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Data Model Documentation

# **Data Model Detail**

This document provides an overview of the data model. For simpler and more focused reports, simply copy this initial template and turn off the sections not required.

## **TWG Conceptual Model**

*Type:* **Package**

*Package:* TWG Admin Boundaries Model

*Detail:* *Created on 22/05/2013*. *Last modified on 22/05/2013.*

*Notes:*

**TWG Admin Unit - Package Overview**

*Created By:* mroy on 28/05/2013

*Last Modified:* 30/07/2013, *Version:*1.0



Figure: 1

### **Core Definition Model**

*Type:* **Package «Application Schema»**

*Package:* TWG Conceptual Model

*Detail:* *Created on 1/08/2013*. *Last modified on 1/08/2013.*

*Notes:* The AreaHierarchy (AH) package contains common behavior model for any nested hierarchy of areas. The model addresses issues of navigation and cross referencing between hierarchies and the scoping of topology to versions of hierarchies.

The hierarchy describes the topological relationships, not the (potentially multiple) alternative geometric descriptions of objects (see package AreaRepresentation).

**Core Definition Model**

*Created By:* mroy on 18/06/2013

*Last Modified:* 30/07/2013, *Version:*1.0



Figure: 2

#### **Area Definition**

*Type:* **Package «Leaf»**

*Package:* Core Definition Model

*Detail:* *Created on 9/07/2013*. *Last modified on 23/07/2013.*

*Notes:* -- Definition --

AreaDefinition (AD) relates to the area model entities, which are defined by the definition process, e.g., transaction processes related to these model entities such as creation, change, deletion etc. The AD can be seen as a common model of metadata to support tracing object definition and source of normative geometry representation where relevant.

##### ***AreaDefinition***

*Database:* Java, *Stereotype:* «FeatureType», *Package:* Area Definition

*Detail:* *Created on* 12/06/2013. *Last modified on* 30/07/2013.

*Notes:* -- Definition --

Area definition refers to a gazetted area defined by a nominated process; it handles changes in the boundary definition with reference to temporal data of the creation, change, deletion or redistribution of a defined area.

An area definition can belong to one or more defined units and only refers to a maximum of one geometrical representation.

***Columns***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PK** | **Name** | **Type** | **Not Null** | **Unique** | **Len** | **Prec** | **Scale** | **Init** | **Notes** |
|  | areaSize | Real |  |  | 0 | 0 | 0 |  |  |
|  | definitionType | EvolutionType |  |  | 0 | 0 | 0 |  |  |
|  | endLifespanVersion | DateTime |  |  | 0 | 0 | 0 |  |  |
|  | fsdf\_Identifier | anyURI |  |  | 0 | 0 | 0 |  | A URI identifier for the feature. In GML this would be instantiated as gml:identifier |
|  | fsdf\_Name | ScopedName |  |  | 0 | 0 | 0 |  | The name of the administrative unit area definition. ScopedName so that in gml this would be instantiated as gml:name with a CodeSpace attribute identifying the authority for the term. |
|  | startLifespanVersion | DateTime |  |  | 0 | 0 | 0 |  |  |

***Relationships***

| **Columns** | **Association** | **Notes** |
| --- | --- | --- |
|  | **1** AreaDefinition.  **0..1** AreaRepresentation.hasRepresentation |  |
|  | **0..1** AreaDefinition.initialDefinedArea  UnitDefinition. |  |
|  | StatisticalUnitVector.  AreaDefinition. |  |
|  | <anonymous>.  AreaDefinition. |  |
|  | AreaSpatialRelationship.  **0..\*** AreaDefinition.sourceArea |  |
|  | AreaSpatialRelationship.  **0..\*** AreaDefinition.targetArea |  |
| definedUnitToDefinedArea | **0..\*** UnitDefinition.belongsToDefinedUnit  **0..\*** AreaDefinition.definedAreas |  |
|  | UnitDefinition.  **0..1** AreaDefinition.currentDefinedArea |  |
|  | Jurisdictional Area Definition.  AreaDefinition. |  |

##### ***EvolutionType***

*Database:* Java, *Stereotype:* «CodeList», *Package:* Area Definition

*Detail:* *Created on* 21/04/2011. *Last modified on* 29/07/2013.

*Notes:* -- Definition --

Description of the reason for change of area definition boundaries.

***Columns***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PK** | **Name** | **Type** | **Not Null** | **Unique** | **Len** | **Prec** | **Scale** | **Init** | **Notes** |
|  | creation |  |  |  | 0 | 0 | 0 |  | -- Definition --  The code for creation. |
|  | change |  |  |  | 0 | 0 | 0 |  | -- Definition --  The code for change. |
|  | deletion |  |  |  | 0 | 0 | 0 |  | -- Definition --  The code for deletion. |
|  | aggregation |  |  |  | 0 | 0 | 0 |  | -- Definition --  The code for aggregation. |
|  | splitting |  |  |  | 0 | 0 | 0 |  | -- Definition --  The code for splitting. |
|  | redistributed |  |  |  | 0 | 0 | 0 |  | -- Definition --  The code for redistribution. |

##### ***LegalStatusValue***

*Database:* Java, *Stereotype:* «CodeList», *Package:* Area Definition

*Detail:* *Created on* 7/04/2009. *Last modified on* 29/07/2013.

*Notes:* -- Definition --

Description of the legal status of area definition boundaries.

***Columns***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PK** | **Name** | **Type** | **Not Null** | **Unique** | **Len** | **Prec** | **Scale** | **Init** | **Notes** |
|  | agreed |  |  |  | 0 | 0 | 0 |  | -- Definition --  The edge-matched boundary has been agreed between neighbouring administrative units and is stable now. |
|  | notAgreed |  |  |  | 0 | 0 | 0 |  | -- Definition --  The edge-matched boundary has not yet been agreed between neighbouring administrative units and could be changed. |

##### ***OfficialStatusValue***

*Database:* Java, *Stereotype:* «CodeList», *Package:* Area Definition

*Detail:* *Created on* 18/06/2013. *Last modified on* 29/07/2013.

*Notes:* -- Definition --

Description of the official status of area definition boundaries.

***Columns***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PK** | **Name** | **Type** | **Not Null** | **Unique** | **Len** | **Prec** | **Scale** | **Init** | **Notes** |
|  | historical |  |  |  | 0 | 0 | 0 |  |  |
|  | official |  |  |  | 0 | 0 | 0 |  |  |
|  | unofficial |  |  |  | 0 | 0 | 0 |  |  |

##### ***TechnicalStatusValue***

*Database:* Java, *Stereotype:* «CodeList», *Package:* Area Definition

*Detail:* *Created on* 7/04/2009. *Last modified on* 29/07/2013.

*Notes:* -- Definition --

Description of the technical status of area definition boundaries.

***Columns***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PK** | **Name** | **Type** | **Not Null** | **Unique** | **Len** | **Prec** | **Scale** | **Init** | **Notes** |
|  | edgeMatched |  |  |  | 0 | 0 | 0 |  | -- Definition --  The boundaries of neighbouring administrative units have the same set of coordinates. |
|  | notEdgeMatched |  |  |  | 0 | 0 | 0 |  | -- Definition --  The boundaries of neighbouring administrative units do not have the same set of coordinates. |

#### **Area Representation**

*Type:* **Package «Leaf»**

*Package:* Core Definition Model

*Detail:* *Created on 17/06/2013*. *Last modified on 23/07/2013.*

*Notes:* -- Definition --

The AreaRepresentation (AR) is the geographical representation of any recorded (versioned) topological unit. This model provides for multiple geometry representations of an area object independent of its definition, i.e., while a jurisdictional entity remains unchanged (to ensure its spatial relationship with other units), its geographical representation may change over.

##### ***AreaBoundary***

*Database:* Java, *Stereotype:* «FeatureType», *Package:* Area Representation

*Detail:* *Created on* 18/06/2013. *Last modified on* 29/07/2013.

*Notes:* -- Definition --

The area boundary feature refers to the geometrical data of the boundary of a defined area; it is represented as a 'Curve'.

ISO 19125 defines LineStrings as the only Subclass of Curves. For LineStrings linear interpolation used to determine the connection between the points.

***Columns***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PK** | **Name** | **Type** | **Not Null** | **Unique** | **Len** | **Prec** | **Scale** | **Init** | **Notes** |
|  | areaBoundary | GM\_Curve |  |  | 0 | 0 | 0 |  |  |
|  | fsdf\_Identifier | anyURI |  |  | 0 | 0 | 0 |  | A URI identifier for the feature. In GML this would be instantiated as gml:identifier |

##### ***AreaRepresentation***

*Database:* Java, *Stereotype:* «FeatureType», *Package:* Area Representation

*Detail:* *Created on* 18/06/2013. *Last modified on* 29/07/2013.

