# DataSet Fingerprint Report

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October 15, 2016

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# 1 Difference between Corporate and Places

### 1.1 Common parts

The table below represents the elements common to both datasets.

Subject	Predicate	Object
ato:MappedCode	ato:affected-table	xsd:string
ato:MappedCode	ato:legacy-code	xsd:string
ato:MappedCode	dc:source	xsd:string
ato:MappedCode	rdf:type	ato:MappedCode
skos:Concept	ato:authority-code	xsd:string
skos:Concept	ato:op-code	xsd:string
skos:Concept	ato:op-mapped-code	ato:MappedCode
skos:Concept	atr:op-code	xsd:string
skos:Concept	dc:identifier	xsd:string
skos:Concept	rdf:type	skos:Concept
skos:Concept	skos:prefLabel	rdf:langString
skos:ConceptScheme	rdf:type	skos:ConceptScheme
skos:ConceptScheme	rdfs:label	rdf:langString

# 1.2 Unique to Corporate

The table below represents the elements present in Corporate but missing in Places.

Subject	Predicate	Object
dct:Agent	atmdr:to_reviewwebsite	*
dct:Agent	ato:authority-code	xsd:string
dct:Agent	ato:op-code	xsd:string
dct:Agent	ato:op-mapped-code	ato:MappedCode
dct:Agent	ato:protocol-order	xsd:string
dct:Agent	ato:protocol.order	xsd:string
dct:Agent	atr:op-code	xsd:string
dct:Agent	dct:created	xsd:date
dct:Agent	dct: date Accepted	xsd:date
dct:Agent	dct:dateSubmitted	xsd:date
dct:Agent	dct:isReplacedBy	dct:Agent, skos:Concept, org:Organisation, foa
dct:Agent	dct:replaces	dct:Agent, skos:Concept, org:Organisation, foa
dct:Agent	dct:type	skos:Concept
dct:Agent	euvoc:endDate	xsd:date
dct:Agent	euvoc:order	xsd:string
dct:Agent	euvoc:startDate	xsd:date
dct:Agent	euvoc:status	euvoc:ConceptStatus, skos:Concept
dct:Agent	euvoc:xlChangeNote	euvoc:XlNote
dct:Agent	euvoc:xlDefinition	euvoc:XlNote
dct:Agent	euvoc:xlHistoryNote	euvoc:XlNote
dct:Agent	euvoc:xlNotation	euvoc:XlNotation
dct:Agent	geowgs:location	*
dct:Agent	lemon:context	*
dct:Agent	owl:versionInfo	xsd:string
dct:Agent	rdf:type	dct:Agent
dct:Agent	skos:broader	dct:Agent, skos:Concept, org:Organisation, foa
dct:Agent	skos:changeNote	rdf:langString
dct:Agent	skos:definition	rdf:langString
dct:Agent	skos:exactMatch	*
dct:Agent	skos:historyNote	rdf:langString
dct:Agent	skos:inScheme	owl:Ontology, skos:ConceptScheme
dct:Agent	skos:newPropoerty	xsd:string

Subject	Predicate	Object
dct:Agent	skos:notation	atdt:CONSIL, atdt:DEMED, atdt:OJ, atdt:WHOISWH.
dct:Agent	skos:prefLabel	rdf:langString
dct:Agent	skos:topConceptOf	owl:Ontology, skos:ConceptScheme
dct:Agent	skoxl:altLabel	skoxl:Label
dct:Agent	skoxl:prefLabel	skoxl:Label
euvoc:ConceptStatus	ato:authority-code	xsd:string
euvoc:ConceptStatus	ato:op-code	xsd:string
euvoc:ConceptStatus	atr:op-code	xsd:string
euvoc:ConceptStatus	dct:created	xsd:date
euvoc:ConceptStatus	dct:dateAccepted	xsd:date
euvoc:ConceptStatus	dct:dateSubmitted	xsd:date
euvoc:ConceptStatus	euvoc:startDate	xsd:date
euvoc:ConceptStatus	euvoc:status	euvoc:ConceptStatus, skos:Concept
euvoc:ConceptStatus	euvoc:xlDefinition	euvoc:XlNote
euvoc:ConceptStatus	owl:versionInfo	xsd:string
euvoc:ConceptStatus	rdf:type	euvoc:ConceptStatus
euvoc:ConceptStatus	skos:definition	rdf:langString
euvoc:ConceptStatus	skos:inScheme	owl:Ontology, skos:ConceptScheme
euvoc:ConceptStatus	skos:prefLabel	rdf:langString
euvoc:ConceptStatus	skos:topConceptOf	owl:Ontology, skos:ConceptScheme
euvoc:ConceptStatus	skoxl:prefLabel	skoxl:Label
euvoc:LabelType	ato:authority-code	xsd:string
euvoc:LabelType	ato:op-code	xsd:string
euvoc:LabelType	atr:op-code	xsd:string
euvoc:LabelType	dct:created	xsd:date
euvoc:LabelType	dct:dateAccepted	xsd:date
euvoc:LabelType	dct:dateSubmitted	xsd:date
euvoc:LabelType	euvoc:startDate	xsd:date
euvoc:LabelType	euvoc:status	euvoc:ConceptStatus, skos:Concept
euvoc:LabelType	owl:versionInfo	xsd:string
euvoc:LabelType	rdf:type	euvoc:LabelType
euvoc:LabelType	skos:inScheme	owl:Ontology, skos:ConceptScheme
euvoc:LabelType	skos:newRel	xsd:string
euvoc:LabelType	skos:prefLabel	rdf:langString
euvoc:LabelType	skos:topConceptOf	owl:Ontology, skos:ConceptScheme
euvoc:LabelType	skoxl:prefLabel	skoxl:Label
euvoc:XlNotation	dct:created	xsd:date
euvoc:XINotation	dct:type	*
euvoc:XINotation	euvoc:endDate	xsd:date
euvoc:XINotation	euvoc:startDate	xsd:date
euvoc:XINotation	euvoc:status	euvoc:ConceptStatus, skos:Concept
euvoc:XINotation	euvoc:xlCodification	xsd:string
euvoc:XINotation	rdf:type	euvoc:XINotation
euvoc:XINote	dct:source	rdf:langString
euvoc:XINote	euvoc:startDate	xsd:date
euvoc:XlNote	euvoc:xlNote	rdf:langString
euvoc:XlNote	rdf:type	euvoc:XlNote
foaf:Agent	atmdr:to_reviewwebsite	*
foaf:Agent	ato:authority-code	xsd:string
foaf:Agent	ato:op-code	xsd:string
foaf:Agent	ato:op-code ato:op-mapped-code	ato:MappedCode
foaf:Agent	ato:protocol-order	xsd:string
foaf:Agent	ato:protocol.order	
_	_	xsd:string
foaf: Agent	atr:op-code	xsd:string
foaf:Agent	dct:created	xsd:date
foaf:Agent	dct:dateAccepted dct:dateSubmitted	xsd:date
foaf:Agent	uct.dateSubmitted	xsd:date

