ISO 19144-2:2012-07 (E)

Geographic information - Classification systems - Part 2: Land Cover Meta Language (LCML)

Contents

Page

Foreword v

Introduction vi

1 Scope 1

2 Conformance 1
2.1 Classes 1
2.2 Conformance of a land cover classification system 1
2.3 Conformance of a register for the extension of the metalanguage 1
2.4 Conformance of a comparison process of land cover classification systems 1

3 Normative references 1

4 Terms, definitions, and abbreviations 2
4.1 Terms and definitions 2
4.2 Abbreviations 3

5 Notation 4

6 Context 4

7 Conceptual basis 6
7.1 Definition adopted for land cover 6
7.2 LCML approach to class definition 6

8 LCML objects 8
8.1 Introduction to LCML objects 8
8.3 Composition of a LC_LandCover object 9
8.4 Elements of the LCML metamodel 10
8.5 High level structure 10
8.6 Land Cover Meta Language object structure 11
8.7 LC_Element 17
8.8 LC_VegetationElement 18
8.9 LC_GrowthForm 18
8.10 LC_WoodyGrowthForm 20
8.11 LC_HerbaceousGrowthForm 22
8.12 LC_LichenAndMoss 24
8.13 LC_AbioticElement 25
8.14 LC_ArtificialSurfaceElement 26
8.15 LC_NaturalSurfaceElement 26
8.16 LC_WaterBodyAndAssociatedSurfaceElement 27
8.17 LC_BuiltUpSurface 30
8.18 LC_NonBuiltUpSurface 33
8.19 LC_RocksSurfaceElement 34
8.20 LC_SoilSandDepositsSurfaceElement 35
8.21 LC_ClassCharacteristic 37
8.22 LC_LandCoverElementCharacteristic 40
8.23 LC_GrowthFormCharacteristic 42
8.24 LC_NameAttributionCriteria 46
8.25 LC_CultivatedAndManagedVegetation 48

8.26 LC_ArtificialSurfaceCharacteristic 52
8.27 LC_WaterAndAssociatedSurfaceCharacteristic 54
8.28 LC_ValueObject permitted numeric values 56

9 Extension of the LCML 60
9.1 Introduction 60
9.2 Backward compatibility 60
9.3 LCML register structure 61

Annex A (normative) Abstract test suite 67

Annex C (informative) Examples 71

Annex D (informative) Glossary of land cover meta-elements 89

Bibliography 106

Alphabetical index to terms in glossary 108