UN/CEFACT

Simple, Transparent and Effective Processes
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REQUIREMENTS SPECIFICATION MAPPING (RSM)

Business Domain	Environmental Management
Business Process	Waste Movement
Title	**Transboundary Movements of Waste** (TMW)
UN/CEFACT Programme Development Area	Regulatory

Version: 0.01 (02-Apr-2013)
Release: 1

DOCUMENT SUMMARY

Document Item	Value
Title	Requirements Specification Mapping Transboundary Movements of Waste
Date Last Modified	02-Apr-2013
Version	0.01
Description (one sentence summary)	Specification of the data model and targeted technology solutions for the electronic interchange of transboundary movements of waste related data as defined by the Basel Convention, http://www.basel.int.

CONTRIBUTORS

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CHANGE LOG

Version	Date	Author	Summary
V0.01	02-Apr-2013	NP	Draft completed.

REFERENCES

1. Basel Convention on the Control of Transboundary Movements of Hazardous Waste and their Disposal, http://www.basel.int
2. Transboundary Movements of Waste, Business Requirements Specification, Version 1.0, Release 1

TABLE OF CONTENTS

1 PURPOSE AND SCOPE

With transboundary movements of waste there is the risk of adverse effects to human health and the environment.

The *Basel Convention on the Control of Transboundary Movements of Hazardous Waste and their Disposal* has been adopted on 22 March 1989 as an international regulatory framework addressing these risks. As of early 2013, 180 countries are party to the convention. The procedures laid down in the Basel Convention and in related legal instruments, such as OECD Decision C(2001)107/FINAL and EU regulation 1013/2006, rely heavily on the exchange of information, both *administration to administration* and *business to administration*.

The purpose of this document is to describe the mapping of Business Requirements, as specified in the TMW Business Requirements Specification document, to UN/CEFACT compliant data structures and data formats.

2 TARGET TECHNOLOGY SOLUTION

The Transboundary Movements of Waste (TMW) solution target technology is **XML Schema**.

The Transboundary Movements of Waste (TMW) solution will not be implemented as a UN/EDIFACT message.

3 BUSINESS REQUIREMENTS SUMMARY

## 3.1 Business Processes, Information Envelopes and Authorised Roles

Information Envelope Name	UMM Business Transaction Name	Authorised Role Requester Name	Authorised Role Responder Name	Collaboration Requirements Name	Collaboration Realisation Name
Certificate of Waste Receipt	Notify Waste Receipt	Information Provider	Information Consumer	Inform on Waste Movement	Inform on Waste Movement
Certificate of Waste Recovery or Disposal	Notify Waste Recovery Disposal	Information Provider	Information Consumer	Inform on Waste Movement	Inform on Waste Movement
Notification Submission	Request Waste Movement Consent	Information Provider	Information Consumer	Inform on Waste Movement	Inform on Waste Movement
Notification Decision	Disseminate Authority Decision	Information Provider	Information Consumer	Inform on Waste Movement	Inform on Waste Movement
Movement Announcement	Announce Waste Movement	Information Provider	Information Consumer	Inform on Waste Movement	Inform on Waste Movement

3.2 Business Partner Types and Authorised Roles

Authorised Role Name	Business Partner Type Name
Information Provider	Information Consumer
Notifier	Information Consumer
Competent Authority of Dispatch	Information Consumer

Competent Authority of Transit	Information Consumer
Competent Authority of Destination	Information Consumer
Consignee	Information Consumer
Facility	Information Consumer

3.3   Conceptual Data Model
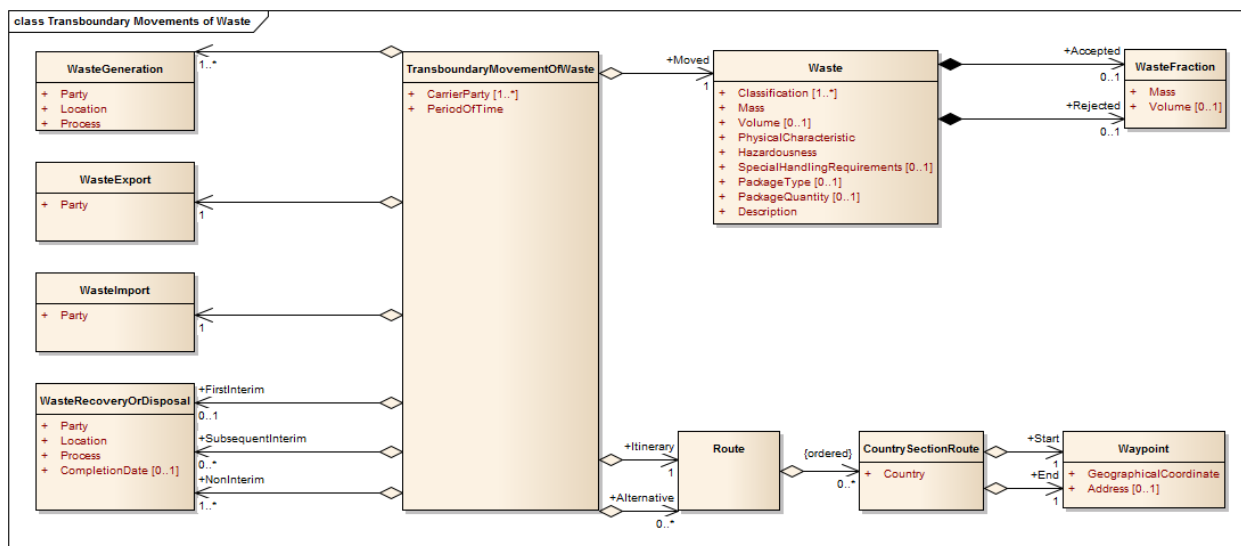
4   INFORMATION MAPPING

4.1   Referenced CCL

99 Core Components and 276 Business Information Entities for Transboundary Movements of Waste (TMW) have been submitted based on the **D08B** release of the UN/CEFACT Core Component Library. They became part of the D09B release.

For the remainder of the Transboundary Movements of Waste (TMW) submission – 2 Core Components, 12 Business Information Entities and Message Assembly – release **D12B** of the UN/CEFACT Core Component Library is the reference.
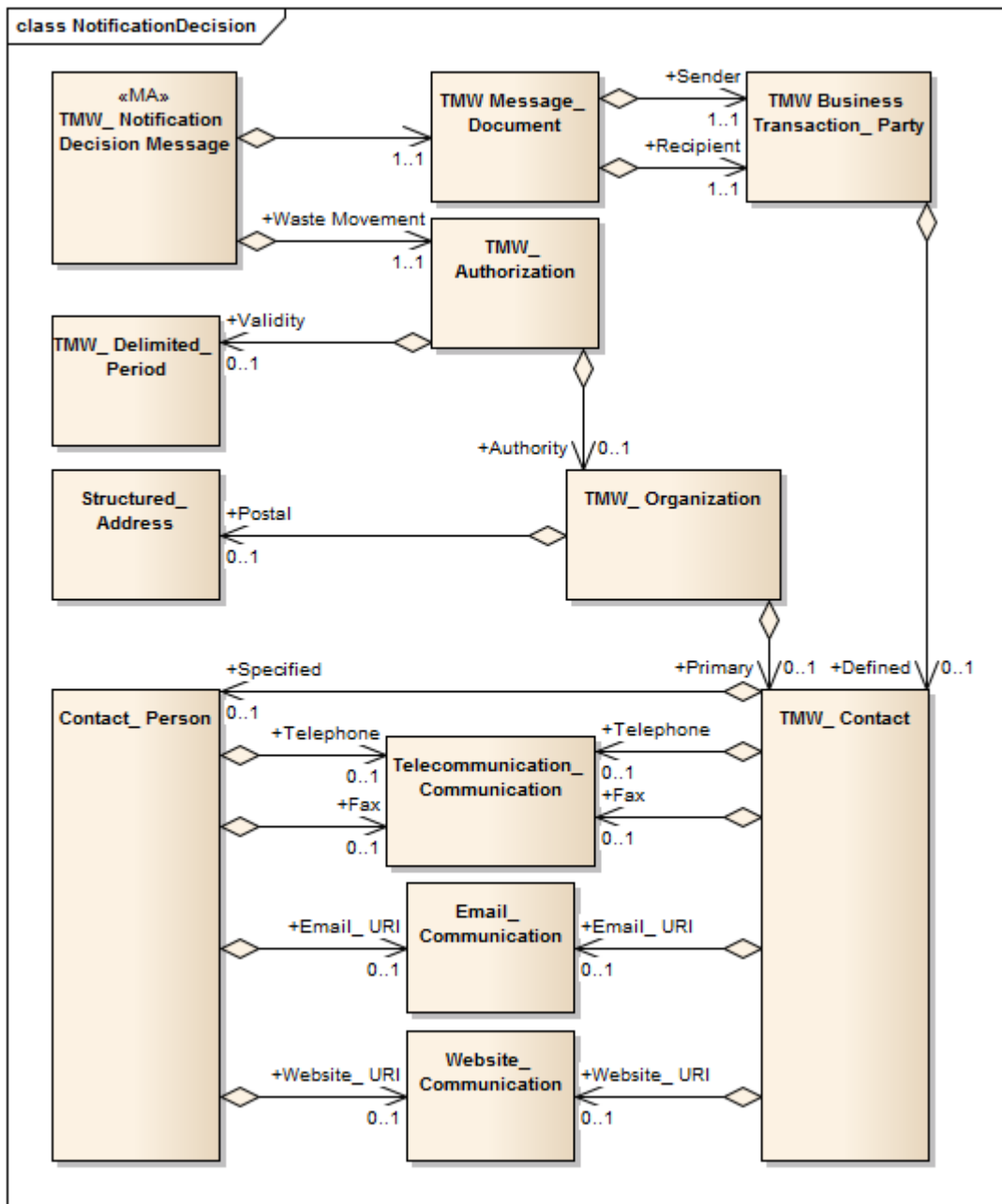
4.2 Business Information Entity Model
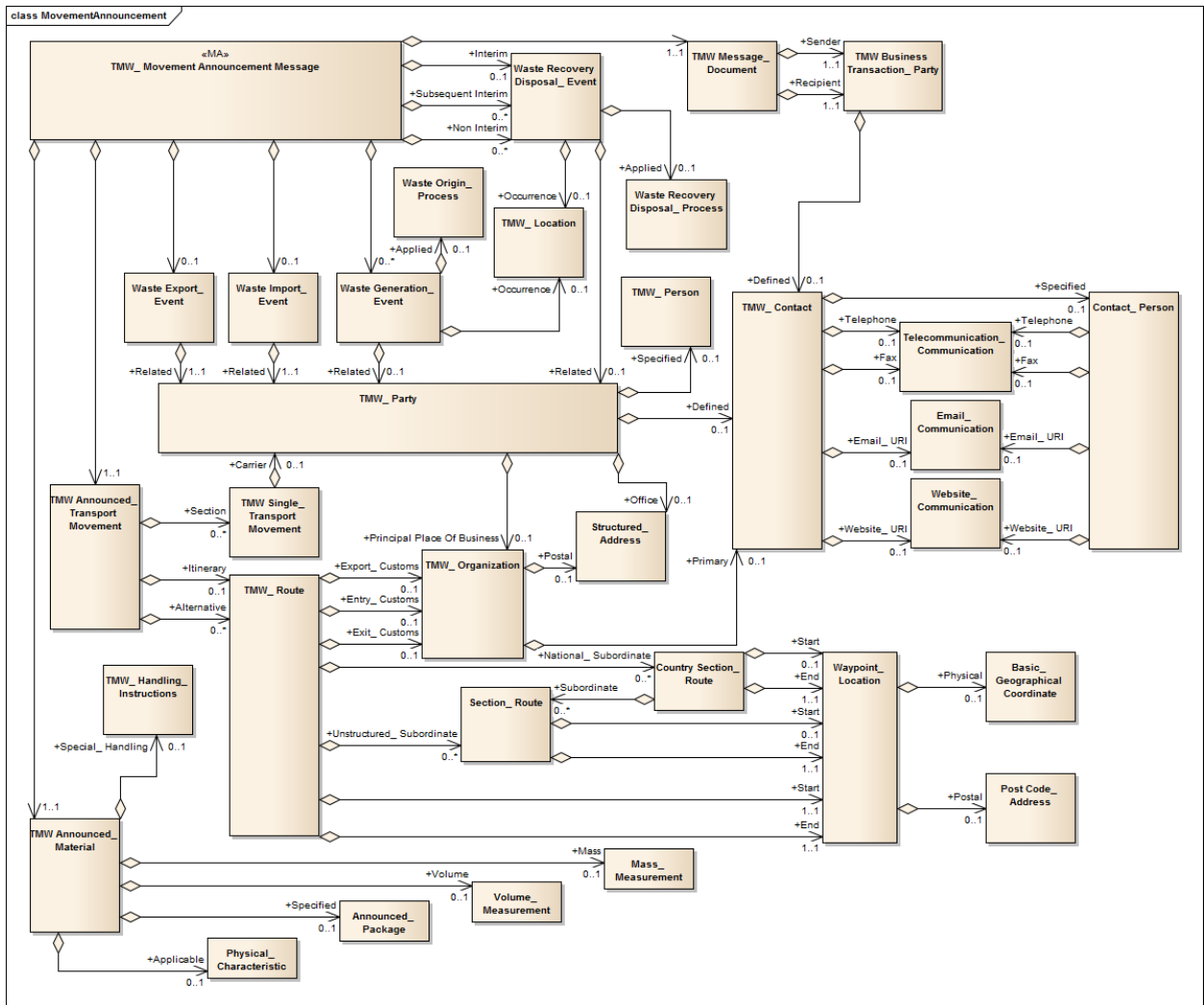
### 4.2.1 UML Class Diagrams

