

## ANNEX 7

### Information on current Commission's GIS

The core DGTREN GIS system is a geodatabase using Oracle 10g and ESRI ArcSDE 9.2. 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 available information (TEN network and TENInvest3 data from implementation report 2004-2005) most related to this study:

Diagram 1 : TENLinks

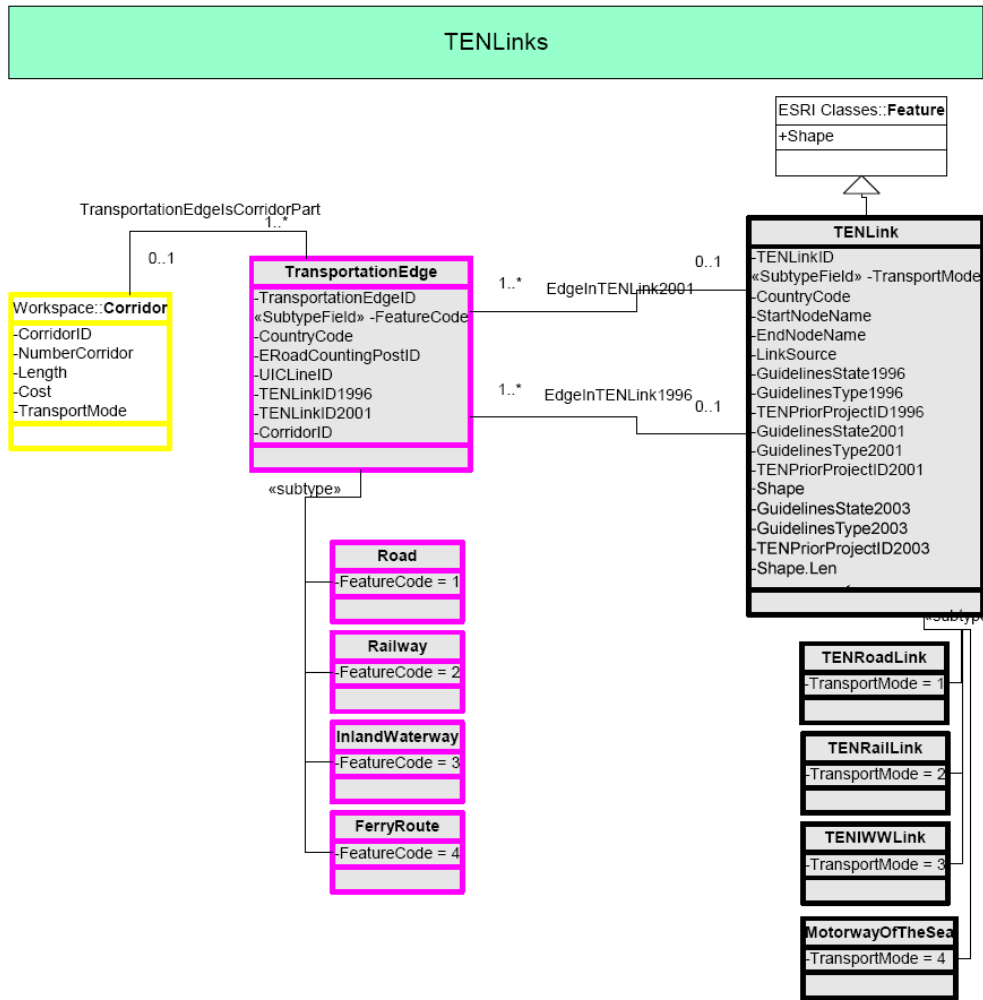


