DIN EN ISO 19135:2026-06 (E)

Geographic information - Registration and register governance (ISO 19135:2026); English version EN ISO 19135:2026

Contents

Page

Foreword ... **viii**

Introduction ... **ix**

1 Scope ... **1**

2 Normative references ... **1**

3 Terms and definitions ... **1**
3.1 General ... 1
3.2 Registers ... 2
3.3 Identifiers ... 3
3.4 Content plane ... 3
3.5 Concept plane ... 4
3.6 Actions ... 4
3.7 Statuses ... 5
3.8 Supporting roles of a register ... 5

4 Conventions ... **6**
4.1 Figure illustrations ... 6
4.2 UML notation ... 7
4.3 Availability of ISO/TC 211 resources ... 7
4.3.1 Maintenance agency for ISO/TC 211 resources ... 7
4.3.2 Resources provided by this document ... 7
4.4 Presentation of ISO/TC 211 resources ... 7
4.4.1 General ... 7
4.4.2 Provision classes and provisions ... 7
4.4.3 Conformance classes and conformance tests ... 8
4.5 Structure of URIs in ISO/TC 211 resources ... 9
4.5.1 General ... 9
4.5.2 Identified resources ... 9
4.5.3 Basic elements used in URI templates ... 9
4.5.4 Provision statements ... 10
4.5.5 Conformance classes and tests ... 10
4.6 Organization of this document ... 11

5 Principles ... **12**
5.1 General ... 12
5.2 Persistent identification and access ... 12
5.3 Evolution support ... 12
5.4 Change history retention ... 13
5.5 Integrity protection ... 13
5.6 Compliance with commitments ... 14
5.7 Technologically neutral ... 14

6 Conformance ... **14**
6.1 General ... 14
6.2 Conformant register types ... 15
6.2.1 General ... 15
6.2.2 Content register ... 15
6.2.3 Concept register ... 15
6.2.4 Governed content register ... 15
6.2.5 Governed concept register ... 16
6.2.6 Comprehensive concept register ... 16
6.3 Requirements classes ... 16

7 Framework ... **18**
7.1 General ... 18
7.2 Data ... 19
7.2.1 General ... 19
7.2.2 Components ... 19
7.2.3 Actions ... 20
7.2.4 Metadata ... 20
7.2.5 Identifiers ... 20
7.2.6 Versions ... 21
7.2.7 Concept plane ... 21
7.2.8 Content plane ... 21
7.2.9 Statuses ... 21
7.2.10 Relations ... 21
7.3 Governance ... 22
7.3.1 General ... 22
7.3.2 Documented information ... 22
7.3.3 Register specification ... 22
7.3.4 Roles and responsibilities ... 22
7.3.5 Governance processes ... 23
7.4 Commitments ... 23

8 Data capabilities ... **23**
8.1 General ... 23
8.2 Metadata ... 24
8.3 Identifiers ... 24
8.3.1 General ... 24
8.3.2 Identifier types ... 24
8.3.3 Identifier schemes ... 25
8.3.4 Object identifier scheme ... 25
8.3.5 Functional identifier scheme ... 26
8.3.6 Requirements ... 26
8.4 Versions ... 28
8.4.1 General ... 28
8.4.2 Scheme ... 29
8.4.3 Requirements ... 29
8.5 Information planes ... 32
8.5.1 Concept plane ... 32
8.5.2 Content plane ... 32
8.5.3 Interconnections between planes ... 32
8.5.4 Management of the planes ... 33
8.6 Concept plane ... 33
8.6.1 Concept system ... 33
8.6.2 Concept ... 34
8.6.3 Concept version ... 35
8.6.4 Concept definitions ... 35
8.6.5 Concept version status ... 36
8.6.6 Relations ... 39
8.7 Content plane ... 46
8.7.1 General ... 46
8.7.2 Register item class ... 47
8.7.3 Register item ... 48
8.7.4 Relations ... 49
8.7.5 Change ... 51
8.8 Requirements ... 51

9 Action capabilities ... **72**
9.1 General ... 72
9.2 Addition to the register ... 73
9.2.1 Add a concept ... 73
9.2.2 Add a concept version ... 74
9.3 Change of concept version statuses ... 75
9.3.1 Invalidate a concept version ... 75
9.3.2 Unpublish a concept version ... 76
9.4 Changes to the register ... 77

