancellation of submission.		
/DangerousGoodsManifest/DocumentHeader/IssueDateTime			
Occurrence:	1		
Type:	Date Time		
Description:	The date/time when the Dangerous Goods Manifest is submitted.		
/DangerousGoodsManifest/DocumentHeader/SenderParty			
Occurrence:	1		
Description:	The party who submits the Dangerous Goods Manifest.		
/DangerousGoodsManifest/DocumentHeader/SenderParty/Id			
Occurrence:	1		
Type:	String	Length:	1-26
See:	Section 4.4.3		
/DangerousGoodsManifest/DocumentHeader/SenderParty/Name			
Occurrence:	1		
Type:	String	Length:	1-80

/DangerousGoodsManifest/DocumentHeader/RecipientParty			
Occurrence:	1		
Description:	Indication of the Hong Kong SAR Government.		
/DangerousGoodsManifest/DocumentHeader/RecipientParty/Id			
Occurrence:	1		
Type:	String	Content:	gov.hk
See:	Section 4.4.3		
/DangerousGoodsManifest/DocumentHeader/RecipientParty/Name			
Occurrence:	1		
Type:	String	Content:	HONG KONG SAR GOVERNMENT
/DangerousGoodsManifest/Transport			
Occurrence:	1		
/DangerousGoodsManifest/Transport/CarrierAgentParty			
Occurrence:	1		
Description:	The shipping agent who transports the dangerous goods.		
/DangerousGoodsManifest/Transport/CarrierAgentParty/Id			
Occurrence:	1		
Type:	String	Length:	1-26
See:	Section 4.4.3		
/DangerousGoodsManifest/Transport/CarrierAgentParty/Name			
Occurrence:	1		
Type:	String	Length:	1-80
/DangerousGoodsManifest/Transport/Vessel			
Occurrence:	1		
Description:	The vessel that transports the dangerous goods.		
/DangerousGoodsManifest/Transport/Vessel/CallsignId			
Occurrence:	1		
Type:	String	Length:	1-10
Description:	Callsign of the vessel.		
/DangerousGoodsManifest/Transport/Vessel/IMOId			
Occurrence:	0-1		
Type:	String	Format:	IMO[0-9]{7}
Description:	IMO number of a vessel.		
/DangerousGoodsManifest/Transport/Vessel/PortAuthorityId			
Occurrence:	0-1		
Type:	String	Format:	[0-9]{10}
Description:	An vessel identifier assigned by the port authority.		
/DangerousGoodsManifest/Transport/Vessel/Name			
Occurrence:	1		
Type:	String	Length:	1-25
Description:	Name of the vessel.		
/DangerousGoodsManifest/Transport/Voyage			
Occurrence:	1		
Description:	The identification of the voyage.		
/DangerousGoodsManifest/Transport/Voyage/Id			
Occurrence:	1		
Type:	String	Length:	1-9
Description:	Voyage number assigned by the carrier.		

/DangerousGoodsManifest/Transport/Voyage/Location			
Occurrence:	1		
Description:	Indicates the berth that docks the vessel.		
/DangerousGoodsManifest/Transport/Voyage/Location/Name			
Occurrence:	1		
Type:	String	Length:	1-60
Description:	The Hong Kong berth that docks the vessel.		
See:	See Section 4.4.4		
/DangerousGoodsManifest/Transport/Voyage/CallPortLocation			
Occurrence:	1		
Description:	Port of call, which is Hong Kong.		
/DangerousGoodsManifest/Transport/Voyage/CallPortLocation/Name			
Occurrence:	1		
Type:	String	Content:	HONG KONG
/DangerousGoodsManifest/Transport/Voyage/PortCallDate			
Occurrence:	1		
Type:	Date Time		
Description:	Port call date of the vessel that transports the dangerous goods.		
/DangerousGoodsManifest/DangerousGoodsItem			
Occurrence:	1-99		
Description:	A dangerous goods item transported.		
/DangerousGoodsManifest/DangerousGoodsItem/DangerousGoods			
Occurrence:	1		
Description:	Details of a dangerous goods.		
/DangerousGoodsManifest/DangerousGoodsItem/DangerousGoods/UNDGId			
Occurrence:	1		
Type:	String	Format:	[0-9]{4}
/DangerousGoodsManifest/DangerousGoodsItem/DangerousGoods/ProperShippingName			
Occurrence:	1		
Type:	String	Length:	1-200
Description:	The name is always in english.		
/DangerousGoodsManifest/DangerousGoodsItem/DangerousGoods/ClassCode			
Occurrence:	1		
Type:	String	Length:	1-4
/DangerousGoodsManifest/DangerousGoodsItem/DangerousGoods/SubsidiaryRiskClassCode			
Occurrence:	0-3		
Type:	String	Length:	1-4
/DangerousGoodsManifest/DangerousGoodsItem/DangerousGoods/PackingGroupCode			
Occurrence:	1		
Type:	String	Length:	1
/DangerousGoodsManifest/DangerousGoodsItem/DangerousGoods/MarinePollutantCode			
Occurrence:	0-1		
Type:	String	Length:	1