Diagram 2 : TENAirports&Ports

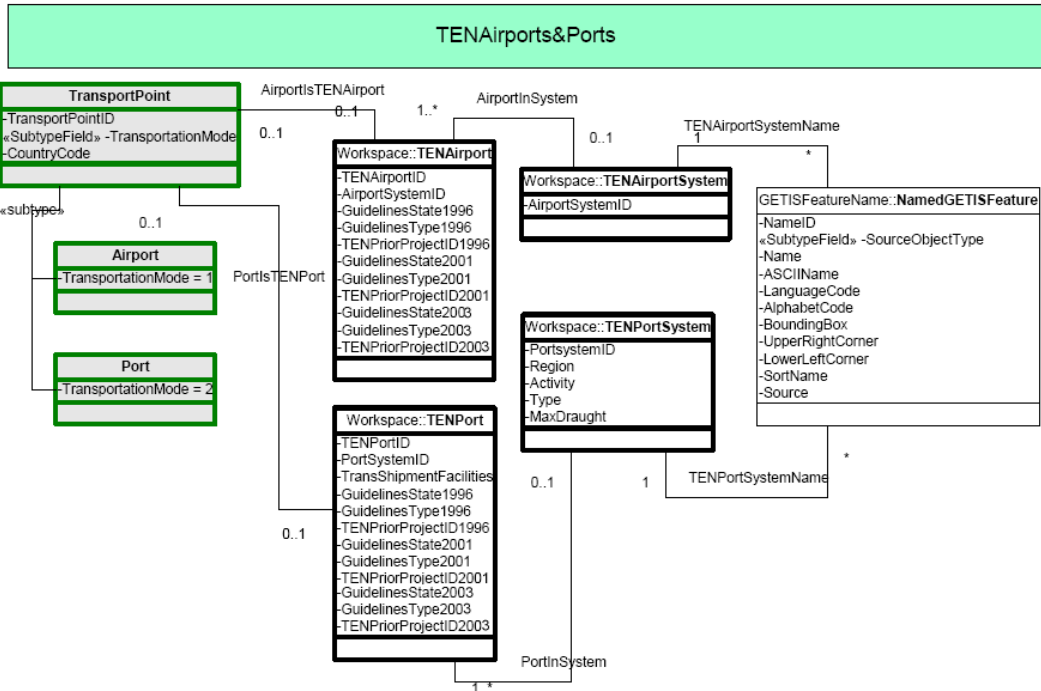


Diagram 3 : TENInvest3 inheritance diagram for roads

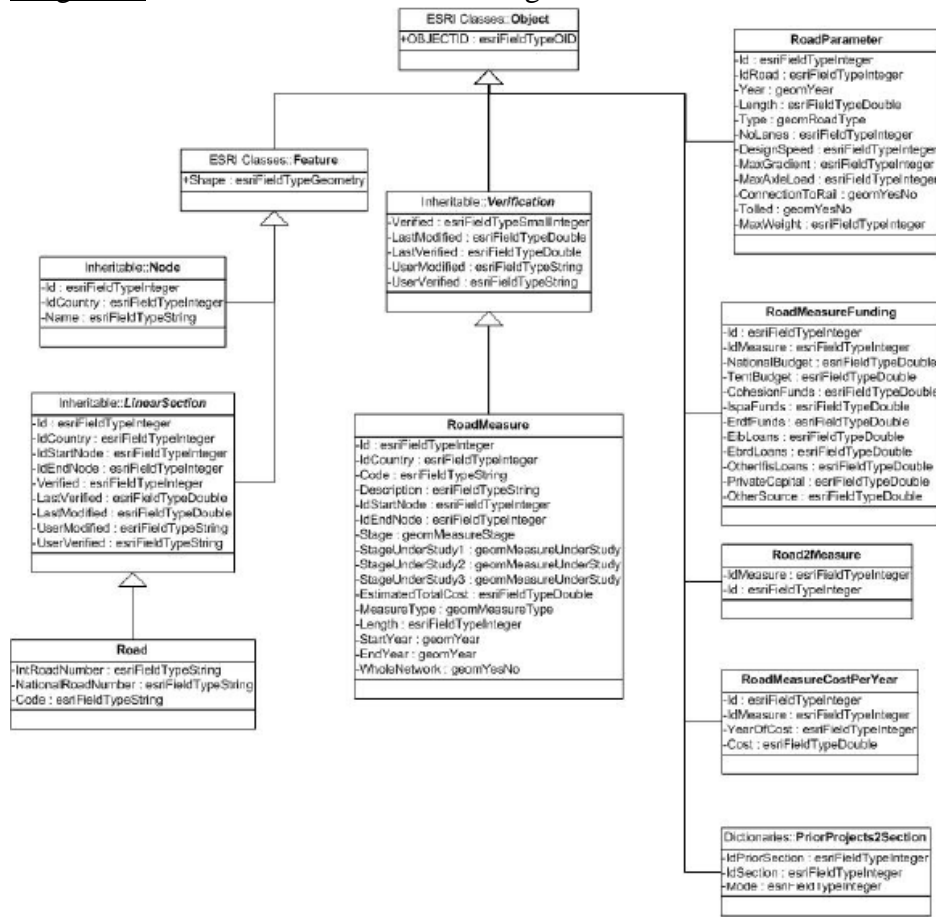


Diagram 4 : TENInvest3 relationship diagram for roads



