TRACECA GIS Web Map Application

GIS Layers Metadata

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Available layers in TRACECA GIS Database:
(ordered by theme and sub-theme)

The GIS database is structured according to the following ten themes (alphabetical order):

- ***Administration:*** *Layers providing administrative boundaries*
- ***Aviation:*** *Layers providing data on aviation*
- ***Geography:*** *Geographical base layers*
- ***Maritime:*** *Layers from maritime theme*
- ***Multimodal:*** *Layers on multimodal transport infrastructures*
- ***Pipelines:*** *Pipelines and pipeline-related layers*
- ***Rail:*** *Rail transport infrastructures*
- ***Road:*** *Road transport infrastructures*
- ***TRACECA:*** *TRACECA routes and projects*
- ***VISUM:*** *Traffic model input and output layers*

By clicking on the theme names, you will find a description of the individual layers, including available user-defined fields. System fields like object ID are not listed in the overview tables.

Each theme is further subdivided into so-called sub-themes, to which the actual layers are assigned. Themes and sub-theme corresponds to one (sub-)directory of the ***TRACECA GIS Database****. In order to allow for future flexibility in maintaining the database, some sub-themes are already implemented which currently do not include any layer, but to which in future layers may well be added.*

In addition to these themes, general information about the database are provided in the general section.

Format:
The TRACECA GIS database is stored as a file-based database in *MapInfo *tab file* format. Each layer consists of a set of individual files. Depending on the actual content of a layer, each layer is assigned to one of the above themes, which furthermore are subdivided into sub-themes. Each theme and sub-theme corresponds to one (sub-)directory of the ***TRACECA GIS Database***.

Object types:
Each layer consists of just one object type. Available object types are polygons, points and lines. Tables are not included in the ***TRACECA GIS Database***, but are part of the ***Transport Data*** dataset.

Geographical coverage:
Basically, all layers cover the entire TRACECA space. In addition, some layers also cover adjacent areas, as indicated in the individual layer descriptions.

Projection:
The projection parameters used are as follows:

Projection name:	GCS_WMS_1984	
Datum:	D_WGS_1984	
Spheroid:	WGS_1984	(6378137.0, 298.257223563
Prime median:	Greenwich	(0.0)
Unit:	Degree	

ADMINISTRATION

Available sub-themes:

- Country
- Region

Sub-theme COUNTRY: **Two layers are currently available under this sub-theme.**

Layer name: **COUNTRIES_BOUNDARIES**
Feature type: Lines
Content: Boundaries of TRACECA countries
Spatial coverage: TRACECA space
Actuality: 2010
Data source: TRACECA

This layer does not include any user-specific fields.

Layer name: **COUNTRIES_TRACECA**
Feature type: Polygons
Content: Polygons of TRACECA countries
Spatial coverage: TRACECA space
Actuality: 2010
Data source: TRACECA

Available fields in attribute table:

Field name	Field type	Description
ADM	Text	2-digits ISO country code: *AM = Armenia* *AZ = Azerbaijan* *BG = Bulgaria* *GE = Georgia* *KG = Kyrgyzstan* *KZ = Kazakhstan* *MD = Moldova* *RO = Romania* *TJ = Tajikistan* *TM = Turkmenistan* *TR = Turkey* *UA = Ukraine* *UZ = Uzbekistan*
TRACECA	Float	Flag to indicate TRACECA membership: *0.0 = No TRACECA country* *1.0 = TRACECA country*
SHAPE_LENG	Float	Length of polygon parameter
SHAPE_AREA	Float	Polygon area

Sub-theme REGION: **currently no layer available under this sub-theme.**

AVIATION

Available sub-themes:

- Links
- Nodes

Sub-theme LINKS:
Currently no layer available under this sub-theme.