Subject	Predicate	Object
foaf:Agent	dct:isReplacedBy	dct:Agent, skos:Concept, org:Organisation, foa
foaf:Agent	dct:replaces	dct:Agent, skos:Concept, org:Organisation, foa
foaf:Agent	dct:type	skos:Concept
foaf:Agent	euvoc:endDate	xsd:date
foaf:Agent	euvoc:order	xsd:string
foaf:Agent	euvoc:startDate	xsd:date
foaf:Agent	euvoc:status	euvoc:ConceptStatus, skos:Concept
foaf:Agent	euvoc:xlChangeNote	euvoc:XlNote
foaf:Agent	euvoc:xlDefinition	euvoc:XlNote
foaf:Agent	euvoc:xlHistoryNote	euvoc:XlNote
foaf:Agent	euvoc:xlNotation	euvoc:XlNotation
foaf:Agent	geowgs:location	*
foaf:Agent	lemon:context	*
foaf:Agent	owl:versionInfo	xsd:string
foaf:Agent	rdf:type	foaf:Agent
foaf:Agent	skos:broader	dct:Agent, skos:Concept, org:Organisation, foa
foaf:Agent	skos:changeNote	rdf:langString
foaf:Agent	skos:definition	rdf:langString
foaf:Agent	skos:exactMatch	*
foaf:Agent	skos:historyNote	rdf:langString
foaf:Agent	skos:inScheme	owl:Ontology, skos:ConceptScheme
foaf:Agent	skos:newPropoerty	xsd:string
foaf:Agent	skos:notation	atdt:CONSIL, atdt:DEMED, atdt:OJ, atdt:WHOISWH
foaf:Agent	skos:prefLabel	rdf:langString
foaf:Agent	skos:topConceptOf	owl:Ontology, skos:ConceptScheme
foaf:Agent	skoxl:altLabel	skoxl:Label
foaf:Agent	skoxl:prefLabel	skoxl:Label
org:Organisation	atmdr:to_reviewwebsite	*
org:Organisation	ato:authority-code	xsd:string
org:Organisation	ato:op-code	xsd:string
org:Organisation	ato:op-mapped-code	ato:MappedCode
org:Organisation	ato:protocol-order	xsd:string
org:Organisation	ato:protocol.order	xsd:string
org:Organisation	atr:op-code	xsd:string
org:Organisation	dct:created	xsd:date
org:Organisation	dct:dateAccepted	xsd:date
org:Organisation	dct:dateSubmitted	xsd:date
org:Organisation	dct:isReplacedBy	dct:Agent, skos:Concept, org:Organisation, foa
org:Organisation	dct:replaces	dct:Agent, skos:Concept, org:Organisation, foa
org:Organisation	dct:type	skos:Concept
org:Organisation	euvoc:endDate	xsd:date
org:Organisation	euvoc:order	xsd:string
org:Organisation	euvoc:startDate	xsd:date
org:Organisation	euvoc:status	euvoc:ConceptStatus, skos:Concept
org:Organisation	euvoc:xlChangeNote	euvoc:XlNote
org:Organisation	euvoc:xlDefinition	euvoc:XlNote
org:Organisation	euvoc:xlHistoryNote	euvoc:XlNote
org:Organisation	euvoc:xlNotation	euvoc:XlNotation
org:Organisation	geowgs:location	*
org:Organisation	lemon:context	*
org:Organisation	owl:versionInfo	xsd:string
org:Organisation	rdf:type	org:Organisation
org:Organisation	skos:broader	dct:Agent, skos:Concept, org:Organisation, foa
org:Organisation	skos:changeNote	rdf:langString
org:Organisation	skos:definition	rdf:langString
org:Organisation	skos:exactMatch	*
org:Organisation	skos:historyNote	rdf:langString

Subject	Predicate	Object
org:Organisation	skos:inScheme	owl:Ontology, skos:ConceptScheme
org:Organisation	skos:newPropoerty	xsd:string
org:Organisation	skos:notation	atdt:CONSIL, atdt:DEMED, atdt:OJ, atdt:WHOISWH
org:Organisation	skos:prefLabel	rdf:langString
org:Organisation	skos:topConceptOf	owl:Ontology, skos:ConceptScheme
org:Organisation	skoxl:altLabel	skoxl:Label
org:Organisation	skoxl:prefLabel	skoxl:Label
owl:Ontology	dct: identifier	xsd:string
owl:Ontology	owl:imports	*
owl:Ontology	owl:versionIRI	*
owl:Ontology	owl:versionInfo	xsd:string
owl:Ontology	rdf:type	owl:Ontology
owl:Ontology	rdfs:comment	rdfs:Literal
owl:Ontology	rdfs:label	rdf:langString
owl:Ontology	skos:prefLabel	rdf:langString
owl:Ontology	skoxl:prefLabel	skoxl:Label
skos:Concept	$atmdr:to\_reviewwebsite$	*
skos:Concept	ato:protocol-order	xsd:string
skos:Concept	ato:protocol.order	xsd:string
skos:Concept	dct:created	xsd:date
skos:Concept	dct: date Accepted	xsd:date
skos:Concept	dct:dateSubmitted	xsd:date
skos:Concept	dct: $isReplacedBy$	dct:Agent, skos:Concept, org:Organisation, foa
skos:Concept	dct:replaces	dct:Agent, skos:Concept, org:Organisation, foa
skos:Concept	dct:type	skos:Concept
skos:Concept	euvoc:endDate	xsd:date
skos:Concept	euvoc:order	xsd:string
skos:Concept	euvoc:startDate	xsd:date
skos:Concept	euvoc:status	euvoc:ConceptStatus, skos:Concept
skos:Concept	euvoc:xlChangeNote	euvoc:XlNote
skos:Concept	euvoc:xlDefinition	euvoc:XlNote
skos:Concept	euvoc:xlHistoryNote	euvoc:XlNote
skos:Concept	euvoc:xlNotation	euvoc:XlNotation
skos:Concept	geowgs:location	*
skos:Concept	lemon:context	*
skos:Concept	owl:versionInfo	xsd:string
skos:Concept	skos:broader	dct:Agent, skos:Concept, org:Organisation, foa
skos:Concept	skos:changeNote	rdf:langString
skos:Concept	skos:definition	rdf:langString
skos:Concept	skos:exactMatch	*
skos:Concept	skos:historyNote	rdf:langString
skos:Concept	skos:inScheme	owl:Ontology, skos:ConceptScheme
skos:Concept	skos:newPropoerty	xsd:string
skos:Concept	skos:newRel	xsd:string
skos:Concept	skos:notation	atdt:CONSIL, atdt:DEMED, atdt:OJ, atdt:WHOISWH
skos:Concept	skos:topConceptOf	owl:Ontology, skos:ConceptScheme
skos:Concept	skoxl:altLabel	skoxl:Label
skos:Concept	skoxl:prefLabel	skoxl:Label
skos:ConceptScheme	dct:identifier	xsd:string
skos:ConceptScheme	owl:imports	*
skos:ConceptScheme	owl:versionIRI	*
skos:ConceptScheme	owl:versionInfo	xsd:string
skos:ConceptScheme	rdfs:comment	rdfs:Literal
skos:ConceptScheme	skos:prefLabel	rdf:langString
skos:ConceptScheme	skoxl:prefLabel	skoxl:Label
skoxl:Label	dct:created	xsd:date
skoxl:Label	dct:type	euvoc:LabelType, skos:Concept

Subject	Predicate	Object
skoxl:Label skoxl:Label skoxl:Label skoxl:Label	euvoc:endDate euvoc:startDate euvoc:status lexvo:gender	xsd:date xsd:date euvoc:ConceptStatus, skos:Concept *
skoxl:Label skoxl:Label skoxl:Label	rdf:type rdfs:label skoxl:literalForm	skoxl:Label rdf:langString rdf:langString

### 1.3 Unique to Places

The table below represents the elements present in Places but missing in Corporate.