*Notes:* -- Definition --

The area definition feature refers to the geometrical data of the area of a defined unit.

Using ISO 19125 (Simple Feature Geometry), an area representation is described by a 'MultiSurface' object, which represents a collection of one or more polygons. each polygon is described by a collection of 'Curves', e.g., a 'LinearRing' describing a polygon..

-- ISO 19125 vs ISO 19107--

Individual SF geometry types correspond to one or more goemetry types of spatial schema, e.g., SF geometry collection (e.g., MultiSurface) corresponds to the GM\_Aggregate of the spatial schema.

***Columns***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PK** | **Name** | **Type** | **Not Null** | **Unique** | **Len** | **Prec** | **Scale** | **Init** | **Notes** |
|  | areaRepresentation | GM\_MultiSurface |  |  | 0 | 0 | 0 |  |  |
|  | fsdf\_Identifier | anyURI |  |  | 0 | 0 | 0 |  | A URI identifier for the feature. In GML this would be instantiated as gml:identifier |

***Relationships***

| **Columns** | **Association** | **Notes** |
| --- | --- | --- |
|  | **1..\*** AreaRepresentation.areaRepresentation  **1..\*** AreaBoundary.boundary |  |
|  | <anonymous>.  AreaRepresentation. |  |
|  | **1** AreaDefinition.  **0..1** AreaRepresentation.hasRepresentation |  |
|  | MaritimeAreaRepresentation.  AreaRepresentation. |  |

#### **SpatialRelationships**

*Type:* **Package «Leaf»**

*Package:* Core Definition Model

*Detail:* *Created on 17/06/2013*. *Last modified on 23/07/2013.*

*Notes:* This model provides a pattern for describing spatial relationships between objects whose definitions (and hence conceptual models) are not directly related.

-- Definition --

The SpatialRelationship package realizes cross relationships between different spatial domains/packages at potentially diffrent hierarchy levels

**SpatialRelationship Model**

*Created By:* mroy on 17/06/2013

*Last Modified:* 30/07/2013, *Version:*1.0



Figure: 3

##### ***AreaSpatialRelationship***

*Database:* Java, *Stereotype:* «FeatureType», *Package:* SpatialRelationships

*Detail:* *Created on* 4/07/2013. *Last modified on* 23/07/2013.

*Notes:* -- Definition --

AreaSpatialRelationship describes spatial relationship between area definitions within sub-theme areas, e.g., AreaDefinition 1 of MaritimeUnit A subsumes AreaDefinition 2 of MaritimeUnit B, and across sub-themes, e.g., AreaDefinition 4 of Admin Unit X overlays AreaDefinition 5 of LGA Unit Y.

***Columns***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PK** | **Name** | **Type** | **Not Null** | **Unique** | **Len** | **Prec** | **Scale** | **Init** | **Notes** |
|  | date | Date |  |  | 0 | 0 | 0 |  |  |
|  | spatialRelationshipType | SpatialRelationshipType |  |  | 0 | 0 | 0 |  |  |

***Relationships***

| **Columns** | **Association** | **Notes** |
| --- | --- | --- |
|  | AreaSpatialRelationship.  **0..\*** AreaDefinition.sourceArea |  |
|  | AreaSpatialRelationship.  **0..\*** Jurisdictional Area Definition.targetUnit |  |
|  | AreaSpatialRelationship.  **0..\*** AreaDefinition.targetArea |  |
|  | AreaSpatialRelationship.  **0..\*** Jurisdictional Area Definition.sourceUnit |  |

##### ***IdentityRelationship***

*Database:* Java, *Stereotype:* , *Package:* SpatialRelationships

*Detail:* *Created on* 30/07/2013. *Last modified on* 30/07/2013.

*Notes:*

##### ***SpatialRelationshipType***

*Database:* Java, *Stereotype:* «FeatureType», *Package:* SpatialRelationships

*Detail:* *Created on* 4/07/2013. *Last modified on* 23/07/2013.

*Notes:*

***Columns***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PK** | **Name** | **Type** | **Not Null** | **Unique** | **Len** | **Prec** | **Scale** | **Init** | **Notes** |
|  | adjacent |  |  |  | 0 | 0 | 0 |  | -- Definition --  Description of the spatial relationship of adjacent units (share boundaries). |
|  | contains |  |  |  | 0 | 0 | 0 |  | --Definition --  Description of the spatial relationship of units containing other units |
|  | intersects |  |  |  | 0 | 0 | 0 |  | --Definition --  Description of the spatial relationship of intersecting units. |
|  | disjoint |  |  |  | 0 | 0 | 0 |  | --Definition --  Description of the spatial relationship of disjoint units. |

##### ***UnitSpatialRelationship***

*Database:* Java, *Stereotype:* «FeatureType», *Package:* SpatialRelationships

*Detail:* *Created on* 4/07/2013. *Last modified on* 29/07/2013.

*Notes:* -- Definition --

UnitSpatialRelationship describes the 'topological' spatial relationship between defined units, e.g., adjacent, subsuming, intersecting, disjunctive etc.

A spatial relationship has one or more source units and/or one or more target units. A defined unit knows about any spatial relationship they participate in.

***Columns***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PK** | **Name** | **Type** | **Not Null** | **Unique** | **Len** | **Prec** | **Scale** | **Init** | **Notes** |
|  | date | Date |  |  | 0 | 0 | 0 |  |  |
|  | fsdf\_Identifier | anyURI |  |  | 0 | 0 | 0 |  | A URI identifier for the feature. In GML this would be instantiated as gml:identifier |
|  | fsdf\_Name | ScopedName |  |  | 0 | 0 | 0 |  |  |
|  | spatialRelationshipType | SpatialRelationshipType |  |  | 0 | 0 | 0 |  |  |

***Relationships***

| **Columns** | **Association** | **Notes** |
| --- | --- | --- |
|  | UnitSpatialRelationship.  **0..\*** UnitDefinition.targetUnit |  |
|  | UnitSpatialRelationship.  **0..\*** UnitDefinition.sourceUnit |  |
|  | **0..\*** UnitDefinition.knownSpatialRelationship  UnitSpatialRelationship. |  |

#### **Unit Approximations**

*Type:* **Package «Leaf»**

*Package:* Core Definition Model

*Detail:* *Created on 19/06/2013*. *Last modified on 23/07/2013.*

*Notes:*

**Unit Approximation - Overview**

*Created By:* mroy on 19/06/2013

*Last Modified:* 30/07/2013, *Version:*1.0



Figure: 4

##### ***Unit Approximation***

*Database:* Java, *Stereotype:* «FeatureType», *Package:* Unit Approximations

*Detail:* *Created on* 4/07/2013. *Last modified on* 24/07/2013.

*Notes:*

***Columns***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PK** | **Name** | **Type** | **Not Null** | **Unique** | **Len** | **Prec** | **Scale** | **Init** | **Notes** |
|  | \_\_attrPlaceholder |  |  |  | 0 | 0 | 0 |  |  |

***Relationships***

| **Columns** | **Association** | **Notes** |
| --- | --- | --- |
|  | Unit Approximation.  **0..1** UnitDefinition.refersTo |  |
|  | Unit Approximation.  **0..\*** UnitDefinition.consistsOf |  |
|  | LGA\_Approximation .  Unit Approximation. |  |
|  | ED\_Approximation.  Unit Approximation. |  |
|  | PC\_Approximation.  Unit Approximation. |  |

#### **Unit Definition**

*Type:* **Package «Leaf»**

*Package:* Core Definition Model

*Detail:* *Created on 11/07/2013*. *Last modified on 23/07/2013.*

*Notes:* -- Definition --

The UD sub-package contains logical definition and common behavior for any nested hierarchy of units The model addresses issues of navigation and cross referencing between hierarchies and the scoping of topology to versions of hierarchies. UD describes the topological relationships, not the (potentially multiple) alternative geometric descriptions of objects (see package AD / AR).

##### ***HierarchicalUnit***

*Database:* Java, *Stereotype:* «FeatureType», *Package:* Unit Definition

*Detail:* *Created on* 18/06/2013. *Last modified on* 1/08/2013.

*Notes:* -- Definition --

An hierarchical unit extends the unit definition with an hierarchal structure describing the topology of units (represents an individual element of that hierarchy).

