ISO/IEC 19757-3:2025-09 (E)

Information technology - Document Schema Definition Languages (DSDL) - Part 3: Rule-based validation using Schematron

Contents

Page

Foreword ..... **v**

Introduction ..... **vi**

1 Scope **1**

2 Normative references **1**

3 Terms and definitions **2**

4 Notation **4**

5 Syntax **4**

5.1 Well-formedness 4
5.2 Namespace 4
5.3 Whitespace 4
5.4 Core elements 5
5.4.1 General 5
5.4.2 `active` element 5
5.4.3 `assert` element 5
5.4.4 `extends` element 5
5.4.5 `group` element 6
5.4.6 `include` element 6
5.4.7 `let` element 6
5.4.8 `library` element 6
5.4.9 `name` element 6
5.4.10 `ns` element 6
5.4.11 `param` element 7
5.4.12 `pattern` element 7
5.4.13 `phase` element 7
5.4.14 `report` element 8
5.4.15 `rule` element 8
5.4.16 `rules` element 8
5.4.17 `schema` element 8
5.4.18 `value-of` element 9
5.5 Ancillary elements and attributes 9
5.5.1 `diagnostic` element 9
5.5.2 `diagnostics` attribute 9
5.5.3 `diagnostics` element 9
5.5.4 `dir` element 9
5.5.5 `emph` element 9
5.5.6 `flag` attribute 9
5.5.7 `from` attribute 10
5.5.8 `fpi` attribute 10
5.5.9 `icon` attribute 10
5.5.10 `p` element 10
5.5.11 `properties` attribute 10
5.5.12 `properties` element 10
5.5.13 `property` element 10
5.5.14 `role` attribute 11
5.5.15 `schematronEdition` attribute 11
5.5.16 `severity` attribute 11
5.5.17 `see` attribute 11
5.5.18 `span` element 11
5.5.19 `subject` attribute 11

5.5.20 `title` element 12
5.5.21 `visit-each` attribute 12
5.5.22 `when` attribute 12

6 Semantics 12
6.1 Validation function 12
6.2 Minimal syntax 13
6.3 Processing model 13
6.4 Abstract pattern processing 14
6.5 Query language binding 16
6.6 Order and side-effects 16
6.7 Localization and language fixup 17
6.8 Base URI fixup 17

7 Conformance 17
7.1 Simple conformance 17
7.2 Full conformance 17

Annex A (normative) **RELAX NG schema for Schematron 19**

Annex B (normative) **Schematron schema for additional constraints 23**

Annex C (normative) **Default query language binding 25**

Annex D (informative) **Schematron Validation Report Language 26**

Annex E (informative) **Design requirements 35**

Annex F (informative) **Use of Schematron as a vocabulary 36**

Annex G (informative) **Use of Schematron for multi-lingual schemas 37**

Annex H (normative) **Query language binding for XSLT2 ..... 38**

Annex I (normative) **Query language binding for XPath2 ..... 40**

Annex J (normative) **Query language binding for XSLT3 ..... 41**

Annex K (normative) **Query language binding for XPath3 ..... 43**

Annex L (normative) **Query language binding for XPath31 ..... 44**

Annex M (normative) **Query language binding for XQuery3 ..... 45**

Annex N (normative) **Query language binding for XQuery31 ..... 47**

Annex O (informative) **Example usage of Schematron properties 49**

Bibliography 51