Information on current Commission's GIS

The core DGTREN GIS system is a geodatabase using Oracle 9i and ESRI ArcSDE 8.3. This geodatabase has two important reference networks: a general Euroglobalmap network and the TEN network (trans-European transport network).

The Euroglobalmap network contains the roads, railway and ferry lines of the Eurogeographics Euroglobalmap v. 1.0. It contains all railway lines, and all regional or national roads. Information can be referenced to this network using the unique identifier for each of the network edges.

The TEN network contains the road, railway and inland waterway links that make up the Trans European Networks. The TEN links are routes: they are associated with a measure so that features can be positioned along the links using linear referencing. Linear referencing is a technique in which (e.g.) a line feature is specified by ID of the route, and the positions of the start and the end of that line feature along the route (expressed in terms of the associated measure). In case of the TEN Links the associated measure is percentage of length.

> **The information should be referenced or linked to the TEN network, and not the Euroglobalmap network.**
>
> **Linear referencing techniques should be used for linking to the TEN network.**

Metadata is integrated with the Geodatabase and describes the meaning of all database objects to the level of attribute domain values. A complete UML data model is available that describes the design of the database.

The following diagrams show an extract of the database model, concerning specifically the TEN network :

Diagram 1 : TENLinks

TENLinks

ESRI Classes::**Feature**
+Shape

TENLink
- TENLinkID
- «SubtypeField» -TransportMode
- CountryCode
- StartNodeName
- EndNodeName
- LinkSource
- GuidelinesState1996
- GuidelinesType1996
- TENPriorProjectID1996
- GuidelinesState2001
- GuidelinesType2001
- TENPriorProjectID2001
- Shape
- GuidelinesState2003
- GuidelinesType2003
- TENPriorProjectID2003
- Shape.Len

TransportationEdgeIsCorridorPart
1..*
0..1

TransportationEdge
- TransportationEdgeID
- «SubtypeField» -FeatureCode
- CountryCode
- ERoadCountingPostID
- UICLineID
- TENLinkID1996
- TENLinkID2001
- CorridorID

1..* EdgeInTENLink2001   0..1

1..* EdgeInTENLink1996   0..1

Workspace::**Corridor**
- CorridorID
- NumberCorridor
- Length
- Cost
- TransportMode

«subtype»

Road
- FeatureCode = 1

Railway
- FeatureCode = 2

InlandWaterway
- FeatureCode = 3

FerryRoute
- FeatureCode = 4

«subtype»

TENRoadLink
- TransportMode = 1

TENRailLink
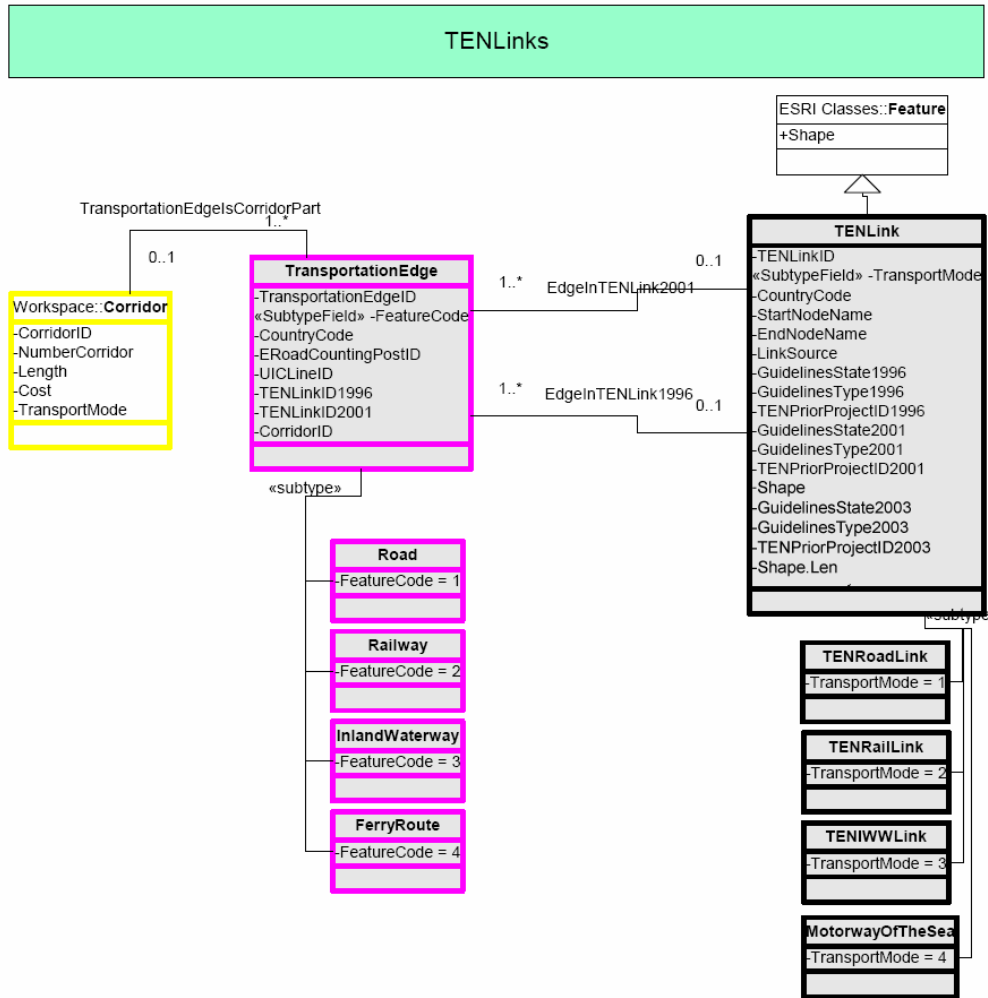- TransportMode = 2

TENIWWLink
- TransportMode = 3

MotorwayOfTheSea
- TransportMode = 4

Diagram 2 : TENAirports&Ports

TENAirports&Ports

TransportPoint
- TransportPointID
- «SubtypeField» -TransportationMode
- CountryCode

AirportIsTENAirport
0..1
0..1

Workspace::TENAirport
- TENAirportID
- AirportSystemID
- GuidelinesState1996
- GuidelinesType1996
- TENPriorProjectID1996
- GuidelinesState2001
- GuidelinesType2001
- TENPriorProjectID2001
- GuidelinesState2003
- GuidelinesType2003
- TENPriorProjectID2003

1..* AirportInSystem
0..1

Workspace::TENAirportSystem
- AirportSystemID

TENAirportSystemName
1
*

GETISFeatureName::NamedGETISFeature
- NameID
- «SubtypeField» -SourceObjectType
- Name
- ASCIIName
- LanguageCode
- AlphabetCode
- BoundingBox
- UpperRightCorner
- LowerLeftCorner
- SortName
- Source

«subtype»
0..1

Airport
- TransportationMode = 1

Port
- TransportationMode = 2

PortIsTENPort

Workspace::TENPortSystem
- PortsystemID
- Region
- Activity
- Type
- MaxDraught

Workspace::TENPort
- TENPortID
- PortSystemID
- TransShipmentFacilities
- GuidelinesState1996
- GuidelinesType1996
- TENPriorProjectID1996
- GuidelinesState2001
- GuidelinesType2001
- TENPriorProjectID2001
- GuidelinesState2003
- GuidelinesType2003
- TENPriorProjectID2003

0..1
0..1   1   TENPortSystemName
*

PortInSystem
1..*