***Columns***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PK** | **Name** | **Type** | **Not Null** | **Unique** | **Len** | **Prec** | **Scale** | **Init** | **Notes** |
|  | level | Integer |  |  | 0 | 0 | 0 |  | The level in the hierarchy |
|  | levelName | CharacterString |  |  | 0 | 0 | 0 |  | -- Definition --  Name of the level in the hierarchy, at which the unit is established. |

***Relationships***

| **Columns** | **Association** | **Notes** |
| --- | --- | --- |
| hierarchical Composition | **0..\*** HierarchicalUnit.lowerLevelUnit  **0..1** HierarchicalUnit.higherLevelUnit |  |
|  | HierarchicalUnit.  UnitDefinition. |  |
|  | **1** UnitHierarchy.  **0..\*** HierarchicalUnit. |  |
|  | <anonymous>.  HierarchicalUnit. |  |
|  | <anonymous>.  HierarchicalUnit. |  |
| hierarchical Composition | **0..\*** HierarchicalUnit.lowerLevelUnit  **0..1** HierarchicalUnit.higherLevelUnit |  |
|  | LocalGovernmentUnit.  HierarchicalUnit. |  |
|  | Jurisdictional Units.  HierarchicalUnit. |  |
|  | ElectoralUnit.  HierarchicalUnit. |  |
|  | <anonymous>.  HierarchicalUnit. |  |
|  | StatisticalUnit.  HierarchicalUnit. |  |

##### ***UnitDefinition***

*Database:* Java, *Stereotype:* «FeatureType», *Package:* Unit Definition

*Detail:* *Created on* 18/06/2013. *Last modified on* 1/08/2013.

*Notes:* -- Definition --

A unit is defined as a logical entity (stand-alone or part of an hierarchy of entities) used across various themes and sub-themes/datasets. It describes the generic information and behavior shared across all entities of the data foundation, e.g., name/object identifier (e.g., using gml:name and gml:identifier) and hierarchical topology respectively.

***Columns***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PK** | **Name** | **Type** | **Not Null** | **Unique** | **Len** | **Prec** | **Scale** | **Init** | **Notes** |
|  | authority | CI\_ResponsibleParty |  |  | 0 | 0 | 0 |  | The issuing or governing authority |
|  | description | CharacterString |  |  | 0 | 0 | 0 |  | A description of the unit. This may be textual description such as the gazetted description of the polygon or more general description, such as "rural Victorian electorate".  Will be instantiated in GML as gml:description. |
|  | endDate | Date |  |  | 0 | 0 | 0 |  | The date at which the Administrative unit was no longer current. |
|  | fsdf\_Identifier | anyURI |  |  | 0 | 0 | 0 |  | A URI identifier for the feature. In GML this would be instantiated as gml:identifier |
|  | fsdf\_Name | ScopedName |  |  | 0 | 0 | 0 |  | The name of the administrative unit. ScopedName so that in gml this would be instantiated as gml:name with a CodeSpace attribute identifying the authority for the term. |
|  | startDate | Date |  |  | 0 | 0 | 0 |  | The date at which the Administrative unit was created or gazetted. |
|  | unitDefinitionType | CharacterString |  |  | 0 | 0 | 0 |  | specify the unit type within the subtypes e.g. for LocalGovernmentArea whether it is a ward or an area. The featureType (LocalGovermentAreaUnit, MaritimeUnit etc specifies the type of unit. |
|  | unitCode | CharacterSetCode |  |  | 0 | 0 | 0 |  |  |

***Relationships***

| **Columns** | **Association** | **Notes** |
| --- | --- | --- |
|  | **0..\*** UnitDefinition.knownSpatialRelationship  UnitSpatialRelationship. |  |
| identityRelationship | **0..\*** UnitDefinition.  **0..1** UnitDefinition.usesDefinition | -- Definition --  The definition process of a particular unit may be identical to other units, represented by the identity relationship, i.e., a unit may reuse the definition of a particular unit, whereas the definition of particular unit may be reused by other units). |
| definedUnitToDefinedArea | **0..\*** UnitDefinition.belongsToDefinedUnit  **0..\*** AreaDefinition.definedAreas |  |
|  | UnitDefinition.  **0..1** AreaDefinition.currentDefinedArea |  |
|  | Unit Approximation.  **0..1** UnitDefinition.refersTo |  |
|  | MaritimeUnit.  UnitDefinition. |  |
| identityRelationship | **0..\*** UnitDefinition.  **0..1** UnitDefinition.usesDefinition | -- Definition --  The definition process of a particular unit may be identical to other units, represented by the identity relationship, i.e., a unit may reuse the definition of a particular unit, whereas the definition of particular unit may be reused by other units). |
|  | UnitSpatialRelationship.  **0..\*** UnitDefinition.targetUnit |  |
|  | UnitSpatialRelationship.  **0..\*** UnitDefinition.sourceUnit |  |
|  | UnincorporatedLand.  UnitDefinition. |  |
|  | <anonymous>.  UnitDefinition. |  |
|  | **0..1** AreaDefinition.initialDefinedArea  UnitDefinition. |  |
|  | Unit Approximation.  **0..\*** UnitDefinition.consistsOf |  |
|  | Postal Code .  UnitDefinition. |  |
|  | HierarchicalUnit.  UnitDefinition. |  |

##### ***UnitHierarchy***

*Database:* Java, *Stereotype:* «FeatureType», *Package:* Unit Definition

*Detail:* *Created on* 30/07/2013. *Last modified on* 30/07/2013.

*Notes:* -- Definition --

An unit hierarchical refers to the overall hierarchy of units (represents the entire hierarchy).

***Relationships***

| **Columns** | **Association** | **Notes** |
| --- | --- | --- |
|  | **1** UnitHierarchy.  **0..\*** HierarchicalUnit. |  |
|  | <anonymous>.  UnitHierarchy. |  |
|  | StatisticalTessellation.  UnitHierarchy. |  |

### **ElectoralUnit**

*Type:* **Package «Application Schema»**

*Package:* TWG Conceptual Model

*Detail:* *Created on 30/07/2013*. *Last modified on 30/07/2013.*

*Notes:*

**Electoral Units Model**

*Created By:* mroy on 5/07/2013

*Last Modified:* 30/07/2013, *Version:*1.0



Figure: 5

#### **CommwealthElectoralDivision**

*Database:* Java, *Stereotype:* «FeatureType», *Package:* ElectoralUnit

*Detail:* *Created on* 5/07/2013. *Last modified on* 30/07/2013.

*Notes:* -- Definition --

Commonwealth Electoral Division (CED)...

***Columns***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PK** | **Name** | **Type** | **Not Null** | **Unique** | **Len** | **Prec** | **Scale** | **Init** | **Notes** |
|  | \_\_attrPlaceholder |  |  |  | 0 | 0 | 0 |  |  |

***Relationships***

| **Columns** | **Association** | **Notes** |
| --- | --- | --- |
|  | CommwealthElectoralDivision.  ElectoralUnit. |  |
|  | <anonymous>.  CommwealthElectoralDivision. |  |

#### **ElectoralUnit**

*Database:* Java, *Stereotype:* «FeatureType», *Package:* ElectoralUnit

*Detail:* *Created on* 5/07/2013. *Last modified on* 30/07/2013.

*Notes:* -- Definition --

***Columns***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PK** | **Name** | **Type** | **Not Null** | **Unique** | **Len** | **Prec** | **Scale** | **Init** | **Notes** |
|  | \_\_attrPlaceholder |  |  |  | 0 | 0 | 0 |  |  |
|  | electoralOfficeAddress | CI\_Address |  |  | 0 | 0 | 0 |  |  |
|  | electoralOfficeOnlineResource | CI\_OnlineResource |  |  | 0 | 0 | 0 |  |  |
|  | electoralOfficeContact | CI\_Contact |  |  | 0 | 0 | 0 |  |  |
|  | firstElection | CI\_Date |  |  | 0 | 0 | 0 |  |  |
|  | electoralOfficeLocation | GM\_Point |  |  | 0 | 0 | 0 |  |  |

***Relationships***

| **Columns** | **Association** | **Notes** |
| --- | --- | --- |
|  | ElectoralUnit.  HierarchicalUnit. |  |
|  | CommwealthElectoralDivision.  ElectoralUnit. |  |
|  | StateElectoralDivision.  ElectoralUnit. |  |

#### **StateElectoralDivision**

*Database:* Java, *Stereotype:* «FeatureType», *Package:* ElectoralUnit

*Detail:* *Created on* 5/07/2013. *Last modified on* 30/07/2013.

*Notes:*

***Columns***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PK** | **Name** | **Type** | **Not Null** | **Unique** | **Len** | **Prec** | **Scale** | **Init** | **Notes** |
|  | \_\_attrPlaceholder |  |  |  | 0 | 0 | 0 |  |  |

***Relationships***

| **Columns** | **Association** | **Notes** |
| --- | --- | --- |
|  | StateElectoralDivision.  ElectoralUnit. |  |
|  | <anonymous>.  StateElectoralDivision. |  |

### **JurisdictionalUnit**

*Type:* **Package «Application Schema»**

*Package:* TWG Conceptual Model

*Detail:* *Created on 30/07/2013*. *Last modified on 30/07/2013.*

*Notes:*

**Jurisdictional Units Model**

*Created By:* myrgei on 27/05/2013

*Last Modified:* 30/07/2013, *Version:*1.0



Figure: 6

#### **Jurisdictional Area Definition**

*Database:* Java, *Stereotype:* «FeatureType», *Package:* JurisdictionalUnit

*Detail:* *Created on* 12/06/2013. *Last modified on* 23/07/2013.