/DangerousGoodsManifest/DangerousGoodsItem/DangerousGoods/FlashpointMeasure			
Occurrence:	0-1		
Type:	Decimal	Digits:	4.1
Attribute:	measureUnitCode = "CEL"		
Description:	Flashpoint temperature in degree Celsius.		
/DangerousGoodsManifest/DangerousGoodsItem/GrossMassMeasure			
Occurrence:	1		
Type:	Decimal	Digits:	11.2
Attribute:	measureUnitCode = "KGM"		
Description:	Gross mass of the dangerous goods item in kilogram.		
/DangerousGoodsManifest/DangerousGoodsItem/ExplosiveMassMeasure			
Occurrence:	0-1		
Type:	Decimal	Digits:	7.2
Attribute:	measureUnitCode = "KGM"		
Description:	Net explosive mass of the dangerous goods item in kilogram.		
See:	Section 4.4.5		
/DangerousGoodsManifest/DangerousGoodsItem/NetMassMeasure			
Occurrence:	0-1		
Type:	Decimal	Digits:	11.2
Attribute:	measureUnitCode = "KGM"		
Description:	Net mass of the dangerous goods item in kilogram.		
/DangerousGoodsManifest/DangerousGoodsItem/Package			
Occurrence:	1		
/DangerousGoodsManifest/DangerousGoodsItem/Package/TypeName			
Occurrence:	1		
Type:	String	Length:	1-100
/DangerousGoodsManifest/DangerousGoodsItem/Package/Quantity			
Occurrence:	1		
Type:	Integer	Digits:	10
/DangerousGoodsManifest/DangerousGoodsItem/LoadingPortLocation			
Occurrence:	1		
/DangerousGoodsManifest/DangerousGoodsItem/LoadingPortLocation/Code			
Occurrence:	1		
Type:	String	Length:	2-5
See:	Section 4.4.6.1		
/DangerousGoodsManifest/DangerousGoodsItem/LoadingPortLocation/Name			
Occurrence:	0-1		
Type:	String	Length:	1-60
/DangerousGoodsManifest/DangerousGoodsItem/DischargePortLocation			
Occurrence:	1		
/DangerousGoodsManifest/DangerousGoodsItem/DischargePortLocation/Code			
Occurrence:	1		
Type:	String	Length:	2-5
See:	Section 4.4.6.2		

/DangerousGoodsManifest/DangerousGoodsItem/DischargePortLocation/Name			
Occurrence:	0-1		
Type:	String	Length:	1-60
/DangerousGoodsManifest/DangerousGoodsItem/Container			
Occurrence:	0-99		
/DangerousGoodsManifest/DangerousGoodsItem/Container/Id			
Occurrence:	1		
Type:	String	Length:	1-13
Description:	This Id is unique within the same DangerousGoodsItem.		
/DangerousGoodsManifest/DangerousGoodsItem/Container/Location/			
Occurrence:	0-1		
/DangerousGoodsManifest/DangerousGoodsItem/Container/Location/Id			
Occurrence:	0-1		
Type:	String	Format:	[0-9]{7}
/DangerousGoodsManifest/DangerousGoodsItem/Container/Location/Name			
Occurrence:	0-1		
Type:	String	Length:	1-15
/DangerousGoodsManifest/DangerousGoodsItem/Container/SizeTypeCode			
Occurrence:	1		
Type:	String	Length:	1
See:	Section 4.4.7		
/DangerousGoodsManifest/DangerousGoodsItem/ContainerCount			
Occurrence:	2		
Description:	Total number of containers of a particular size type that contain dangerous goods. Two ContainerCount elements should occur to indicate the total numbers of 20-foot containers and 40-foot containers respectively.		
/DangerousGoodsManifest/DangerousGoodsItem/ContainerCount/SizeTypeCode			
Occurrence:	1		
Type:	String	Length:	1
See:	Section 4.4.7		
/DangerousGoodsManifest/DangerousGoodsItem/ContainerCount/Quantity			
Occurrence:	1		
Type:	Integer	Range:	0-99
Description:	Total number of containers of a particular size type that contains dangerous goods.		
See:	See Section 4.4.8		

4.2 ACKNOWLEDGEMENT SCHEMA APPLICATION

/Acknowledgement/DocumentHeader			
Occurrence:	1		
/Acknowledgement/DocumentHeader/DocumentId			
Occurrence:	1		
Type:	String	Length:	1-35
Description:	A unique Document Identifier assigned by the Marine Department.		