Sub-theme NODES: **Currently one layer is available under this sub-theme.**

Layer name: **AIRPORTS**
Feature type: Points
Content: Location of airports with commercial flights
Spatial coverage: TRACECA space, Iran
Actuality: 2010
Data source: RRG GIS Database

Available fields in attribute table:

Field name	Field type	Description
ISO_COUNTR	Text	2-digits ISO country code: *AM = Armenia* *AZ = Azerbaijan* *BG = Bulgaria* *GE = Georgia* *IR = Iran* *KG = Kyrgyzstan* *KZ = Kazakhstan* *MD = Moldova* *RO = Romania* *TJ = Tajikistan* *TM = Turkmenistan* *TR = Turkey* *UA = Ukraine* *UZ = Uzbekistan*
IATA_CODE	Text	IATA code of airport
ICAO_CODE	Text	ICAO code of airport
OPERATION	Float	Airport status: *0.0 = Information not available* *1.0 = Under operation* *2.0 = Closed*

Available fields in attribute table:

Field name	Field type	Description
		3.0 = Planned / under construction
TYPE	Text	Airport type: *-99 = Information not available* *1 = International airport* *2 = Domestic airport* *3 = Military air base* *(values can be combined, e.g. 1,3 = Int. airport and airbase)*
NAME_ALIAS	Text	Alias name of airport
AIRPORT_NA	Text	Airport name

GEOGRAPHY

Available sub-themes:

- Base layers (layers used for map production)
- Miscellaneous (layers used for map production as well as for specific tasks)
- Relief

Sub-theme BASE_LAYERS: **Currently four layers are available under this sub-theme.**

Layer name: **CITIES**
Feature type: Points
Content: Location of najor cities and towns
Spatial coverage: TRACECA space, Central Europe, Eastern Europe, Central Asia, Middle East
Actuality: 2010
Data source: TRACECA

Available fields in attribute table:

Field name	Field type	Description
CITY_NAME	Text	City name (engl.)
GMI_ADMIN	Text	Code of administrative region in which city is located
ADMIN_NAME	Text	Name of administrative region in which city is located
FIPS_COUNTR	Text	2-digits country code
CNTR_NAME	Text	Country name
STATUS	Text	City status: *National capital* *National capital and provincial capital enclave* *National and provincial capital* *Other city*
POP_RANK	Float	Population rank: *1.0 = 5,000,000 inhabitants and more* *2.0 = 1,000,000 to 4,999,999 inhabitants* *3.0 = 500,000 to 999,999 inhabitants* *4.0 = 250,000 to 499,999 inhabitants* *5.0 = 100,000 to 249,999 inhabitants* *6.0 = 50,000 to 99,999 inhabitants* *7.0 = less than 50,000 inhabitants*
POP_CLASS	Text	Airport type: *less than 50,000 inhabitants* *50,000 to 99,999 inhabitants* *100,000 to 249,999 inhabitants* *250,000 to 499,999 inhabitants* *500,000 to 999,999 inhabitants* *1,000,000 to 4,999,999 inhabitants*

Available fields in attribute table:

Field name	Field type	Description
		5,000,000 inhabitants and more
LABEL_FLAG	Float	Flag to assign labels in maps *0.0 = City not to be labelled* *1.0 = City to be labelled*
CAPITAL	Float	Flag to indicate capital cities *0.0 = Not a capital city* *1.0 = Capital city*

Layer name: **INLAND_WATERS**

Feature type: Polygons

Content: Inland water bodes (lakes, rivers) with simplified geometries, and with reduced number of objects, with a focus on major water bodes. To be used for small scale applications and maps.

Spatial coverage: TRACECA space, Central Europe, Eastern Europe, Central Asia, Middle East

Actuality: 2010

Data source: TRT

This layer does not include any user-specific fields.

Layer name: **INLAND_WATERS_LARGE**

Feature type: Polygons

Content: Inland water bodes (lakes, rivers) with detailed geometries. to be used for large scale applications and maps.

Spatial coverage: TRACECA space, Central Europe, Eastern Europe, Central Asia, Middle East

Actuality: 2010

Data source: TRT

This layer does not include any user-specific fields.