Subject	Predicate	Object
geowgs:SpatialThing	geowgs:lat	xsd:float
geowgs:SpatialThing	geowgs:long	xsd:float
geowgs:SpatialThing	rdf:type	geowgs:SpatialThing
geowgs:SpatialThing	rdfs:label	rdf:langString
skos:Concept	ato:deprecated	xsd:string
skos:Concept	ato:end.use	xsd:string
skos:Concept	ato:start.use	xsd:string
skos:Concept	owl:sameAs	geowgs:SpatialThing
skos:Concept	skos:hiddenLabel	xsd:string
skos:Concept	skos:inScheme	skos:ConceptScheme
skos:ConceptScheme	ato:prefLabel	rdf:langString
skos:ConceptScheme	ato:table.id	xsd:string
skos:ConceptScheme	ato: table. version. number	xsd:string

### 2 What do data say about Corporate

#### 2.1 Class instantiation overview for Corporate

The table below describes how are classes instantiated. Please note that the instance counts are different from total number of unique instances in the data-set. When an individualinstantiates multiple classes, then it is counted once for each class it instantiates. The relative number of instances is scaled to the total number of unique instances per class.

Class	Unique instances	% unique instance sum
skoxl:Label	41099	80.71
euvoc:XlNotation	3244	6.37
ato:MappedCode	1340	2.63
skos:Concept	1176	2.31
dct:Agent	1139	2.24
org:Organisation	1139	2.24
foaf:Agent	1139	2.24
euvoc:XlNote	618	1.21
euvoc:LabelType	11	0.02
euvoc:ConceptStatus	9	0.02
owl:Ontology	4	0.01
skos:ConceptScheme	4	0.01

#### 2.2 Application profile reconstruction for Corporate

This section attempts at reconstructing the profiled shapes for each class. The profile is deduced based on descriptive statistics presented elsewhere. The tables below contain the following columns: Property name, Cardinality, Property Type, Property Range and Confidence.

Confidence is a categorial value derived from the property usage relative to the total number of unique individuals instantiating this class. Property range is a list of distinct encountered object types. In case of higher number of object type the list is non-exhaustive. Cardinality of the property is expressed in terms of minimum and maximum occurrences of the property. The minimum value varies from zero (0) meaning that the property is optional to one (1) meaning that the property is mandatory while the maximum value varies from one (1) meaning that the property is sufficient to star (\*) meaning that the property is maximally unbound. Finally the type indicates whether the property range whether a data type or an individual URI.

#### 2.2.1 Estimated Application Profile for ato:MappedCode class

Property	Cardinality	Type	Range	Confidence
rdf:type	11	object	$ato: {\bf MappedCode}$	certain
dc:source	1 1	data	xsd:string	$\operatorname{certain}$
ato:legacy-code	1 1	data	xsd:string	$\operatorname{certain}$
ato:affected-table	0 *	data	xsd:string	possible

#### 2.2.2 Estimated Application Profile for dct:Agent class

Property	Cardinality	Type	Range	Confidence
rdf:type	4 *	object	dct:Agent	certain
skos:topConceptOf	1 1	object	owl:Ontology, skos:ConceptScheme	certain
skos:inScheme	1 1	object	owl:Ontology, skos:ConceptScheme	certain
owl:versionInfo	1 1	data	xsd:string	certain
euvoc:status	1 1	object	euvoc:ConceptStatus, skos:Concept	certain
euvoc:startDate	1 1	data	xsd:date	certain
dct:created	1 1	data	xsd:date	$\operatorname{certain}$
atr:op-code	1 1	data	xsd:string	$\operatorname{certain}$
ato:op-code	1 1	data	xsd:string	$\operatorname{certain}$
ato:authority-code	1 1	data	xsd:string	$\operatorname{certain}$
skoxl:prefLabel	1 *	object	skoxl:Label	$\operatorname{certain}$
skos:prefLabel	1 *	data	rdf:langString	$\operatorname{certain}$
dct:type	1 1	object	skos:Concept	$\operatorname{certain}$
dct:dateSubmitted	1 1	data	xsd:date	$\operatorname{certain}$
dct:dateAccepted	1 1	data	xsd:date	$\operatorname{certain}$
lemon:context	1 *	data	*	certain
geowgs:location	1 *	data	*	likely
skos:broader	0 *	object	dct:Agent, skos:Concept, org:Organisation, foa	possible
skos:notation	0 *	data	atdt:CONSIL, atdt:DEMED, atdt:OJ, atdt:WHOISWH	possible
euvoc:xlNotation	0 *	object	euvoc:XlNotation	possible
ato:op-mapped-code	0 *	object	ato:MappedCode	possible
skoxl:altLabel	0 *	object	skoxl:Label	possible
euvoc:endDate	0 *	$\det^{\sigma}$	xsd:date	unlikely
skos:definition	0 *	data	rdf:langString	unlikely
euvoc:xlDefinition	0 *	object	euvoc:XlNote	unlikely
dct:replaces	0 *	object	dct:Agent, skos:Concept, org:Organisation, foa	unlikely
dct: $isReplacedBy$	0 *	object	dct:Agent, skos:Concept, org:Organisation, foa	unlikely
skos:exactMatch	0 *	data	*	unlikely
atmdr:to_reviewwebsite	0 *	data	*	rare
skos:changeNote	0 *	data	rdf:langString	rare
euvoc:xlChangeNote	0 *	object	euvoc:XlNote	rare
skos:historyNote	0 *	data	rdf:langString	very rare
euvoc:xlHistoryNote	0 *	object	euvoc:XlNote	very rare

Property	Cardinality	Type	Range	Confidence
euvoc:order	0 *	data	xsd:string	very rare
ato:protocol.order	0 *	data	xsd:string	very rare
ato:protocol-order	0 *	data	xsd:string	very rare
skos:newPropoerty	0 *	data	xsd:string	very rare

# ${\bf 2.2.3} \quad {\bf Estimated \ Application \ Profile \ for \ euvoc: Concept Status \ class}$

Property	Cardinality	Type	Range	Confidence
skos:definition	2 *	data	rdf:langString	certain
rdf:type	2 *	object	euvoc:ConceptStatus	certain
euvoc:xlDefinition	2 *	object	euvoc:XlNote	certain
skoxl:prefLabel	1 1	object	skoxl:Label	certain
skos:topConceptOf	1 1	object	owl:Ontology, skos:ConceptScheme	certain
skos:prefLabel	1 1	data	rdf:langString	certain
skos:inScheme	1 1	object	owl:Ontology, skos:ConceptScheme	certain
owl:versionInfo	1 1	data	xsd:string	certain
euvoc:status	1 1	object	euvoc:ConceptStatus, skos:Concept	certain
euvoc:startDate	1 1	data	xsd:date	certain
dct:created	1 1	data	xsd:date	certain
atr:op-code	1 1	data	xsd:string	certain
ato:op-code	1 1	data	xsd:string	certain
ato:authority-code	1 1	data	xsd:string	certain
dct:dateSubmitted	0 *	data	xsd:date	unlikely
dct:dateAccepted	0 *	data	xsd:date	unlikely

