Edig@s 6.1 XML guideline to schematron mapping

1 Introduction

This document describes the Edig@s 6.1 document validation service.

TBC

2 Edigas coverage

TBC

2.1 Edigas version

There are several version of Edig@s in use. The service covers the most recent version of Edig@s , which is version 6.1. All XML schemas (XSD) are based on the following release content:

- XML schema set of 2024-09-30 available from https://www.edigas.org/download/132/.

- CC library of 2024-09-30 available from https://www.edigas.org/download/118/.

2.2 Service Areas

Edig@s 6.1 is organized in seven services, commonly called process areas which are given a process area code, e.g. A16:

1. A14   Edigas 6.1 Capacity Allocation

2. A15   Edigas 6.1 Gas Trading

3. A16   Edigas 6.1 Nomination & Matching

4. A17   Edigas 6.1 Balancing & Settlement

5. A18   Edigas 6.1 Remit & Transparency

6. A19   Edigas 6.1 General Process

7. A20   Edigas 6.1 System Operation

The service will initially cover process area A16 Edigas 6.1 Nomination & Matching. There is a sub-folder in this documentation for each covered process area. For each sub-folder, there are sub-folders for each document type. Each document type sub-folder, there are four sub-folders:

1. XSD: containing two sub-folders:

   ◦ A folder "{area}_{documenttype}" containing the XSD for the document type

   ◦ A folder "cclib-v6" containing the CC library.

2. SCH: Schematron source file for business rules.

3. XSLT: XSLT version of the Schematron source file.

4. SAMPLES: directory containing document instances for testing.   It has three sub-folders

   ◦ CORRECT: valid samples

   ◦ INVALID_XSD: samples that are valid against the XSD.

   ◦ INVALID_SCH: samples that are valid against the Schematron rules.

2.3 A16   Edigas 6.1 Nomination & Matching

Process area code A16 relates to the document types in Edig@s 6.1 for the Nomination & Matching processes. There are:

• NOMAUT Nomination Authorisation Document

- NOMINT Nomination Document

- NOMRES Nomination Responsedocument

- DELORD Deliveryorder Document

- DELRES Deliveryresponse Document

Validation rules for each document are provided by EASEE-gas as an XML schema document (XSD) and as natural language documentation. The validation service adds Schematron assertions for any validation rules that are not expressed in the XSD.

3   Nomination Document NOMINT

3.1 Organisation

For the NOMINT (Nomination Document), the validation content is organized in the following sub-folder structure:

- AS16 (Nomination & Matching)

  ◦ NOMINT (Nomination Document)

    ▪ XSD

      - A16_NOMINT

      - cclin-v16

    ▪ SCH

    ▪ XSLT

    ▪ SAMPLES

The sub-folder "XSD" is ZIPed and uploaded to Validex for XSD validation.

The compiled XSLT in the XSLT folder is uploaded to Validex for Schematron validation.

3.2 XML Schema Definition

Nomination documents are validated against the Edig@s 6.1 XML Schema:

- Folder "XSD/Edigas_6.1/Schemas/3. Nomination and Matching"

- Schema file: urn-easee-gas-eu-edigas-BrpNominationAndMatching-NominationDocument-6-1.xsd

3.3 Schematron Assertions

Business rules that are not expressed in the XML schema are defined as assertions in in a Schematron rules document. The assertions follow the specifications in the table provided for the Nomination Document in the Edig@s 6.1 documentation. The following naming convention has been adopted:

- Names start with the "R-EDIGAS-A16-NOMINT-" followed by a value from column 1 in the table below.

- The values in column 1 below are the table row number, in some cases followed by one of the letters A, B, C or D for the four columns in the table.

- Two rules with identifiers 024 and 025 are added for some format checks on EIC values which are not covered by the schema validation alone.

- Some rules are skipped as they are covered by the XSD.

