INTERNATIONAL STANDARD ISO/IEC 11179-3:2003

TECHNICAL CORRIGENDUM 1

Published 2004-04-01

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION
INTERNATIONAL ELECTROTECHNICAL COMMISSION • МЕЖДУНАРОДНАЯ ЭЛЕКТРОТЕХНИЧЕСКАЯ КОМИССИЯ • COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

Information technology — Metadata registries (MDR) —

Part 3:
Registry metamodel and basic attributes

TECHNICAL CORRIGENDUM 1

Technologies de l'information — Registres de métadonnées (RM) —

Partie 3: Métamodèle de registre et attributs de base

RECTIFICATIF TECHNIQUE 1

Technical Corrigendum 1 to ISO/IEC 11179-3:2003 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 32, *Data management and interchange*.

ICS 35.040 **Ref. No. ISO/IEC 11179-3:2003/Cor.1:2004(E)**

© ISO/IEC 2004 – All rights reserved

Published in Switzerland

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

Contents

Page

Foreword ..... Error! Bookmark not defined.

0 Cover Page **3**

3. Definitions **3**
3.1 Definitions of Metamodel Constructs **3**
3.2 Broad Terms used in this part of ISO/IEC 11179 ..... **3**
3.3 Alphabetical list of metadata objects in the metamodel **4**

4. Structure of a Metadata Registry **5**
4.7 Description of metamodel **5**
4.7.2 Types of Administered Items **5**
4.9 Naming and Definition Region **7**
4.9.1 Metadata objects in the Naming and Definition region **7**
4.10 Classification Region **8**
4.10.1 Metadata objects in the Classification region **8**
4.11 Data Element Concept Region **9**
4.11.1 Metadata objects in the Data Element Concept region **9**
4.12 Conceptual and Value Domain Region **11**
4.12.1 Metadata objects in the Conceptual and Value Domain region **12**
4.13 Data Element Region **13**
4.13.1 Metadata objects in the Data Element region **13**
4.14 Consolidated metamodel **15**

Annex A (of ISO/IEC 11179-3:2003) (informative) **Alphabetical List of Terms** **17**

© ISO/IEC 2004 – All rights reserved

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS

Not for Resale

Information technology — Metadata registries (MDR) —

Part 3:
Registry metamodel and basic attributes

TECHNICAL CORRIGENDUM 1

0 Cover Page

The central element of the French title should be: Registre de métadonnées (RM). This was a typographical error.

3. Definitions

3.1 Definitions of Metamodel Constructs

In 3.1.8, in the Note, 'name' should be in bold because it is a defined term.

3.1.8
identifier (in **Metadata Registry**)
⟨metamodel⟩ a sequence of characters, capable of uniquely identifying that with which it is associated, within a specified context

NOTE A **name** should not be used as an identifier because it is not linguistically neutral.

3.2 Broad Terms used in this part of ISO/IEC 11179

In 3.2.10, the reference to [ISO/IEC 2382-1:1998, 01.01.02] should be to [ISO/IEC 2382-1:1993, 01.01.02]. This was a typographical error.

3.2.10
data
a re-interpretable representation of information in a formalized manner suitable for communication, interpretation or processing

NOTE Data can be processed by human or automatic means.

[ISO/IEC 2382-1:1993, 01.01.02]

In 3.2.11, in the definition, 'data' should be in bold because it is a defined term.

3.2.11
data model
a graphical and/or lexical representation of **data**, specifying their properties, structure and inter-relationships

In 3.2.12, in the definition, 'concept' should be in bold because it is a defined term.

--`,,```,,,,````-`-`,,`,,`,`,,`---
© ISO/IEC 2004 - All rights reserved
Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

3.2.12
definition
representation of a **concept** by a descriptive statement which serves to differentiate it from related concepts

[ISO 1087-1:2000, 3.3.1]

NOTE See also **Definition (of Administered Item)** (3.3.58).

In 3.2.13, in the definition, 'concept' should be in bold because it is a defined term.

3.2.13
designation
representation of a **concept** by a sign which denotes it

[ISO 1087-1:2000, 3.4.1]

NOTE See also **Designation (of Administered Item)** (3.3.67) and **name** (3.2.27).

In 3.2.26, in the definition, 'object' should be in bold because it is a defined term.

3.2.26
name
the **designation** of an **object** by a linguistic expression

NOTE See also **name (of Administered Item)** (3.3.83)

3.3 Alphabetical list of metadata objects in the metamodel

Delete the term and definition in 3.3.10, because Classification Scheme inherits the Administration Record from its parent Administered Item.

Delete the term and definition in 3.3.22, because Conceptual Domain inherits the Administration Record from its parent Administered Item.

Delete the term and definition in 3.3.31, because Context inherits the Administration Record from its parent Administered Item.

In 3.3.36, in the definition, 'data' should be in bold because it is a defined term.

3.3.36
Data Element
DE
a unit of **data** for which the **definition**, identification, representation and **Permissible Value**s are specified by means of a set of **attribute**s

NOTE Metamodel construct is: *Class*.

Delete the term and definition in 3.3.37, because Data Element inherits the Administration Record from its parent Administered Item.

In 3.3.38, in the definition, 'concept' should be in bold because it is a defined term.

© ISO/IEC 2004 – All rights reserved
Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

3.3.38
Data Element Concept
DEC
a **concept** that can be represented in the form of a **Data Element**, described independently of any particular representation

NOTE Metamodel construct is: *Class*.

