

# DIN EN ISO 19103:2025-03 (E)

Geographic information - Conceptual schema language (ISO 19103:2024); English  
version EN ISO 19103:2024

---

<b>Contents</b>		<b>Page</b>
Foreword		v
Introduction		vi
<b>1</b>	<b>Scope</b>	<b>1</b>
<b>2</b>	<b>Normative references</b>	<b>1</b>
<b>3</b>	<b>Terms and definitions</b>	<b>1</b>
<b>4</b>	<b>Symbols and abbreviated terms</b>	<b>11</b>
<b>5</b>	<b>Conformance</b>	<b>12</b>
5.1	Conformance overview	12
5.2	Conceptual schemas modelled in UML	12
<b>6</b>	<b>Overview</b>	<b>12</b>
<b>7</b>	<b>Use of UML</b>	<b>13</b>
7.1	General use of UML	13
7.2	Classifiers	15
7.2.1	General	15
7.2.2	Classes	16
7.2.3	Data types	16
7.2.4	Enumerations	17
7.2.5	Interfaces	18
7.3	Features	19
7.3.1	General	19
7.3.2	Properties	19
7.3.3	Operations	23
7.4	Relationships	23
7.4.1	General	23
7.4.2	Associations	23
7.4.3	Generalizations	25
7.4.4	Realizations	25
7.4.5	Template bindings	26
7.5	Packages	26
7.6	Comments	28
7.7	Constraints	28
7.8	UML profile	28
7.9	Naming provisions	35
7.10	Diagrams	38
7.10.1	General	38
7.10.2	Package diagrams	39
7.10.3	Class diagrams	39
7.11	Reusable types	40
7.11.1	General	40
7.11.2	Core data types	40
7.11.3	Common types	40
<b>8</b>	<b>Core data types</b>	<b>40</b>
8.1	General	40
8.1.1	Relation with ISO/IEC 11404	40
8.1.2	Modelling choice for the core data types	42

8.2	Contents of the Core Data Types abstract schema.....	44
8.2.1	AnnualDate.....	44
8.2.2	AnnualMonth.....	44
8.2.3	Binary.....	44
8.2.4	Bit.....	45
8.2.5	Boolean.....	45
8.2.6	Character.....	45
8.2.7	CharacterString.....	45
8.2.8	Date.....	46
8.2.9	DateTime.....	46
8.2.10	Decimal.....	46
8.2.11	Digit.....	46
8.2.12	Integer.....	47
8.2.13	IRI.....	47
8.2.14	Measure.....	47
8.2.15	Number.....	48
8.2.16	PositionInTime.....	48
8.2.17	Rational.....	50
8.2.18	Real.....	50
8.2.19	RecurringPositionInTime.....	50
8.2.20	Sign.....	51
8.2.21	Time.....	51
8.2.22	URI.....	51
8.2.23	UUID.....	52
8.2.24	Vector.....	52
8.2.25	Year.....	53
8.2.26	YearMonth.....	53
<b>Annex A</b>	<b>(normative) Abstract test suite.....</b>	<b>54</b>
<b>Annex B</b>	<b>(informative) Backward compatibility.....</b>	<b>57</b>
<b>Annex C</b>	<b>(informative) On conceptual schema languages.....</b>	<b>63</b>
<b>Annex D</b>	<b>(informative) UML notation reference.....</b>	<b>64</b>
<b>Annex E</b>	<b>(informative) Differences between UML 2.5.1 and UML 2.4.1.....</b>	<b>71</b>
<b>Annex F</b>	<b>(informative) Mapping between ISO 19103 and ISO/IEC 11404 data types.....</b>	<b>72</b>
<b>Annex G</b>	<b>(informative) Conceptual schema representations.....</b>	<b>75</b>
<b>Annex H</b>	<b>(informative) Code sets.....</b>	<b>76</b>
<b>Bibliography</b>	<b>.....</b>	<b>86</b>