



**UN/CEFACT**

SIMPLE, TRANSPARENT AND EFFECTIVE PROCESSES

FOR GLOBAL BUSINESS

# **BUSINESS REQUIREMENTS SPECIFICATION (BRS)**

**Business domain: Fisheries**

**Business process: Electronic data exchange for fisheries control and management**

**Document identification: P1000 – 10; MDM domain**

**Title: Fisheries Language for Universal eXchange**

**UN/CEFACT International Trade and Business Processes Group:**

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Date of change	Version	Paragraphs changed	Summary of changes	Author
<b>14/01/2014</b>	1.0.0	Initial document for harmonization	Based on working document v0.3.2	EHO
<b>23/12/2014</b>	2.0.0		Impact due to General Principle changes (Validation Report).	EHO
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<b>03/02/2015</b>	2.0.2		Editorial & Diagrams	EHO
<b>11/02/2015</b>	2.0.3		Adding Binary File ass. In MDR Element Data Node entity.  Editorial & Diagrams for publication.	EHO

# Business Requirements Specification

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# 1 Preamble

This BRS document builds upon the general principles set out in the P1000-1; General Principles BRS document; It details the "MDM" (Master Data Management) business domain identified in P1000-1.

This BRS is standardizing a part of the electronic logbooks and reporting data exchanges between fishing vessels and their flag states, and between these flag states and other parties, using the UN/CEFACT Modeling Methodology (UMM) approach and Unified Modeling Language.

The structure of this document is based on the structure of the UN/CEFACT Business Requirements Specification (BRS) document reference CEFACT/ICG/005.

# 2 References

UN/CEFACT Modelling Methodology User Guide (CEFACT/TMG/N093)

UN/CEFACT Business Requirement Specification Document Template (CEFACT/ICG/005)

UN/CEFACT FLUX General Principles Business Requirement Specification Document (v2.x)

### 3 Objective

The objective of this document is to propose a standard for the communication of MDM data within the FLUX framework.

### 4 Scope

The document concentrates on data exchanges from a Master Data Register (MDR) and any requester of Fisheries information registered in it. This document does not touch upon the underlying transportation layer, which is considered operational before implementing the MDM domain. This domain is based on the specifications defined in the FLUX General Principles BRS and extends the basics defined but cannot contradicting them except if it is explicitly specified.

Categories	Description and Values
Business Process	General Message Exchange
Product Classification	
Industry Classification	Fisheries sector
Geopolitical	Global
Official Constraints	European Regulations National regulations Locally applicable regulations International agreements
Business Process Role	User of the Master Data Register system
Supporting Role	None
System Capabilities	Agreed level of security to protect data integrity

## 5 Stakeholders

Requester	Any system requiring codes, description, additional information about Fisheries data.
MDR	The system holding the Fisheries data inside a Master Data Register.

## 6 Business requirements

### 6.1 Business requirements view

In the context of the FLUX domain aiming to define an international standard for the exchange of fisheries data, the elements and the structure used in the different entities must be filled-in by querying a Central Data Repository (Master Data Register).

### 6.2 Business process elaboration

#### 6.2.1 Query for the content of MDR

##### Principles

A system can request for having the content of a specific list of codes stored in the FLUX Master Data Register. The requester can optionally filter his needs and the reply will contain the codes, description as well as additional data elements depending on the type of code list requested.

Use case: query for Code List

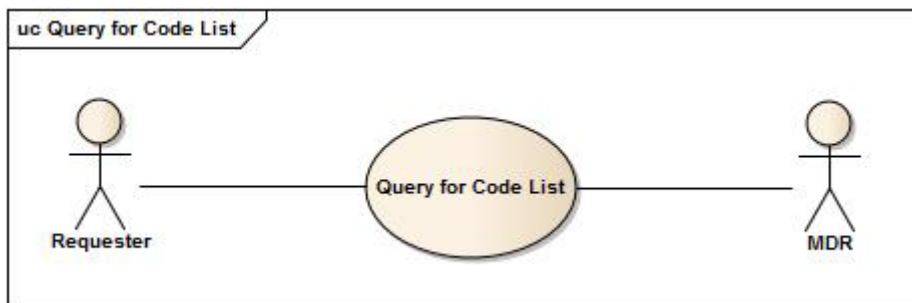


Figure 1: Use case diagram

##### Use case description

<b>Business process name</b>	Query for Code List
<b>Identifier</b>	QCL
<b>Actors</b>	Requester, Master Data Register
<b>Description</b>	A system request for having a list of codes.
<b>Pre-condition</b>	
<b>Post-conditions</b>	
<b>Scenarios</b>	
<b>Remarks</b>	