4.2.1.1 Notification Submission

class NotificationSubmission

«MA»
TMW_ Notification Submission Message

TMW Message_ Document

TMW Business Transaction_ Party

Financial_ Guarantee

Waste Recovery Disposal_ Event
+Interim 0..1
+Subsequent Interim 0..*
+Non Interim 0..*

+Sender 1..1
+Recipient 1..1

+Effective 0..1

Delimited_ Period

Waste Origin_ Process

TMW_ Location

Waste Recovery Disposal_ Process

Non Recovery Waste_ Material

+Occurrence 0..1
+Applied 0..1
+Intended Disposal_ Treatment
+Non Recovery_ Fraction 0..1

Waste Import_ Event 0..1
Waste Export_ Event 1..1
Waste Generation_ Event 0..*

+Applied 0..1
+Occurrence 0..1

TMW_ Person

TMW_ Contact

Telecommunication_ Communication

Contact_ Person

+Defined 0..1
+Specified
+Telephone 0..1
+Fax 0..1
+Telephone 0..1
+Fax 0..1

+Specified 0..1

+Related 1..1
+Related 1..1
+Related 0..1
+Related 0..1

TMW_ Party

Email_ Communication
+Email_ URI 0..1
+Email_ URI 0..1

+Defined 0..1

Website_ Communication
+Website_ URI 0..1
+Website_ URI 0..1

+Carrier 0..1

TMW Notified_ Transport Movement

TMW Single_ Transport Movement
+Section 0..*

Structured_ Address
+Office 0..1

+Primary 0..1

+Principal Place Of Business 0..1
+Postal 0..1

TMW_ Route
+Itinerary 0..1
+Alternative 0..*

TMW_ Organization
+Export_ Customs 0..1
+Entry_ Customs 0..1
+Exit_ Customs 0..1

Waypoint_ Location
+Start 0..1
+End 1..1

Country Section_ Route

Basic_ Geographical Coordinate
+Physical 0..1

+National_ Subordinate
+Subordinate 0..*

Section_ Route 0..*

TMW_ Handling Instructions

+Start 0..1
+End 1..1

Post Code_ Address
+Postal 0..1

+Unstructured_ Subordinate 0..*

+Special_ Handling 0..1

+Start 1..1
+End 1..1

TMW Notified_ Material

Recovery Waste_ Material
+Recovery_ Fraction 0..1

+Mass 0..1

Mass_ Measurement

+Volume 0..1

Volume_ Measurement

+Specified 0..1

TMW_ Package

+Physical_ Applicable 0..1

Physical_ Characteristic

4.2.1.2 Notification Decision

4.2.1.3   Movement Announcement
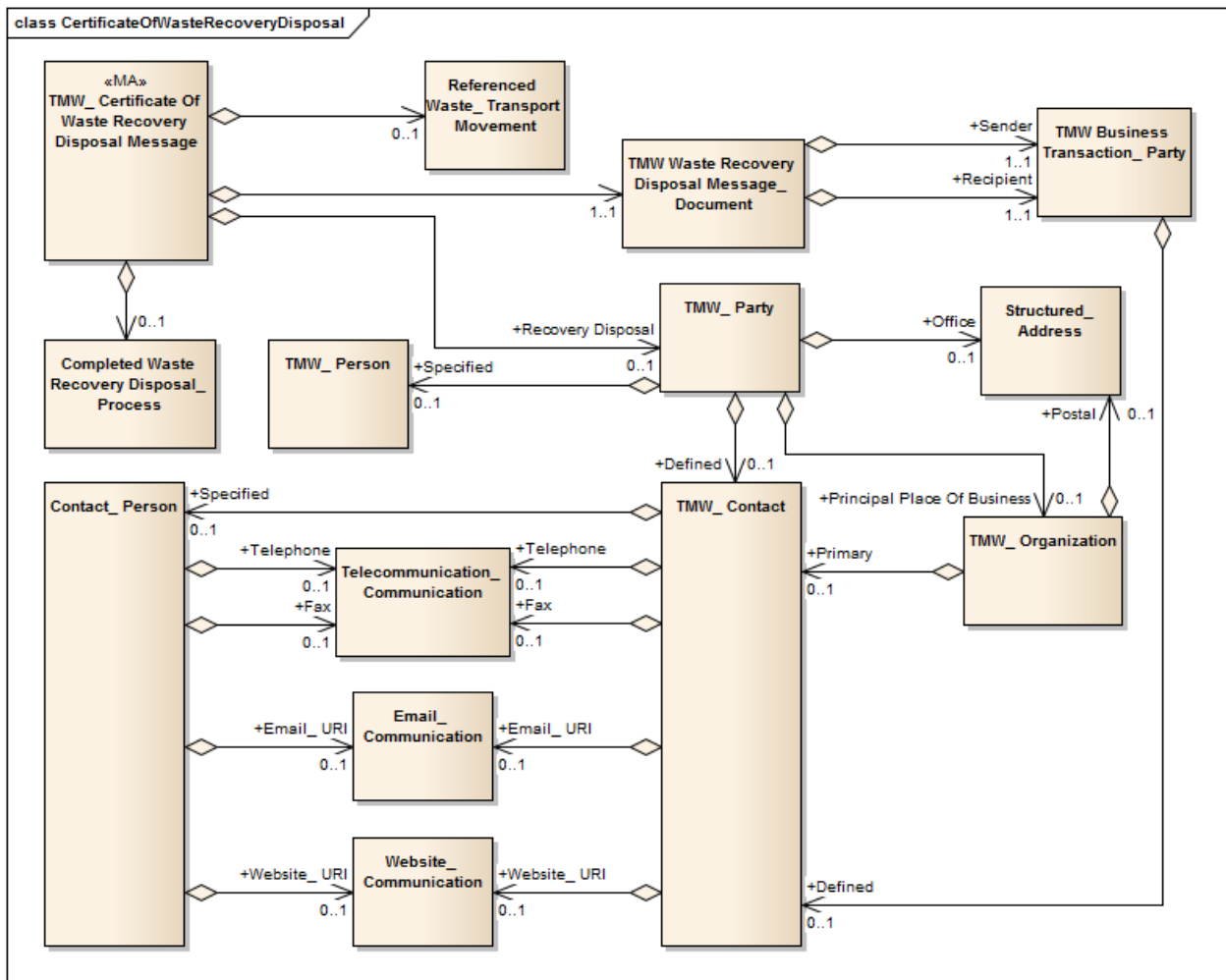

class MovementAnnouncement

4.2.1.4   Certificate of Waste Receipt
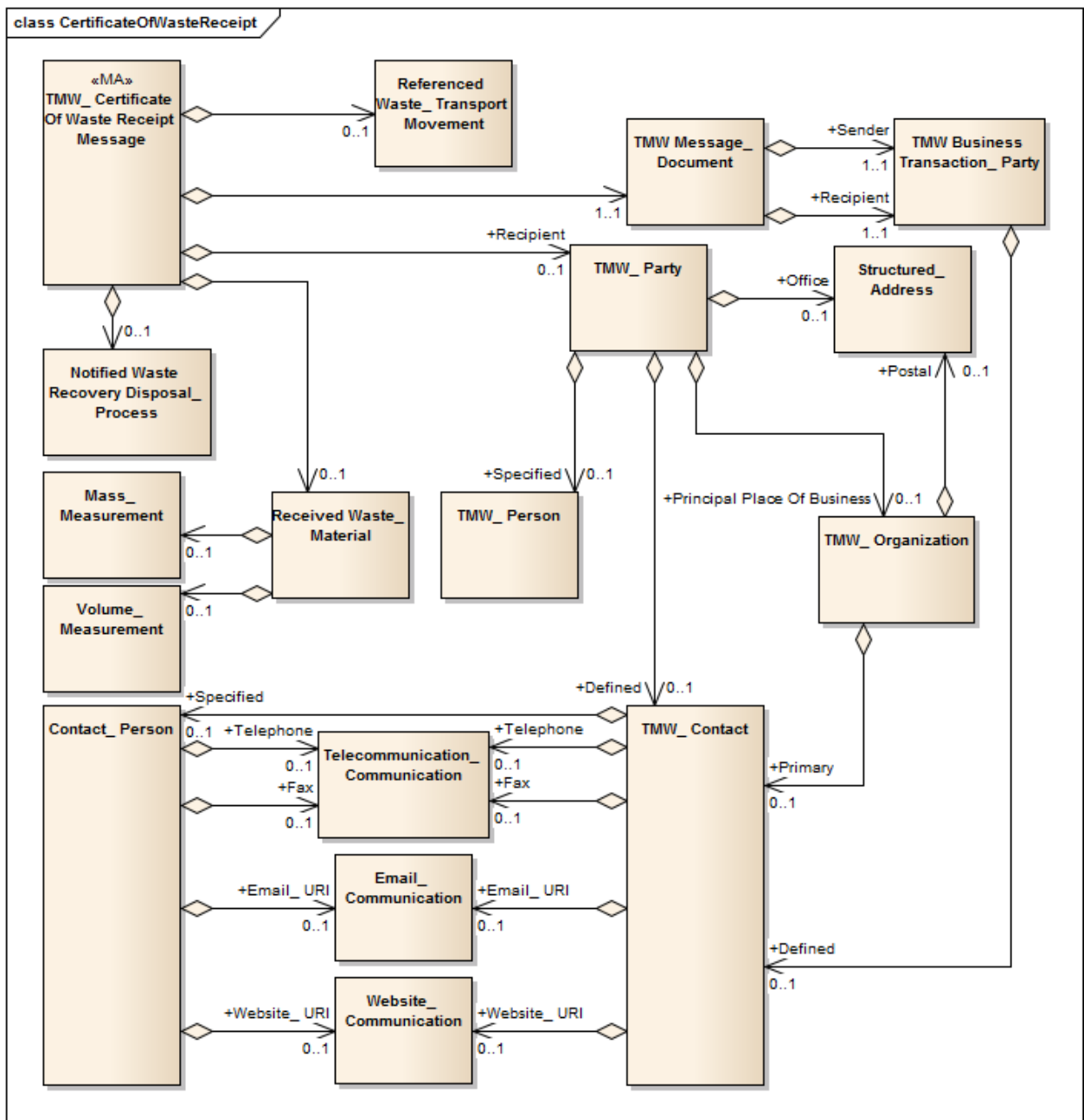
4.2.1.5 Certificate of Waste Recovery or Disposal

4.2.2 Description

Type	Occ.	Name/Definition
ABIE		**Announced_ Package. Details**
		Any self-contained wrapping or container as announced, such as a box or a barrel.
BBIE	0..1	Announced_ Package. Item. Quantity
		The number of packages announced.
BBIE	0..*	Announced_ Package. Type. Code
		A code specifying a type of announced package.
BBIE	0..1	Announced_ Package. Description. Text
		The textual description of this announced package.
ABIE		**Basic_ Geographical Coordinate. Details**
		The latitude, longitude, and altitude of a place, by which its relative situation on the globe is known.
BBIE	0..1	Basic_ Geographical Coordinate. Altitude. Measure
		The measure of the altitude that reflects the vertical elevation relative to a surface of an object for this basic geographical coordinate.
BBIE	1..1	Basic_ Geographical Coordinate. Latitude. Measure
		The measure of the latitude as an angular distance in degrees north or south from the Equator meridian to the meridian of a specific place for this basic geographical coordinate.
BBIE	1..1	Basic_ Geographical Coordinate. Longitude. Measure
		The measure of the longitude as an angular distance in degrees east or west from the Greenwich meridian to the meridian of a specific place for this basic geographical coordinate.