Diagram 5 : TENInvest3 inheritance diagram for railways

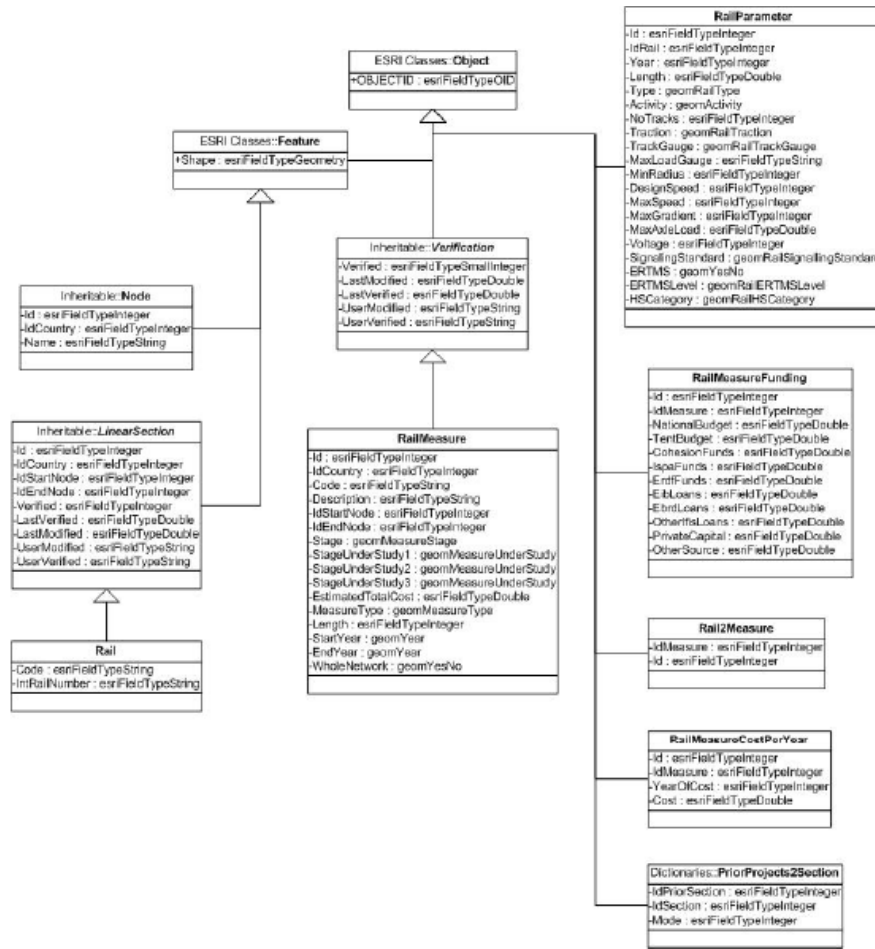


Diagram 6 : TENInvest3 relationship diagram for railways

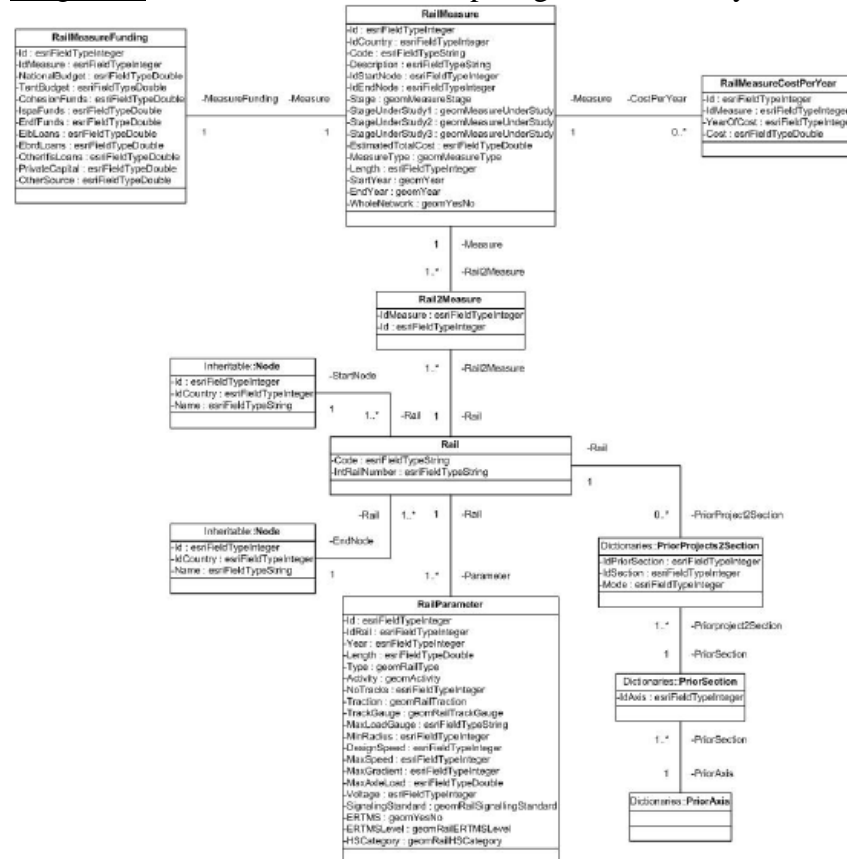