Delete the term and definition in 3.3.39, because Data Element Concept inherits the Administration Record from its parent Administered Item.

Delete the term and definition in 3.3.64, because Derivation Rule inherits the Administration Record from its parent Administered Item.

Delete the term and definition in 3.3.89, because Object Class inherits the Administration Record from its parent Administered Item.

Delete the term and definition in 3.3.108, because Property inherits the Administration Record from its parent Administered Item. [DR-001]

Delete the term and definition in 3.3.127, because Representation Class inherits the Administration Record from its parent Administered Item.

In 3.3.139, in the definition, 'data' should be in bold because it is a defined term.

3.3.139
Value
a data value

NOTE Metamodel construct is: *Class*.

Delete the term and definition in 3.3.141, because Value Domain inherits the Administration Record from its parent Administered Item.

4. Structure of a Metadata Registry

4.7 Description of metamodel

4.7.2 Types of Administered Items

Replace Figure 2 with the following, which:

(1) adds "Derivation Rule" as a sub-type of "Administered Item"; and

(2) shows the Administration_Record within Administered_Item to better illustrate that this will be inherited by each of the sub-types.

© ISO/IEC 2004 - All rights reserved

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

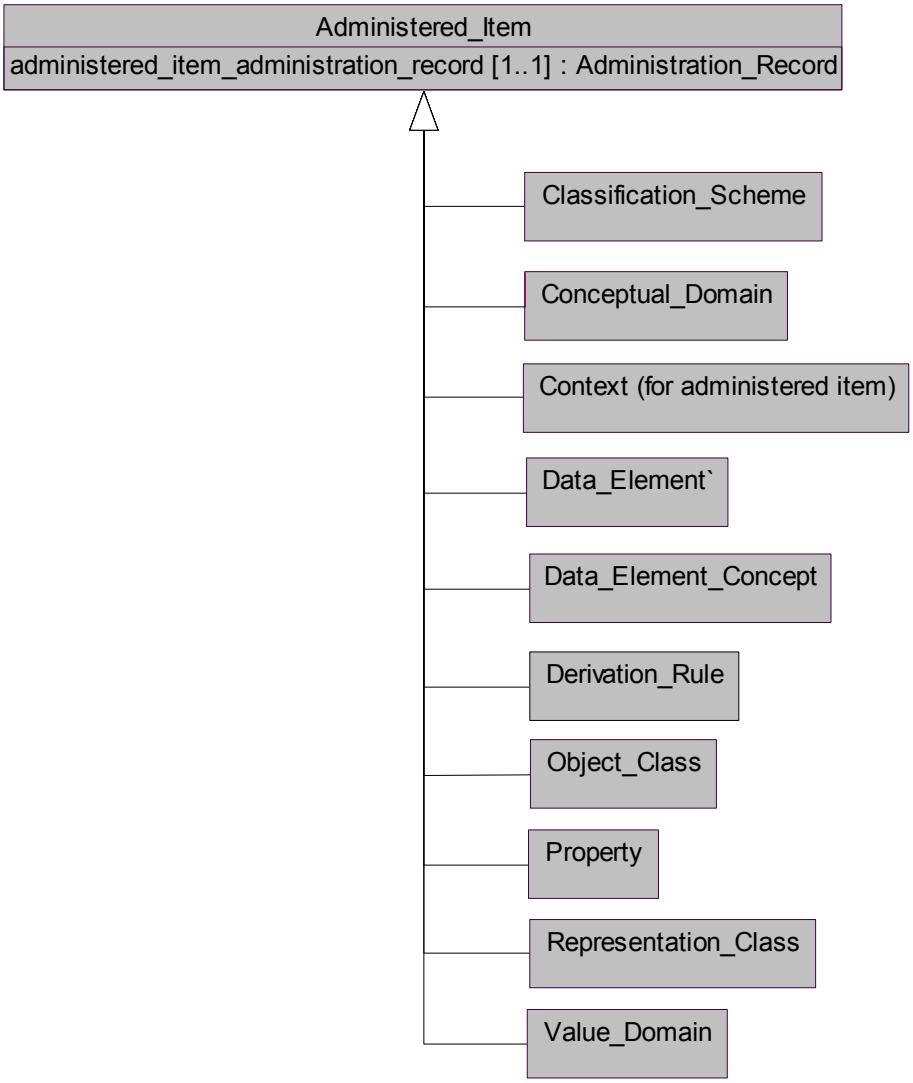

Figure 2 – Types of Administered Items

© ISO/IEC 2004 – All rights reserved
Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

4.9 Naming and Definition Region

4.9.1 Metadata objects in the Naming and Definition region

Replace Figure 6 by the following, which removes "context_administration_record".

NOTE Context inherits the Administration Record from its parent Administered Item (see Figure 2).