Type	Occ.	Name/Definition
ABIE		**Cancelled_ Document. Details**
		A collection of data that is relevant to a cancelled document.
BBIE	1..1	Cancelled_ Document. Identification. Identifier
		The unique identifier of the cancelled document.
BBIE	0..1	Cancelled_ Document. Cancellation Reason. Code
		The code specifying the reason for the cancellation of the cancelled document.
BBIE	0..1	Cancelled_ Document. Cancellation Reason. Text
		The cancellation reason, expressed as text, for the cancelled document.
ABIE		**Completed Waste Recovery Disposal_ Process. Details**
		A completed process of either regaining substances in usable form, or of getting rid of substances.
BBIE	0..*	Completed Waste Recovery Disposal_ Process. Type. Code
		A code specifying a type of completed waste recovery disposal process.
BBIE	0..1	Completed Waste Recovery Disposal_ Process. Description. Text
		The textual description of this completed waste recovery disposal process.
BBIE	0..1	Completed Waste Recovery Disposal_ Process. End. Date Time
		The end date for this completed waste recovery disposal process.
ABIE		**Contact_ Person. Details**
		An individual human being in a position to give assistance or information.
BBIE	0..1	Contact_ Person. Title. Text
		The textual expression of the title associated with this contact person, such as Doctor.
BBIE	1..1	Contact_ Person. Given Name. Text
		The name, expressed as text, given to this contact person, usually by parents at birth.
BBIE	0..1	Contact_ Person. Middle Name. Text
		The middle name, expressed as text, of this contact person, usually given by parents at birth.
BBIE	0..1	Contact_ Person. Family Name Prefix. Text
		The prefix, expressed as text, that precedes this contact person's family name, such as Van, Von.
BBIE	1..1	Contact_ Person. Family Name. Text
		The name, expressed as text, that this contact person shares with members of his/her family.
BBIE	0..1	Contact_ Person. Name Suffix. Text
		The suffix, expressed as text, that follows this contact person's name, such as Junior, Third.
BBIE	0..1	Contact_ Person. Gender. Code
		The code specifying the gender of this contact person.
ASBIE	0..1	Contact_ Person. Telephone. Telecommunication_ Communication
		Telephone communication information for this contact person.
ASBIE	0..1	Contact_ Person. Fax. Telecommunication_ Communication
		Facsimile communication information for this contact person.
ASBIE	0..1	Contact_ Person. Email_ URI. Email_ Communication
		The email Uniform Resource Identifier (URI) communication for this contact person.
ASBIE	0..1	Contact_ Person. Website_ URI. Website_ Communication
		The website Uniform Resource Identifier (URI) communication for this contact person.
ABIE		**Country Section_ Route. Details**
		A section of a way taken from one place to another that lies within the borders of one country only.
BBIE	0..1	Country Section_ Route. Description. Text
		The textual description of this country route section.
BBIE	0..1	Country Section_ Route. Distance. Measure
		The measure of the distance of this country route section.
ASBIE	0..1	Country Section_ Route. Start. Waypoint_ Location
		The starting location for this country route section.
ASBIE	1..1	Country Section_ Route. End. Waypoint_ Location
		The ending location for this country route section.
ASBIE	0..*	Country Section_ Route. Subordinate. Section_ Route
		A subsection of this country route section.