*Notes:* Area defined by a nominated process. Handles change in boundary definition

***Columns***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PK** | **Name** | **Type** | **Not Null** | **Unique** | **Len** | **Prec** | **Scale** | **Init** | **Notes** |
|  | authorityID | Integer |  |  | 0 | 0 | 0 |  | -- Definition --  E.g., custodian state or territory |
|  | legalStatus | LegalStatusValue |  |  | 0 | 0 | 0 |  | -- Definition --  Legal status of this maritime boundary. |
|  | officialStatus | OfficialStatusValue |  |  | 0 | 0 | 0 |  | -- Definition --  indicates of the name / area is authorised |
|  | technicalStatus | TechnicalStatusValue |  |  | 0 | 0 | 0 |  | -- Definition --  The technical status of the maritime boundary. |

***Relationships***

| **Columns** | **Association** | **Notes** |
| --- | --- | --- |
|  | Jurisdictional Area Definition.  AreaDefinition. |  |
|  | AreaSpatialRelationship.  **0..\*** Jurisdictional Area Definition.targetUnit |  |
|  | **0..\*** Jurisdictional Units.  **0..\*** Jurisdictional Area Definition. |  |
|  | StatisticalUnitVector.  Jurisdictional Area Definition. |  |
|  | MaritimeAreaDefinition.  Jurisdictional Area Definition. |  |
|  | <anonymous>.  Jurisdictional Area Definition. |  |
|  | AreaSpatialRelationship.  **0..\*** Jurisdictional Area Definition.sourceUnit |  |

#### **Jurisdictional Units**

*Database:* Java, *Stereotype:* «FeatureType», *Package:* JurisdictionalUnit

*Detail:* *Created on* 7/03/2008. *Last modified on* 26/07/2013.

*Notes:* -- Definition --

Unit of administration where a Member State has and/or exercises jurisdictional rights, for local, regional and national governance.

***Columns***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PK** | **Name** | **Type** | **Not Null** | **Unique** | **Len** | **Prec** | **Scale** | **Init** | **Notes** |
|  | residenceOfAuthority | NamedPlace |  |  | 0 | 0 | 0 |  | -- Definition --  Center for national or local administration. |

***Relationships***

| **Columns** | **Association** | **Notes** |
| --- | --- | --- |
|  | Jurisdictional Units.  HierarchicalUnit. |  |
| administrationRelationship | **0..\*** Jurisdictional Units.administeredBy  **0..\*** Jurisdictional Units.coAdminister |  |
|  | **0..\*** Jurisdictional Units.  **0..\*** Jurisdictional Area Definition. |  |
| hasUnincorporatedLand | **0..\*** UnincorporatedLand.unincorporatedLand  **1..\*** Jurisdictional Units.admUnit |  |
| administrationRelationship | **0..\*** Jurisdictional Units.administeredBy  **0..\*** Jurisdictional Units.coAdminister |  |

#### **ResidenceOfAuthority**

*Database:* Java, *Stereotype:* «dataType», *Package:* JurisdictionalUnit

*Detail:* *Created on* 22/06/2009. *Last modified on* 5/07/2013.

*Notes:* -- Definition --

Data type representing the name and position of a residence of authority.

***Columns***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PK** | **Name** | **Type** | **Not Null** | **Unique** | **Len** | **Prec** | **Scale** | **Init** | **Notes** |
|  | name | GeographicalName |  |  | 0 | 0 | 0 |  | -- Definition --  Name of the residence of authority. |
|  | geometry | GM\_Point |  |  | 0 | 0 | 0 |  | -- Definition --  Position of the residence of authority. |

#### **UnincorporatedLand**

*Database:* Java, *Stereotype:* «featureType», *Package:* JurisdictionalUnit

*Detail:* *Created on* 14/04/2009. *Last modified on* 5/07/2013.

*Notes:* -- Definition --

An administrative area established independently to any national administrative division of territory and administered by two or more countries.

-- Description --

NOTE Condominium is not a part of any national administrative hierarchy of territory division in Member State.

***Columns***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PK** | **Name** | **Type** | **Not Null** | **Unique** | **Len** | **Prec** | **Scale** | **Init** | **Notes** |
|  | \_\_attrPlaceholder |  |  |  | 0 | 0 | 0 |  |  |

***Relationships***

| **Columns** | **Association** | **Notes** |
| --- | --- | --- |
| hasUnincorporatedLand | **0..\*** UnincorporatedLand.unincorporatedLand  **1..\*** Jurisdictional Units.admUnit |  |
|  | UnincorporatedLand.  UnitDefinition. |  |

### **LocalGovernmentUnit**

*Type:* **Package «Application Schema»**

*Package:* TWG Conceptual Model

*Detail:* *Created on 31/07/2013*. *Last modified on 31/07/2013.*

*Notes:*

**Local Government Units Model**

*Created By:* mroy on 27/06/2013

*Last Modified:* 31/07/2013, *Version:*1.0



Figure: 7

#### **LGA\_TypeTerm**

*Database:* Java, *Stereotype:* «CodeList», *Package:* LocalGovernmentUnit

*Detail:* *Created on* 31/07/2013. *Last modified on* 31/07/2013.

*Notes:* This class is an indicative placeholder only for a vocabulary of terms describing the type of local government unit. Users are encouraged to use the vocabulary of unit types provided by the FSDF vocabularies working group.

-- Description --

The naming conventions for local governments vary across Australia. They can be called cities, shires, towns, or municipalities, but they are still controlled by the state or territory government above them. The types of LGAs in each state and the Northern Territory are:

-- Example values --

Cities (C)

Areas (A)

Rural Cities (RC)

Boroughs (B)

Shires (S)

Towns (T)

Regional Councils (R)

Municipalities/Municipal Councils (M)

District Councils (DC)

Regional Councils (RegC)

Aboriginal Councils (AC)

#### **LocalGovernmentUnit**

*Database:* Java, *Stereotype:* «FeatureType», *Package:* LocalGovernmentUnit

*Detail:* *Created on* 27/06/2013. *Last modified on* 30/07/2013.

*Notes:*

***Columns***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PK** | **Name** | **Type** | **Not Null** | **Unique** | **Len** | **Prec** | **Scale** | **Init** | **Notes** |
|  | \_\_attrPlaceholder |  |  |  | 0 | 0 | 0 |  |  |
|  | LGAType | LGA\_TypeTerm |  |  |  |  |  |  |  |

***Relationships***

| **Columns** | **Association** | **Notes** |
| --- | --- | --- |
|  | LocalGovernmentUnit.  HierarchicalUnit. |  |
|  | <anonymous>.  LocalGovernmentUnit. |  |
|  | <anonymous>.  LocalGovernmentUnit. |  |

### **MaritimeUnit**

*Type:* **Package «Application Schema»**

*Package:* TWG Conceptual Model

*Detail:* *Created on 29/07/2013*. *Last modified on 29/07/2013.*

*Notes:*

**Maritime Units Model**

*Created By:* akmiecik on 28/05/2013

*Last Modified:* 9/07/2013, *Version:*1.0



Figure: 8

#### **Baseline**

*Database:* Java, *Stereotype:* «featureType», *Package:* MaritimeUnit

*Detail:* *Created on* 13/05/2012. *Last modified on* 26/06/2013.

*Notes:* -- Name --

baseline

-- Definition --

The line from which the outer limits of the territorial sea and certain other outer limits are measured.

-- Description --

The baseline comprises of one or more baseline segments - the baseline segment can be normal, straight or archipelagic depending on the method used to determine the baseline segment.

COMMENT: For this moment there is no clearly identified use-case that would require Baseline spatial object types, therefore it is not strictly necessary to include these objects in the dataset.

***Columns***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PK** | **Name** | **Type** | **Not Null** | **Unique** | **Len** | **Prec** | **Scale** | **Init** | **Notes** |
|  | beginLifespanVersion | DateTime |  |  | 0 | 0 | 0 |  | -- Definition --  Date and time at which this version of the spatial object was inserted or changed in the spatial data set. |
|  | endLifespanVersion | DateTime |  |  | 0 | 0 | 0 |  | -- Definition --  Date and time at which this version of the spatial object was superseded or retired in the spatial data set. |
|  | fsdfID | Identifier |  |  | 0 | 0 | 0 |  | -- Definition --  External object identifier of the spatial object.  -- Description --  NOTE An external object identifier is a unique object identifier published by the responsible body, which may be used by external applications to reference the spatial object. The identifier is an identifier of the spatial object, not an identifier of the real-world phenomenon. |

#### **BaselineSegment**

*Database:* Java, *Stereotype:* «featureType», *Package:* MaritimeUnit

*Detail:* *Created on* 25/05/2012. *Last modified on* 26/06/2013.