/Acknowledgement/DocumentHeader/DocumentTypeCode			
Occurrence:	1		
Type:	String	Content:	ACK
Description:	Indication that the document is an Acknowledgement.		
/Acknowledgement/DocumentHeader/ResponseTypeCode			
Occurrence:	1		
Type:	String	Length:	2
See:	Section 4.4.9		
/Acknowledgement/DocumentHeader/ReferenceDocumentId			
Occurrence:	1		
Type:	String	Length:	0-35
Description:	The Document Identifier of the reference Dangerous Goods Manifest. Empty string is used when the Dangerous Goods Manifest cannot be opened.		
/Acknowledgement/DocumentHeader/ReferenceDocumentTypeCode			
Occurrence:	1		
Type:	String	Content:	DGM
Description:	Indication that the reference document is a Dangerous Goods Manifest.		
/Acknowledgement/DocumentHeader/IssueDateTime			
Occurrence:	1		
Type:	Date Time		
Description:	The date/time when the Acknowledgement is sent by the Marine Department.		
/Acknowledgement/DocumentHeader/SenderParty			
Occurrence:	1		
Description:	Indication of the Hong Kong SAR Government.		
/Acknowledgement/DocumentHeader/SenderParty/Id			
Occurrence:	1		
Type:	String	Content:	gov.hk
/Acknowledgement/DocumentHeader/SenderParty/Name			
Occurrence:	1		
Type:	String	Content:	HONG KONG SAR GOVERNMENT
/Acknowledgement/DocumentHeader/RecipientParty			
Occurrence:	1		
Description:	The party whose Dangerous Goods Manifest is acknowledged.		
/Acknowledgement/DocumentHeader/RecipientParty/Id			
Occurrence:	1		
Type:	String	Length:	0-26
See:	Section 4.4.3		
/Acknowledgement/DocumentHeader/RecipientParty/Name			
Occurrence:	1		
Type:	String	Length:	0-80
/Acknowledgement/ProcessingResult			
Occurrence:	0-99		
/Acknowledgement/ProcessingResult/Code			
Occurrence:	1		
Type:	String	Format:	[0-9]{3}
See:	Section 4.4.10		

/Acknowledgement/ProcessingResult/Text			
Occurrence:	0-1		
Type:	String	Length:	0-200

4.3 CREDENTIAL SCHEMA APPLICATION

/Credential/DomainId			
Occurrence:	1		
Type:	String	Content:	DGIS
/Credential/UserId			
Occurrence:	1		
Type:	String	Length:	1-5
Description:	DGIS Agent ID.		
Description:	If a shipping agent has not obtained its UserId and Password from MD before, the shipping agent should first obtain an UserId (together with Password) from MD.		
/Credential/PasswordText			
Occurrence:	1		
Type:	String	Length:	1-10
Description:	DGIS Password		
Description:	If a shipping agent has not obtained its UserId and Password from MD before, the shipping agent should first obtain a password (together with UserId) from MD.		

4.4 DATA DESCRIPTIONS

4.4.1 Data Types and Their Properties

Every leaf element is bound to a data type, which determines what data content the element contains. Each data type corresponds to a XML Schema Simple Type as follows:

Data Type	XML Schema Simple Type
Date Time	xs:dateTime
Decimal	xs:decimal
Integer	xs:decimal (with zero decimal place)
String	xs:string

Each data type can be associated with the following properties:

Property	Supported Data Types	Description
Content	All data types	Pre-set content.
Digits	Decimal, Integer	X.Y representing the number of digits in the integral part (X) and the number of digits in the fraction part (Y). In case, it is a negative number, the negative sign is considered as 1 digit in the integral part (X).
Format	All data types	Specification of the content format.
Length	String	Length of a string.

4.4.2 Document Identifier

Every Dangerous Goods Manifest document is identified by a unique Document Identifier. A Document Identifier is composed of two parts—an Issuer Document Identifier (*issuer_document_id*) and a Party Identifier (*party_id*). The Document Identifier is in the format of *issuer_document_id@party_id*, where the two parts are separated by an '@' character.