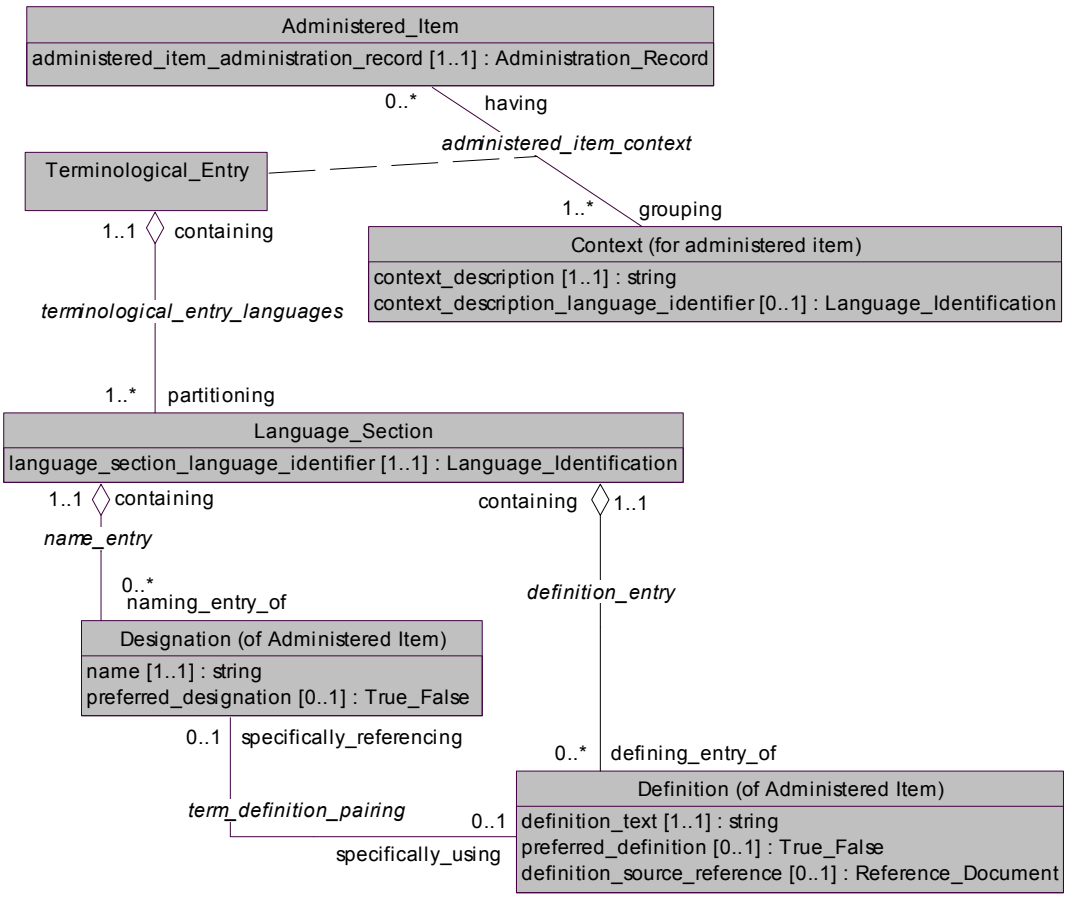

Figure 6 – Naming and definition metamodel region

4.9.1.2 Context (for Administered Item)

In the attribute listing, rename "context administration record" to "administered item administration record" and indicate that it is inherited from Administered Item.

Attribute	Occurrences	Datatype
administered item administration record	One per *Context (inherited from Administered Item)*	*Administration_Record*

4.9.1.3 Terminological Entry

Replace the first sentence of paragraph 2 by the following:

An *Administered Item* shall have one or more *Terminological Entries,* each in a particular *Context*.

--`,,```,,,,````-`-`,,`,,`,`,,`---

© ISO/IEC 2004 - All rights reserved
Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

4.10 Classification Region

Replace Figure 7 by the following, which removes "classification_scheme_administration_record".

NOTE Classification Scheme inherits the Administration Record from its parent Administered Item (see Figure 2).