9.4.1 General 77
9.4.2 Concept supersession 78
9.4.3 Concept version supersession 80
9.4.4 Substantive change 81
9.4.5 Clarification change 83
9.4.6 Correctional change 86
9.5 Destructive changes 88
9.5.1 Redaction 88
9.5.2 Delete a concept 89
9.5.3 Delete a concept version 90
9.6 Concept definition 91
9.6.1 General 91
9.6.2 Add a concept definition 91
9.6.3 Add a concept definition version 92
9.6.4 Migrating a concept realization to an evolved concept definition with unchanged semantics 93
9.6.5 Migrate a concept realization to an evolved concept definition with changed semantics 94
9.6.6 Add a concept realization through new semantics provided in an evolved concept definition 97
9.7 Concept domains 98
9.8 Concept incorporation 99
9.8.1 General 99
9.8.2 Unversioned and versioned incorporated concepts 99
9.8.3 Creating an incorporating concept 103
9.8.4 Updating an incorporating concept 103
9.8.5 Modify an incorporated concept 104
9.8.6 Modify both an incorporated concept and an incorporating concept 106
9.9 Concept composition 108
9.9.1 General 108
9.9.2 Add a composed concept 109
9.9.3 Add a realized composed concept 110
9.9.4 Modify composed concept parts 111
9.9.5 Modify composed concept part definitions 112
9.10 Concept inheritance 113
9.10.1 General 113
9.10.2 Add an inherited concept 113
9.10.3 Add a realized inherited concept 114
9.10.4 Modify inherited concept definitions 116
9.10.5 Usage within incorporated or composed concepts 118
9.11 Requirements 119
10 Governance processes **131**
10.1 General 131
10.2 Establishing a register 132
10.2.1 General 132
10.2.2 Requirements 132
10.3 Operating a register 134
10.3.1 Proposal process 134
10.3.2 Approval process 136
10.3.3 Appeal process 138
10.3.4 Content management process 140
10.4 Decommissioning a register 141
10.4.1 General 141
10.4.2 Requirements 141
11 Roles and responsibilities **143**
11.1 General 143
11.2 Register owner 144
11.3 Register manager 146
12 Documented information **149**
12.1 Register specification 149
12.1.1 General 149
12.1.2 Requirements 150
12.2 Proposal instructions 156
13 Conceptual model **156**
13.1 Overview 156
13.2 Components package 157
13.2.1 Components overview 157
13.2.2 Defining tables 158
13.3 Identifiers package 162
13.3.1 Identifiers overview 162
13.3.2 Defining tables 162
13.4 Statuses package 164
13.4.1 Statuses overview 164
13.4.2 Defining tables 165
13.5 Relations package 167
13.5.1 Relations overview 167
13.5.2 Defining tables 168
13.6 Proposal and appeal package 171
13.6.1 Proposal and appeal overview 171
13.6.2 Defining tables 172
13.7 Requirements 173
14 Commitments **173**
14.1 General 173
14.2 Access commitments 174
14.2.1 General 174
14.2.2 Metadata access 174
14.2.3 Content access 174
14.2.4 Historic access 174
14.3 Persistence, integrity and traceability commitments 174
14.3.1 General 174
14.3.2 Identifier persistence 175
14.3.3 Metadata persistence and retention 175
14.3.4 Content persistence and retention 175
14.3.5 Historic persistence with full traceability 176
14.4 Transparency commitments 177
14.4.1 General 177
14.4.2 Metadata transparency 177
14.4.3 Content transparency 178
14.4.4 Historic transparency 178
14.5 Compliance 178
14.6 Documentation 178
14.7 Requirements 178
Annex A (normative) **Conformance test suite** **184**
Annex B (informative) **Differences with ISO 19135-1:2015** **263**
Annex C (informative) **Register specification template** **265**
Annex D (informative) **Register specification sample: Register of Units of Measure ("RUM")** **267**
Annex E (informative) **Composite registers** **276**

11.4 Control body ... 147
11.5 Register system manager ... 148
11.6 Proposer ... 148
11.7 Register user ... 149

12 Documented information ... 149
12.1 Register specification ... 149
12.1.1 General ... 149
12.1.2 Requirements ... 150
12.2 Proposal instructions ... 156

13 Conceptual model ... 156
13.1 Overview ... 156
13.2 Components package ... 157
13.2.1 Components overview ... 157
13.2.2 Defining tables ... 158
13.3 Identifiers package ... 162
13.3.1 Identifiers overview ... 162
13.3.2 Defining tables ... 162
13.4 Statuses package ... 164
13.4.1 Statuses overview ... 164
13.4.2 Defining tables ... 165
13.5 Relations package ... 167
13.5.1 Relations overview ... 167
13.5.2 Defining tables ... 168
13.6 Proposal and appeal package ... 171
13.6.1 Proposal and appeal overview ... 171
13.6.2 Defining tables ... 172
13.7 Requirements ... 173

14 Commitments ... 173
14.1 General ... 173
14.2 Access commitments ... 174
14.2.1 General ... 174
14.2.2 Metadata access ... 174
14.2.3 Content access ... 174
14.2.4 Historic access ... 174
14.3 Persistence, integrity and traceability commitments ... 174
14.3.1 General ... 174
14.3.2 Identifier persistence ... 175
14.3.3 Metadata persistence and retention ... 175
14.3.4 Content persistence and retention ... 175
14.3.5 Historic persistence with full traceability ... 176
14.4 Transparency commitments ... 177
14.4.1 General ... 177
14.4.2 Metadata transparency ... 177
14.4.3 Content transparency ... 178
14.4.4 Historic transparency ... 178
14.5 Compliance ... 178
14.6 Documentation ... 178
14.7 Requirements ... 178

Annex A (normative) **Conformance test suite ... 184**

Annex B (informative) **Differences with ISO 19135-1:2015 ... 263**

Annex C (informative) **Register specification template ... 265**

Annex D (informative) **Register specification sample: Register of Units of Measure ("RUM") Register Specification ... 267**

Annex E (informative) **Composite registers ... 276**

Bibliography ... 284