Layer name: **OCEAN**

Feature type: Polygons

Content: Ocean layer (used as map background).

Spatial coverage: TRACECA space, Central Europe, Eastern Europe, Central Asia, Middle East

Actuality: 2010

Data source: TRT

This layer does not include any user-specific fields.

Sub-theme MISCELLANEOUS: **Currently four layers are available under this sub-theme.**

Layer name: **BOUNDING_BOX**

Feature type: Polygons

Content: rectangular bounding box around TRACECA space (to be used for maps to define

TRACECA map extent).

Spatial coverage: TRACECA space, plus adjacent areas within bounding box

Actuality: 2010

Data source: TRACECA

This layer does not include any user-specific fields.

Layer name: **COUNTRIES_BACKGROUND**

Feature type: Polygons

Content: Country background layer (continents).

Spatial coverage: TRACECA space, plus adjacent areas within bounding box

Actuality: 2010

Data source: TRACECA

This layer does not include any user-specific fields.

Layer name: **COUNTRY_MATRIX**

Feature type: Lines

Content: Layer with straight lines connecting territorial centres of each TRACECA country with each other. Useful layer to map trade or traffic flows between countries, or any other interaction data at national level. Such interaction data, however, needs to be joined to this layer (layer only provides the geometries). The ORIG_ID and DEST_ID fields can be used to join statistical data.

Spatial coverage: TRACECA space

Actuality: 2010

Data source: RRG GIS Database

Available fields in attribute table:

Field name	Field type	Description
ORIG_ID	Text	Name of from-country (origin)
DEST_ID	Text	Name of to-country (destination)
DES_LENGTH	Float	Link length (meters)

Layer name: **REGIONS_MATRIX**

Feature type: Lines

Content: Layer with straight lines connecting territorial centres of each TRACECA region with each other. Useful layer to map trade or traffic flows between regions, or any other interaction data at regional level. Such interaction data, however, needs to be joined to this layer (layer only provides the geometries). The ORIG_ID and DEST_ID fields can be used to join statistical data.

Spatial coverage: TRACECA space

Actuality: 2010

Data source: RRG GIS Database

Available fields in attribute table:

Field name	Field type	Description
ORIG_ID	Text	Name of from-region (origin)
DEST_ID	Text	Name of to-region (destination)
DES_LENGTH	Float	Link length (meters)

Sub-theme RELIEF:

Currently three relief datasets are available under this sub-theme. These datasets represent raster data, which do not have any attribute fields assigned. The raster datasets are widely used as background layers for map production. such datasets are often very big datasets, so using them in web map application needs care. The following datasets are available:

- DEMISE_HILLSHADE
- DEMISE_TOPOGRAPHY
- TRACECA_AREA

MARITIME

Available sub-themes:

- Ports
- Routes

Sub-theme PORTS: **One layer is currently available under this sub-theme.**

Layer name: **PORTS**
Feature type: Points
Content: Location of major commercial ports
Spatial coverage: TRACECA space (Black Sea, Caspian Sea), adjacent areas
Actuality: 2010
Data source: TRACECA

Available fields in attribute table:

Field name	Field type	Description
NAME	Text	Port name
IDPORT	Float	Unique port ID
COUNTRY	Text	2/3-digit country code *AZE = Azerbaijan* *BUL = Bulgaria* *GEO = Georgia* *GRE = Greece* *IR = Iran* *KAZ = Kazakhstan* *MO = Moldova* *ROM = Romania* *RS = Russia* *TUR = Turkmenistan* *TYR = Turkey* *UKR = Ukraine*

Sub-theme ROUTES: **Three layers are currently available under this sub-theme.**

Layer name: **FERRIES_RAIL**
Feature type: Lines
Content: Rail ferries
Spatial coverage: Black Sea, Caspian Sea (excerpt from the overall transport network model used by VISUM)
Actuality: 2010
Data source: TRACECA