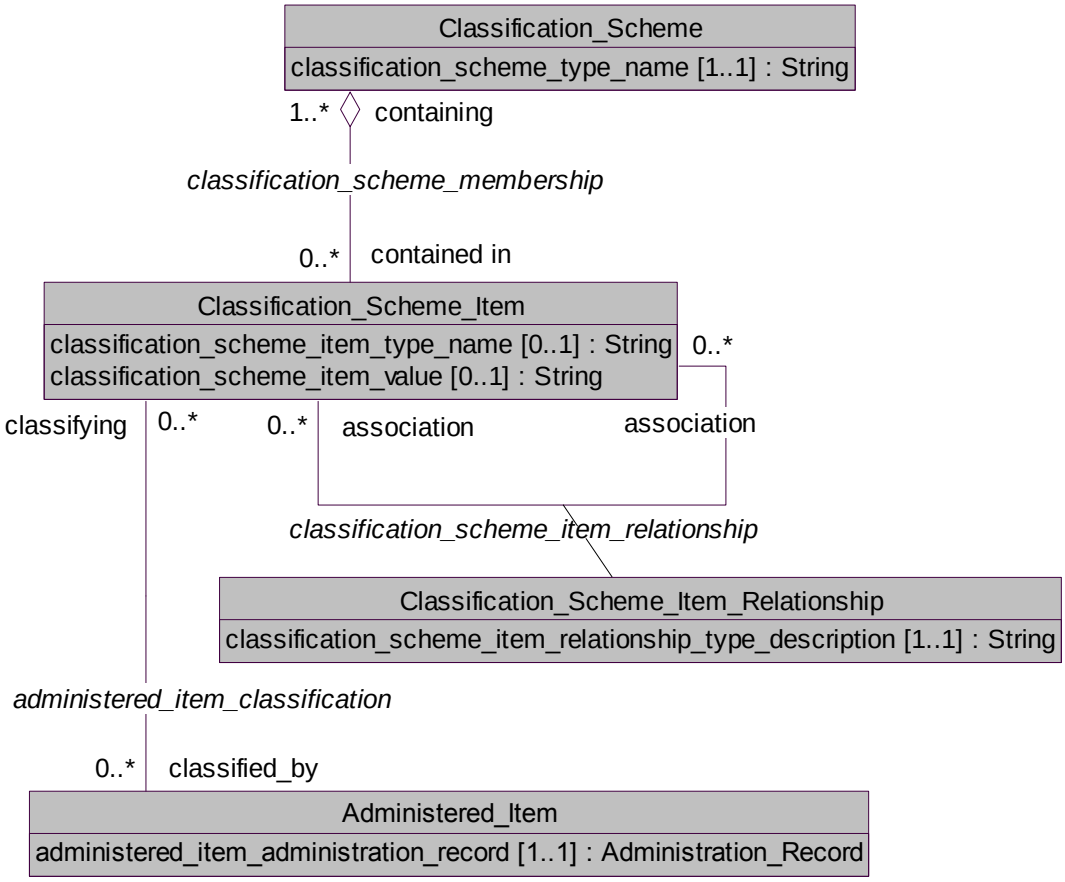

Figure 7 – Classification metamodel region

4.10.1 Metadata objects in the Classification region

4.10.1.2 Classification Scheme

In the attribute listing, rename "classification scheme administration record" to "administered item administration record" and indicate that it is inherited from Administered Item.

Attribute	**Allowed Occurrences**	**Datatype**
administered item administration record	One per *Classification Scheme (inherited from Administered Item)*	*Administration_Record*

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale
© ISO/IEC 2004 – All rights reserved

4.11 Data Element Concept Region

Replace Figure 8 by the following, which removes "data_element_concept_administration_record", "object_class_administration_record" and "property_administration_record".

NOTE Data Element Concept, Object Class and Property each inherit the Administration Record from their respective parent Administered Item (see Figure 2).

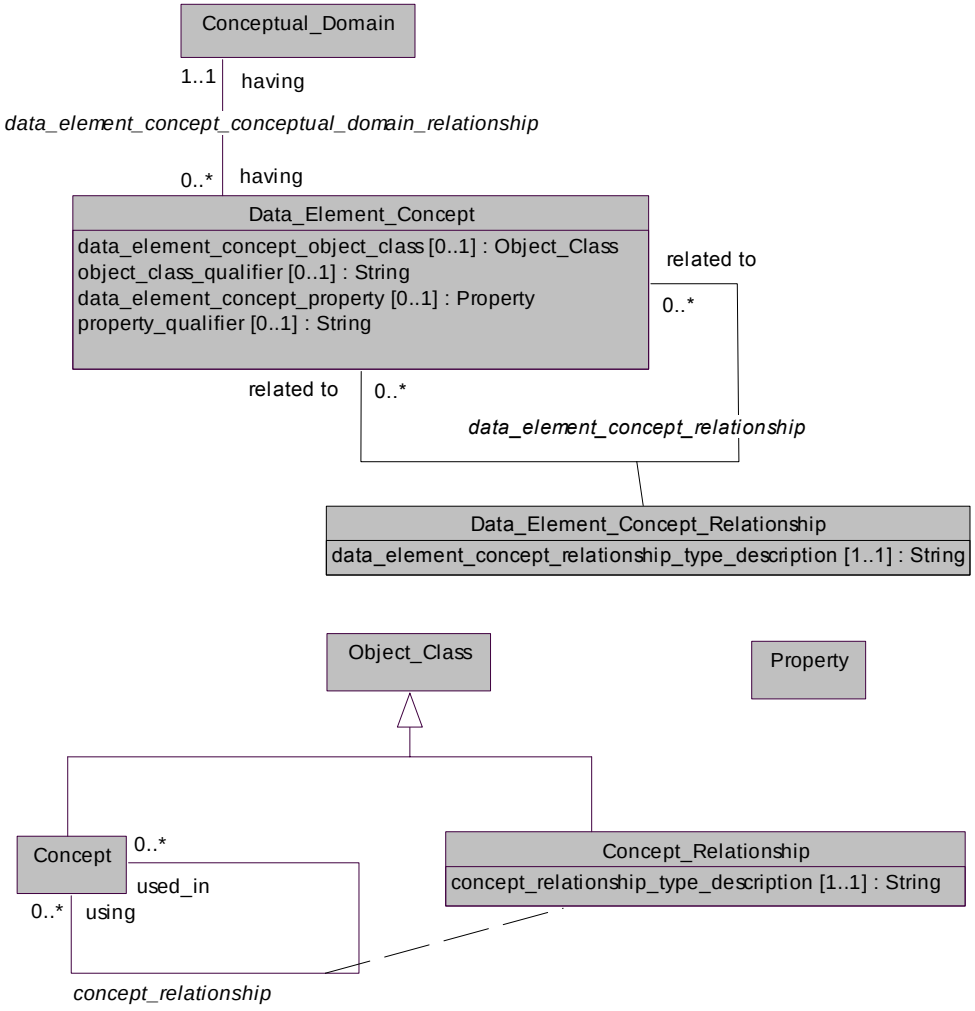

Figure 8 – Data element concept metamodel region

4.11.1 Metadata objects in the Data Element Concept region

4.11.1.1 Object Class

In the attribute listing, rename "object class administration record" to "administered item administration record" and indicate that it is inherited from Administered Item.

Attribute	**Allowed Occurrences**	**Datatype**
administered item administration record	One per *Object Class (inherited from Administered Item)*	*Administration_Record*

© ISO/IEC 2004 - All rights reserved
Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

4.11.1.2 Property

In the attribute listing, rename "property administration record" to "administered item administration record" and indicate that it is inherited from Administered Item.