Type	Occ.	Name/Definition
ABIE		**Email_ Communication. Details**
		An address for the delivery of electronic mail.
BBIE	1..1	Email_ Communication. Email_ URI. Identifier
		The Uniform Resource Identifier (URI) for this email communication.
ABIE		**Financial_ Guarantee. Details**
		An official promise or assurance to fulfil a financial obligation.
BBIE	0..1	Financial_ Guarantee. Description. Text
		The textual description of this financial guarantee.
BBIE	1..1	Financial_ Guarantee. Liability. Amount
		The monetary value of the liability in this financial guarantee.
ASBIE	0..1	Financial_ Guarantee. Effective. Delimited_ Period
		The period within which this financial guarantee is effective.
ABIE		**Identified_ Referenced_ Document. Details**
		The identification of a referenced collection of written, printed or electronic data that provides information or evidence.
BBIE	1..1	Identified_ Referenced_ Document. Identification. Identifier
		The unique identifier for this identified, referenced document.
ABIE		**Information_ Query. Details**
		A request for information.
BBIE	1..1	Information_ Query. Content. Text
		Content, expressed as text, for this information query.
ABIE		**Mass_ Measurement. Details**
		A measurement of the mass of some physical matter.
BBIE	1..1	Mass_ Measurement. Value. Measure
		The value of the measure for this mass measurement.
BBIE	0..1	Mass_ Measurement. Quantification Type. Code
		The code specifying the type of quantification for this mass measurement, such as calculated or estimated.
ABIE		**Non Recovery Waste_ Material. Details**
		Waste material that will not be recovered.
BBIE	0..1	Non Recovery Waste_ Material. Treatment Cost. Amount
		The monetary value of the cost of treatment for this non recovery waste material.
ASBIE	0..1	Non Recovery Waste_ Material. Intended Disposal_ Treatment. Waste Recovery Disposal_ Process
		The disposal process intended for this non recovery waste material.
ABIE		**Notified Waste Recovery Disposal_ Process. Details**
		A notified process of either regaining substances in usable form, or of getting rid of substances.
BBIE	0..*	Notified Waste Recovery Disposal_ Process. Type. Code
		A code specifying a type of notified waste recovery or disposal process.
BBIE	0..1	Notified Waste Recovery Disposal_ Process. Description. Text
		The textual description of this notified waste recovery or disposal process.
BBIE	0..1	Notified Waste Recovery Disposal_ Process. Start. Date Time
		The start date of this notified waste recovery or disposal process.
ABIE		**Physical_ Characteristic. Details**
		A prominent physical attribute or aspect.
BBIE	0..*	Physical_ Characteristic. Type. Code
		A code specifying a type of physical characteristic, such as powdery, sludge-like or liquid.
BBIE	0..1	Physical_ Characteristic. Description. Text
		The textual description of this physical characteristic.
ABIE		**Post Code_ Address. Details**
		A postal delivery area identified by post code.
BBIE	1..1	Post Code_ Address. Postcode. Code
		The postcode of this address.

Type	Occ.	Name/Definition
BBIE	1..1	Post Code_ Address. Country. Identifier
		The unique identifier of the country for this post code address.
ABIE		**Received Waste_ Material. Details**
		Waste material received out of a transport movement.
BBIE	0..1	Received Waste_ Material. Receipt. Date Time
		The date of the receipt of this waste material.
BBIE	0..1	Received Waste_ Material. Rejection. Indicator
		The indication of whether or not this waste material is rejected by the recipient.
BBIE	0..1	Received Waste_ Material. Rejection Reason. Text
		The reason or reasons, expressed as text, for rejection of this waste material by the recipient.
ASBIE	0..1	Received Waste_ Material. Mass. Mass_ Measurement
		The mass measurement of this received waste material.
ASBIE	0..1	Received Waste_ Material. Volume. Volume_ Measurement
		The volume measurement of this received waste material.
ABIE		**Recovery Waste_ Material. Details**
		Waste material designated to undergo a process whereby it is regained in usable form.
BBIE	0..1	Recovery Waste_ Material. Mass Ratio. Measure
		The mass ratio measure of the waste material destined for recovery in relation to the total mass of waste.
BBIE	0..1	Recovery Waste_ Material. Volume Ratio. Measure
		The volume ratio measure of the waste material destined for recovery in relation to the total volume of waste.
BBIE	0..1	Recovery Waste_ Material. Estimated_ Value. Amount
		The estimated monetary value of this recovery waste material.
BBIE	0..1	Recovery Waste_ Material. Treatment Cost. Amount
		The monetary value of the cost of treatment for this recovery waste material.
ABIE		**Referenced Waste_ Transport Movement. Details**
		A reference to a conveyance of unused or unwanted physical matter from one place to another.
BBIE	0..1	Referenced Waste_ Transport Movement. Sequence. Numeric
		The sequence number for this referenced waste transport movement.
BBIE	0..1	Referenced Waste_ Transport Movement. Notification. Identifier
		The unique identifier of the notification for this referenced waste transport movement, such as a notification of competent authorities about a planned movement of waste.
ABIE		**Section_ Route. Details**
		A section of a way or course taken from one location to another.
BBIE	0..1	Section_ Route. Description. Text
		The textual description of this route section.
BBIE	0..1	Section_ Route. Distance. Measure
		The measure of the distance of this route section.
ASBIE	0..1	Section_ Route. Start. Waypoint_ Location
		The starting location for this route section.
ASBIE	1..1	Section_ Route. End. Waypoint_ Location
		The ending location for this route section.
ABIE		**Specific_ Issue. Details**
		A specific topic for debate or resolution.
BBIE	0..1	Specific_ Issue. Type. Code
		The code specifying the type of specific issue.
BBIE	0..1	Specific_ Issue. Severity. Code
		The code specifying the severity of this specific issue.
BBIE	0..1	Specific_ Issue. Description. Text
		The textual description of this specific issue.
ABIE		**Structured_ Address. Details**
		The location at which a particular organization may be found or reached.

Type	Occ.	Name/Definition
BBIE	0..1	Structured_ Address. Identification. Identifier
		The unique identifier in the structured address.
BBIE	0..1	Structured_ Address. Postcode. Code
		The code specifying the postcode in the structured address.
BBIE	0..1	Structured_ Address. Building Name. Text
		The name, expressed as text, of a building, a house or other structure on a street in the structured address.
BBIE	0..1	Structured_ Address. Street Name. Text
		The name, expressed as text, of a street or thoroughfare in the structured address.
BBIE	0..1	Structured_ Address. City Name. Text
		The name, expressed as text, of the city, town or village in the structured address.
BBIE	1..1	Structured_ Address. Country. Identifier
		The unique identifier of a country in the structured address (Reference ISO 3166 and UN/ECE Rec 3).
BBIE	0..1	Structured_ Address. City Sub-Division Name. Text
		A name, expressed as text, of a sub-division of a city for this address, for example a district or borough.
BBIE	0..1	Structured_ Address. Country Name. Text
		The name, expressed as text, of the country in the structured address.
BBIE	0..1	Structured_ Address. Country Sub-Division Name. Text
		The name, expressed as text, of the sub-division of a country in the structured address.
BBIE	0..1	Structured_ Address. Block Name. Text
		The block name, expressed as text, for an area surrounded by streets and usually containing several buildings for this address.
BBIE	0..1	Structured_ Address. Plot Identification. Text
		The identification, expressed as text, of the plot for this structured address.
BBIE	0..1	Structured_ Address. Post Office Box. Text
		The unique identifier, expressed as text, of a container commonly referred to as a box, in a post office or other postal service location, where postal items may be kept for this structured address.
BBIE	0..1	Structured_ Address. Building Number. Text
		The number, expressed as text, of a building or house on a street at this structured address.
BBIE	0..1	Structured_ Address. Staircase Number. Text
		The number, expressed as text, of a staircase for this structured address.
BBIE	0..1	Structured_ Address. Floor Identification. Text
		The identification by name or number, expressed as text, of the floor in a building as part of this structured address.
BBIE	0..1	Structured_ Address. Room Identification. Text
		The identification, expressed as text, of a room, suite, office or apartment as part of this structured address.
ABIE		**TMW Acknowledged Message_ Document. Details**
		A collection of data that is relevant to Transboundary Movements of Waste (TMW), transmitted electronically from one point of communication to another, and acknowledged by the recipient.
BBIE	1..1	TMW Acknowledged Message_ Document. Identification. Identifier
		The unique identifier of the TMW acknowledged message document.
BBIE	1..1	TMW Acknowledged Message_ Document. Preliminary_ Identification. Identifier
		The preliminary unique identifier of the TMW acknowledged message document.
BBIE	0..1	TMW Acknowledged Message_ Document. Type. Code
		The code specifying the type of TMW acknowledged message document.
BBIE	1..1	TMW Acknowledged Message_ Document. Status. Code
		The code specifying the status of the TMW acknowledged message document, such as accepted or rejected.
BBIE	0..1	TMW Acknowledged Message_ Document. Rejection Reason. Text
		The reason, expressed as text, for the rejection of the TMW acknowledged message document.
ASBIE	0..1	TMW Acknowledged Message_ Document. Sender. TMW Business Transaction_ Party
		The party that sends the TMW acknowledged message document.
ASBIE	0..1	TMW Acknowledged Message_ Document. Recipient. TMW Business Transaction_ Party
		The party that receives the TMW acknowledged message document.

Type	Occ.	Name/Definition
ABIE		**TMW Acknowledged Notification_ Document. Details**
		A collection of data for a piece of written, printed or electronic matter that provides notification information, is acknowledged by the recipient, and is relevant to Transboundary Movements of Waste (TMW).
BBIE	0..1	TMW Acknowledged Notification_ Document. Identification. Identifier
		The identifier for this TMW acknowledged notification document.
BBIE	0..1	TMW Acknowledged Notification_ Document. Receipt. Date Time
		The date of the formal receipt of this TMW acknowledged notification document.
BBIE	0..1	TMW Acknowledged Notification_ Document. Acceptance. Date Time
		The date of the acceptance of this TMW acknowledged notification document.
ASBIE	0..1	TMW Acknowledged Notification_ Document. Acknowledging. TMW_ Organization
		The organization that acknowledges this TMW notification document.
ABIE		**TMW Announced_ Material. Details**
		Material announced for Transboundary Movements of Waste (TMW).
BBIE	0..1	TMW Announced_ Material. Name. Text
		The name, expressed as text, of this TMW announced material.
BBIE	0..1	TMW Announced_ Material. Composition Description. Text
		The textual description of the composition of this TMW announced material.
BBIE	0..*	TMW Announced_ Material. Type. Code
		A code specifying a type of TMW announced material.
BBIE	0..1	TMW Announced_ Material. Special Handling Requirement. Indicator
		The indication of whether or not special handling is required for this TMW announced material.
ASBIE	0..1	TMW Announced_ Material. Mass. Mass_ Measurement
		The measurement of the mass of this TMW announced material.
ASBIE	0..1	TMW Announced_ Material. Volume. Volume_ Measurement
		The measurement of the volume of this TMW announced material.
ASBIE	0..1	TMW Announced_ Material. Physical_ Applicable. Physical_ Characteristic
		The physical characteristic applicable to this TMW announced material.
ASBIE	0..1	TMW Announced_ Material. Specified. Announced_ Package
		The package specified for this TMW announced material.
ASBIE	0..1	TMW Announced_ Material. Special_ Handling. TMW_ Handling_ Instructions
		Special handling instructions for this TMW announced material.
ABIE		**TMW Announced_ Transport Movement. Details**
		One or more announced conveyances of unused or unwanted physical matter from one place to another for Transboundary Movements of Waste (TMW).
BBIE	0..1	TMW Announced_ Transport Movement. Sequence. Numeric
		The sequence number for this TMW announced transport movement.
BBIE	0..1	TMW Announced_ Transport Movement. Total. Quantity
		The total number of TMW announced transport movements.
BBIE	0..1	TMW Announced_ Transport Movement. Notification. Identifier
		The unique identifier of a notification for this TMW announced transport movement, such as a notification of competent authorities.
BBIE	0..1	TMW Announced_ Transport Movement. Start. Date Time
		The date for the start of this TMW announced transport movement.
ASBIE	0..1	TMW Announced_ Transport Movement. Itinerary. TMW_ Route
		The route taken for this TMW announced transport movement.
ASBIE	0..*	TMW Announced_ Transport Movement. Alternative. TMW_ Route
		An alternative route to be taken for the carriage of waste in this TMW announced transport movement, such as for unforeseen events like a road block on the main route.
ASBIE	0..*	TMW Announced_ Transport Movement. Section. TMW Single_ Transport Movement
		A single transport movement that is a section of this TMW announced transport movement.
ABIE		**TMW Business Transaction_ Party. Details**
		An individual, a group, or a body with a role in a business transaction for Transboundary Movements of Waste (TMW).