### 6.3 Information flow definition (activity diagram, description)

#### 6.3.1 MDR Query message exchange

The activity diagram allows identifying all the significant information flows between the requester and the Register where the codes are stored.

#### Activity Diagram

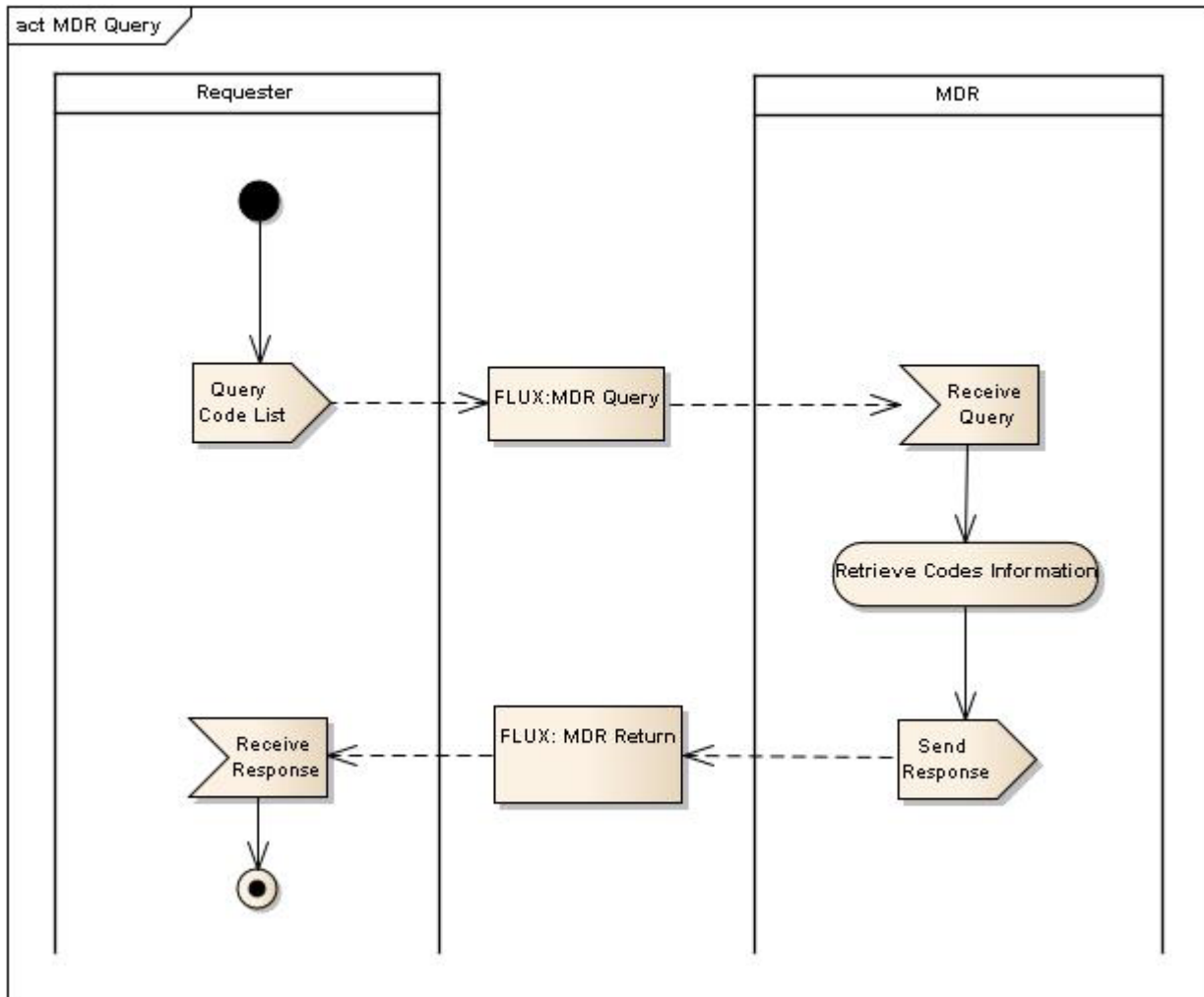


Figure 2 MDR Query message transmission diagram



## 6.4 Information model definition (class diagram)

Class diagram describes all the necessary classes of information for a flow of information exchange for the MDR message transmission case.