The issuer should assign every submitted document a unique Issue Document Identifier. This identifier must be unique among all documents that the issuer has submitted to the Marine Department for a reasonable long period of time.

The Party Identifier is the identifier that the Marine Department uses to identify the issuer. See Section 4.4.2.

The Document Identifier (i.e. *issuer_document_id@party_id*) of a submitted Dangerous Goods Manifest document will be referenced in the Acknowledgement documents that respond to the submitted Dangerous Goods Manifest.

4.4.3 Party Identification

A party is identified a party identifier (element name *Id*) and/or a descriptive party name (element name *Name*). If a party identifier and a party name both exist, the party identifier is used as the definitive identification.

Generally, the party should use its domain name (e.g. *abc.com*) as its party identifier. If the party does not have a registered domain name, it must request for the Marine Department to assign a party identifier.

4.4.4 Hong Kong Berths

The issuer must indicate the name of the berth in Hong Kong that docks the visiting vessel in the element */DangerousGoodsManifest/Transport/Voyage/Location/Name*. The berth name must be chosen in the following list:

1	ABERDEEN SOUTH TYPHOON SHELTER
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2	ABERDEEN WEST TYPHOON SHELTER
3	AREAS NOT DEFINED
4	BERTH AT JUNK BAY (TSANG KWAN O)
5	BERTH AT KOWLOON BAY
6	BERTH AT TUEN MUN
7	CAUSEWAY BAY TYPHOON SHELTER
8	CHA KAO LING PUBLIC CARGO WORKING AREA
9	CHEUNG CHAU TYPHOON SHELTER
10	CHINA MERCHANT KENNEDY TOWN
11	CHINA MERCHANT TSING YI (FORMER EUROASIA)
12	CHU KONG BERTH CHEP LAP KOK AIRPORT
13	EASTERN QUARANTINE AND IMMIGRATION ANCHORAGE
14	GOVERNMENT MOORING BUOY
15	GOVERNMENT MOORING BUOY AT WESTERN DG ANCHORAGE
16	GOVT. EXPL. DEPOT
17	HEI LING CHAU TYPHOON SHELTER
18	HUNG HOM PRIVATE BERTH
19	KWAI CHUNG CONTAINER BERTH NO. 1 (TERMINAL 1, MTL)
20	KWAI CHUNG CONTAINER BERTH NO. 10 (TERMINAL 7, HIT)
21	KWAI CHUNG CONTAINER BERTH NO. 11 (TERMINAL 8, COSCO-HIT)
22	KWAI CHUNG CONTAINER BERTH NO. 12 (TERMINAL 8, COSCO-HIT)
23	KWAI CHUNG CONTAINER BERTH NO. 13 (TERMINAL 8, MTL)
24	KWAI CHUNG CONTAINER BERTH NO. 14 (TERMINAL 8, MTL)
25	KWAI CHUNG CONTAINER BERTH NO. 2 (TERMINAL 2, MTL)
26	KWAI CHUNG CONTAINER BERTH NO. 3 (TERMINAL 3, SLOT)
27	KWAI CHUNG CONTAINER BERTH NO. 4 (TERMINAL 4, HIT)
28	KWAI CHUNG CONTAINER BERTH NO. 5 (TERMINAL 5, MTL)
29	KWAI CHUNG CONTAINER BERTH NO. 6 (TERMINAL 4, HIT)
30	KWAI CHUNG CONTAINER BERTH NO. 7 (TERMINAL 6, HIT)
31	KWAI CHUNG CONTAINER BERTH NO. 8 (TERMINAL 6, HIT)
32	KWAI CHUNG CONTAINER BERTH NO. 9 (TERMINAL 7, HIT)
33	KWAI CHUNG CONTAINER TERMINAL (COSCO-HIT)
34	KWAI CHUNG CONTAINER TERMINAL (CSX)
35	KWAI CHUNG CONTAINER TERMINAL (HIT)
36	KWAI CHUNG CONTAINER TERMINAL (MTL)
37	KWUN TONG PUBLIC CARGO WORKING AREA
38	KWUN TONG TYPHOON SHELTER
39	MA WAN ANCHORAGE
40	NORTH LAMMA ANCHORAGE
41	NORTH POINT EAST
42	NORTH POINT WEST