Type	Occ.	Name/Definition
BBIE	1..*	TMW Business Transaction_ Party. Identification. Identifier
		A unique identifier of this TMW business transaction party.
BBIE	1..1	TMW Business Transaction_ Party. Role. Code
		The code specifying the role of this TMW business transaction party.
ASBIE	0..1	TMW Business Transaction_ Party. Defined. TMW_ Contact
		The defined contact for this TMW business transaction party.
ABIE		**TMW Notified_ Material. Details**
		Material notified to competent authorities due to intended Transboundary Movements of Waste (TMW).
BBIE	0..1	TMW Notified_ Material. Name. Text
		The name, expressed as text, of this TMW notified material.
BBIE	0..1	TMW Notified_ Material. Composition Description. Text
		The textual description of the composition of this TMW notified material.
BBIE	0..*	TMW Notified_ Material. Type. Code
		A code specifying a type of TMW notified material.
BBIE	0..1	TMW Notified_ Material. Special Handling Requirement. Indicator
		The indication of whether or not special handling is required for this TMW notified material.
BBIE	0..1	TMW Notified_ Material. Estimated Minimum_ Mass. Measure
		The estimated minimum mass measure of this TMW notified material.
BBIE	0..1	TMW Notified_ Material. Estimated Maximum_ Mass. Measure
		The estimated maximum mass measure of this TMW notified material.
BBIE	0..1	TMW Notified_ Material. Estimated Minimum_ Volume. Measure
		The estimated minimum volume measure of this TMW notified material.
BBIE	0..1	TMW Notified_ Material. Estimated Maximum_ Volume. Measure
		The estimated maximum volume measure of this TMW notified material.
ASBIE	0..1	TMW Notified_ Material. Mass. Mass_ Measurement
		The mass measurement of this TMW notified material.
ASBIE	0..1	TMW Notified_ Material. Volume. Volume_ Measurement
		The volume measurement of this TMW notified material.
ASBIE	0..1	TMW Notified_ Material. Physical_ Applicable. Physical_ Characteristic
		The physical characteristic applicable to this TMW notified material.
ASBIE	0..1	TMW Notified_ Material. Specified. TMW_ Package
		The package specified for this TMW notified material.
ASBIE	0..1	TMW Notified_ Material. Special_ Handling. TMW_ Handling_ Instructions
		Special handling instructions for this TMW notified material.
ASBIE	0..1	TMW Notified_ Material. Recovery_ Fraction. Recovery Waste_ Material
		The fraction of this TMW notified material that is destined for recovery.
ASBIE	0..1	TMW Notified_ Material. Non Recovery_ Fraction. Non Recovery Waste_ Material
		The fraction of this TMW notified material that is not destined for recovery.
ABIE		**TMW Notified_ Transport Movement. Details**
		One or more intended conveyances of unused or unwanted physical matter from one place to another, notified to competent authorities for Transboundary Movements of Waste (TMW).
BBIE	0..1	TMW Notified_ Transport Movement. Total. Quantity
		The total number of TMW notified transport movements.
BBIE	0..1	TMW Notified_ Transport Movement. Notification. Identifier
		The unique identifier of the notification for this TMW transport movement, such as a notification of competent authorities.
BBIE	0..1	TMW Notified_ Transport Movement. Reason. Text
		The reason, expressed as text, for this TMW notified transport movement.
BBIE	0..1	TMW Notified_ Transport Movement. First_ Start. Date Time
		The date for the start of the first TMW notified transport movement.
BBIE	0..1	TMW Notified_ Transport Movement. Last_ Start. Date Time
		The date for the start of the last TMW notified transport movement.
ASBIE	0..1	TMW Notified_ Transport Movement. Itinerary. TMW_ Route

Type	Occ.	Name/Definition
		The route taken for the carriage of waste in this TMW notified transport movement.
ASBIE	0..*	TMW Notified_ Transport Movement. Alternative. TMW_ Route
		An alternative route to be taken for the carriage of waste in this TMW notified transport movement, such as for unforeseen events like a road block on the main route.
ASBIE	0..*	TMW Notified_ Transport Movement. Section. TMW Single_ Transport Movement
		A single transport movement that is a section of this TMW notified transport movement.
ABIE		**TMW Single_ Transport Movement. Details**
		A conveyance of physical matter from one place to another conducted by one carrier for Transboundary Movements of Waste (TMW).
BBIE	0..*	TMW Single_ Transport Movement. Mode. Code
		A code specifying a mode of transport, such as rail or road, for this TMW single transport movement.
ASBIE	0..1	TMW Single_ Transport Movement. Carrier. TMW_ Party
		The carrier party in this TMW single transport movement.
ABIE		**TMW Waste Recovery Disposal Message_ Document. Details**
		A waste recovery or disposal related collection of data that is relevant to Transboundary Movements of Waste (TMW) and transmitted electronically from one point of communication to another.
BBIE	1..1	TMW Waste Recovery Disposal Message_ Document. Preliminary_ Identification. Identifier
		The preliminary unique identifier of this TMW waste recovery disposal message document.
BBIE	1..1	TMW Waste Recovery Disposal Message_ Document. Type. Code
		The code specifying the type of TMW waste recovery disposal message document.
BBIE	0..*	TMW Waste Recovery Disposal Message_ Document. Attachment. Binary Object
		A binary attachment to this TMW waste recovery disposal message document.
ASBIE	1..1	TMW Waste Recovery Disposal Message_ Document. Sender. TMW Business Transaction_ Party
		The party that sends this TMW waste recovery disposal message document.
ASBIE	1..1	TMW Waste Recovery Disposal Message_ Document. Recipient. TMW Business Transaction_ Party
		The party that receives this TMW waste recovery disposal message document.
ABIE		**TMW Message_ Document. Details**
		A waste movement related collection of data that is relevant to Transboundary Movements of Waste (TMW) and transmitted electronically from one point of communication to another.
BBIE	1..1	TMW Message_ Document. Preliminary_ Identification. Identifier
		The preliminary unique identifier of this TMW message document.
BBIE	0..*	TMW Message_ Document. Attachment. Binary Object
		A binary attachment to this TMW message document.
ASBIE	1..1	TMW Message_ Document. Sender. TMW Business Transaction_ Party
		The party that sends this TMW message document.
ASBIE	1..1	TMW Message_ Document. Recipient. TMW Business Transaction_ Party
		The party that receives this TMW message document.
ABIE		**TMW_ Authorization. Details**
		An official permission or approval of a Transboundary Movement of Waste (TMW).
BBIE	1..1	TMW_ Authorization. Granted. Indicator
		The indication of whether or not this TMW authorization is granted.
BBIE	0..1	TMW_ Authorization. Condition. Text
		The conditions, expressed as text, for this TMW authorization.
BBIE	0..1	TMW_ Authorization. Objection. Text
		The objections, expressed as text, to this TMW authorization.
BBIE	0..1	TMW_ Authorization. Decision. Date Time
		The date of the decision regarding this TMW authorization.
BBIE	1..1	TMW_ Authorization. Subject. Identifier
		The unique identifier of the subject of this TMW authorization.
ASBIE	0..1	TMW_ Authorization. Authority. TMW_ Organization
		The authority organization for this TMW authorization.
ASBIE	0..1	TMW_ Authorization. Validity. TMW_ Delimited_ Period
		The period of time within which this TMW authorization is valid.

