

# ISO 19154:2014-11 (E)

## Geographic information - Ubiquitous public access - Reference model

---

<b>Contents</b>		<b>Page</b>
Foreword .....		iv
Introduction .....		v
1	Scope .....	1
2	Conformance .....	1
3	Normative references .....	1
4	Terms and definitions .....	1
5	Symbols (and abbreviated terms) .....	5
5.1	Abbreviated terms .....	5
5.2	UML notation .....	6
6	Reference model requirements .....	6
6.1	Background .....	6
6.2	Design principles of ubiquitous public access .....	7
6.3	Semantics of UPA .....	7
6.4	Conceptual framework .....	8
6.5	Relationship with other ISO geographic information standards .....	9
6.6	Other areas of standardization .....	11
7	RM-ODP viewpoints .....	12
7.1	Enterprise viewpoint .....	12
7.2	Information viewpoint .....	14
7.3	Computational viewpoint .....	19
Annex A (normative) Abstract test suite .....		22
Annex B (informative) Additional background information on UPA-to-GI .....		24
Annex C (informative) Open Distributed Processing (RM-ODP) for UPA-to-GI reference model .....		26
Annex D (informative) Service architecture for UPA-to-GI .....		27
Annex E (informative) Existing standardization efforts .....		30
Annex F (informative) UPA-to-GI service scenarios .....		37
Bibliography .....		43