Available fields in attribute table:

Field name	Field type	Description

Available fields in attribute table:

Field name	Field type	Description
NO	Float	Unique link ID (from transport model)
FROMNODENO	Float	Unique ID of the from-node (start-node) (from transport model)
TONODENO	Float	Unique ID of the to-node (end-node) (from transport model)
TYPENO	Float	Link type (as used by transport model) *73.0 = Rail ferry*
LENGTH	Float	Link length
NUMLANES	Float	Number of lanes (from transport model)
COST_KM	Float	Link costs per km (in USD; as applied by transport model)
COST_H	Float	Link costs per hour (in USD; as applied by transport model)
COST_FIXED	Float	Fixed Link costs (in USD; as applied by transport model)
IDLE_TIME	Float	Idle time (in hours; as applied by transport model)

Layer name: **FERRIES_RIVER**
Feature type: Lines
Content: River ferries
Spatial coverage: River ferries in Eastern Europe (excerpt from the overall transport network model used by VISUM)
Actuality: 2010
Data source: TRACECA

Available fields in attribute table:

Field name	Field type	Description
NO	Float	Unique link ID (from transport model)
FROMNODENO	Float	Unique ID of the from-node (start-node) (from transport model)
TONODENO	Float	Unique ID of the to-node (end-node) (from transport model)
TYPENO	Float	Link type (as used by transport model) *50.0 = River ferry*
LENGTH	Float	Link length
NUMLANES	Float	Number of lanes (from transport model)

Available fields in attribute table:

Field name	Field type	Description
COST_KM	Float	Link costs per km (in USD; as applied by transport model)
COST_H	Float	Link costs per hour (in USD; as applied by transport model)
COST_FIXED	Float	Fixed Link costs (in USD; as applied by transport model)
IDLE_TIME	Float	Idle time (in hours; as applied by transport model)

Layer name: **FERRIES_ROAD**

Feature type: Lines

Content: Road ferries

Spatial coverage: Road ferries across Baltic Sea and Caspian Sea and adjacent areas (excerpt from the overall transport network model used by VISUM)

Actuality: 2010

Data source: TRACECA

Available fields in attribute table:

Field name	Field type	Description
NO	Float	Unique link ID (from transport model)
FROMNODENO	Float	Unique ID of the from-node (start-node) (from transport model)
TONODENO	Float	Unique ID of the to-node (end-node) (from transport model)
TYPENO	Float	Link type (as used by transport model) *71.0 = Road ferry*
LENGTH	Float	Link length
NUMLANES	Float	Number of lanes (from transport model)
COST_KM	Float	Link costs per km (in USD; as applied by transport model)
COST_H	Float	Link costs per hour (in USD; as applied by transport model)
COST_FIXED	Float	Fixed Link costs (in USD; as applied by transport model)
IDLE_TIME	Float	Idle time (in hours; as applied by transport model)

MULTIMODAL

Available sub-themes:

- Border crossings
- Freight villages

Sub-theme BORDER_CROSSINGS:

Currently no layer is available under this sub-theme.

Sub-theme FREIGHT_VILLAGES: Currently three layers are available under this sub-theme.

Layer name:	**FREIGHT_VILLAGES**
Feature type:	Points
Content:	Location of freight villages. Freight villages include logistics centres, airprts, ports, and road-rail transhipment points.
Spatial coverage:	Eastern Europe, Russia
Actuality:	2010
Data source:	RRG GIS Database

Available fields in attribute table:

Field name	Field type	Description
TERMINALID	Float	Unique point ID
COUNTRY	Text	2-digits ISO country code: *BG = Bulgaria* *MD = Moldova* *RO = Romania* *RU = Russia* *TR = Turkey* *UA = Ukraine*
LABEL	Text	Name of freight villages
OPERATION	Float	Status of freight villages: *1.0 = Under operation* *2.0 = Planned*