### 6.4.1 MDR Query Declaration:

Description: This declaration is used when requesting for information from FLUX Master Data Register. The diagram describes the general information of MDR Query message<sup>1</sup>.

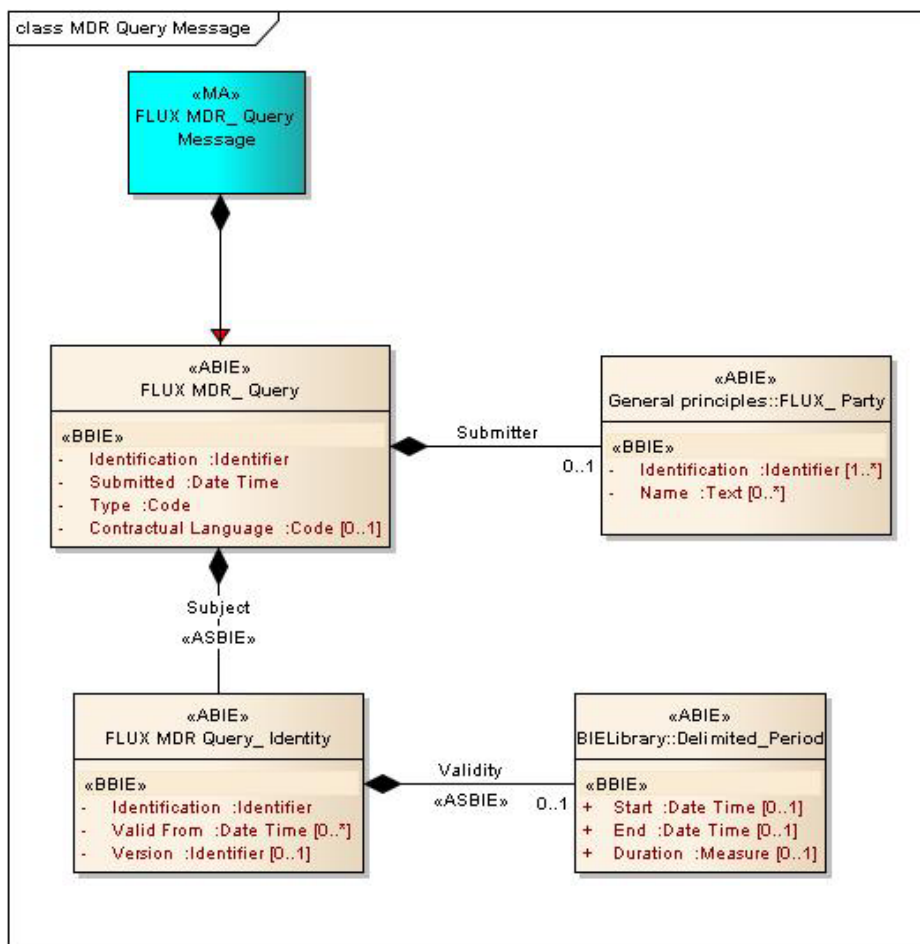


Figure 3: class diagram MDR-Query declaration

<sup>1</sup> The definition of base entities such as *FLUX\_Party* can be found in the *General Principles* BRS document

### MDR-Query Entity

Description: Entity containing the information of a MDR Query which is either a formally raised question or request for FLUX MDR information.

Mult.	Business term	Rel.	Type	Description
1	Identification	Att	Identifier	The unique identifier for this FLUX MDR query.
1	Submitted	Att	Date Time	A date, time, date time, or other date time value when this FLUX MDR query was submitted.
1	Type	Att	Code	A code specifying the type of this FLUX MDR query.
0..1	Contractual Language	Att	Code	A code specifying the contractual language for this FLUX MDR query.
0..1	Submitter	Ass	FLUX_Party <sup>1</sup>	The FLUX party that submits this FLUX MDR query.
1	Subject	Ass	MDR Query_Identity	The identity of a subject of this FLUX MDR query.

