E DIN EN ISO 19123-2:2025-11 (E)

Erscheinungsdatum: 2025-10-03

Geographic information - Schema for coverage geometry and functions - Part 2: Coverage implementation schema (ISO/DIS 19123-2:2025); English version prEN ISO 19123-2:2025

Contents

Page

Foreword ..... **v**

Introduction ..... **vi**

1 Scope **1**

2 Normative references **1**

3 Terms, definitions, and abbreviated terms **1**
3.1 Terms and definitions 1
3.2 Abbreviated terms 2

4 Conformance **2**
4.1 Notation 2
4.2 Interoperability and conformance testing 2
4.3 Organization 3

5 Coverages **5**
5.1 Overview 5
5.2 Terminology 6
5.3 General coverage structure 9
5.4 Domain/range based coverage structure 10
5.5 Domain Set 12
5.5.1 Coordinate Reference System 13
5.5.2 Direct Positions 14
5.5.3 Envelope 15
5.6 Range type 17
5.6.1 Overview 17
5.6.2 Data description 17
5.6.3 Interpolation 18
5.7 Range Set 18
5.8 Metadata 19

6 Multi-Point Coverage **19**

7 General Grid Coverage **20**
7.1 Overview 20
7.2 General grid 20
7.3 Regular grid axis 25
7.3.1 Overview 25
7.3.2 Index Axis 27
7.3.3 Regular Axis 27
7.4 Irregular grid axis 28
7.4.1 Overview 28
7.4.2 Irregular independent grid axes 29
7.4.3 Irregular correlated grid axes 31
7.5 Transformation grid 32
7.5.1 Transformation 32
7.5.2 SensorML 33
7.6 Number of direct positions in grid 35

8 Multi-Curve Coverage **35**

9 Multi-Surface Coverage **36**

10 Multi-Solid Coverage **37**

11 Coverage partitioning **38**
11.1 Overview 38
11.2 Partitioning 38
11.3 CRS and partition envelope constraints 40
11.4 Domain set constraints 41
11.5 Range type constraints 42

12 Coverage encodings **42**
12.1 Overview 42
12.2 XML 42
12.2.1 Relation with GML 43
12.3 JSON Coverage 43
12.4 Multipart encoding 44
12.4.1 Overview 44
12.4.2 Root part 44
12.4.3 Further parts 45

Annex A (normative) **Abstract test suite** **46**

Annex B (normative) **Rectified and Referenceable Grid Coverages** **48**

Bibliography **55**