*Notes:* -- Name --

baseline segment

-- Definition --

Segment of the baseline from which the outer limits of the territorial sea and certain other outer limits are measured.

***Columns***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PK** | **Name** | **Type** | **Not Null** | **Unique** | **Len** | **Prec** | **Scale** | **Init** | **Notes** |
|  | segmentType | BaselineSegmentType |  |  | 0 | 0 | 0 |  | -- Name --  segment type  -- Definition --  The baseline type used for this segment.  -- Description --  The type can be 'normal', 'straight' or 'archipelagic'. |

***Relationships***

| **Columns** | **Association** | **Notes** |
| --- | --- | --- |
|  | BaselineSegment.  AreaBoundary. |  |
|  | **1..\*** BaselineSegment.segment  Baseline. |  |

#### **BaselineSegmentType**

*Database:* Java, *Stereotype:* «codeList», *Package:* MaritimeUnit

*Detail:* *Created on* 13/05/2012. *Last modified on* 26/06/2013.

*Notes:* -- Definition --

The types of baselines used to measure the breadth of the territorial sea.

-- Description--

The territorial sea baseline may be of various types depending upon the shape of the coastline in any given locality:

The Normal baseline corresponds with the low water line along the coast, including the coasts of islands. Under the Convention, normal baseline can be drawn around low tide elevations which are defined as naturally formed areas of land surrounded by and above water at low tide but submerged at high tide, provided they are wholly or partly within 12 nautical miles of the coast. For Australian purposes, normal baseline corresponds to the level of Lowest Astronomical Tide (LAT).

Straight baselines are a system of straight lines joining specified or discrete points on the low-water line, usually known as straight baseline end points. These may be used in localities where the coastline is deeply indented and cut into, or where there is a fringe of islands along the coast in its immediate vicinity.

Bay or river closing lines are straight lines drawn between the respective low-water marks of the natural entrance points of bays or rivers.

***Columns***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PK** | **Name** | **Type** | **Not Null** | **Unique** | **Len** | **Prec** | **Scale** | **Init** | **Notes** |
|  | archipelagic |  |  |  | 0 | 0 | 0 |  | -- Definition --  The baseline for measuring the breadth of the territorial sea is the straight baseline joining the outermost points of the outermost islands and drying reefs of the archipelago.  -- Description --  SOURCE Article 47 of the United Nations Convention on the Law of the Sea. |
|  | normal |  |  |  | 0 | 0 | 0 |  | -- Definition --  The normal baseline for measuring the breadth of the territorial sea is the low-water line along the coast as marked on large-scale charts officially recognized by the coastal State.  -- Description --  SOURCE Article 5 of the United Nations Convention on the Law of the Sea. |
|  | straight |  |  |  | 0 | 0 | 0 |  | --Definition--  The baseline for measuring the breadth of the territorial sea is the straight baseline established by joining the appropriate points.  -- Description --  SOURCE Article 7 of the United Nations Convention on the Law of the Sea. |

#### **Coastal Water**

*Database:* Java, *Stereotype:* «featureType», *Package:* MaritimeUnit

*Detail:* *Created on* 4/03/2012. *Last modified on* 24/06/2013.

*Notes:* -- Name --

territorial sea

-- Definition --

A belt of sea of a defined breadth not exceeding 12 nautical miles measured from the baselines determined in accordance to the United Nations Convention of Law on the Sea.

-- Description --

SOURCE IHO Dictionary, S-32, Fifth Edition.

NOTE The sovereignty of a coastal State extends, beyond its land territory and internal waters and, in the case of an archipelagic State, its archipelagic waters, to an adjacent belt of sea, is described as the territorial sea. This sovereignty extends to the air space over the territorial sea as well as to its bed and subsoil.

The sovereignty over the territorial sea is exercised subject to the United Nations Convention of Law on the Sea (UNCLOS) and to other rules of international law.

***Relationships***

| **Columns** | **Association** | **Notes** |
| --- | --- | --- |
|  | Coastal Water.  MaritimeUnit. |  |

#### **ContiguousZone**

*Database:* Java, *Stereotype:* «featureType», *Package:* MaritimeUnit

*Detail:* *Created on* 4/03/2012. *Last modified on* 24/06/2013.

*Notes:* -- Name --

contiguous zone

-- Definition --

A zone contiguous to a territorial sea of a coastal State, which may not extend beyond 24 nautical miles from the baselines from which the breadth of the territorial sea is measured.

-- Description --

SOURCE IHO Dictionary,S-32, 5th Edition.

NOTE 1 The contiguous zone is adjacent to the territorial sea of a coastal State.

NOTE 2 In the contiguous zone a coastal State may exercise the control necessary to prevent and punish infringements of its customs, fiscal, immigration, or sanitary laws and regulations within its territory or territorial sea. See also Article 33 of United Nations Convention on the Law of the Sea.

***Relationships***

| **Columns** | **Association** | **Notes** |
| --- | --- | --- |
|  | ContiguousZone.  MaritimeUnit. |  |

#### **ContinentalShelf**

*Database:* Java, *Stereotype:* «featureType», *Package:* MaritimeUnit

*Detail:* *Created on* 20/05/2012. *Last modified on* 24/06/2013.

*Notes:* -- Name --

continental shelf

-- Definition --

A maritime zone beyond and adjacent to the a territorial sea of a coastal State whose outer boundary is determined in accordance with Article 76 of the United Nations Convention on the Law of the Sea.

-- Description --

NOTE 1 The continental shelf is adjacent to the territorial sea of a coastal State. The continental shelf overlaps with the extent of contiguous zone and exclusive economic zone of a coastal State.

NOTE 2 Art. 76 of the United Nations Convention on the Law of the Sea:

1. The continental shelf of a coastal State comprises the seabed and subsoil of the submarine areas that extend beyond its territorial sea throughout the natural prolongation of its land territory to the outer edge of the continental margin, or to a distance of 200 nautical miles from the baselines from which the breadth of the territorial sea is measured where the outer edge of the continental margin does not extend up to that distance.

2. The continental shelf of a coastal State shall not extend beyond the limits provided for in paragraphs 4 to 6.

3. The continental margin comprises the submerged prolongation of the land mass of the coastal State, and consists of the seabed and subsoil of the shelf, the slope and the rise. It does not include the deep ocean floor with its oceanic ridges or the subsoil thereof.

4. (a) For the purposes of this Convention, the coastal State shall establish the outer edge of the continental margin wherever the margin extends beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured, by either:

(i) a line delineated in accordance with paragraph 7 by reference to the outermost fixed points at each of which the thickness of sedimentary rocks is at least 1 per cent of the shortest distance from such point to the foot of the continental slope; or

(ii) a line delineated in accordance with paragraph 7 by reference to fixed points not more than 60 nautical miles from the foot of the continental slope.

(b) In the absence of evidence to the contrary, the foot of the continental slope shall be determined as the point of maximum change in the gradient at its base.

5. The fixed points comprising the line of the outer limits of the continental shelf on the seabed, drawn in accordance with paragraph 4 (a)(i) and (ii), either shall not exceed 350 nautical miles from the baselines from which the breadth of the territorial sea is measured or shall not exceed 100 nautical miles from the 2,500 metre isobath, which is a line connecting the depth of 2,500 metres.

6. Notwithstanding the provisions of paragraph 5, on submarine ridges, the outer limit of the continental shelf shall not exceed 350 nautical miles from the baselines from which the breadth of the territorial sea is measured. This paragraph does not apply to submarine elevations that are natural components of the continental margin, such as its plateaux, rises, caps, banks and spurs.

7. The coastal State shall delineate the outer limits of its continental shelf, where that shelf extends beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured, by straight lines not exceeding 60 nautical miles in length, connecting fixed points, defined by coordinates of latitude and longitude.

8. Information on the limits of the continental shelf beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured shall be submitted by the coastal State to the Commission on the Limits of the Continental Shelf set up under Annex II on the basis of equitable geographical representation. The Commission shall make recommendations to coastal States on matters related to the establishment of the outer limits of their continental shelf. The limits of the shelf established by a coastal State on the basis of these recommendations shall be final and binding.

9. The coastal State shall deposit with the Secretary-General of the United Nations charts and relevant information, including geodetic data, permanently describing the outer limits of its continental shelf. The Secretary-General shall give due publicity thereto.

10. The provisions of this article are without prejudice to the question of delimitation of the continental shelf between States with opposite or adjacent coasts.

***Relationships***

| **Columns** | **Association** | **Notes** |
| --- | --- | --- |
|  | ContinentalShelf.  MaritimeUnit. |  |

#### **ExclusiveEconomicZone**

*Database:* Java, *Stereotype:* «featureType», *Package:* MaritimeUnit

*Detail:* *Created on* 4/03/2012. *Last modified on* 24/06/2013.