### ${\bf 2.2.4} \quad {\bf Estimated \ Application \ Profile \ for \ euvoc: Label Type \ class}$

Property	Cardinality	Type	Range	Confidence
rdf:type	2 *	object	euvoc:LabelType	certain
skoxl:prefLabel	1 1	object	skoxl:Label	certain
skos:topConceptOf	1 1	object	owl:Ontology, skos:ConceptScheme	certain
skos:prefLabel	11	data	rdf:langString	certain
skos:inScheme	11	object	owl:Ontology, skos:ConceptScheme	certain
owl:versionInfo	11	data	xsd:string	certain
euvoc:status	11	object	euvoc:ConceptStatus, skos:Concept	certain
euvoc:startDate	1 1	data	xsd:date	certain
dct:created	1 1	data	xsd:date	certain
atr:op-code	11	data	xsd:string	certain
ato:op-code	1 1	data	xsd:string	certain
ato:authority-code	1 1	data	xsd:string	certain
dct:dateSubmitted	0 *	data	xsd:date	unlikely
dct:dateAccepted	0 *	data	xsd:date	unlikely
skos:newRel	0 *	data	xsd:string	rare

### ${\bf 2.2.5} \quad {\bf Estimated \ Application \ Profile \ for \ euvoc:} Xl Notation \ class$

Property	Cardinality	Type	Range	Confidence
rdf:type	11	object	euvoc:XlNotation	certain
euvoc:xlCodification	1 1	data	xsd:string	$\operatorname{certain}$
dct:type	1 1	data	*	certain
euvoc:status	1 1	object	euvoc:ConceptStatus, skos:Concept	certain
euvoc:startDate	1 1	data	xsd:date	certain
	4:1			

Property	Cardinality	Type	Range	Confidence
dct:created	1 1	data	xsd:date	certain
euvoc:endDate	0 *	data	xsd:date	unlikely

### ${\bf 2.2.6} \quad {\bf Estimated \ Application \ Profile \ for \ euvoc:} XlNote \ class$

Property	Cardinality	Type	Range	Confidence
rdf:type	1 1	object	euvoc:XlNote	certain
euvoc:xlNote	1 1	data	rdf:langString	certain
euvoc:startDate	0 *	data	xsd:date	possible
dct:source	0 *	data	rdf:langString	possible

# ${\bf 2.2.7} \quad {\bf Estimated \ Application \ Profile \ for \ foaf: Agent \ class}$

Property	Cardinality	Type	Range	Confidence
rdf:type	4 *	object	foaf:Agent	certain
skos:topConceptOf	1 1	object	owl:Ontology, skos:ConceptScheme	certair
skos:inScheme	1 1	object	owl:Ontology, skos:ConceptScheme	certair
owl:versionInfo	1 1	data	xsd:string	certair
euvoc:status	1 1	object	euvoc:ConceptStatus, skos:Concept	certair
euvoc:startDate	1 1	data	xsd:date	certair
dct:created	1 1	data	xsd:date	certair
atr:op-code	1 1	data	xsd:string	certair
ato:op-code	1 1	data	xsd:string	certair
ato:authority-code	1 1	data	xsd:string	certair
skoxl:prefLabel	1 *	object	skoxl:Label	certair
skos:prefLabel	1 *	data	rdf:langString	certair
dct:type	1 1	object	skos:Concept	certain
dct:dateSubmitted	1 1	data	xsd:date	certair
dct:dateAccepted	1 1	data	xsd:date	certair
lemon:context	1 *	data	*	certair
geowgs:location	1 *	data	*	likely
skos:broader	0 *	object	${\it dct:} Agent, \ skos: Concept, \ org: Organisation,$	possible
skos:notation	0 *	data	foa atdt:CONSIL, atdt:DEMED, atdt:OJ, atdt:WHOISWH	possibl
euvoc:xlNotation	0 *	object	euvoc:XlNotation	possible
ato:op-mapped-code	0 *	object	ato:MappedCode	possible
skoxl:altLabel	0 *	object	skoxl:Label	possible
euvoc:endDate	0 *	$\det^{\sigma}$	xsd:date	unlikely
skos:definition	0 *	data	rdf:langString	unlikely
euvoc:xlDefinition	0 *	object	euvoc:XlNote	unlikely
dct:replaces	0 *	object	dct:Agent, skos:Concept, org:Organisation, foa	unlikely
dct:isReplacedBy	0 *	object	dct:Agent, skos:Concept, org:Organisation, foa	unlikely
skos:exactMatch	0 *	data	*	unlikely
atmdr:to reviewwebsite	0 *	data	*	rare
skos:changeNote	0 *	data	rdf:langString	rare
euvoc:xlChangeNote	0 *	object	euvoc:XlNote	rare
skos:historyNote	0 *	data	rdf:langString	very rare
euvoc:xlHistoryNote	0 *	object	euvoc:XlNote	very rare
euvoc:order	0 *	data	xsd:string	very rare
ato:protocol.order	0 *	data	xsd:string	very rare
ato:protocol-order	0 *	data	xsd:string	very rare

Property	Cardinality	Type	Range	Confidence
skos:newPropoerty	0 *	data	xsd:string	very rare

# ${\bf 2.2.8} \quad {\bf Estimated \ Application \ Profile \ for \ org:} {\bf Organisation \ class}$

Property	Cardinality	Type	Range	Confidence
rdf:type	4 *	object	org:Organisation	certain
skos:topConceptOf	1 1	object	owl:Ontology, skos:ConceptScheme	certain
skos:inScheme	1 1	object	owl:Ontology, skos:ConceptScheme	certain
owl:versionInfo	1 1	data	xsd:string	certain
euvoc:status	1 1	object	euvoc:ConceptStatus, skos:Concept	certain
euvoc:startDate	1 1	data	xsd:date	certain
dct:created	1 1	data	xsd:date	certain
atr:op-code	1 1	data	xsd:string	certain
ato:op-code	1 1	data	xsd:string	certain
ato:authority-code	1 1	data	xsd:string	certain
skoxl:prefLabel	1 *	object	skoxl:Label	certain
skos:prefLabel	1 *	data	rdf:langString	certain
dct:type	1 1	object	skos:Concept	certain
dct:dateSubmitted	1 1	data	xsd:date	certain
dct:dateAccepted	1 1	data	xsd:date	certain
lemon:context	1 *	data	*	certain
geowgs:location	1 *	data	*	likely
skos:broader	0 *	object	dct:Agent, skos:Concept, org:Organisation, foa	possible
skos:notation	0 *	data	atdt:CONSIL, atdt:DEMED, atdt:OJ, atdt:WHOISWH	possible
euvoc:xlNotation	0 *	object	euvoc:XlNotation	possible
ato:op-mapped-code	0 *	object	ato:MappedCode	possible
skoxl:altLabel	0 *	object	skoxl:Label	possible
euvoc:endDate	0 *	$\det^{\sigma}$	xsd:date	unlikely
skos:definition	0 *	data	rdf:langString	unlikely
euvoc:xlDefinition	0 *	object	euvoc:XlNote	unlikely
dct:replaces	0 *	object	dct:Agent, skos:Concept, org:Organisation, foa	unlikely
dct: $isReplacedBy$	0 *	object	dct:Agent, skos:Concept, org:Organisation, foa	unlikely
skos:exactMatch	0 *	data	*	unlikely
atmdr:to reviewwebsite	0 *	data	*	rare
skos:changeNote	0 *	data	rdf:langString	rare
euvoc:xlChangeNote	0 *	object	euvoc:XlNote	rare
skos:historyNote	0 *	data	rdf:langString	very rare
euvoc:xlHistoryNote	0 *	object	euvoc:XlNote	very rare
euvoc:order	0 *	data	xsd:string	very rare
ato:protocol.order	0 *	data	xsd:string	very rare
ato:protocol-order	0 *	data	xsd:string	very rare
skos:newPropoerty	0 *	data	xsd:string	very rare