Diagram 7 : TENInvest3 inheritance diagram for inland waterways

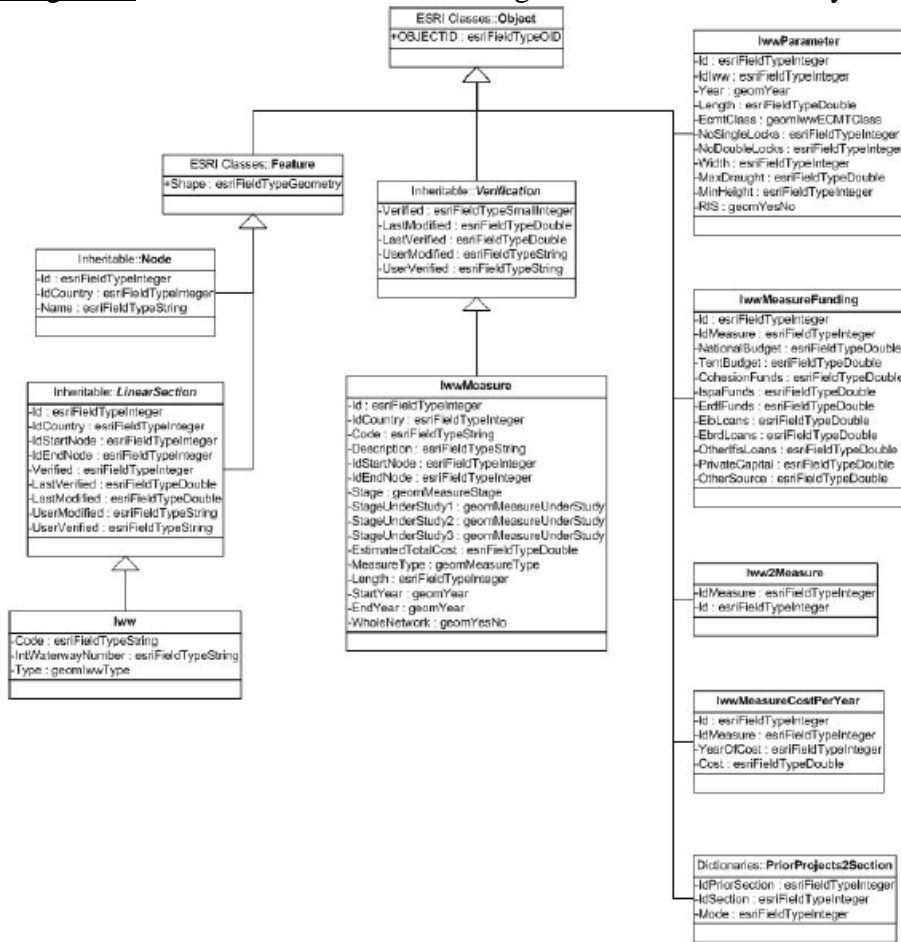


Diagram 8 : TENInvest3 relationship diagram for inland waterways