Nomination document	Connection Point	VTP OTC	VTP exchange	Non matching nomination
identification	Mandatory.			
version	Mandatory.			
documentCode	01G = Nomination.	02G = VTP OTC nomination.	03G = VTP exchange nomination.	04G = Non matching nomination.
creationDateTime	Mandatory.			
validityPeriod	Mandatory.			
applicationContext	May be used. Deprecated attribute which will be removed in the next version of Edig@s.			
issuer_MarketParticipant.identification	Mandatory; codingScheme = 305 (EIC Party X code).			
issuer_MarketParticipant.marketRole.roleCode	ZSH = Balance Responsible Party.	ZSH = Balance Responsible Party.	ZUM = Clearing Responsible	ZSH = Balance Responsible Party.
recipient_MarketParticipant.identification	Mandatory; codingScheme = 305 (EIC Party X code).			
recipient_MarketParticipant.marketRole.roleCode	ZSO = System Operator.	ZUK = Area Coordinator.	ZUK = Area Coordinator.	ZSO = System Operator.
Internal_Account.internalAccount	Mandatory; codingScheme = 305 (EIC Account Y code) or ZSO.			
Internal_Account.internalAccountTso	Used if the account identification is ambiguous; codingScheme = 305 (EIC Party X code).			
connectionPoint.identification	Mandatory; codingScheme = 305 (EIC Measurement Point Z or Y code) or ZSO.			
ConnectionPoint.measureUnit.unitOfMeasureCode	KW1 = Kilowatt-hour per hour (kWh/h). KW2 = Kilowatt-hour per day (kWh/d).			
NominationType.nominationCode	A01 = Single sided. A02 = Double sided.	A02 = Double sided.	Not used.	Not used.
External_Account.externalAccount	Mandatory codingScheme = 305 (EIC Account Ycode) or ZSO.	Mandatory; codingScheme = 305 (EIC Account Y code) or ZSO.	Mandatory; codingScheme = 305 (EIC Account Y code) or ZSO.	Not used.

Rule ID	Definition
001A	Root element must be Nomination_Document
001B	Root element namespace must be urn:easee-gas.eu:edigas:BrpNominationAndMatching:NominationDocument:6:1
002	The document code of a NOMINT must be one of 01G, 02G, 03G or 04G
009A	If the document code is 01G (Nomination) the issuer must be a ZSH (Balance responsible party)
009B	If the document code is 02G (VTP OTC Nomination) the issuer must be a ZSH (Balance responsible party)
009C	If the document code is 03G (VTP exchange nomination) the issuer must be a ZUM (Clearing Responsible)
009D	If the document code is 04G (Non matching nomination) the issuer must be a ZSH (Balance responsible party)
010	The coding scheme for recipient market participant must be 305 (EIC Party X code)
011A	If the document code is 01G (Nomination) the recipient must be a ZSO (System Operator)
011B	If the document code is 02G (VTP OTC Nomination) the recipient must be a ZUK (Area Coordinator)

Rule ID	Definition
011C	If the document code is 03G (VTP exchange nomination) the recipient must be a ZUK (Area Coordinator)
011D	If the document code is 04G (Non matching nomination) the recipient must be a ZSO (System Operator)
012	The coding scheme for internal account must be 305 (EIC Account Y code) or ZSO
013	The coding scheme for internal account TSO must be 305 (EIC Party X code)
014	The coding scheme for internal account must be 305 (EIC Measurement Point Z or Y code) or ZSO
015	The coding scheme for units of measure for connection points must be KW1 (Kilowatt-hour per hour (kWh/h)) or KW2 (Kilowatt-hour per day (kWh/d))
016A	If the document code is 01G, the nomination type code must A01 (Single sided) or A02 (Double sided)
016B	If the document code is 02G, the nomination type code must A02 (Double sided)
016C	If the document code is 03G, the nomination type code must not be used)
016D	If the document code is 04G, the nomination type code must not be used)
017A	If the document type code is 04G (Non matching nomination), the External_Account is not used

Rule ID	Definition
017B	The coding scheme for external account must be 305 (EIC Account Y code) or ZSO
018	The coding scheme for external account must be 305 (EIC Party X code) or ZSO
020	In a Period in a ConnectionPoint, the gas direction code must of Z02 or Z03
022	In a Period in a ConnectionPoint, priority status code may only be used if the document type code is 01G
023	In a Period in a ConnectionPoint, Decomposition Quantity may only be used if the document type code is 01G
024	If the coding scheme is 305, the code value has to be an EIC code value of 16 characters
025	If the coding scheme is 305, the code value has to be an EIC Party X code value

3.4 XSLT file

The Schematron file is compiled into an XSL transformation (XSLT) file.

3.5 Sample files

Three valid files in folder "CORRECT"

Two invalid files (XSD invalid) in folder "INCORRECT_XSD"

Ten invalid files (Schematron invalid) in folder "INCORRECT_SCH"

4   Nomination Response Document NOMRES