Type	Occ.	Name/Definition
ABIE		**TMW_ Contact. Details**
		A point of contact for a person or department for Transboundary Movements of Waste (TMW).
ASBIE	0..1	TMW_ Contact. Telephone. Telecommunication_ Communication
		Telephone communication information for this TMW contact.
ASBIE	0..1	TMW_ Contact. Fax. Telecommunication_ Communication
		Fax communication information for this TMW contact.
ASBIE	0..1	TMW_ Contact. Email_ URI. Email_ Communication
		The email address for this TMW contact.
ASBIE	0..1	TMW_ Contact. Website_ URI. Website_ Communication
		The website address for this TMW contact.
ASBIE	0..1	TMW_ Contact. Specified. Contact_ Person
		The contact person for this TMW contact.
ABIE		**TMW_ Delimited_ Period. Details**
		A period of time from a start date up to an end date relevant to Transboundary Movements of Waste (TMW).
BBIE	1..1	TMW_ Delimited_ Period. Start. Date Time
		The start date of this TMW delimited period.
BBIE	1..1	TMW_ Delimited_ Period. End. Date Time
		The end date of this TMW delimited period.
ABIE		**TMW_ Handling_ Instructions. Details**
		Information of an instructive nature that tells someone how to handle something that requires special handling relevant to Transboundary Movements of Waste (TMW).
BBIE	1..1	TMW_ Handling_ Instructions. Handling. Text
		The TMW handling instructions, expressed as text.
ABIE		**TMW_ Location. Details**
		A location relevant to Transboundary Movements of Waste (TMW).
BBIE	1..1	TMW_ Location. Description. Text
		The textual description of this TMW location.
ABIE		**TMW_ Organization. Details**
		An organized structure with a role in Transboundary Movements of Waste (TMW).
BBIE	0..*	TMW_ Organization. Identification. Identifier
		A unique identifier for this TMW organization.
BBIE	0..1	TMW_ Organization. Name. Text
		The name, expressed as text, of this TMW organization.
ASBIE	0..1	TMW_ Organization. Primary. TMW_ Contact
		The primary contact for this TMW organization.
ASBIE	0..1	TMW_ Organization. Postal. Structured_ Address
		The postal address for this TMW organization.
ABIE		**TMW_ Party. Details**
		An individual, a group, or a body having a role in Transboundary Movements of Waste (TMW), such as a waste recovery facility or a competent authority.
BBIE	0..*	TMW_ Party. Identification. Identifier
		A unique identifier of this TMW party.
BBIE	0..1	TMW_ Party. Branch. Indicator
		The indication of whether or not this TMW party is a branch of an organization.
BBIE	0..1	TMW_ Party. Organization_ Name. Text
		The organization name, expressed as text, of this TMW party.
ASBIE	0..1	TMW_ Party. Specified. TMW_ Person
		The specified person for this TMW party.
ASBIE	0..1	TMW_ Party. Defined. TMW_ Contact
		The defined contact for this TMW party.
ASBIE	0..1	TMW_ Party. Office. Structured_ Address
		The office address for this TMW party.

Type	Occ.	Name/Definition
ASBIE	0..1	TMW_ Party. Principal Place Of Business. TMW_ Organization
		The organization which is the principal place of business of this TMW party.
ABIE		**TMW_ Package. Details**
		Any self-contained wrapping or container, such as a box or a barrel, for Transboundary Movements of Waste (TMW).
BBIE	0..*	TMW_ Package. Type. Code
		A code specifying a type of TMW package.
BBIE	0..1	TMW_ Package. Description. Text
		The textual description of this TMW package.
ABIE		**TMW_ Person. Details**
		An individual human being with a role related to Transboundary Movements of Waste (TMW), such as a person working at a waste recovery facility, or a person working for a competent authority.
BBIE	0..1	TMW_ Person. Title. Text
		The title, expressed as text, of this TMW person.
BBIE	1..1	TMW_ Person. Given Name. Text
		The name, expressed as text, given to this TMW person, usually by parents at birth.
BBIE	0..1	TMW_ Person. Middle Name. Text
		The middle name, expressed as text, of this TMW person, usually given by parents at birth.
BBIE	0..1	TMW_ Person. Family Name Prefix. Text
		The prefix, expressed as text, that precedes this TMW person's family name, such as Van, Von.
BBIE	1..1	TMW_ Person. Family Name. Text
		The name, expressed as text, that this TMW person shares with members of his/her family.
BBIE	0..1	TMW_ Person. Name Suffix. Text
		The suffix, expressed as text, that follows this TMW person's name, such as Junior, Third.
BBIE	0..1	TMW_ Person. Gender. Code
		The code specifying the gender of this TMW person.
ABIE		**TMW_ Route. Details**
		A way or course taken from one location to another for Transboundary Movements of Waste (TMW).
BBIE	0..1	TMW_ Route. Description. Text
		The textual description of this TMW route.
BBIE	0..1	TMW_ Route. Map. Binary Object
		The binary object representation of this TMW route map, such as in Global Positioning System Exchange (GPX) Format.
BBIE	0..1	TMW_ Route. Distance. Measure
		The measure of the distance of this TMW route.
BBIE	0..1	TMW_ Route. Coordinate System. Identifier
		The unique identifier of the coordinate system used for the representation of points on this TMW route.
ASBIE	1..1	TMW_ Route. Start. Waypoint_ Location
		The starting location for this TMW route.
ASBIE	1..1	TMW_ Route. End. Waypoint_ Location
		The ending location for this TMW route.
ASBIE	0..*	TMW_ Route. National_ Subordinate. Country Section_ Route
		A national subsection of this TMW route.
ASBIE	0..*	TMW_ Route. Unstructured_ Subordinate. Section_ Route
		A subsection of this TMW route.
ASBIE	0..1	TMW_ Route. Entry_ Customs. TMW_ Organization
		The customs organization of entry into the community for this TMW route.
ASBIE	0..1	TMW_ Route. Exit_ Customs. TMW_ Organization
		The customs organization of exit from the community for this TMW route.
ASBIE	0..1	TMW_ Route. Export_ Customs. TMW_ Organization
		The customs organization of export from the community for this TMW route.
ABIE		**Volume_ Measurement. Details**
		A measurement of the volume of some physical matter.

Type	Occ.	Name/Definition
BBIE	1..1	Volume_ Measurement. Value. Measure
		The value of the measure for this volume measurement.
BBIE	0..1	Volume_ Measurement. Quantification Type. Code
		The code specifying the type of quantification for this volume measurement, such as calculated or estimated.
ABIE		**Waste Export_ Event. Details**
		An occurrence of shipping waste to another country.
ASBIE	1..1	Waste Export_ Event. Related. TMW_ Party
		The Transboundary Movement of Waste (TMW) party exporting waste for this waste export event.
ABIE		**Waste Generation_ Event. Details**
		An occurrence of waste production.
ASBIE	0..1	Waste Generation_ Event. Related. TMW_ Party
		The Transboundary Movement of Waste (TMW) party generating waste for this waste generation event.
ASBIE	0..1	Waste Generation_ Event. Occurrence. TMW_ Location
		The Transboundary Movement of Waste (TMW) location at which waste generation occurs for this waste generation event.
ASBIE	0..1	Waste Generation_ Event. Applied. Waste Origin_ Process
		The process of waste generation applied for this waste generation event.
ABIE		**Waste Import_ Event. Details**
		An occurrence of bringing in waste from another country.
ASBIE	1..1	Waste Import_ Event. Related. TMW_ Party
		The Transboundary Movement of Waste (TMW) party importing waste for this waste import event.
ABIE		**Waste Origin_ Process. Details**
		A physical process out of which waste originates.
BBIE	1..1	Waste Origin_ Process. Description. Text
		The textual description of this waste origin process.
ABIE		**Waste Recovery Disposal_ Event. Details**
		An occurrence of recovery or disposal of waste.
ASBIE	0..1	Waste Recovery Disposal_ Event. Related. TMW_ Party
		The Transboundary Movement of Waste (TMW) party recovering or disposing waste for this waste recovery or disposal event.
ASBIE	0..1	Waste Recovery Disposal_ Event. Occurrence. TMW_ Location
		The Transboundary Movement of Waste (TMW) location at which waste recovery or disposal occurs for this waste recovery or disposal event.
ASBIE	0..1	Waste Recovery Disposal_ Event. Applied. Waste Recovery Disposal_ Process
		The process of recovery or disposal applied for this waste recovery or disposal event.
ABIE		**Waste Recovery Disposal_ Process. Details**
		A process of either regaining substances in usable form, or of getting rid of substances.
BBIE	0..*	Waste Recovery Disposal_ Process. Type. Code
		A code specifying a type of waste recovery or disposal process.
BBIE	0..1	Waste Recovery Disposal_ Process. Description. Text
		The textual description of this waste recovery disposal process.
ABIE		**Waypoint_ Location. Details**
		A location of a point on a route.
BBIE	0..1	Waypoint_ Location. Name. Text
		The name, expressed as text, of this waypoint location.
BBIE	0..1	Waypoint_ Location. Type. Text
		The type, expressed as text, of this waypoint location.
BBIE	0..1	Waypoint_ Location. Description. Text
		The textual description of this waypoint location.
ASBIE	0..1	Waypoint_ Location. Physical. Basic_ Geographical Coordinate
		The physical geographical coordinates for this waypoint location.
ASBIE	0..1	Waypoint_ Location. Postal. Post Code_ Address

Type	Occ.	Name/Definition
		The postcode for this waypoint location.
ABIE		**Website_ Communication. Details**
		An address for the exchange of information from and to a website over the Internet.
BBIE	1..1	Website_ Communication. Website_ URI. Identifier
		The Uniform Resource Identifier (URI) of this website communication.

4.3   New and Changed Components

4.3.1   New Aggregate Core Components (ACCs)

The reference for all of the following additions is Core Component Library D08B.

Type	Occ.	Name/Definition
ACC		**Authorization. Details**
		An official permission or approval.
BCC	0..*	Authorization. Granted. Indicator
		An indication of whether or not this authorization is granted.
BCC	0..*	Authorization. Condition. Text
		A condition, expressed as text, for this authorization.
BCC	0..*	Authorization. Objection. Text
		An objection, expressed as text, to this authorization.
BCC	0..*	Authorization. Decision. Date Time
		A date, time, date time or other date time value of a decision for this authorization.
BCC	0..*	Authorization. Subject. Identifier
		A unique identifier of a subject of this authorization.
ASCC	0..*	Authorization. Authority. Organization
		An authority organization for this authorization.
ASCC	0..*	Authorization. Validity. Period
		A period within which this authorization is valid.
ACC		**Issue. Details**
		A topic for debate or resolution.
BCC	0..*	Issue. Type. Code
		A code specifying a type of issue.
BCC	0..*	Issue. Severity. Code
		A code specifying the severity of an issue, such as harmless, alarming, or severe.
BCC	0..*	Issue. Description. Text
		A textual description of this issue.
ACC		**Material. Details**
		Something inanimate that occupies space and possesses mass.
BCC	0..*	Material. Name. Text
		A name, expressed as text, of this material.
BCC	0..*	Material. Type. Code
		A code specifying a type of material.
BCC	0..*	Material. Composition Description. Text
		A textual description of the composition of this material.
BCC	0..*	Material. Special Handling Requirement. Indicator
		An indication whether or not special handling is required for this material.
BCC	0..*	Material. Mass. Measure
		A measure of the mass of this material.
BCC	0..*	Material. Mass Ratio. Measure
		A mass measure of the this material expressed as a ratio to another mass.
BCC	0..*	Material. Volume. Measure
		A measure of the volume of this material.