Attribute	Allowed Occurrences	Datatype
administered item administration record	One per *Property (inherited from Administered Item)*	*Administration_Record*

4.11.1.3 Data Element Concept

In the attribute listing, rename "data element concept administration record" to "administered item administration record" and indicate that it is inherited from Administered Item.

Attribute	Allowed Occurrences	Datatype
administered item administration record	One per *Data Element Concept (inherited from Administered Item)*	*Administration_Record*

--`,,```,,,,````-`-`,,`,,`,`,,`---
© ISO/IEC 2004 – All rights reserved
Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

4.12 Conceptual and Value Domain Region

Replace Figure 9 by the following, which removes "conceptual_domain_administration_record", "value_domain_administration_record" and "representation_class_administration_record".

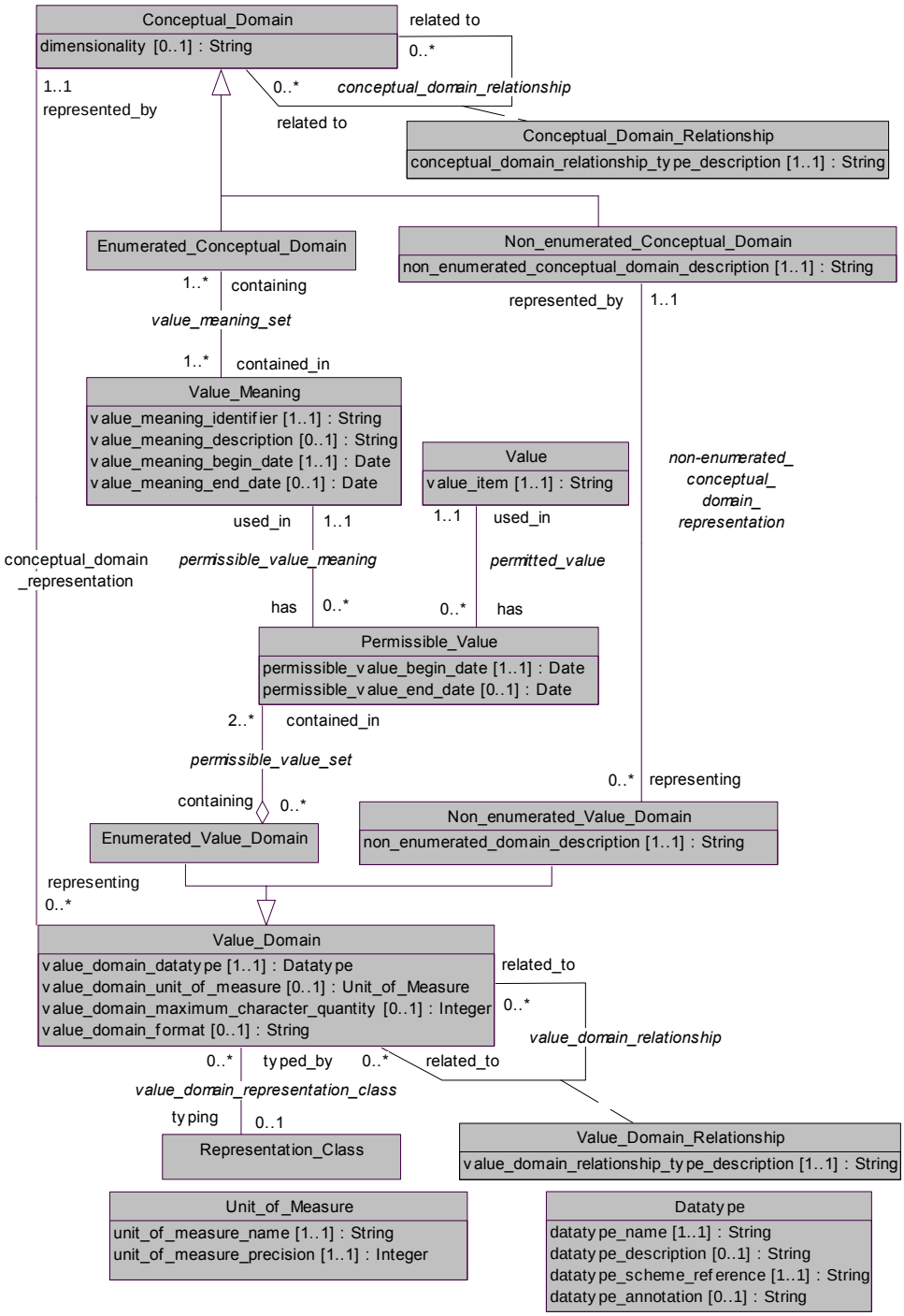

Figure 9 – Conceptual and value domain metamodel region

--`,,```,,,,````-`-`,,`,,`,`,,`---

© ISO/IEC 2004 - All rights reserved

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

NOTE Conceptual Domain, Value Domain and Representation Class each inherit the Administration Record from their respective parent Administered Item (see Figure 2).

4.12.1 Metadata objects in the Conceptual and Value Domain region

4.12.1.1 Conceptual Domain

In the attribute listing, rename "conceptual domain administration record" to "administered item administration record" and indicate that it is inherited from Administered Item.

Attribute	Allowed Occurrences	Datatype
administered item administration record	One per *Conceptual Domain (inherited from Administered Item)*	*Administration_Record*

4.12.1.5 Value Domain

In the attribute listing, rename "value domain administration record" to "administered item administration record" and indicate that it is inherited from Administered Item.