# ${\bf 2.2.9} \quad {\bf Estimated \ Application \ Profile \ for \ owl:} {\bf Ontology \ class}$

Property	Cardinality	Type	Range	Confidence		
rdf:type skoxl:prefLabel skos:prefLabel rdfs:label	2 * 1 1 1 1 1 1	object object data data	owl:Ontology skoxl:Label rdf:langString rdf:langString	certain certain certain certain		
Continued on next page						

Property	Cardinality	Type	Range	Confidence
rdfs:comment	1 1	data	rdfs:Literal	certain
owl:versionInfo	1 1	data	xsd:string	$\operatorname{certain}$
owl:versionIRI	1 1	data	*	certain
owl:imports	1 1	data	*	certain
dct:identifier	1 1	data	xsd:string	certain

### ${\bf 2.2.10}\quad {\bf Estimated\ Application\ Profile\ for\ skos:} {\bf Concept\ class}$

Property	Cardinality	Type	Range	Confidence
skos:inScheme	1 1	object	owl:Ontology, skos:ConceptScheme	certain
atr:op-code	1 1	data	xsd:string	certain
ato:op-code	1 1	data	xsd:string	certain
skos:prefLabel	1 *	data	rdf:langString	certain
rdf:type	1 *	object	skos:Concept	certain
skos:topConceptOf	1 1	object	owl:Ontology, skos:ConceptScheme	certain
owl:versionInfo	1 1	data	xsd:string	certain
euvoc:status	1 1	object	euvoc:ConceptStatus, skos:Concept	certain
euvoc:startDate	1 1	data	xsd:date	certain
dct:created	1 1	data	xsd:date	certain
ato:authority-code	1 1	data	xsd:string	certain
skoxl:prefLabel	1 *	object	skoxl:Label	certain
dct:dateSubmitted	1 1	data	xsd:date	certain
dct:dateAccepted	1 1	data	xsd:date	certain
dct:type	11	object	skos:Concept	certain
lemon:context	1 *	data	*	certain
geowgs:location	0 *	data	*	possible
skos:broader	0 *	object	dct:Agent, skos:Concept, org:Organisation, foa	possible
skos:notation	0 *	data	atdt:CONSIL, atdt:DEMED, atdt:OJ, atdt:WHOISWH	possible
euvoc:xlNotation	0 *	object	euvoc:XlNotation	possible
ato:op-mapped-code	0 *	object	ato:MappedCode	possible
skoxl:altLabel	0 *	object	skoxl:Label	possible
euvoc:endDate	0 *	data	xsd:date	unlikely
skos:definition	0 *	data	rdf:langString	unlikely
euvoc:xlDefinition	0 *	object	euvoc:XlNote	unlikely
dct:replaces	0 *	object	dct:Agent, skos:Concept, org:Organisation, foa	unlikely
dct: $isReplacedBy$	0 *	object	dct:Agent, skos:Concept, org:Organisation, foa	unlikely
skos:exactMatch	0 *	data	*	unlikely
skos:changeNote	0 *	data	rdf:langString	rare
euvoc:xlChangeNote	0 *	object	euvoc:XlNote	rare
atmdr:to_reviewwebsite	0 *	data	*	rare
skos:historyNote	0 *	data	rdf:langString	very rare
euvoc:xlHistoryNote	0 *	object	euvoc:XlNote	very rare
euvoc:order	0 *	data	xsd:string	very rare
ato:protocol.order	0 *	data	xsd:string	very rare
ato:protocol-order	0 *	data	xsd:string	very rare
skos:newRel	0 *	data	xsd:string	very rare
skos:newPropoerty	0 *	data	xsd:string	very rare
dc:identifier	0 *	data	xsd:string	very rare

# ${\bf 2.2.11} \quad {\bf Estimated \ Application \ Profile \ for \ skos:} Concept Scheme \ class$

Property	Cardinality	Type	Range	Confidence
rdf:type	2 *	object	skos:ConceptScheme	certain
skoxl:prefLabel	1 1	object	skoxl:Label	certain
skos:prefLabel	1 1	data	rdf:langString	certain
rdfs:label	1 1	data	rdf:langString	certain
rdfs:comment	1 1	data	rdfs:Literal	certain
owl:versionInfo	1 1	data	xsd:string	certain
owl:versionIRI	1 1	data	*	certain
owl:imports	1 1	data	*	certain
dct:identifier	1 1	data	xsd:string	certain

#### 2.2.12 Estimated Application Profile for skoxl:Label class

Property	Cardinality	Type	Range	Confidence
skoxl:literalForm	11	data	rdf:langString	certain
rdfs:label	1 1	data	rdf:langString	certain
rdf:type	1 1	object	skoxl:Label	certain
dct:type	1 1	object	euvoc:LabelType, skos:Concept	certain
euvoc:status	1 1	object	euvoc:ConceptStatus, skos:Concept	likely
euvoc:startDate	1 1	data	xsd:date	likely
dct:created	1 1	data	xsd:date	likely
euvoc:endDate	0 *	data	xsd:date	unlikely
lexvo:gender	0 *	data	*	very rare

### 2.3 Property usage statistics for Corporate

This section provides descriptive statistical indicators for each class. The tables below contain the following columns: property name, absolute normalised usage (Norm usg/a), absolute actual usage(Usage/a), normalised minimum (Min), normalised maximum (Max), normalised average (Avg), relative normalised usage (Norm usg/r), relative actual usage (Usage/r).

The normalization mentioned above refers to counting out of all classindividuals how many are actually using the property at least once whilethe actual property usage refers to counting all occurrences for a given class. The rdf:type property plays a special role because it indicates the number of unique class instances and in case of multiple class instantiation the number is scaled by the number of distinct parent classes.

The relative actual usage (Usage/r) is calculated with respect to a sibling property that maximally occurs in all class instances. Therefore there is no standard property to be chosen as reference like in the case of rdf:type but it varies from case to case.