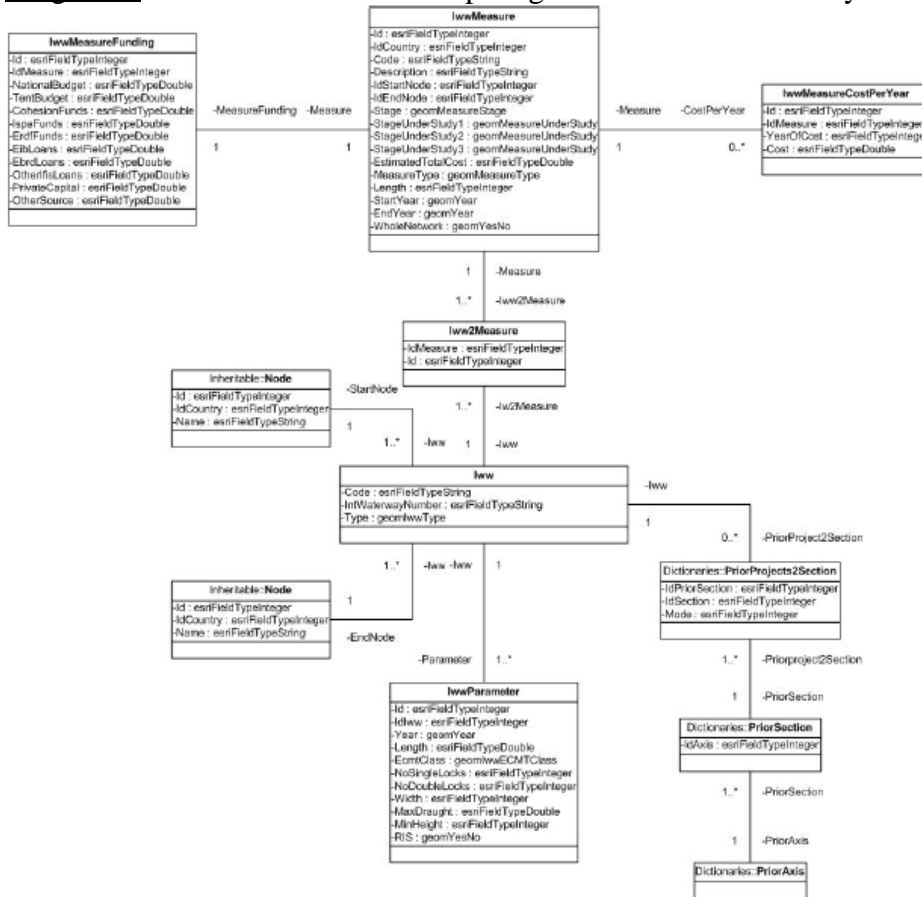


Diagram 9 : TENInvest3 inheritance diagram for airports

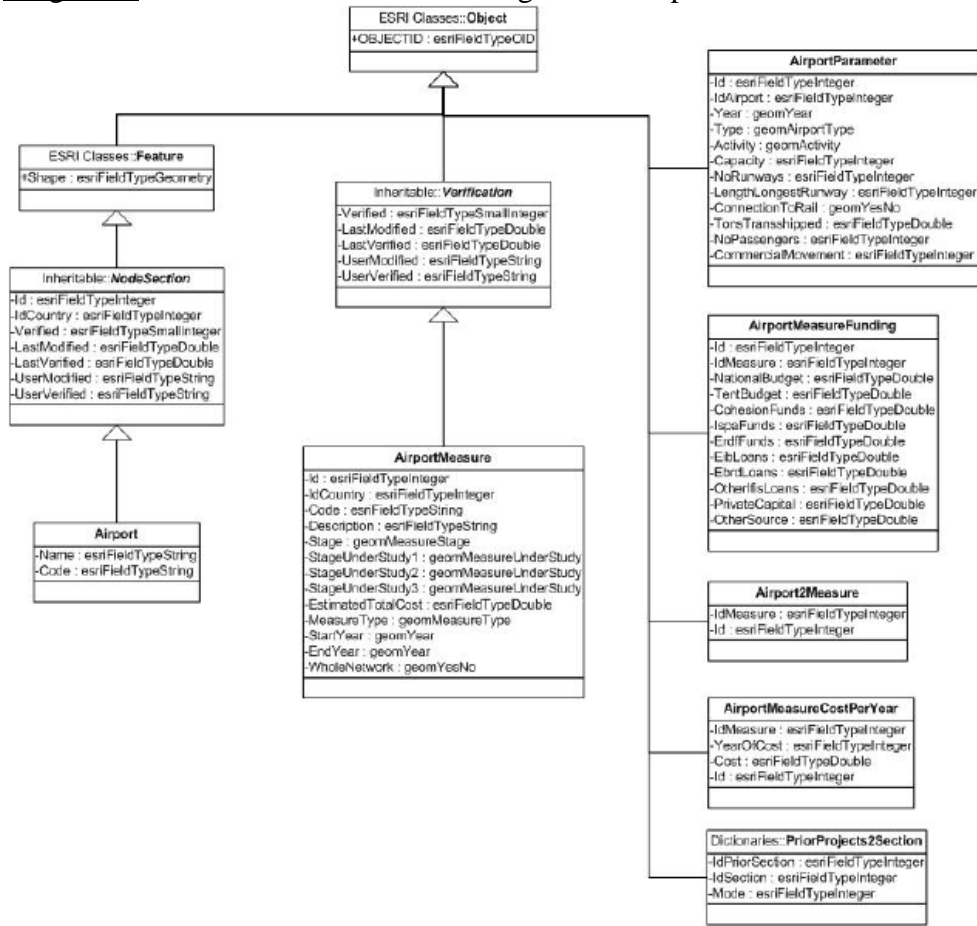


Diagram 10 : TENInvest3 relationship diagram for airports