Attribute	Allowed Occurrences	Datatype
administered item administration record	One per *Value Domain (inherited from Administered Item)*	*Administration_Record*

© ISO/IEC 2004 – All rights reserved
Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

4.13 Data Element Region

Replace Figure 10 by the following, which removes "data_element_administration_record", "derivation_rule_administration_record" and "representation_class_administration_record".

NOTE Data Element, Derivation Rule and Representation Class each inherit the Administration Record from their respective parent Administered Item (see Figure 2).

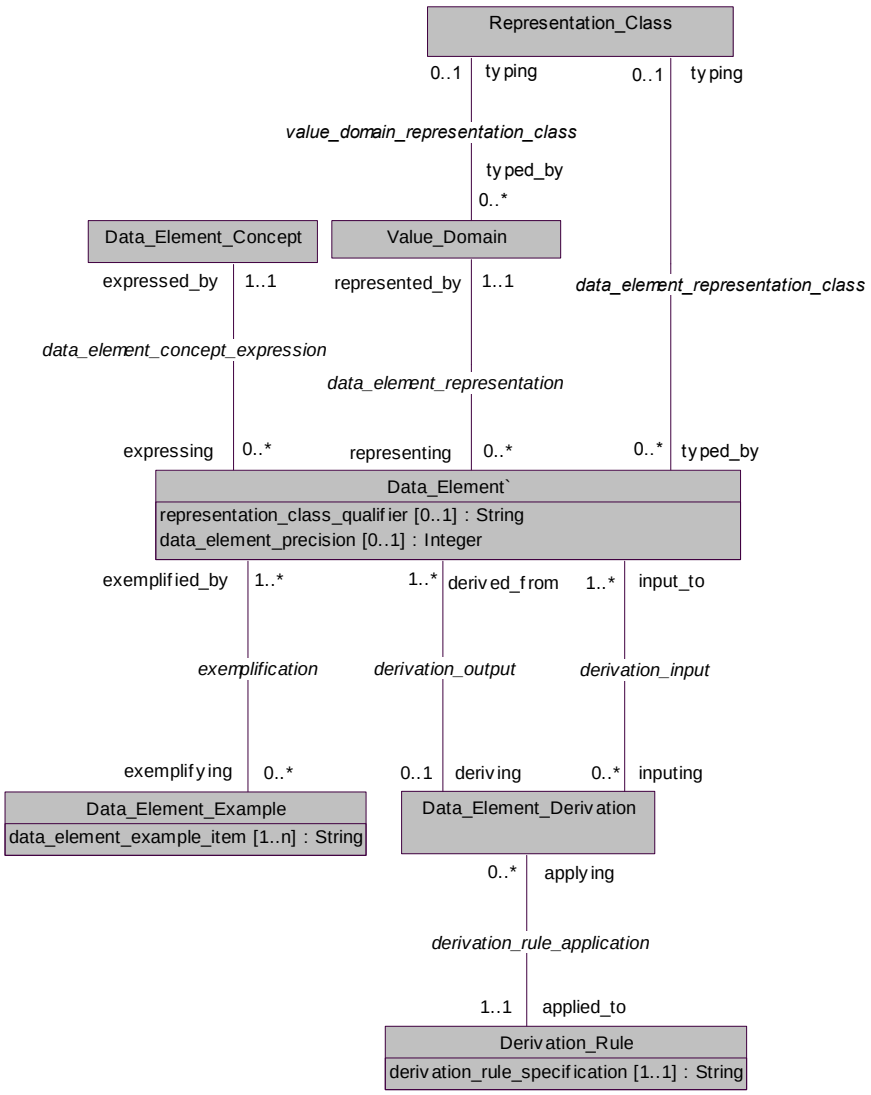

Figure 10 – Data element metamodel region

4.13.1 Metadata objects in the Data Element region

4.13.1.1 Data Element

In the attribute listing, rename "data element administration record" to "administered item administration record" and indicate that it is inherited from Administered Item.

© ISO/IEC 2004 - All rights reserved

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

Attribute	Allowed Occurrences	Datatype
administered item administration record	One per *Data Element (inherited from Administered Item)*	*Administration_Record*

4.13.1.4 Representation Class

In the attribute listing, rename "representation class administration record" to "administered item administration record" and indicate that it is inherited from Administered Item.

Attribute	Allowed Occurrences	Datatype
administered item administration record	One per *Representation Class (inherited from Administered Item)*	*Administration_Record*

4.13.1.6 Derivation Rule

In the attribute listing, rename "derivation rule administration record" to "administered item administration record" and indicate that it is inherited from Administered Item.

Attribute	Allowed Occurrences	Datatype
administered item administration record	One per *Derivation Rule (inherited from Administered Item)*	*Administration_Record*

--`,,```,,,,````-`-`,,`,,`,`,,`---
Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
© ISO/IEC 2004 – All rights reserved
Not for Resale

4.14 Consolidated metamodel

Replace Figure 11 by the following, which removes "data_element_concept_administration_record", "conceptual_domain_administration_record", "derivation_rule_administration_record" , "data_element_administration_record", and "value_domain_administration_record".