### MDR Query Identity Entity

Description: Entity identifying MDR Query. The information uniquely identifies a MDR Query object.

Mult.	Business term	Rel.	Type	Description
1	Identification	Att	Identifier	The unique identifier for this FLUX MDR query identity.
0..n	Valid From	Att	Date Time	A date, time, date time or other date time value from which this MDR query identity is valid.
0..1	Version	Att	Identifier	The identifier of the version of this MDR query identity.
0..1	Validity	Ass	Delimited_Period	The delimited period for which this MDR query identity is valid.

### Delimited Period Entity

Description: Entity containing information on a period of time from a start date time onwards up to an end date time.

Mult.	Business term	Rel.	Type	Description
0..1	Start	Att	Date Time	The date, time, date time or other date time value for the start of this delimited period.
0..1	End	Att	Date Time	The date, time, date time or other date time value for the end of this delimited period.
0..1	Duration	Att	Measure	The measure of the length of time for this delimited period such as hours, days, weeks, months or years.

## 6.4.2 MDR Return Declaration:

Description: Declaration in response to a MDR Query<sup>2</sup>.

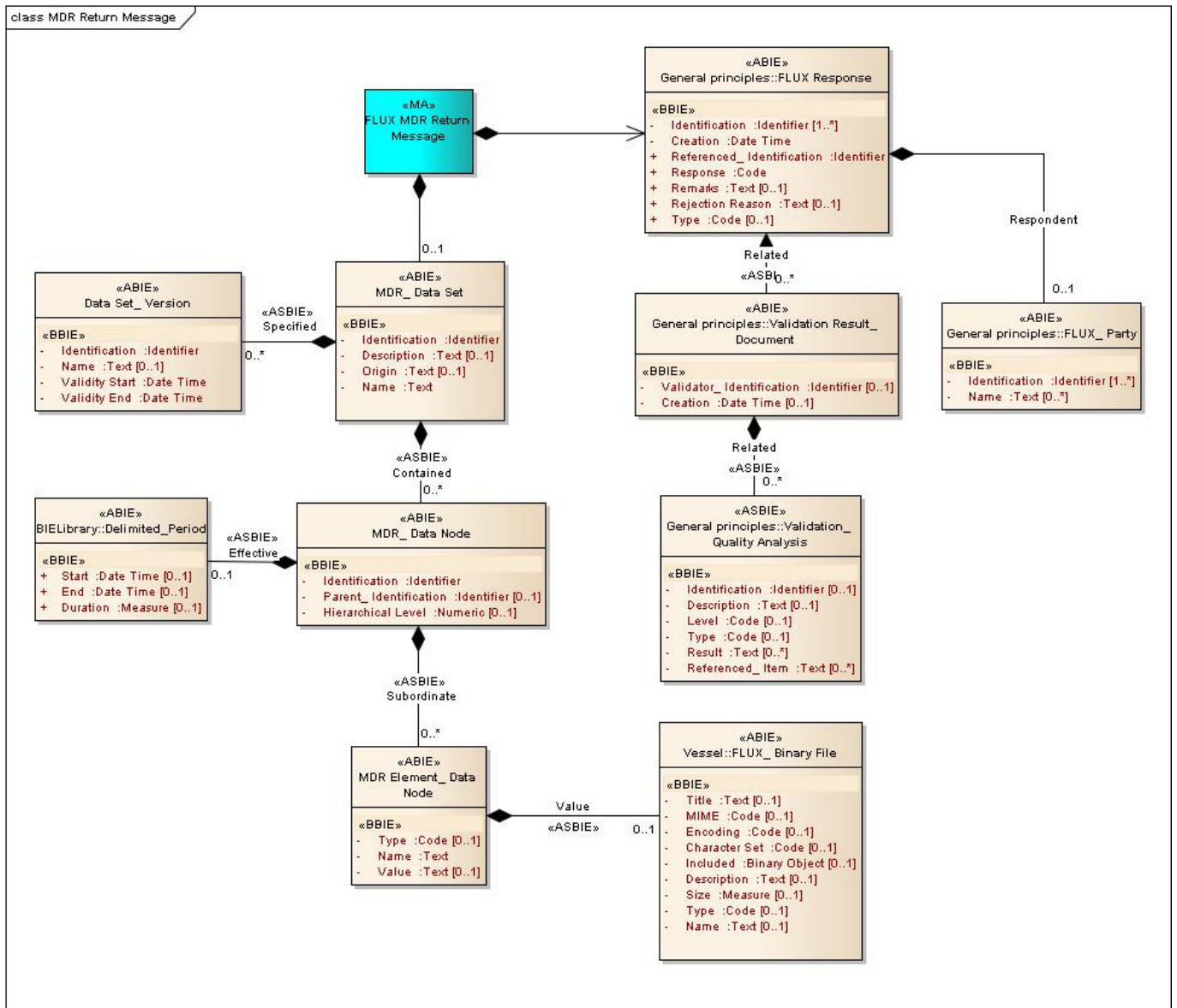


Figure 4: class diagram MDR Return declaration

<sup>2</sup> The definition of base entities such as *FLUX\_Response*, *Validation Result\_Document* and *Validation\_Quality Analysis* can be found in the *General Principles* document.

## **MDR Data Set Entity**

Description: A collection of data provides from Master Data Register.

<b>Mult.</b>	<b>Business term</b>	<b>Rel.</b>	<b>Type</b>	<b>Description</b>
1	Identification	Att	Identifier	The unique identifier for this MDR dataset.
0..1	Description	Att	Text	The textual description for this MDR data set.
0..1	Origin	Att	Text	The origin of this MDR data set.
1	Name	Att	Text	The name of this MDR data set.
0..n	Specified	Ass	Data Set_ Version Entity	A version specified for this MDR data set.
0..n	Contained	Ass	MDR_ Data Node Entity	A data node contained in this MDR data set