Type	Occ.	Name/Definition
BCC	0..*	Material. Volume Ratio. Measure
		A volume measure of this material expressed as a ratio to another volume.
BCC	0..*	Material. Value. Amount
		A monetary value of this material.
BCC	0..*	Material. Treatment Cost. Amount
		A monetary value of a treatment cost for this material.
BCC	0..*	Material. Receipt. Date Time
		A date, time, date time, or other date time value of the receipt of this material.
BCC	0..*	Material. Rejection. Indicator
		An indication of whether or not this material is rejected.
BCC	0..*	Material. Rejection Reason. Text
		A reason, expressed as text, for rejection of this material.
ASCC	0..*	Material. Mass. Measurement
		A measurement of the mass of this material.
ASCC	0..*	Material. Volume. Measurement
		A measurement of the volume of this material.
ASCC	0..*	Material. Applicable. Characteristic
		A characteristic applicable to this material.
ASCC	0..*	Material. Specified. Package
		A package specified for this material.
ASCC	0..*	Material. Handling. Instructions
		Handling instructions for this material.
ASCC	0..*	Material. Fraction. Material
		A fraction of this material.
ASCC	0..*	Material. Treatment. Process
		A treatment process for this material.

4.3.2 Additions to previously existing Aggregate Core Components (ACCs)

The reference for all of the following additions is Core Component Library D08B, except for *Event. Related. Party* and *Event. Applied. Process*. The reference for these two components is Core Component Library D12B.

Type	Occ.	Name/Definition
BCC	0..1	Address. Staircase Number. Text
		The number, expressed as text, of a staircase for this address.
ASCC	0..*	Contact. Specified. Person
		A person specified as a contact.
BCC	0..*	Document. Rejection Reason. Text
		A reason, expressed as text, for the rejection of this document.
BCC	0..*	Document. Cancellation Reason. Code
		A code specifying the reason for the cancellation of this document, such as cancellation due to a change in circumstances invalidating the document, or cancellation due to inadvertent incorrect document content.
BCC	0..*	Document. Cancellation Reason. Text
		A reason, expressed as text, for the cancellation of this document.
ASCC	0..*	Document. Acknowledging. Organization
		An organization acknowledging this document.
ASCC	0..*	Event. Related. Party
		A party related to this event.
ASCC	0..*	Event. Applied. Process
		A process applied to this event.
BCC	0..*	Location. Type. Text
		A type, expressed as text, of this location.
BCC	0..*	Measurement. Value. Measure
		A value of a measure for this measurement.
BCC	0..*	Measurement. Quantification Type. Code

A code specifying a quantification type for this measurement, such as measured, calculated, or estimated.

BCC	0..*	Party. Branch. Indicator	

An indication of whether or not this party is a branch of an organization.

ASCC	0..1	Party. Principal Place Of Business. Organization

The organization which is the principal place of business of this party, such as the organization where the accounting and record books are maintained.

ASCC	0..*	Party. Office. Address

An office address for this party.

BCC	0..*	Process. Start. Date Time

A date, time, date time or other date time value for the start of this process.

BCC	0..*	Process. End. Date Time

A date, time, date time or other date time value for the end of this process.

BCC	0..*	Route. Distance. Measure

A measure of the distance of this route.

BCC	0..*	Route. Coordinate System. Identifier

A unique identifier of a coordinate system for this route.

ASCC	0..*	Route. Start. Location

A start location for this route.

ASCC	0..*	Route. End. Location

An end location for this route.

ASCC	0..*	Route. Subordinate. Route

A subordinate route of this route, such as a section of this route.

ASCC	0..*	Route. Customs. Organization

A customs organization for this route.

BCC	0..*	Transport Movement. Sequence. Numeric

A sequence number for this transport movement.

BCC	0..*	Transport Movement. Total. Quantity

A total number of transport movements.

BCC	0..*	Transport Movement. Notification. Identifier

A unique identifier of a notification for this transport movement, such as a notification of competent authorities about a planned movement of waste.

BCC	0..*	Transport Movement. Reason. Text

A reason, expressed as text, for this transport movement.

BCC	0..*	Transport Movement. Start. Date Time

A date, time, date time, or other date time value for the start of this transport movement.

ASCC	0..*	Transport Movement. Alternative. Route

An alternative route for this transport movement, such as for unforeseen events like a road block on the main route.

ASCC	0..*	Transport Movement. Section. Transport Movement

A transport movement that is a section of this transport movement.

4.3.3 Changed Components

The reference for all of the following changes is Core Component Library D08B.

Component	Change
Package. Type. Code	Cardinality changed from 0..1 to 0..unbounded

4.4 New and Changed Data Types

No new or changed data types are used for Transboundary Movements of Waste (TMW) related data.

5 LOGICAL MESSAGE STRUCTURE

5.1 Message Assembly

Type	Occ.	Name/Definition
MA		**TMW_ Cancellation Message. Details**
		Cancellation of a previously sent message relating to transboundary movements of waste (TMW).
ASMA	1..1	TMW_ Cancellation Message. TMW Message_ Document
		Header information of the cancellation message.
ASMA	1..1	TMW_ Cancellation Message. Cancelled_ Document
		Details on the message to be cancelled.
MA		**TMW_ Certificate Of Waste Receipt Message. Details**
		Confirmation of the receipt of waste by a consignee or by a recovery or disposal facility at the destination country of transboundary movements of waste (TMW).
ASMA	1..1	TMW_ Certificate Of Waste Receipt Message. TMW Message_ Document
		Header information of the confirmation of waste receipt message.
ASMA	0..1	TMW_ Certificate Of Waste Receipt Message. Referenced Waste_ Transport Movement
		Identification by which the movement of waste has previously been notified to competent authorities.
ASMA	0..1	TMW_ Certificate Of Waste Receipt Message. Recipient. TMW_ Party
		The party receiving the waste.
ASMA	0..1	TMW_ Certificate Of Waste Receipt Message. Received Waste_ Material
		Details on the received waste, such as the date of reception, the accepted fraction and the rejected fraction.
ASMA	0..1	TMW_ Certificate Of Waste Receipt Message. Notified Waste Recovery Disposal_ Process
		The recovery or disposal operation intended to be subsequently applied to the accepted fraction of the received waste.
MA		**TMW_ Certificate Of Waste Recovery Disposal Message. Details**
		Information on the completion of an interim or non-interim waste recovery or disposal operation at the destination country of transboundary movements of waste (TMW).
ASMA	1..1	TMW_ Certificate Of Waste Recovery Disposal Message. TMW Waste Recovery Disposal Message_ Document
		Header information of the waste recovery disposal message.
ASMA	0..1	TMW_ Certificate Of Waste Recovery Disposal Message. Referenced Waste_ Transport Movement
		Identification by which the movement of waste has previously been notified to competent authorities.
ASMA	0..1	TMW_ Certificate Of Waste Recovery Disposal Message. Recovery Disposal. TMW_ Party
		The party that recovered or disposed the waste.
ASMA	0..1	TMW_ Certificate Of Waste Recovery Disposal Message. Completed Waste Recovery Disposal_ Process
		Details on the completed recovery or disposal operation, such as date and type of operation.
MA		**TMW_ Confirmation Of Message Receipt Message. Details**
		Acknowledgement of the receipt of a transboundary movements of waste (TMW) related message.
ASMA	1..1	TMW_ Confirmation Of Message Receipt Message. Identified_ Referenced_ Document
		Header information of the confirmation of message receipt message.
ASMA	1..1	TMW_ Confirmation Of Message Receipt Message. TMW Acknowledged Message_ Document
		Details on the received message, such as identification and reception status.
MA		**TMW_ Movement Announcement Message. Details**
		Prior information regarding the actual start of a transboundary movement of waste (TMW).
ASMA	1..1	TMW_ Movement Announcement Message. TMW Message_ Document
		Header information of the movement announcement message.
ASMA	0..*	TMW_ Movement Announcement Message. Waste Generation_ Event
		Details on the waste generation, such as the waste generator party and the site of waste generation.
ASMA	0..1	TMW_ Movement Announcement Message. Waste Export_ Event
		Details on the waste export, such as the party exporting the waste.
ASMA	0..1	TMW_ Movement Announcement Message. Waste Import_ Event
		Details on the waste import, such as the party importing the waste.