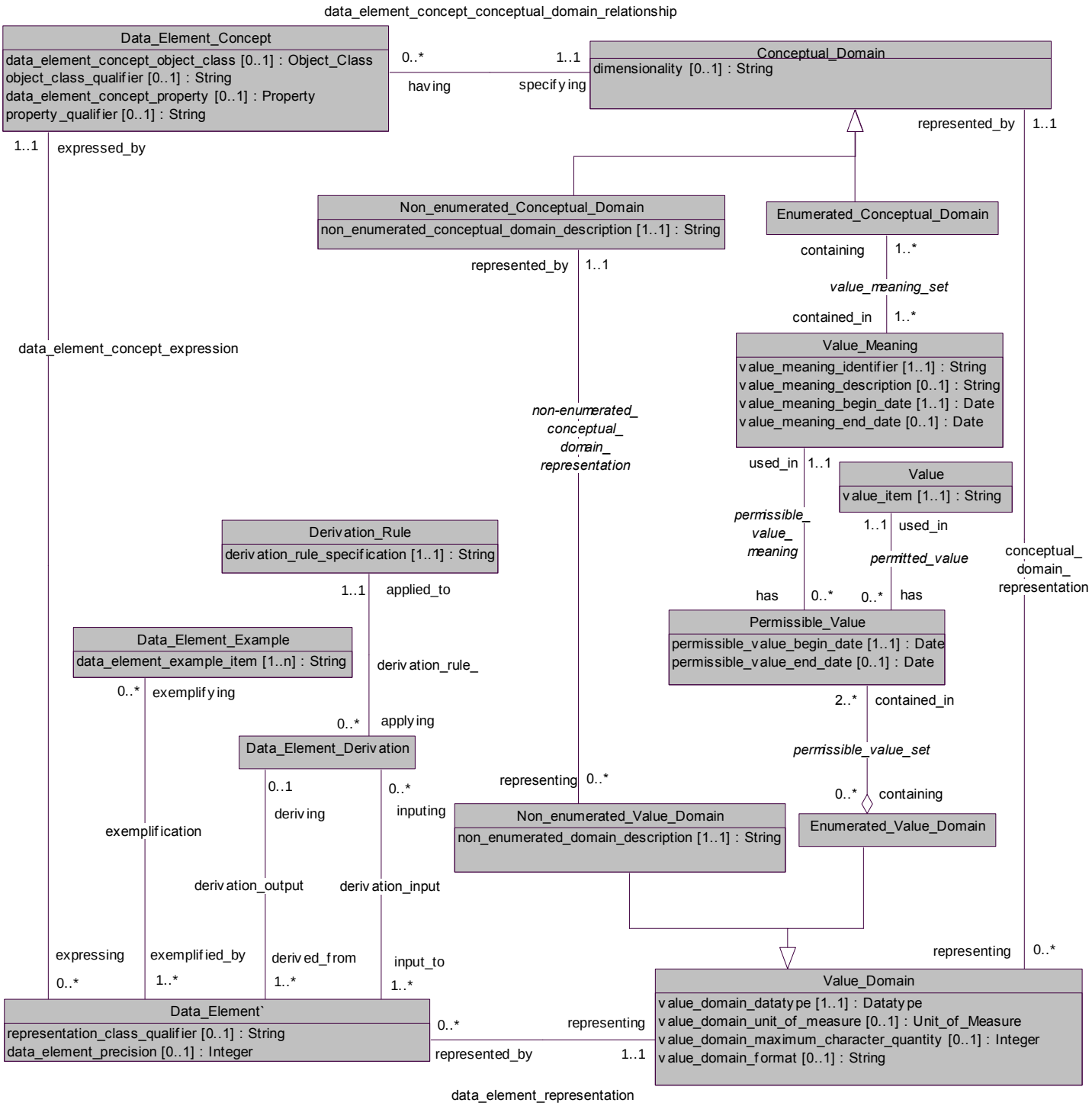

Figure 11 – Consolidated metamodel

© ISO/IEC 2004 - All rights reserved
Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

NOTE Data Element Concept, Conceptual Domain, Data Element, Derivation Rule and Value Domain each inherit an Administration Record from their respective parent Administered Item (see Figure 2).

--`,,```,,,,````-`-`,,`,,`,`,,`---

© ISO/IEC 2004 – All rights reserved
Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

Annex A (of ISO/IEC 11179-3:2003) (informative)

Alphabetical List of Terms

Term and definition deleted from clause 3.3 must also be deleted from Annex A.

Term	Defined in
Administered Item	3.3.1
administered item classification	3.3.2
administered item context	3.3.3
administered item identifier	3.3.4
Administration Record	3.3.5
administrative note	3.3.6
administrative status	3.3.7
association	3.1.1
association class	3.1.2
attribute	3.1.3
attribute instance	3.2.1
attribute value	3.2.2
basic attribute	3.2.3
binding	3.2.4
CD	3.3.21, 3.4.1
change description	3.3.8
characteristic	3.2.5
class	3.1.4
Classification Scheme	3.3.9
Classification Scheme Item (CSI)	3.3.11
Classification Scheme Item Relationship	3.3.12
classification scheme item relationship type description	3.3.13
classification scheme item type name	3.3.14
classification scheme item value	3.3.15
classification scheme membership	3.3.16
classification scheme type name	3.3.17
common attribute	3.2.6
common facility	3.2.7
composite attribute	3.1.5
composite datatype	3.1.6
Concept	3.3.18
Concept Relationship	3.3.19
concept relationship type description	3.3.20
conceptual data model	3.2.8