*Notes:* -- Name --

exclusive economic zone

-- Definition --

An area beyond and adjacent to the territorial sea of a coastal State, subject to the specific legal regime under which the rights and jurisdiction of the coastal State and the rights and freedoms of other States are governed by the relevant provisions of the United Nations Convention on Law of the Sea.

-- Description --

SOURCE Article 55 of United Nations Convention on the Law of the Sea.

NOTE 1 The exclusive economic zone is adjacent to the territorial sea of a coastal State. Exclusive economic zone overlaps with the extent of contiguous zone of a coastal State.

NOTE 2 Under the United Nations Convention on the Law of the Sea (UNCLOS), the coastal States are entitled to an exclusive economic zone extending no further than 200 nautical miles from the baselines from which the breadth of the Member State's territorial sea is measured.

NOTE 3 In contrast to the continental shelf, an exclusive economic zone must be explicitly proclaimed or installed by the coastal state and includes, besides the seabed and its subsoil, the waters super-adjacent to the seabed.

***Relationships***

| **Columns** | **Association** | **Notes** |
| --- | --- | --- |
|  | ExclusiveEconomicZone.  MaritimeUnit. |  |

#### **InternalWaters**

*Database:* Java, *Stereotype:* «featureType», *Package:* MaritimeUnit

*Detail:* *Created on* 4/03/2012. *Last modified on* 24/06/2013.

*Notes:* --Name--

internal waters

--Definition--

The waters on the landward side of the baselines of the territorial sea of the coastal State.

--Description--

SOURCE Article 5 of United Nations Convention of Law on the Sea.

NOTE 1 The internal waters is the zone between the shoreline and the baseline (see the Data Specification for „Sea Regions” INSPIRE theme). The delineation of the landward boundary of the internal waters is regulated differently in different countries.

NOTE 2 The internal waters can include waterways, mouths of the rivers and bays.

***Relationships***

| **Columns** | **Association** | **Notes** |
| --- | --- | --- |
|  | InternalWaters.  MaritimeUnit. |  |

#### **MaritimeAreaDefinition**

*Database:* Java, *Stereotype:* «featureType», *Package:* MaritimeUnit

*Detail:* *Created on* 4/03/2012. *Last modified on* 24/06/2013.

*Notes:* -- Name --

maritime zone

-- Definition --

A belt of sea defined by international treaties and conventions, where coastal State executes jurisdictional rights.

-- Description --

NOTE 1 The zone is established for e.g. cadastral, administrative, economic, security or safety purposes. It is not established for environmental management or regulation, which is covered by the theme Area management/restriction/regulation zones and reporting areas, or for environmental protection, which is covered by the theme Protected sites.

NOTE 2 The maritime zone can be either internal waters, territorial sea, contiguous zone, exclusive economic zone or continental shelf.

***Relationships***

| **Columns** | **Association** | **Notes** |
| --- | --- | --- |
|  | MaritimeAreaDefinition.  **1..\*** Baseline.baseline |  |
|  | MaritimeAreaDefinition.  Jurisdictional Area Definition. |  |
|  | **1** MaritimeAreaDefinition.  **0..1** MaritimeAreaRepresentation. |  |
|  | MaritimeUnit.  **1..\*** MaritimeAreaDefinition.definedArea |  |

#### **MaritimeAreaRepresentation**

*Database:* Java, *Stereotype:* «featureType», *Package:* MaritimeUnit

*Detail:* *Created on* 24/06/2013. *Last modified on* 25/06/2013.

*Notes:*

***Relationships***

| **Columns** | **Association** | **Notes** |
| --- | --- | --- |
|  | **1..\*** MaritimeAreaRepresentation.  **1..\*** MaritimeBoundary.maritimeBoundaries |  |
|  | MaritimeAreaRepresentation.  AreaRepresentation. |  |
|  | **1** MaritimeAreaDefinition.  **0..1** MaritimeAreaRepresentation. |  |

#### **MaritimeBoundary**

*Database:* Java, *Stereotype:* «featureType», *Package:* MaritimeUnit

*Detail:* *Created on* 4/03/2012. *Last modified on* 24/06/2013.

*Notes:* -- Name --

maritime zone

-- Definition --

A belt of sea defined by international treaties and conventions, where coastal State executes jurisdictional rights.

-- Description --

NOTE 1 The zone is established for e.g. cadastral, administrative, economic, security or safety purposes. It is not established for environmental management or regulation, which is covered by the theme Area management/restriction/regulation zones and reporting areas, or for environmental protection, which is covered by the theme Protected sites.

NOTE 2 The maritime zone can be either internal waters, territorial sea, contiguous zone, exclusive economic zone or continental shelf.

***Relationships***

| **Columns** | **Association** | **Notes** |
| --- | --- | --- |
|  | MaritimeBoundary.  AreaBoundary. |  |
|  | **1..\*** MaritimeAreaRepresentation.  **1..\*** MaritimeBoundary.maritimeBoundaries |  |

#### **MaritimeUnit**

*Database:* Java, *Stereotype:* «featureType», *Package:* MaritimeUnit

*Detail:* *Created on* 4/03/2012. *Last modified on* 24/06/2013.

*Notes:* -- Name --

maritime zone

-- Definition --

A belt of sea defined by international treaties and conventions, where coastal State executes jurisdictional rights.

-- Description --

NOTE 1 The zone is established for e.g. cadastral, administrative, economic, security or safety purposes. It is not established for environmental management or regulation, which is covered by the theme Area management/restriction/regulation zones and reporting areas, or for environmental protection, which is covered by the theme Protected sites.

NOTE 2 The maritime zone can be either internal waters, territorial sea, contiguous zone, exclusive economic zone or continental shelf.

***Columns***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PK** | **Name** | **Type** | **Not Null** | **Unique** | **Len** | **Prec** | **Scale** | **Init** | **Notes** |
|  | country | CountryCode |  |  | 0 | 0 | 0 |  | -- Name --  country  -- Definition --  The country that executes jurisdictional rights on the maritime zone. |
|  | name | GeographicalName |  |  | 0 | 0 | 0 |  | -- Name --  name  -- Definition --  Name(s) of the maritime zone. |
|  | rangeInNauticalMiles | int |  |  | 0 | 0 | 0 |  |  |

***Relationships***

| **Columns** | **Association** | **Notes** |
| --- | --- | --- |
|  | MaritimeUnit.  UnitDefinition. |  |
| subsumesMaritimeUnit | **0..\*** MaritimeUnit.  **0..\*** MaritimeUnit. |  |
| bordersMaritimeUnit | **1..\*** MaritimeUnit.  **1..\*** MaritimeUnit. | -- Description --  MaritimeUnits border other Maritime Units, e.g., CZ and TS |
|  | MaritimeUnit.  **1..\*** MaritimeAreaDefinition.definedArea |  |
|  | ContiguousZone.  MaritimeUnit. |  |
|  | TerritorialSea.  MaritimeUnit. |  |
|  | ExclusiveEconomicZone.  MaritimeUnit. |  |
|  | Coastal Water.  MaritimeUnit. |  |
|  | InternalWaters.  MaritimeUnit. |  |
| subsumesMaritimeUnit | **0..\*** MaritimeUnit.  **0..\*** MaritimeUnit. |  |
| bordersMaritimeUnit | **1..\*** MaritimeUnit.  **1..\*** MaritimeUnit. | -- Description --  MaritimeUnits border other Maritime Units, e.g., CZ and TS |
|  | ContinentalShelf.  MaritimeUnit. |  |

#### **TerritorialSea**

*Database:* Java, *Stereotype:* «featureType», *Package:* MaritimeUnit

*Detail:* *Created on* 4/03/2012. *Last modified on* 24/06/2013.

*Notes:* -- Name --

territorial sea

-- Definition --

A belt of sea of a defined breadth not exceeding 12 nautical miles measured from the baselines determined in accordance to the United Nations Convention of Law on the Sea.

-- Description --

SOURCE IHO Dictionary, S-32, Fifth Edition.

NOTE The sovereignty of a coastal State extends, beyond its land territory and internal waters and, in the case of an archipelagic State, its archipelagic waters, to an adjacent belt of sea, is described as the territorial sea. This sovereignty extends to the air space over the territorial sea as well as to its bed and subsoil.

The sovereignty over the territorial sea is exercised subject to the United Nations Convention of Law on the Sea (UNCLOS) and to other rules of international law.

***Relationships***

| **Columns** | **Association** | **Notes** |
| --- | --- | --- |
|  | TerritorialSea.  MaritimeUnit. |  |

### **PostalCodeUnit**

*Type:* **Package «Application Schema»**

*Package:* TWG Conceptual Model

*Detail:* *Created on 30/07/2013*. *Last modified on 30/07/2013.*

*Notes:*

**Postal Codes Model**

*Created By:* mroy on 27/06/2013

*Last Modified:* 30/07/2013, *Version:*1.0



Figure: 9

#### **Postal Code**

*Database:* Java, *Stereotype:* «featureType», *Package:* PostalCodeUnit

*Detail:* *Created on* 27/06/2013. *Last modified on* 27/06/2013.