#### 2.3.1 Propoerty statistics for ato:MappedCode class

Property	Norm usg/a	Usage/a	Min	Max	Avg	Norm usg/r	Usage/r
rdf:type	1340	1340	1	1	1	100	100
dc:source	1340	1340	1	1	1	100	100
ato:legacy-code	1340	1340	1	1	1	100	100
ato:affected-table	1053	1053	1	1	1	78	78

#### 2.3.2 Propoerty statistics for dct:Agent class

Property	Norm usg/a	Usage/a	Min	Max	Avg	Norm usg/r	Usage/r		
skoxl:prefLabel	1139	28778	1	216	35	100	100		
skos:prefLabel	1139	24486	1	27	23	100	85		
rdf:type	1139	4556	4	4	4	100	15		
Continued on next page									

Property	Norm usg/a	Usage/a	Min	Max	Avg	Norm usg/r	Usage/r
skos:topConceptOf	1139	1139	1	1	1	100	3
skos:inScheme	1139	1139	1	1	1	100	3
owl:versionInfo	1139	1139	1	1	1	100	3
euvoc:status	1139	1139	1	1	1	100	3
euvoc:startDate	1139	1139	1	1	1	100	3
dct:created	1139	1139	1	1	1	100	3
atr:op-code	1139	1139	1	1	1	100	3
ato:op-code	1139	1139	1	1	1	100	3
ato:authority-code	1139	1139	1	1	1	100	3
lemon:context	1138	2281	1	6	$^2$	99	7
dct:type	1138	1138	1	1	1	99	3
dct:dateSubmitted	1138	1138	1	1	1	99	3
dct:dateAccepted	1138	1138	1	1	1	99	3
geowgs:location	998	1023	1	12	1	87	3
skos:broader	897	898	1	2	1	78	3
skos:notation	841	1018	1	38	5	73	3
euvoc:xlNotation	723	3244	1	69	9	63	11
ato:op-mapped-code	676	1340	1	38	4	59	4
skoxl:altLabel	563	12284	1	138	41	49	42
euvoc:endDate	367	367	1	1	1	32	1
euvoc:xlDefinition	339	467	1	4	1	29	1
skos:definition	339	451	1	2	1	29	1
dct:isReplacedBy	215	236	1	4	1	18	0
dct:replaces	213	236	1	4	1	18	0
skos:exactMatch	191	191	1	1	1	16	0
$atmdr: to\_review website$	92	92	1	1	1	8	0
skos:changeNote	84	96	1	2	1	7	0
euvoc:xlChangeNote	84	96	1	2	1	7	0
skos:historyNote	22	24	1	2	1	1	0
euvoc:xlHistoryNote	22	24	1	2	1	1	0
euvoc:order	17	17	1	1	1	1	0
ato:protocol.order	17	17	1	1	1	1	0
ato:protocol-order	17	17	1	1	1	1	0
skos:newPropoerty	1	1	1	1	1	0	0

### ${\bf 2.3.3} \quad {\bf Propoerty \ statistics \ for \ euvoc:} {\bf ConceptStatus \ class}$

Property	Norm usg/a	Usage/a	Min	Max	Avg	Norm usg/r	Usage/r
skos:definition	9	18	2	2	2	100	100
rdf:type	9	18	2	2	2	100	100
euvoc:xlDefinition	9	18	2	2	2	100	100
skoxl:prefLabel	9	9	1	1	1	100	50
skos:topConceptOf	9	9	1	1	1	100	50
skos:prefLabel	9	9	1	1	1	100	50
skos:inScheme	9	9	1	1	1	100	50
owl:versionInfo	9	9	1	1	1	100	50
euvoc:status	9	9	1	1	1	100	50
euvoc:startDate	9	9	1	1	1	100	50
dct:created	9	9	1	1	1	100	50
atr:op-code	9	9	1	1	1	100	50
ato:op-code	9	9	1	1	1	100	50
ato:authority-code	9	9	1	1	1	100	50
dct:dateSubmitted	4	4	1	1	1	44	22
dct:dateAccepted	4	4	1	1	1	44	22

# 2.3.4 Propoerty statistics for euvoc:LabelType class

Property	Norm usg/a	Usage/a	Min	Max	Avg	Norm usg/r	Usage/r
rdf:type	11	22	2	2	2	100	100
skoxl:prefLabel	11	11	1	1	1	100	50
skos:topConceptOf	11	11	1	1	1	100	50
skos:prefLabel	11	11	1	1	1	100	50
skos:inScheme	11	11	1	1	1	100	50
owl:versionInfo	11	11	1	1	1	100	50
euvoc:status	11	11	1	1	1	100	50
euvoc:startDate	11	11	1	1	1	100	50
dct:created	11	11	1	1	1	100	50
atr:op-code	11	11	1	1	1	100	50
ato:op-code	11	11	1	1	1	100	50
ato:authority-code	11	11	1	1	1	100	50
dct:dateSubmitted	3	3	1	1	1	27	13
dct:dateAccepted	3	3	1	1	1	27	13
skos:newRel	1	1	1	1	1	9	4

### ${\bf 2.3.5} \quad {\bf Propoerty \ statistics \ for \ euvoc:} {\bf XlNotation \ class}$

Property	Norm usg/a	Usage/a	Min	Max	Avg	Norm usg/r	Usage/r
rdf:type	3244	3244	1	1	1	100	100
euvoc:xlCodification	3244	3244	1	1	1	100	100
dct:type	3244	3244	1	1	1	100	100
euvoc:status	3239	3239	1	1	1	99	99
euvoc:startDate	3239	3239	1	1	1	99	99
dct:created	3239	3239	1	1	1	99	99
euvoc:endDate	873	873	1	1	1	26	26

### ${\bf 2.3.6} \quad {\bf Propoerty \ statistics \ for \ euvoc:} XlNote \ class$

Property	Norm usg/a	Usage/a	Min	Max	Avg	Norm usg/r	Usage/r
rdf:type	618	618	1	1	1	100	100
euvoc:xlNote	618	618	1	1	1	100	100
dct:source	498	498	1	1	1	80	80
euvoc:startDate	497	497	1	1	1	80	80

### 2.3.7 Propoerty statistics for foaf:Agent class

Property	Norm usg/a	Usage/a	Min	Max	Avg	Norm usg/r	Usage/r
skoxl:prefLabel	1139	28778	1	216	35	100	100
skos:prefLabel	1139	24486	1	27	23	100	85
rdf:type	1139	4556	4	4	4	100	15
skos:topConceptOf	1139	1139	1	1	1	100	3
skos:inScheme	1139	1139	1	1	1	100	3
owl:versionInfo	1139	1139	1	1	1	100	3
euvoc:status	1139	1139	1	1	1	100	3
euvoc:startDate	1139	1139	1	1	1	100	3
dct:created	1139	1139	1	1	1	100	3
atr:op-code	1139	1139	1	1	1	100	3
ato:op-code	1139	1139	1	1	1	100	3
ato:authority-code	1139	1139	1	1	1	100	3
lemon:context	1138	2281	1	6	2	99	7
dct:type	1138	1138	1	1	1	99	3