Term	Defined in
Conceptual Domain (CD)	3.3.21
~~conceptual domain administration record~~	~~3.3.22~~
Conceptual Domain Relationship	3.3.23
conceptual domain relationship type description	3.3.24
conceptual domain representation	3.3.25
conditional	3.2.9
Contact	3.3.26
contact information	3.3.27
contact name	3.3.28
contact title	3.3.29
Context (for administered item)	3.3.30
context description	3.3.32
context description language identifier	3.3.33
country identifier (of Language Identification)	3.3.34
creation date	3.3.35
CSI	3.3.11, 3.4.2
data	3.2.10
Data Element (DE)	3.3.36
~~data element administration record~~	~~3.3.37~~
Data Element Concept (DEC)	3.3.38
~~data element concept administration record~~	~~3.3.39~~
data element concept conceptual domain relationship	3.3.40
data element concept expression	3.3.41
data element concept object class	3.3.42
data element concept property	3.3.43
Data Element Concept Relationship	3.3.44
data element concept relationship type description	3.3.45
Data Element Derivation	3.3.46
Data Element Example	3.3.47
data element example item	3.3.48

© ISO/IEC 2004 - All rights reserved
Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

Term	Defined in
data element precision	3.3.49
data element representation	3.3.50
data element representation class	3.3.51
data identifier	3.3.52
data model	3.2.11
Datatype	3.3.53
datatype annotation	3.3.54
datatype description	3.3.55
datatype name	3.3.56
datatype scheme reference	3.3.57
DE	3.3.36, 3.4.3
DEC	3.3.38, 3.4.4
definition	3.2.12
Definition (of Administered Item)	3.3.58
definition source reference	3.3.59
definition text	3.3.60
derivation input	3.3.61
derivation output	3.3.62
Derivation Rule	3.3.63
derivation rule application	3.3.65
derivation rule specification	3.3.66
designation	3.2.13
Designation (of Administered Item)	3.3.67
dimensionality (of Conceptual Domain)	3.3.68
documentation language identifier	3.3.69
effective date	3.3.70
entity	3.2.14
Enumerated Conceptual Domain	3.3.71
Enumerated Value Domain	3.3.72
exemplification	3.3.73
explanatory comment	3.3.74
extension	3.2.15
generalization	3.1.7
identifier (in Metadata Registry)	3.1.8
international code designator	3.3.75
Item identifier	3.3.76
item registration authority identifier	3.3.77
language	3.2.16
Language Identification	3.3.78
language identifier	3.3.79
Language Section	3.3.80

Term	Defined in
language section language identifier	3.3.81
last change date	3.3.82
mandatory	3.2.17
MDR	3.2.22, 3.4.5
metadata	3.2.18
metadata item	3.2.19
metadata object	3.2.20
metadata register	3.2.21
Metadata Registry (MDR)	3.2.22
metadata set	3.2.23
metamodel	3.2.24
metamodel construct	3.2.25
name	3.2.26
name (of Administered Item)	3.3.83
Non-enumerated Conceptual Domain	3.3.84
non-enumerated conceptual domain description	3.3.85
Non-enumerated Value Domain	3.3.86
non-enumerated value domain description	3.3.87
object	3.2.27
Object Class	3.3.88
object class qualifier	3.3.90
opi	3.3.96, 3.4.6
optional	3.2.28
Organization	3.3.91
organization identifier	3.3.92
organization mail address	3.3.93
organization name	3.3.94
organization part	3.3.95
organization part identifier (opi)	3.3.96
organization part identifier source	3.3.97
origin (of Administered Item)	3.3.98
Permissible Value	3.3.99
permissible value begin date	3.3.100
permissible value end date	3.3.101
permissible value meaning	3.3.102
permissible value set	3.3.103
permitted value	3.3.104
preferred definition	3.3.105
preferred designation	3.3.106
Property	3.3.107

© ISO/IEC 2004 – All rights reserved
Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale

Term	Defined in
property qualifier	3.3.109
RA	3.3.121, 3.4.7
reference	3.3.110
Reference Document	3.3.111
reference document identifier	3.3.112
reference document language identifier	3.3.113
reference document title	3.3.114
reference document type description	3.3.115
reference organization	3.3.116
Registrar	3.3.117
registrar contact	3.3.118
registrar identifier	3.3.119
registration	3.3.120
Registration Authority (RA)	3.3.121
registration authority identifier	3.3.122
Registration Authority Identifier	3.3.123
registration authority registrar	3.3.124
registration status	3.3.125
registry item	3.2.29
registry metamodel	3.2.30
related metadata reference	3.2.31
relationship (in registry metamodel)	3.1.9
Representation Class	3.3.126
representation class qualifier	3.3.128
Stewardship (of Administered Item)	3.3.129
stewardship (of metadata)	3.2.32
stewardship contact	3.3.130

Term	Defined in
Submission (of Administered Item)	3.3.131
submission contact	3.3.132
Terminological Entry	3.3.133
Unit of Measure (of Value Domain)	3.3.134
unit of measure name	3.3.135
unit of measure precision	3.3.136
unresolved issue	3.3.137
until date	3.3.138
Value	3.3.139
Value Domain (VD)	3.3.140
value domain datatype	3.3.142
value domain format	3.3.143
value domain maximum character quantity	3.3.144
Value Domain Relationship	3.3.145
value domain relationship type description	3.3.146
value domain representation class	3.3.147
value domain unit of measure	3.3.148
value item	3.3.149
Value Meaning	3.3.150
value meaning begin date	3.3.151
value meaning description	3.3.152
value meaning end date	3.3.153
value meaning identifier	3.3.154
value meaning set	3.3.155
VD	3.3.140, 3.4.8
version	3.3.156

© ISO/IEC 2004 - All rights reserved

Copyright International Organization for Standardization
Provided by IHS under license with ISO
No reproduction or networking permitted without license from IHS
Not for Resale