*Notes:*

***Columns***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PK** | **Name** | **Type** | **Not Null** | **Unique** | **Len** | **Prec** | **Scale** | **Init** | **Notes** |
|  | \_\_attrPlaceholder |  |  |  | 0 | 0 | 0 |  |  |

***Relationships***

| **Columns** | **Association** | **Notes** |
| --- | --- | --- |
|  | Postal Code .  UnitDefinition. |  |

### **StatisticalUnit**

*Type:* **Package «Application Schema»**

*Package:* TWG Conceptual Model

*Detail:* *Created on 30/07/2013*. *Last modified on 30/07/2013.*

*Notes:*

**Statistical Units Model**

*Created By:* julien Gaffuri on 29/05/2013

*Last Modified:* 30/07/2013, *Version:*1.0



Figure: 10

#### **ED\_Approximation**

*Database:* Java, *Stereotype:* «FeatureType», *Package:* StatisticalUnit

*Detail:* *Created on* 30/07/2013. *Last modified on* 30/07/2013.

*Notes:*

***Columns***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PK** | **Name** | **Type** | **Not Null** | **Unique** | **Len** | **Prec** | **Scale** | **Init** | **Notes** |
|  | \_\_attrPlaceholder |  |  |  | 0 | 0 | 0 |  |  |

***Relationships***

| **Columns** | **Association** | **Notes** |
| --- | --- | --- |
|  | ED\_Approximation.  Unit Approximation. |  |
|  | <anonymous>.  ED\_Approximation. |  |

#### **GeneralisedGeometryDescriptor**

*Database:* Java, *Stereotype:* «dataType», *Package:* StatisticalUnit

*Detail:* *Created on* 26/10/2010. *Last modified on* 5/07/2013.

*Notes:* -- Definition --

A vector statistical unit geometry descriptor for generalised geometry. Such geometry is characterised by a suitable scale range.

***Columns***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PK** | **Name** | **Type** | **Not Null** | **Unique** | **Len** | **Prec** | **Scale** | **Init** | **Notes** |
|  | mostDetailedScale | Integer |  |  | 0 | 0 | 0 |  | -- Definition --  The most detailled scale the generalised geometry is supposed to be suitable for (expressed as the inverse of an indicative scale). |
|  | lessDetailledScale | Integer |  |  | 0 | 0 | 0 |  | -- Definition --  The less detailled scale the generalised geometry is supposed to be suitable for (expressed as the inverse of an indicative scale). |

***Relationships***

| **Columns** | **Association** | **Notes** |
| --- | --- | --- |
|  | GeneralisedGeometryDescriptor.  GeometryDescriptor. |  |

#### **GeometryDescriptor**

*Database:* Java, *Stereotype:* «dataType», *Package:* StatisticalUnit

*Detail:* *Created on* 26/10/2010. *Last modified on* 5/07/2013.

*Notes:* -- Definition --

A descriptor for a vector statistical unit geometry.

***Columns***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PK** | **Name** | **Type** | **Not Null** | **Unique** | **Len** | **Prec** | **Scale** | **Init** | **Notes** |
|  | geometryType | GeometryType |  |  | 0 | 0 | 0 |  | -- Definition --  The geometry type, among the *GeometryType* codelist. |

#### **GeometryType**

*Database:* Java, *Stereotype:* «codeList», *Package:* StatisticalUnit

*Detail:* *Created on* 26/10/2010. *Last modified on* 5/07/2013.

*Notes:* -- Definition --

Codes to describe vector statistical unit geometry types.

***Columns***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PK** | **Name** | **Type** | **Not Null** | **Unique** | **Len** | **Prec** | **Scale** | **Init** | **Notes** |
|  | referenceGeometry |  |  |  | 0 | 0 | 0 |  | -- Definition --  The described geometry is the reference geometry.  NOTE For all statistical units, exactlly one reference geometry should be defined. |
|  | pointLabel |  |  |  | 0 | 0 | 0 |  | -- Definition --  The described geometry is a point geometry for labeling.  -- Description --  Of course, geometries having this type should be points. |
|  | centerOfGravity |  |  |  | 0 | 0 | 0 |  | -- Definition --  The described geometry is a point geometry located at the center of gravity of the unit.  -- Description --  Of course, geometries having this type should be points. |
|  | generalisedGeometry |  |  |  | 0 | 0 | 0 |  | -- Definition --  A generalised geometry of the statistical unit.  -- Description --  Geometries having such a code must have a descriptor for generalised geometries. |
|  | other |  |  |  | 0 | 0 | 0 |  | -- Definition --  Other kind of geometry type. |

#### **GridPosition**

*Database:* Java, *Stereotype:* «DataType», *Package:* StatisticalUnit

*Detail:* *Created on* 9/06/2011. *Last modified on* 30/07/2013.

*Notes:* -- Definition --

A grid cell position within a grid.

***Columns***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PK** | **Name** | **Type** | **Not Null** | **Unique** | **Len** | **Prec** | **Scale** | **Init** | **Notes** |
|  | x | Integer |  |  | 0 | 0 | 0 |  | -- Definition --  The position of the cell on the horizontal axis, starting from the left side, toward the right, from 0 to the grid width -1. |
|  | y | Integer |  |  | 0 | 0 | 0 |  | -- Definition --  The position of the cell on the vertical axis, starting from the bottom toward the top, from 0 to the grid height -1. |

#### **GridTessellation**

*Database:* Java, *Stereotype:* «FeatureType», *Package:* StatisticalUnit

*Detail:* *Created on* 7/09/2010. *Last modified on* 30/07/2013.

*Notes:* -- Definition --

A grid composed of statistical cells.

-- Description --

Such grid is associated with an upper grid, that has a bigger resolution, and a lower grid that has a lower resolution. Some statistical grids are organised into a hierarchy of grids with different resolutions. The cells composing two linked grids have to satisfy some topological constraints: each cell of the upper grid should be the aggregation of cells of the lower grid.

EXAMPLE The hierarchical structure is a quadtree if the grids are composed of quadrilateral cells and each cell is composed of less than four cells of the lower level.

***Columns***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PK** | **Name** | **Type** | **Not Null** | **Unique** | **Len** | **Prec** | **Scale** | **Init** | **Notes** |
|  | height | Integer |  |  | 0 | 0 | 0 |  | -- Definition --  The grid height, in cell number (if defined). |
|  | origin | DirectPosition |  |  | 0 | 0 | 0 |  | -- Definition --  The position of the origin point of the grid in the specified coordinate reference system (if defined).  -- Description --  The origin point is the lower left grid point. |
|  | resolution | StatisticalUnitGridResolution |  |  | 0 | 0 | 0 |  | -- Definition --  The grid resolution. |
|  | width | Integer |  |  | 0 | 0 | 0 |  | -- Definition --  The grid width, in cell number (if defined). |
|  | \_\_SomeKindOfCoordinateReferenceSystemCode |  |  |  |  |  |  |  |  |

***Relationships***

| **Columns** | **Association** | **Notes** |
| --- | --- | --- |
|  | GridTessellation.  StatisticalTessellation. |  |

#### **LGA\_Approximation**

*Database:* Java, *Stereotype:* «FeatureType», *Package:* StatisticalUnit

*Detail:* *Created on* 19/06/2013. *Last modified on* 30/07/2013.

*Notes:*

***Columns***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PK** | **Name** | **Type** | **Not Null** | **Unique** | **Len** | **Prec** | **Scale** | **Init** | **Notes** |
|  | \_\_attrPlaceholder |  |  |  | 0 | 0 | 0 |  |  |

***Relationships***

| **Columns** | **Association** | **Notes** |
| --- | --- | --- |
|  | LGA\_Approximation .  Unit Approximation. |  |
|  | <anonymous>.  LGA\_Approximation . |  |

#### **PC\_Approximation**

*Database:* Java, *Stereotype:* «featureType», *Package:* StatisticalUnit

*Detail:* *Created on* 27/06/2013. *Last modified on* 30/07/2013.

*Notes:*

***Columns***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PK** | **Name** | **Type** | **Not Null** | **Unique** | **Len** | **Prec** | **Scale** | **Init** | **Notes** |
|  | \_\_attrPlaceholder |  |  |  | 0 | 0 | 0 |  |  |

***Relationships***

| **Columns** | **Association** | **Notes** |
| --- | --- | --- |
|  | PC\_Approximation.  Unit Approximation. |  |
|  | <anonymous>.  PC\_Approximation. |  |

#### **StatisticalTessellation**

*Database:* Java, *Stereotype:* , *Package:* StatisticalUnit

*Detail:* *Created on* 7/09/2010. *Last modified on* 30/07/2013.