Layer name:	**ILC_POLY**
Feature type:	Polygons
Content:	Delimitation of international logistics centres (ILC) (patch boundaries). Delimitations comprise existing and planned ILC´s.
Spatial coverage:	Western NIS countries: Armenia, Azerbaijan, Georgia, Moldova, Ukraine
Actuality:	2009

Data source: Western NIS

Available fields in attribute table:

Field name	Field type	Description
NAME	Text	Name of International Logistics Centre (ILC)
COUNTRY	Text	2-digits ISO country code: *AM = Armenia* *AZ = Azerbaijan* *GE = Georgia* *MD = Moldova* *UA = Ukraine*
SHAPE_LEN	Float	Length of polygon boundary
SHAPE_AREA	Float	Polygon area

Layer name: **ILC_PTS**

Feature type: Points

Content: Center points of international logistics centres (ILC). Point locations comprise existing and planned ILC´s.

Spatial coverage: Western NIS countries: Armenia, Azerbaijan, Georgia, Moldova, Ukraine

Actuality: 2009

Data source: Western NIS

Available fields in attribute table:

Field name	Field type	Description
NAME	Text	Name of International Logistics Centre (ILC)
DESC_	Text	Additional description of International Logistics Centre (ILC)
COUNTRY	Text	2-digits ISO country code: *AM = Armenia* *AZ = Azerbaijan* *GE = Georgia* *MD = Moldova* *UA = Ukraine*
ABBR	Text	Short name/abbreviation

Sub-theme TRANSHIPMENT: **Currently one layer is available under this sub-theme.**

Layer name: **TRANSHIPMENT_LINKS**

Feature type: Links

Content: Functional links to connect different transport modes with each other (like

transhipment from rail to road). Used in transport model VISUM to carry waiting or transhipment times or costs, or both. This layer represents a subset of the overall transport network model used by VISUM.

Spatial coverage:	TRACECa space
Actuality:	2009
Data source:	TRACECA

Available fields in attribute table:

Field name	Field type	Description
NO	Float	Unique link ID (from transport model)
FROMNODENO	Float	Unique ID of the from-node (start-node) (from transport model)
TONODENO	Float	Unique ID of the to-node (end-node) (from transport model)
TYPENO	Float	Link type (as used by transport model) *81.0 = Connection roads and RoRo ferries* *83.0 = Connecting rails and rail ferries* *85.0 = Intra-zonal connection road-rail* *87.0 = transhipment of oil* *89.0 = transhipment of gas* *97.0 = other virtual connection* *98.0 = virtual connection by land* *99.0 = Virtual maritime connection*
LENGTH	Float	Link length
NUMLANES	Float	Number of lanes (from transport model)
COST_KM	Float	Link costs per km (in USD; as applied by transport model)
COST_H	Float	Link costs per hour (in USD; as applied by transport model)
COST_FIXED	Float	Fixed Link costs (in USD; as applied by transport model)
IDLE_TIME	Float	Idle time (in hours; as applied by transport model)

PIPELINES

Available sub-themes:

- Links
- Nodes

Sub-theme LINKS: **Currently three layers are available under this sub-theme.**

Layer name:	**PIPELINE_GAS**
Feature type:	Lines
Content:	Pipeline infrastructure: gas pipes. Layer used for transport modelling with VISUM. Layer contains only crude alignments (more or less straight lines). Layer is a subset of the overall transport network modelling net used in VISUM.
Spatial coverage:	TRACECA space and adjacent areas
Actuality:	2009
Data source:	TRACECA

Available fields in attribute table:

Field name	Field type	Description
NO	Float	Unique link ID (from transport model)
FROMNODENO	Float	Unique ID of the from-node (start-node) (from transport model)
TONODENO	Float	Unique ID of the to-node (end-node) (from transport model)
TYPENO	Float	Link type (as used by transport model) *78.0 = Natural gas pipeline*
LENGTH	Float	Link length
NUMLANES	Float	Number of lanes (from transport model)
COST_KM	Float	Link costs per km (in USD; as applied by transport model)
COST_H	Float	Link costs per hour (in USD; as applied by transport model)
COST_FIXED	Float	Fixed Link costs (in USD; as applied by transport model)
IDLE_TIME	Float	Idle time (in hours; as applied by transport model)