Property	Norm usg/a	Usage/a	Min	Max	Avg	Norm usg/r	Usage/r
dct:dateSubmitted	1138	1138	1	1	1	99	3
dct:dateAccepted	1138	1138	1	1	1	99	3
geowgs:location	998	1023	1	12	1	87	3
skos:broader	897	898	1	2	1	78	3
skos:notation	841	1018	1	38	5	73	3
euvoc:xlNotation	723	3244	1	69	9	63	11
ato:op-mapped-code	676	1340	1	38	4	59	4
skoxl:altLabel	563	12284	1	138	41	49	42
euvoc:endDate	367	367	1	1	1	32	1
euvoc:xlDefinition	339	467	1	4	1	29	1
skos:definition	339	451	1	2	1	29	1
dct: $isReplacedBy$	215	236	1	4	1	18	0
dct:replaces	213	236	1	4	1	18	0
skos:exactMatch	191	191	1	1	1	16	0
atmdr:to_reviewwebsite	92	92	1	1	1	8	0
skos:changeNote	84	96	1	2	1	7	0
euvoc:xlChangeNote	84	96	1	2	1	7	0
skos:historyNote	22	24	1	2	1	1	0
euvoc:xlHistoryNote	22	24	1	2	1	1	0
euvoc:order	17	17	1	1	1	1	0
ato:protocol.order	17	17	1	1	1	1	0
ato:protocol-order	17	17	1	1	1	1	0
skos:newPropoerty	1	1	1	1	1	0	0

# ${\bf 2.3.8} \quad {\bf Propoerty \ statistics \ for \ org:} {\bf Organisation \ class}$

Property	Norm usg/a	Usage/a	Min	Max	Avg	Norm usg/r	Usage/r
skoxl:prefLabel	1139	28778	1	216	35	100	100
skos:prefLabel	1139	24486	1	27	23	100	85
rdf:type	1139	4556	4	4	4	100	15
skos:topConceptOf	1139	1139	1	1	1	100	3
skos:inScheme	1139	1139	1	1	1	100	3
owl:versionInfo	1139	1139	1	1	1	100	3
euvoc:status	1139	1139	1	1	1	100	3
euvoc:startDate	1139	1139	1	1	1	100	3
dct:created	1139	1139	1	1	1	100	3
atr:op-code	1139	1139	1	1	1	100	3
ato:op-code	1139	1139	1	1	1	100	3
ato:authority-code	1139	1139	1	1	1	100	3
lemon:context	1138	2281	1	6	2	99	7
dct:type	1138	1138	1	1	1	99	3
dct:dateSubmitted	1138	1138	1	1	1	99	3
dct:dateAccepted	1138	1138	1	1	1	99	3
geowgs:location	998	1023	1	12	1	87	3
skos:broader	897	898	1	2	1	78	3
skos:notation	841	1018	1	38	5	73	3
euvoc:xlNotation	723	3244	1	69	9	63	11
ato:op-mapped-code	676	1340	1	38	4	59	4
skoxl:altLabel	563	12284	1	138	41	49	42
euvoc:endDate	367	367	1	1	1	32	1
euvoc:xlDefinition	339	467	1	4	1	29	1
skos:definition	339	451	1	2	1	29	1
dct:isReplacedBy	215	236	1	4	1	18	0
dct:replaces	213	236	1	4	1	18	0
skos:exactMatch	191	191	1	1	1	16	0
$\underline{ \text{atmdr:to\_reviewwebsite}}$	92	92	1	1	1	8	0

Property	Norm usg/a	Usage/a	Min	Max	Avg	Norm usg/r	Usage/r
skos:changeNote	84	96	1	2	1	7	0
euvoc:xlChangeNote	84	96	1	2	1	7	0
skos:historyNote	22	24	1	2	1	1	0
euvoc:xlHistoryNote	22	24	1	2	1	1	0
euvoc:order	17	17	1	1	1	1	0
ato:protocol.order	17	17	1	1	1	1	0
ato:protocol-order	17	17	1	1	1	1	0
skos:newPropoerty	1	1	1	1	1	0	0

# 2.3.9 Propoerty statistics for owl:Ontology class

Property	Norm usg/a	Usage/a	Min	Max	Avg	Norm usg/r	Usage/r
rdf:type	4	8	2	2	2	100	100
skoxl:prefLabel	4	4	1	1	1	100	50
skos:prefLabel	4	4	1	1	1	100	50
rdfs:label	4	4	1	1	1	100	50
rdfs:comment	4	4	1	1	1	100	50
owl:versionInfo	4	4	1	1	1	100	50
owl:versionIRI	4	4	1	1	1	100	50
owl:imports	4	4	1	1	1	100	50
dct:identifier	4	4	1	1	1	100	50

### ${\bf 2.3.10} \quad {\bf Propoerty \ statistics \ for \ skos:} {\bf Concept \ class}$

Property	Norm usg/a	Usage/a	Min	Max	Avg	Norm usg/r	Usage/r
skos:prefLabel	1176	24615	1	27	23	100	85
rdf:type	1176	4613	1	4	3	100	16
skos:inScheme	1176	1176	1	1	1	100	4
atr:op-code	1176	1176	1	1	1	100	4
ato:op-code	1176	1176	1	1	1	100	4
skoxl:prefLabel	1172	28811	1	216	35	99	100
skos:topConceptOf	1172	1172	1	1	1	99	4
owl:versionInfo	1172	1172	1	1	1	99	4
euvoc:status	1172	1172	1	1	1	99	4
euvoc:startDate	1172	1172	1	1	1	99	4
dct:created	1172	1172	1	1	1	99	4
ato:authority-code	1172	1172	1	1	1	99	4
dct:dateSubmitted	1158	1158	1	1	1	98	4
dct:dateAccepted	1158	1158	1	1	1	98	4
lemon:context	1138	2281	1	6	2	96	7
dct:type	1138	1138	1	1	1	96	3
geowgs:location	998	1023	1	12	1	84	3
skos:broader	897	898	1	2	1	76	3
skos:notation	841	1018	1	38	5	71	3
euvoc:xlNotation	723	3244	1	69	9	61	11
ato:op-mapped-code	676	1340	1	38	4	57	4
skoxl:altLabel	563	12284	1	138	41	47	42
euvoc:endDate	367	367	1	1	1	31	1
euvoc:xlDefinition	361	498	1	4	1	30	1
skos:definition	361	482	1	2	1	30	1
dct:isReplacedBy	215	236	1	4	1	18	0
dct:replaces	213	236	1	4	1	18	0
skos:exactMatch	191	191	1	1	1	16	0
$atmdr:to\_review website$	92	92	1	1	1	7	0

Property	Norm usg/a	Usage/a	Min	Max	Avg	Norm usg/r	Usage/r
skos:changeNote	84	96	1	2	1	7	0
euvoc:xlChangeNote	84	96	1	2	1	7	0
skos:historyNote	22	24	1	2	1	1	0
euvoc:xlHistoryNote	22	24	1	2	1	1	0
euvoc:order	17	17	1	1	1	1	0
ato:protocol.order	17	17	1	1	1	1	0
ato:protocol-order	17	17	1	1	1	1	0
dc:identifier	4	4	1	1	1	0	0
skos:newRel	1	1	1	1	1	0	0
skos:newPropoerty	1	1	1	1	1	0	0

#### 2.3.11 Propoerty statistics for skos:ConceptScheme class

Property	Norm usg/a	Usage/a	Min	Max	Avg	Norm usg/r	Usage/r
rdf:type	4	8	2	2	2	100	100
skoxl:prefLabel	4	4	1	1	1	100	50
skos:prefLabel	4	4	1	1	1	100	50
rdfs:label	4	4	1	1	1	100	50
rdfs:comment	4	4	1	1	1	100	50
owl:versionInfo	4	4	1	1	1	100	50
owl:versionIRI	4	4	1	1	1	100	50
owl:imports	4	4	1	1	1	100	50
dct:identifier	4	4	1	1	1	100	50

