

ISO/IEC 5087-2:2024-04 (E)

Information technology - City data model - Part 2: City level concepts

Contents

Page

- Foreword..... v
- Introduction..... vi
- 1 Scope..... 1
- 2 Normative references..... 1
- 3 Terms and definitions..... 1
- 4 Abbreviated terms and namespace prefixes..... 3
- 5 Unique identifiers..... 4
- 6 City-level ontologies..... 5
 - 6.1 General..... 5
 - 6.2 Code pattern..... 5
 - 6.2.1 General..... 5
 - 6.2.2 Key classes and properties..... 6
 - 6.2.3 Formalization..... 6
 - 6.3 Infrastructure pattern..... 6
 - 6.3.1 General..... 6
 - 6.3.2 Key classes and properties..... 6
 - 6.3.3 Formalization..... 7
 - 6.4 Transportation Infrastructure pattern..... 7
 - 6.4.1 General..... 7
 - 6.4.2 Key classes and properties..... 7
 - 6.4.3 Formalization..... 9
 - 6.5 Building pattern..... 10
 - 6.5.1 General..... 10
 - 6.5.2 Key classes and properties..... 10
 - 6.5.3 Formalization..... 12
 - 6.6 Land Use pattern..... 13
 - 6.6.1 General..... 13
 - 6.6.2 Key classes and properties..... 13
 - 6.6.3 Formalization..... 13
 - 6.7 Person pattern..... 13
 - 6.7.1 General..... 13
 - 6.7.2 Key classes and properties..... 14
 - 6.7.3 Formalization..... 15
 - 6.8 City Resident pattern..... 16
 - 6.8.1 General..... 16
 - 6.8.2 Key classes and properties..... 16
 - 6.8.3 Formalization..... 17
 - 6.9 Household pattern..... 18
 - 6.9.1 General..... 18
 - 6.9.2 Key classes and properties..... 18
 - 6.9.3 Formalization..... 18
 - 6.10 City Organization pattern..... 18
 - 6.10.1 General..... 18
 - 6.10.2 Key classes and properties..... 19
 - 6.10.3 Formalization..... 21
 - 6.11 City pattern..... 22
 - 6.11.1 General..... 22
 - 6.11.2 Key classes and properties..... 22

6.11.3	Formalization.....	23
6.12	City Service pattern.....	23
6.12.1	General.....	23
6.12.2	Key classes and properties.....	23
6.13	Contract pattern.....	26
6.13.1	General.....	26
6.13.2	Key classes and properties.....	26
6.13.3	Formalization.....	27
6.14	Bylaw pattern.....	28
6.14.1	General.....	28
6.14.2	Use cases.....	28
6.14.3	Key classes and properties.....	28
6.14.4	Formalization.....	30
6.15	Contact pattern.....	31
6.15.1	General.....	31
6.15.2	Key classes and properties.....	31
6.15.3	Formalization.....	32
6.16	Sensors pattern.....	33
6.16.1	General.....	33
Annex A (informative) Relationship to existing standards.....		34
Annex B (informative) Extending the Land Use pattern with multiple classification systems.....		42
Annex C (informative) Location of pattern implementations.....		46
Bibliography.....		47