Type	Occ.	Name/Definition
ASMA	0..1	TMW_ Movement Announcement Message. Interim. Waste Recovery Disposal_ Event
		Details on the first interim recovery or disposal announced for the shipped waste, such as the recovery or disposal site and recovery or disposal operations.
ASMA	0..*	TMW_ Movement Announcement Message. Subsequent Interim. Waste Recovery Disposal_ Event
		Details on subsequent interim recovery or disposal operations announced to be applied to the shipped waste, such as the recovery or disposal site and recovery or disposal operations.
ASMA	0..*	TMW_ Movement Announcement Message. Non Interim. Waste Recovery Disposal_ Event
		Details on the non-interim recovery or disposal operation announced to be applied to the shipped waste, such as the recovery or disposal site and recovery or disposal operations.
ASMA	1..1	TMW_ Movement Announcement Message. TMW Announced_ Material
		Details on the waste announced to be shipped, such as waste classification, waste quantity and physical characteristics.
ASMA	1..1	TMW_ Movement Announcement Message. TMW Announced_ Transport Movement
		Details on the announced transport movement, such as route and start date.
MA		**TMW_ Notification Acknowledgdement Message. Details**
		Acknowledgement of the receipt of a properly completed notification of transboundary movements of waste (TMW).
ASMA	1..1	TMW_ Notification Acknowledgdement Message. TMW Message_ Document
		Header information of the notification acknowledgement message.
ASMA	1..1	TMW_ Notification Acknowledgdement Message. TMW Acknowledged Notification_ Document
		Details on the acknowledgement of the receipt of a properly completed notification, such as the date of acknowledgement.
MA		**TMW_ Notification Decision Message. Details**
		A competent authority's decision on one or more transboundary movements of waste (TMW). Any such decision falls into one of the following three categories: consent, consent with conditions and objection.
ASMA	1..1	TMW_ Notification Decision Message. TMW Message_ Document
		Header information of the notification decision message.
ASMA	1..1	TMW_ Notification Decision Message. Waste Movement. TMW_ Authorization
		Details on the decision, such as whether or not the competent authority consents to the movement of waste and the date when the decision was reached.
MA		**TMW_ Notification Submission Message. Details**
		Information on one or more intended transboundary movements of waste (TMW).
ASMA	1..1	TMW_ Notification Submission Message. TMW Message_ Document
		Header information of the notification submission message.
ASMA	0..*	TMW_ Notification Submission Message. Waste Generation_ Event
		Details on the waste generation, such as the waste generator party and the site of waste generation.
ASMA	1..1	TMW_ Notification Submission Message. Waste Export_ Event
		Details on the waste export, such as the party exporting the waste.
ASMA	0..1	TMW_ Notification Submission Message. Waste Import_ Event
		Details on the waste import, such as the party importing the waste.
ASMA	0..1	TMW_ Notification Submission Message. Interim. Waste Recovery Disposal_ Event
		Details on the first interim recovery or disposal intended for the shipped waste, such as the recovery or disposal site and recovery or disposal operations.
ASMA	0..*	TMW_ Notification Submission Message. Subsequent Interim. Waste Recovery Disposal_ Event
		Details on subsequent interim recovery or disposal operations intended to be applied to the shipped waste, such as the recovery or disposal site and recovery or disposal operations.
ASMA	0..*	TMW_ Notification Submission Message. Non Interim. Waste Recovery Disposal_ Event
		Details on the non-interim recovery or disposal intended to be applied to the shipped waste, such as the recovery or disposal site and recovery or disposal operations.
ASMA	1..1	TMW_ Notification Submission Message. TMW Notified_ Material
		Details on the waste intended to be shipped, such as waste classification, waste quantity and physical characteristics.
ASMA	1..1	TMW_ Notification Submission Message. TMW Notified_ Transport Movement
		Details on the intended transport movement, such as the route.

Type	Occ.	Name/Definition
ASMA	0..*	TMW_ Notification Submission Message. Financial_ Guarantee
		Details on financial guarantees or equivalent insurance for the intended movements of waste.
MA		**TMW_ Request For Further Notification Information Message. Details**
		Request for information and documentation to a notified transboundary movement of waste (TMW).
ASMA	1..1	TMW_ Request For Further Notification Information Message. TMW Message_ Document
		Header information of the information request message.
ASMA	1..1	TMW_ Request For Further Notification Information Message. Identified_ Referenced_ Document
		Identification by which the movement of waste, to which the request for information relates, has previously been notified to competent authorities.
ASMA	1..1	TMW_ Request For Further Notification Information Message. Information_ Query
		Details on the request for information and documentation, such as the request expressed as text.
MA		**TMW_ Transport Statement Message. Details**
		Description of issues with a transboundary movement of waste (TMW).
ASMA	1..1	TMW_ Transport Statement Message. TMW Message_ Document
		Header information of the transport statement message.
ASMA	1..1	TMW_ Transport Statement Message. Referenced Waste_ Transport Movement
		Identification by which the movement of waste, to which the transport statement relates, has previously been notified to competent authorities.
ASMA	1..*	TMW_ Transport Statement Message. Specific_ Issue
		Details on the issues relating to a movement of waste, such as the issue severity.

Annex 1.   DEFINITION OF TERMS

Source: OMG (Object Management Group) UML Specification (refer http://www.omg.org)	
Association	The semantic relationship between two or more classifiers that specifies connections among their instances. An association may represent **an aggregation** (i.e., a whole/part relationship). In this case, the association-end attached to the whole element is designated, and the other association-end of the association represents the parts of the aggregation. **Composite aggregation** is a strong form of aggregation, which requires that a part instance be included in at most one composite at a time and that the composite object has sole responsibility for the disposition of its parts. This means that the composite object is responsible for the creation and destruction of the parts. If a composite object is destroyed, it must destroy all of its parts. It may remove a part and give it to another composite object, which then assumes responsibility for it.
Cardinality	The number of elements in a set.
Class diagram	A class diagram shows the static structure of the information model, in particular, the things that exist, their internal structure, and their relationships to other things. A class diagram does not show temporal information. It is a diagram that shows a collection of declarative (static) model elements, such as classes, types, and their contents and relationships.
Class	A description of a set of objects that share the same attributes, operations, methods, relationships, and semantics.
Constraint	A semantic condition or restriction.
Datatype	A descriptor of a set of values that lack identity and whose operations do not have side effects. Datatypes include primitive pre-defined types and user-definable types. Predefined types include numbers, string and time. User definable types include enumerations.
Enumeration	A list of named values used as the range of a particular attribute type. For example, RGBColor = {red, green, blue}.
Generalization	A taxonomic relationship between a more general element and a more specific element. The more specific element is fully consistent with the more general element (it has all of its properties, members, and relationships) and may contain additional information.
Multiplicity	A specification of the range of allowable cardinalities that a set may assume. Multiplicity specifications may be given for roles within associations, parts within composites, repetitions, and other purposes. Essentially a multiplicity is a (possibly infinite) subset of the non-negative integers.
Relationship	A semantic connection among model elements. Examples of relationships include associations and generalizations.
Role	The named specific behaviour of an entity participating in a particular context.
Stereotype	A type of modeling element that extends the semantics of the metamodel. Stereotypes must be based on certain existing types or classes in the metamodel. Stereotypes may extend the semantics, but not the structure of pre-existing types and classes.

Source: Core Components Technical Specification Version 2.01	
Aggregate Business Information Entity (ABIE)	A collection of related pieces of business information that together convey a distinct business meaning in a specific *Business Context*. Expressed in modelling terms, it is the representation of an *Object Class*, in a specific *Business Context*.
Aggregate Core Component (ACC)	A collection of related pieces of business information that together convey a distinct business meaning, independent of any specific *Business Context*. Expressed in modelling terms, it is the representation of an *Object Class*, independent of any specific *Business Context*.
Association Business Information Entity (ASBIE)	A *Business Information Entity* that represents a complex business characteristic of a specific *Object Class* in a specific *Business Context*. It has a unique *Business Semantic* definition. An *Association Business Information Entity* represents an *Association Business Information Entity Property* and is associated to an *Aggregate Business Information Entity*, which describes its structure. An *Association Business Information Entity* is derived from an *Association Core Component*.
Association Core Component (ASCC)	A *Core Component* which constitutes a complex business characteristic of a specific *Aggregate Core Component* that represents an *Object Class*. It has a unique *Business Semantic* definition. An *Association Core Component* represents an *Association Core Component Property* and is associated to an *Aggregate Core Component*, which describes its structure.
Basic Business Information Entity (BBIE)	A *Business Information Entity* that represents a singular business characteristic of a specific *Object Class* in a specific *Business Context*. It has a unique *Business Semantic* definition. A *Basic Business Information Entity* represents a *Basic Business Information Entity Property* and is therefore linked to a *Data Type*, which describes it values. A *Basic Business Information Entity* is derived from a *Basic Core Component*.
Basic Core Component (BCC)	A *Core Component* which constitutes a singular business characteristic of a specific *Aggregate Core Component* that represents an *Object Class*. It has a unique *Business Semantic* definition. A *Basic Core Component* represents a *Basic Core Component Property* and is therefore of a *Data Type*, which defines its set of values. *Basic Core Components* function as the *Properties* of *Aggregate Core Components*.
Business Context	The formal description of a specific business circumstance as identified by the values of a set of *Context Categories*, allowing different business circumstances to be uniquely distinguished.
Business Information Entity (BIE)	A piece of business data or a group of pieces of business data with a unique *Business Semantic* definition. A *Business Information Entity* can be a *Basic Business Information Entity* (BBIE), an *Association Business Information Entity* (ASBIE), or an *Aggregate Business Information Entity* (ABIE).
Core Component (CC)	A building block for the creation of a semantically correct and meaningful information exchange package. It contains only the information pieces necessary to describe a specific concept.
Core Component Type (CCT)	A *Core Component*, which consists of one and only one *Content Component*, that carries the actual content plus one or more *Supplementary Components* giving an essential extra definition to the *Content Component*. *Core Component Types* do not have *Business Semantics*.

Source: Core Components Technical Specification Version 2.01	
Data Type	Defines the set of valid values that can be used for a particular *Basic Core Component Property* or *Basic Business Information Entity Property*. It is defined by specifying restrictions on the *Core Component Type* that forms the basis of the *Data Type*.

Source: Core Components Technical Specification Version 3.0	
Association Business Information Entity (ASBIE) Property	An association business information entity property is a business information entity property for which the permissible values are expressed as a complex structure, represented by an aggregate business information entity.
Association Core Component (ASCC) Property	An association core component property is a core component property for which the permissible values are expressed as a complex structure, represented by an aggregate core component.
Business Information Entity (BIE) Property	A business information entity property is a business characteristic belonging to the Object Class in its specific business context that is represented by an aggregate business information entity.
Basic Core Component (BCC) Property	A basic core component property is a core component property for which the permissible values are expressed by simple values, represented by a data type.
Business Data Type	A business data type is a data type consisting of one and only one business data type content component that carries the actual content plus zero or more business data type supplementary components giving essential extra definition to the business data type content component. Business data types have business semantics.