Diagram 11 : TENInvest3 inheritance diagram for ports

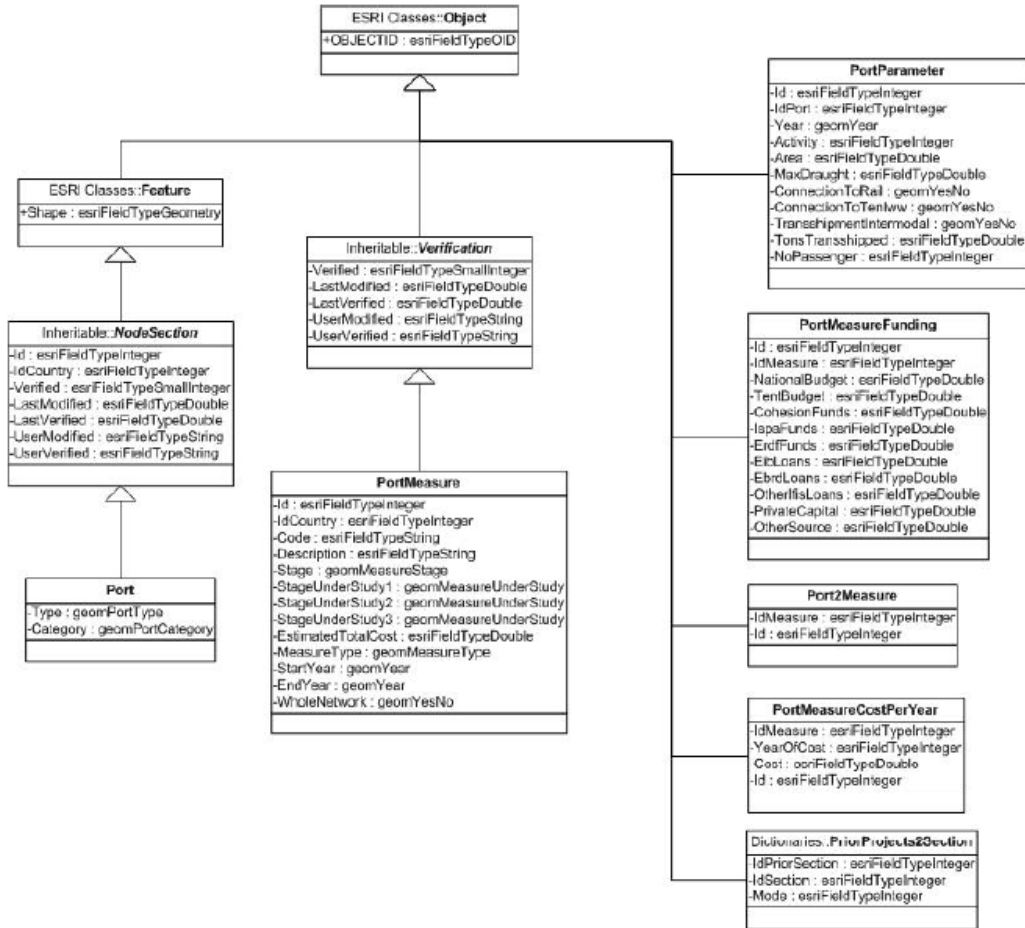


Diagram 12 : TENInvest3 relationship diagram for ports

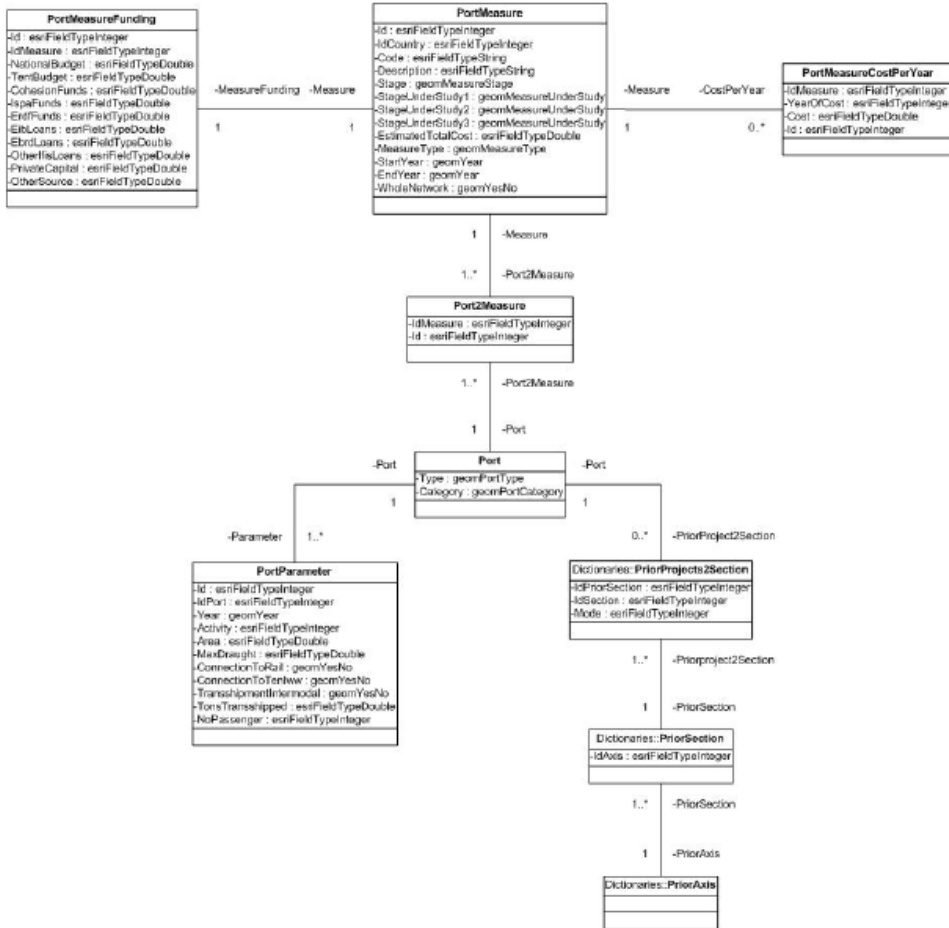