*Notes:* -- Definition --

A tesselation composed of area statistical units.

***Columns***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PK** | **Name** | **Type** | **Not Null** | **Unique** | **Len** | **Prec** | **Scale** | **Init** | **Notes** |
|  | \_\_attrPlaceholder |  |  |  | 0 | 0 | 0 |  |  |

***Relationships***

| **Columns** | **Association** | **Notes** |
| --- | --- | --- |
| hierarchical Relation | **0..1** StatisticalTessellation.lowerTessellation  **0..1** StatisticalTessellation.upperTessellation | -- Definition --  The hierarchical relation between statistical tessellations. |
|  | StatisticalTessellation.  UnitHierarchy. |  |
|  | <anonymous>.  StatisticalTessellation. |  |
| hierarchical Relation | **0..1** StatisticalTessellation.lowerTessellation  **0..1** StatisticalTessellation.upperTessellation | -- Definition --  The hierarchical relation between statistical tessellations. |
|  | <anonymous>.  StatisticalTessellation. |  |
|  | GridTessellation.  StatisticalTessellation. |  |
|  | VectorTessellation.  StatisticalTessellation. |  |
| Tessellation | **0..\*** StatisticalUnit.units  **0..1** StatisticalTessellation.tesselation | -- Definition --  The composition between a statistical tesselation and its composing area statistical units. |

#### **StatisticalUnit**

*Database:* Java, *Stereotype:* «FeatureType», *Package:* StatisticalUnit

*Detail:* *Created on* 7/09/2010. *Last modified on* 30/07/2013.

*Notes:* -- Definition --

Unit for dissemination or use of statistical information.

-- Description --

SOURCE [INSPIRE Directive:2007].

\*\*\*NOTE The Australian Statistical Geography Standard (ASGS) is the Australian Bureau of Statistics' new geographical framework and it is effective from July 2011. The ASGS replaces the Australian Standard Geographical Classification (ASGC). The ASGS has been utilised for release of data from the 2011 Census of Population and Housing, however 2011 Census data is also available on ASGC Statistical Local Areas (SLAs). The vast majority of ABS spatial data will be based on the ASGS by 2014.

The ASGS subdivides each jurisdiction into a number of statistical area units. Seven levels from country down to MeshBlock (level7).

http://www.abs.gov.au/websitedbs/D3310114.nsf/home/Australian+Statistical+Geography+Standard+(ASGS)

\*\*\*NOTE The New Zealand Harmonised System Classification 2012 is one of several standards used to define statistical units within NZ.

http://www.stats.govt.nz/surveys\_and\_methods/methods/classifications-and-standards/classification-related-stats-standards/harmonised-system-2012.aspx

EXAMPLE grid cell, point, line, polygon.

NOTE Spatial features of any INSPIRE application schema can be considered as a statistical unit, because all can be used as spatial reference. This class is provided to represent features that are used only to disseminate statistical information and that are not included in another INSPIRE application schema.

***Columns***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PK** | **Name** | **Type** | **Not Null** | **Unique** | **Len** | **Prec** | **Scale** | **Init** | **Notes** |
|  | \_\_attrPlaceholder |  |  |  | 0 | 0 | 0 |  |  |

***Relationships***

| **Columns** | **Association** | **Notes** |
| --- | --- | --- |
|  | StatisticalUnit.  HierarchicalUnit. |  |
| Tessellation | **0..\*** StatisticalUnit.units  **0..1** StatisticalTessellation.tesselation | -- Definition --  The composition between a statistical tesselation and its composing area statistical units. |
|  | StatisticalUnitVector.  StatisticalUnit. |  |
|  | <anonymous>.  StatisticalUnit. |  |
|  | StatisticalUnitCell.  StatisticalUnit. |  |

#### **StatisticalUnitCell**

*Database:* Java, *Stereotype:* «FeatureType», *Package:* StatisticalUnit

*Detail:* *Created on* 28/05/2010. *Last modified on* 30/07/2013.

*Notes:* -- Definition --

Unit for dissemination or use of statistical information that is represented as a grid cell.

-- Description --

A statistical grid cell is associated with:

- the unique statistical grid cell of its upper level (if any) it is covered by,

- the statistical grid cells of its lower level (if any) it covers.

NB Statistical grid cells are squares.

EXAMPLE In a quadtree structure, some cells are associated with the four cells they are decomposed into.

***Columns***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PK** | **Name** | **Type** | **Not Null** | **Unique** | **Len** | **Prec** | **Scale** | **Init** | **Notes** |
|  | geographicalPosition | DirectPosition |  |  | 0 | 0 | 0 |  | -- Definition --  The grid cell lower left cell corner geographical position. |
|  | geometry | GM\_Polygon |  |  | 0 | 0 | 0 |  | -- Definition --  The grid cell geometry. |
|  | gridPosition | GridPosition |  |  | 0 | 0 | 0 |  | -- Definition --  The grid cell position within the grid based on the grid coordinates. |

***Relationships***

| **Columns** | **Association** | **Notes** |
| --- | --- | --- |
|  | StatisticalUnitCell.  StatisticalUnit. |  |

#### **StatisticalUnitGridResolution**

*Database:* Java, *Stereotype:* «union», *Package:* StatisticalUnit

*Detail:* *Created on* 9/06/2011. *Last modified on* 30/07/2013.

*Notes:* -- Definition --

A statistical unit resolution value.

-- Definition --

The resolution can be a distance or an angle.

***Columns***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PK** | **Name** | **Type** | **Not Null** | **Unique** | **Len** | **Prec** | **Scale** | **Init** | **Notes** |
|  | lengthResolution | Length |  |  | 0 | 0 | 0 |  | -- Definition --  A distance resolution. |
|  | angleResolution | Angle |  |  | 0 | 0 | 0 |  | -- Definition --  An angle resolution. |

#### **StatisticalUnitVector**

*Database:* Java, *Stereotype:* «FeatureType», *Package:* StatisticalUnit

*Detail:* *Created on* 28/05/2010. *Last modified on* 30/07/2013.

*Notes:* -- Definition --

A statistical unit is represented as an area representation (i.e., GM\_MultiSurface) - it has a reference to area definition describing a temporal definition of the the geometric representation of the statistical vector unit.

***Relationships***

| **Columns** | **Association** | **Notes** |
| --- | --- | --- |
|  | StatisticalUnitVector.  StatisticalUnit. |  |
|  | StatisticalUnitVector.  AreaDefinition. |  |
|  | StatisticalUnitVector.  Jurisdictional Area Definition. |  |

#### **VectorStatisticalUnitGeometry**

*Database:* Java, *Stereotype:* «dataType», *Package:* StatisticalUnit

*Detail:* *Created on* 21/10/2010. *Last modified on* 5/07/2013.

*Notes:* -- Definition --

A geometrical representation for vector statistical units.

-- Description --

Vector statistical units can have several representations depending on the context they are used for. It is adviced to produce at least one reference geometry.

EXAMPLE1: A vector statistical units may be represented both by an area and a point geometry. Such point can be the center of gravity or a label location.

EXAMPLE2: For mapping, different generalised representations of vector statistical units are required. These geometries depend on the visualisation scale.

***Columns***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PK** | **Name** | **Type** | **Not Null** | **Unique** | **Len** | **Prec** | **Scale** | **Init** | **Notes** |
|  | geometry | GM\_Object |  |  | 0 | 0 | 0 |  | -- Definition --  The geometry. |
|  | geometryDescriptor | GeometryDescriptor |  |  | 0 | 0 | 0 |  | -- Definition --  The statistical unit geometry descriptor. |

#### **VectorTessellation**

*Database:* Java, *Stereotype:* «FeatureType», *Package:* StatisticalUnit

*Detail:* *Created on* 7/09/2010. *Last modified on* 30/07/2013.

*Notes:* -- Definition --

A grid composed of statistical cells.

-- Description --

Such grid is associated with an upper grid, that has a bigger resolution, and a lower grid that has a lower resolution. Some statistical grids are organised into a hierarchy of grids with different resolutions. The cells composing two linked grids have to satisfy some topological constraints: each cell of the upper grid should be the aggregation of cells of the lower grid.

EXAMPLE The hierarchical structure is a quadtree if the grids are composed of quadrilateral cells and each cell is composed of less than four cells of the lower level.

***Columns***

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PK** | **Name** | **Type** | **Not Null** | **Unique** | **Len** | **Prec** | **Scale** | **Init** | **Notes** |
|  | \_\_attrPlaceholder |  |  |  | 0 | 0 | 0 |  |  |

***Relationships***

| **Columns** | **Association** | **Notes** |
| --- | --- | --- |
|  | VectorTessellation.  StatisticalTessellation. |  |