ISO/TS 19139-1:2019 (E)

Geographic information — XML schema implementation — Part 1: Encoding rules

Contents

Foreword

Introduction

1 Scope

2 Normative references

3 Terms and definitions

4 Symbols and abbreviated terms

- 4.1 Abbreviated terms
- 4.2 Namespace abbreviations
- 4.3 UML model stereotypes
- 4.3.1 Overview of UML model stereotypes
- 4.3.2 Stereotypes of classes
- 4.3.3 Stereotypes of attributes
- 4.3.4 Stereotypes of links
- 4.3.5 Stereotypes of packages

5 Conformance

6 Requirements for encoding

- 6.1 Overview of requirements
- 6.2 Rule-based
- 6.3 Quality
- 6.4 Web implementations
- 6.5 Use of external XML implementations
- 6.6 Polymorphism

7 Encoding rules

- 7.1 Overview of encoding rules
- 7.2 Default encoding
- 7.2.1 XML class type (XCT)
- 7.2.1.1 Overview of XML class type (XCT)
- 7.2.1.2 XCT rule
- 7.2.1.3 XCT rule example
- 7.2.2 XML Class Global Element (XCGE)
- 7.2.2.1 Overview of the XML Class Global Element (XCGE)
- 7.2.2.2 XCGE rule
- 7.2.2.3 XCGE example
- 7.2.3 The XML Class Property Type (XCPT)
- 7.2.3.1 Overview of the XML Class Property Type (XCPT)
- 7.2.3.2 XCPT rule
- 7.2.3.3 XCPT example
- 7.3 Special case encodings
- 7.3.1 Overview of special case encodings
- 7.3.2 Abstract classes
- 7.3.2.1 Overview of abstract class
- 7.3.2.2 Abstract class rule
- 7.3.2.3 Abstract class example
- 7.3.3 Inheritance and sub-class encodings
- 7.3.3.1 Overview of inheritance and sub-class encoding

7.3.3.2 Inheritance and sub-class rule
7.3.3.3 Inheritance and sub-class example
7.3.4 Enumeration encodings
7.3.4.1 Overview of enumeration encodings
7.3.4.2 Enumeration rule
7.3.4.3 Enumeration example
7.3.5 CodeList encoding
7.3.5.1 Overview and building blocks of the CodeList encoding
7.3.5.2 CodeList encoding rule
7.3.5.3 Details of the CodeList encoding
7.3.6 Union encoding
7.3.6.1 Overview of the Union encoding rule
7.3.6.2 Union encoding rule
7.3.6.3 Union encoding example
7.3.7 Encoding of MetaClasses
7.3.8 Encoding of externally identified implementations
7.3.8.1 Overview of externally identified implementations
7.3.8.2 Encoding options
7.3.8.2.1 Encoding through XCPT
7.3.8.2.2 Encoding through XCGE
7.3.8.2.3 Encoding through XCT
7.3.8.2.3.1 General
7.3.8.2.3.2 The xs:simpleType stereotype
7.3.8.2.3.3 The xs:simpleContent stereotype
7.3.8.2.3.4 The xs:complexType stereotype
7.3.8.2.3.5 The xs:union stereotype
7.3.8.2.4 Creating the XCGE when encoding through the XCT
7.3.8.2.5 Creating the XCPT
7.4 XML Namespace package encoding
7.5 XML schema package encoding

8 Additional encodings

9 Encoding for modularity and reuse

9.1 UML packages and XML namespaces
9.2 UML model for XML implementation
9.3 Implementation Approach for Decoupling XML Packages
9.3.1 Overview
9.3.2 Implementation Approach Rules
9.3.2.1 Abstract Common Classes Namespace
9.3.2.2 Schema for namespace 1 (ns1)
9.3.2.3 Schema for namespace 2 (ns2)
9.3.3 Example of Decoupling

Annex A (normative) Abstract test suite

Annex B (informative) Backward compatibility

B.1 Overview

Page count: 41