Diagram 13 : Referencing to TENLink for TENInvest- roads, railways and waterways

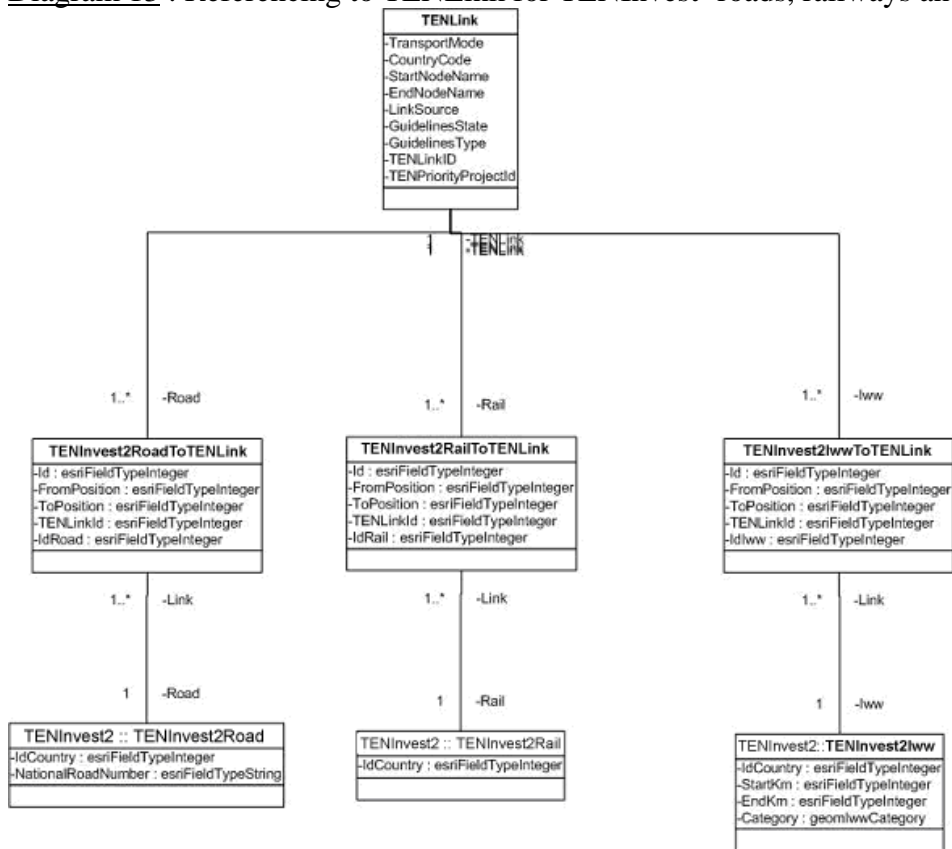


Diagram 14 : Referencing to TENAirport&Port for TENInvest- Airports and Ports