## **MDR Data Node Entity**

Description: Entity containing a single element or node within a Master Data Register (MDR) data structure, usually a hierarchical structure.

<b>Mult.</b>	<b>Business term</b>	<b>Rel.</b>	<b>Type</b>	<b>Description</b>
1	Identification	Att	Identifier	The unique identifier for this MDR data node.
0..1	Parent_ Identification	Att	Identifier	The unique identifier of the parent for this MDR data node.
0..1	Hierarchical Level	Att	Numeric	The number (integer) representing how deeply nested within the hierarchical tree structure the MDR data node lies. For example, level 1 may mean it is a top level node, and level 4 may mean that there are three levels of nodes above this node in the tree.
0..1	Effective	Ass	Delimited_ Period Entity	The delimited period within which this MDR data node is effective.
0..n	Subordinate	Ass	MDR Element_ Data Node Entity	A MDR element data node that is subordinate to this MDR data node.

### **MDR Element Data Node Entity**

Description: Entity containing an element which is part of a Master Data Register node.

<b>Mult.</b>	<b>Business term</b>	<b>Rel.</b>	<b>Type</b>	<b>Description</b>
0..1	Type	Att	Code	The code specifying a type for this MDR element data node.
1	Name	Att	Text	The name, expressed as text, of this MDR element data node.
0..1	Value	Att	Text	The value, expressed as text, of this MDR element data node.
0..1	Value	Ass.	FLUX_ Binary File <sup>3</sup>	The value, expressed in a FLUX Binary File, of this MDR element data node.

### **Data Set Version Entity**

Description: Entity containing information of a specific issuance of a MDR Data Set object.

<b>Mult.</b>	<b>Business term</b>	<b>Rel.</b>	<b>Type</b>	<b>Description</b>
1	Identification	Att	Identifier	The unique identifier for this data set version.
0..1	Name	Att	Text	A name, expressed as text, of this version.
1	Validity Start	Att	Date Time	The date, time or other date time value from which this data set version is valid.
1	Validity End	Att	Date Time	The date, time or other date time value up to which this data set version is valid.

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<sup>3</sup> *FLUX\_ Binary File* entity is defined in *P1000-2; Vessel domain BRS*.