43	NORTH WEST LAMMA ANCHORAGE
44	PUN SHAN SHEK ANCHORAGE
45	RAMBLER CHANNEL CARGO WORKING AREA
46	RAMBLER CHANNEL TYPHOON SHELTER
47	RIVER TRADE TERMINAL AT TUEN MUN
48	SAM KA TSUEN TYPHOON SHELTER
49	SHAU KEI WAN TYPHOON SHELTER
50	SOUTH EAST LAMMA ANCHORAGE
51	SOUTH WEST LAMMA ANCHORAGE
52	STONECUTTERS ISLAND PUBLIC CARGO WORKING AREA
53	TRANSIT HKW
54	TUEN MUN CHU KONG GODOWN
55	TUEN MUN IMMIGRATION ANCHORAGE
56	TUEN MUN PUBLIC CARGO WORKING AREA
57	WAN CHAI PUBLIC CARGO WORKING AREA
58	WESTERN ANCHORAGE
59	WESTERN DG ANCHORAGE
60	WESTERN DIST. WF
61	WESTERN DISTRICT PUBLIC CARGO WORKING AREA
62	WESTERN QUARANTINE AND IMMIGRATION ANCHORAGE
63	YAU LIAN WHARF AT TSING YI
64	YAU MA TEI ANCHORAGE
65	YAU MA TEI PUBLIC CARGO WORKING AREA
66	YAU MA TEI TYPHOON SHELTER
67	YIM TIN TSAI TYPHOON SHELTER
68	YUEN FAT WHARF AT CHEUNG SHA WAN

4.4.5 Occurrence of ExplosiveMassMeasure

If /DangerousGoodsManifest/DangerousGoodsItem/DangerousGoodsClassCode is "1" or starts with "1.", the occurrence of /DangerousGoodsManifest/DangerousGoodsItem/ExplosiveMassMeasure element should be 1.

4.4.6 Classification of Ports of Loading and Discharge

The issuer must supply a Classification Code for each of the Port of Loading and Port of Discharge.

4.4.6.1 Port of Loading

The Classification Code for the Port of Loading is specified in the following element:

/DangerousGoodsManifest/DangerousGoodsItem/
LoadingPortLocation/Code

The Classification Codes for the Port of Loading are listed below:

1	HK	Hong Kong
2	PRC	Mainland China
3	OTH	Others

4.4.6.2 Port of Discharge

The Classification Code for the Port of Discharge is specified in the following element:

/DangerousGoodsManifest/DangerousGoodsItem/
DischargePortLocation/Code

The Classification Codes for the Port of Discharge are listed below:

1	HK	Hong Kong
2	PRC	Mainland China
4	HKS	Hong Kong (Transshipment)
3	OTH	Others

4.4.7 Container Size/Type Codes

The supported container size/type codes are as follows:

1	2	20-feet container
2	4	40-feet container

4.4.8 Container Count

The total number of containers for a particular size type recorded in the /DangerousGoodsManifest/DangerousGoodsItem/ContainerCount/Quantity element must be more than or equal to the number of the /DangerousGoodsManifest/DangerousGoodsItem/Container elements for that size type. The reason why they may not be identical is that the agent may not be able to supply the container information for some dangerous goods items and the Container element is optional under /DangerousGoodsManifest/DangerousGoodsItem.

4.4.9 Acknowledgment Response Type Codes

1	AP	Approved. Indication that the submitted Dangerous Goods Manifest has been approved.
2	AQ	Accepted for processing. Indication that the submitted Dangerous

		Goods Manifest has been accepted for processing by the receiving application (e.g. when processing is pending).
3	RE	Rejected. Indication that the submitted Dangerous Goods Manifest has been rejected after completely or partially being processed by the receiving application.
4	RP	Rejected for processing. Indication that the submitted Dangerous Goods Manifest has been rejected before it could actually being processed by the receiving application.

4.4.10 Processing Result Codes

1	113	Message function invalid
2	201	Declaring party unknown or invalid
3	220	Proper shipping name not indicated
4	221	IMDG class unknown
5	222	IMDG class versus UN number: combination invalid
6	226	Flashpoint: not indicated or invalid
7	228	Type of package not indicated or invalid
8	231	Quantity limitation: exceeded
9	234	Handling: not permitted at indicated berth
10	317	Reference to previous message invalid
11	355	Berth not indicated or invalid
12	375	Port call date invalid
13	401	Invalid credential information
14	410	Duplicate Document Id
15	501	Data content length invalid
16	502	Data content is not of the fixed value
17	503	Data content is not in the fixed enumeration
18	504	Data type invalid
19	505	Data format invalid
20	506	Number of digits of data invalid
21	507	Data range invalid
22	508	Attribute data invalid
23	520	Occurrence of data invalid
24	530	Schema Specification violated
25	540	Identifier not unique