#### 2.3.12 Propoerty statistics for skoxl:Label class

Property	Norm usg/a	Usage/a	Min	Max	Avg	Norm usg/r	Usage/r
skoxl:literalForm	41099	41099	1	1	1	100	100
rdfs:label	41099	41099	1	1	1	100	100
rdf:type	41099	41099	1	1	1	100	100
dct:type	41099	41099	1	1	1	100	100
euvoc:status	35594	35594	1	1	1	86	86
euvoc:startDate	35594	35594	1	1	1	86	86
dct:created	35594	35594	1	1	1	86	86
euvoc:endDate	15233	15233	1	1	1	37	37
lexvo:gender	50	50	1	1	1	0	0

# 3 What do data say about Places

### 3.1 Class instantiation overview for Places

The table below describes how are classes instantiated. Please note that the instance counts are different from total number of unique instances in the data-set. When an individualinstantiates multiple classes, then it is counted once for each class it instantiates. The relative number of instances is scaled to the total number of unique instances per class.

Class	Unique instances	% unique instance sum
skos:Concept	1580	60.77
ato:MappedCode	655	25.19
geowgs:SpatialThing	364	14.00
skos:ConceptScheme	1	0.04

#### 3.2 Application profile reconstruction for Places

This section attempts at reconstructing the profiled shapes for each class. The profile is deduced based on descriptive statistics presented elsewhere. The tables below contain the following columns: Property name, Cardinality, Property Type, Property Range and Confidence.

Confidence is a categorial value derived from the property usage relative to the total number of unique individuals instantiating this class. Property range is a list of distinct encountered object types. In case of higher number of object type the list is non-exhaustive. Cardinality of the property is expressed in terms of minimum and maximum occurrences of the property. The minimum value varies from zero (0) meaning that the property is optional to one (1) meaning that the property is mandatory while the maximum value variesfrom one (1) meaning that the property is sufficient to star (\*) meaning that the property is maximally unbound. Finally the type indicates whether the property range whether a data type or an individual URI.

#### 3.2.1 Estimated Application Profile for ato:MappedCode class

Property	Cardinality	Type	Range	Confidence
rdf:type	1 1	object	$ato: {\bf MappedCode}$	certain
dc:source	1 1	data	xsd:string	$\operatorname{certain}$
ato:legacy-code	1 1	data	xsd:string	certain
ato:affected-table	0 *	data	xsd:string	unlikely

#### 3.2.2 Estimated Application Profile for geowgs:SpatialThing class

Property	Cardinality	Type	Range	Confidence
rdfs:label	1 1	data	rdf:langString	certain
rdf:type	1 1	object	geowgs:SpatialThing	certain
geowgs:long	1 *	data	xsd:float	certain
geowgs:lat	1 *	data	xsd:float	certain

#### 3.2.3 Estimated Application Profile for skos:Concept class

Property	Cardinality	Type	Range	Confidence
skos:inScheme	1 1	object	skos:ConceptScheme	certain
rdf:type	1 1	object	skos:Concept	certain
dc:identifier	1 1	data	xsd:string	certain
atr:op-code	1 1	data	xsd:string	certain
ato:op-code	1 1	data	xsd:string	certain
skos:prefLabel	1 *	data	rdf:langString	certain
ato:start.use	1 1	data	xsd:string	certain
ato:deprecated	1 1	data	xsd:string	certain
ato:authority-code	1 1	data	xsd:string	certain
ato:op-mapped-code	0 *	object	ato:MappedCode	unlikely
owl:sameAs	0 *	object	geowgs:SpatialThing	unlikely
skos:hiddenLabel	0 *	data	xsd:string	very rare
ato:end.use	0 *	data	xsd:string	very rare

#### 3.2.4 Estimated Application Profile for skos:ConceptScheme class

Property	Cardinality	Type	Range	Confidence			
rdfs:label rdf:type ato:table.version.number	1 1 1 1 1 1	data object data	rdf:langString skos:ConceptScheme xsd:string	certain certain certain			
Continued on next page							

Property	Cardinality	Type	Range	Confidence
ato:table.id	1 1	data	xsd:string	certain
ato:prefLabel	1 1	data	rdf:langString	certain

### 3.3 Property usage statistics for Places

This section provides descriptive statistical indicators for each class. The tables below contain the following columns: property name, absolute normalised usage (Norm usg/a), absolute actual usage(Usage/a), normalised minimum (Min), normalised maximum (Max), normalised average (Avg), relative normalised usage (Norm usg/r), relative actual usage (Usage/r).

The normalization mentioned above refers to counting out of all classindividuals how many are actually using the property at least once whilethe actual property usage refers to counting all occurrences for a given class. The rdf:type property plays a special role because it indicates the number of unique class instances and in case of multiple class instantiation the number is scaled by the number of distinct parent classes.

The relative actual usage (Usage/r) is calculated with respect to a sibling property that maximally occurs in all class instances. Therefore there is no standard property to be chosen as reference like in the case of rdf:type but it varies from case to case.

#### 3.3.1 Propoerty statistics for ato:MappedCode class

Property	Norm usg/a	Usage/a	Min	Max	Avg	Norm usg/r	Usage/r
rdf:type	655	655	1	1	1	100	100
dc:source	655	655	1	1	1	100	100
ato:legacy-code	655	655	1	1	1	100	100
ato:affected-table	209	209	1	1	1	31	31

#### 3.3.2 Propoerty statistics for geowgs:SpatialThing class

Property	Norm usg/a	Usage/a	Min	Max	Avg	Norm usg/r	Usage/r
geowgs:long	364	390	1	2	1	100	100
geowgs:lat	364	388	1	2	1	100	99
rdfs:label	364	364	1	1	1	100	93
rdf:type	364	364	1	1	1	100	93

### 3.3.3 Propoerty statistics for skos:Concept class

Property	Norm usg/a	Usage/a	Min	Max	Avg	Norm usg/r	Usage/r
skos:prefLabel	1580	24861	1	29	19	100	100
skos:inScheme	1580	1580	1	1	1	100	6
rdf:type	1580	1580	1	1	1	100	6
dc:identifier	1580	1580	1	1	1	100	6
atr:op-code	1580	1580	1	1	1	100	6
ato:op-code	1580	1580	1	1	1	100	6
ato:start.use	1579	1579	1	1	1	99	6
ato:deprecated	1579	1579	1	1	1	99	6
ato:authority-code	1579	1579	1	1	1	99	6
ato:op-mapped-code	517	655	1	4	1	32	2
owl:sameAs	366	366	1	1	1	23	1
ato:end.use	5	5	1	1	1	0	0
skos:hiddenLabel	1	1	1	1	1	0	0

### ${\bf 3.3.4} \quad {\bf Propoerty \ statistics \ for \ skos:} {\bf Concept Scheme \ class}$

Property	Norm usg/a	Usage/a	Min	Max	Avg	Norm usg/r	Usage/r
rdfs:label	1	1	1	1	1	100	100
rdf:type	1	1	1	1	1	100	100
ato:table.version.number	1	1	1	1	1	100	100
ato:table.id	1	1	1	1	1	100	100
ato:prefLabel	1	1	1	1	1	100	100