

DIN CEN ISO/TS 19139-1:2020-01 (E)

Geographic information - XML schema implementation - Part 1: Encoding rules (ISO/TS 19139-1:2019); English version CEN ISO/TS 19139-1:2019

Contents

Page

Foreword	v	
Introduction	vi	
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Symbols and abbreviated terms	2
4.1	Abbreviated terms.....	2
4.2	Namespace abbreviations.....	2
4.3	UML model stereotypes.....	3
4.3.1	Overview of UML model stereotypes.....	3
4.3.2	Stereotypes of classes.....	3
4.3.3	Stereotypes of attributes.....	3
4.3.4	Stereotypes of links.....	3
4.3.5	Stereotypes of packages.....	4
5	Conformance	4
6	Requirements for encoding	4
6.1	Overview of requirements.....	4
6.2	Rule-based.....	4
6.3	Quality.....	5
6.4	Web implementations.....	5
6.5	Use of external XML implementations.....	5
6.6	Polymorphism.....	5
7	Encoding rules	5
7.1	Overview of encoding rules.....	5
7.2	Default encoding.....	6
7.2.1	XML class type (XCT).....	6
7.2.2	XML Class Global Element (XCGE).....	8
7.2.3	The XML Class Property Type (XCPT).....	9
7.3	Special case encodings.....	10
7.3.1	Overview of special case encodings.....	10
7.3.2	Abstract classes.....	11
7.3.3	Inheritance and sub-class encodings.....	12
7.3.4	Enumeration encodings.....	15
7.3.5	CodeList encoding.....	17
7.3.6	Union encoding.....	19
7.3.7	Encoding of MetaClasses.....	21
7.3.8	Encoding of externally identified implementations.....	22
7.4	XML Namespace package encoding.....	29
7.5	XML schema package encoding.....	29
8	Additional encodings	32
9	Encoding for modularity and reuse	32
9.1	UML packages and XML namespaces.....	32
9.2	UML model for XML implementation.....	32
9.3	Implementation Approach for Decoupling XML Packages.....	33

9.3.1 Overview..... 33
9.3.2 Implementation Approach Rules..... 33
9.3.3 Example of Decoupling..... 35
Annex A (normative) Abstract test suite 38
Annex B (informative) Backward compatibility 39

Bibliography 40