Layer name:	**PIPELINE_OIL**
Feature type:	Lines

Content:	Pipeline infrastructure: oil pipes. Layer used for transport modelling with VISUM. Layer contains only crude alignments (more or less straight lines). Layer is a subset of the overall transport network modelling net used in VISUM.
Spatial coverage:	TRACECA space and adjacent areas
Actuality:	2009
Data source:	TRACECA

Available fields in attribute table:

Field name	Field type	Description
NO	Float	Unique link ID (from transport model)
FROMNODENO	Float	Unique ID of the from-node (start-node) (from transport model)
TONODENO	Float	Unique ID of the to-node (end-node) (from transport model)
TYPENO	Float	Link type (as used by transport model) *76.0 = Crude oil pipeline*
LENGTH	Float	Link length
NUMLANES	Float	Number of lanes (from transport model)
COST_KM	Float	Link costs per km (in USD; as applied by transport model)
COST_H	Float	Link costs per hour (in USD; as applied by transport model)
COST_FIXED	Float	Fixed Link costs (in USD; as applied by transport model)
IDLE_TIME	Float	Idle time (in hours; as applied by transport model)

Layer name:	**TANKER**
Feature type:	Lines
Content:	Pipeline infrastructure: oil tanker across seas. Layer used for transport modelling with VISUM. Layer contains only crude alignments (more or less straight lines). Layer is a subset of the overall transport network modelling net used in VISUM.
Spatial coverage:	TRACECA space and adjacent areas
Actuality:	2009
Data source:	TRACECA

Available fields in attribute table:

Field name	Field type	Description

Available fields in attribute table:

Field name	Field type	Description
NO	Float	Unique link ID (from transport model)
FROMNODENO	Float	Unique ID of the from-node (start-node) (from transport model)
TONODENO	Float	Unique ID of the to-node (end-node) (from transport model)
TYPENO	Float	Link type (as used by transport model) *77.0 = Crude oil tanker*
LENGTH	Float	Link length
NUMLANES	Float	Number of lanes (from transport model)
COST_KM	Float	Link costs per km (in USD; as applied by transport model)
COST_H	Float	Link costs per hour (in USD; as applied by transport model)
COST_FIXED	Float	Fixed Link costs (in USD; as applied by transport model)
IDLE_TIME	Float	Idle time (in hours; as applied by transport model)

Sub-theme NODES:

Currently no layer is available under this sub-theme. Sub-theme dedicated to store point pipeline infrastructures, such as pump stations etc., if available.

RAIL

Available sub-themes:

- Links
- Nodes

Sub-theme LINKS: **Currently there is one layer available under this sub-theme.**

Layer name:	**RAIL_LINKS**
Feature type:	Lines
Content:	Railway network. Layer used for transport modelling with VISUM. Layer is a subset of the overall transport network modelling net used in VISUM.
Spatial coverage:	TRACECA space and adjacent areas
Actuality:	2009
Data source:	TRACECA

Available fields in attribute table:

Field name	Field type	Description
NO	Float	Unique link ID (from transport model)
FROMNODENO	Float	Unique ID of the from-node (start-node) (from transport model)
TONODENO	Float	Unique ID of the to-node (end-node) (from transport model)
TYPENO	Float	Link type (as used by transport model) *60.0 = premium rail link, 4-tracks* *61.0 = premium rail link, double-tracks* *62.0 = rail link, double-tracks* *63.0 = rail link, slow, double-tracks* *64.0 = premium rail link, single-track* *65.0 = rail link, single track* *66.0 = rail link, slow, single track* *67.0 = rail uncertain* *68.0 = rail link, single track, forcast* *69.0 = ral link, double track, forcast*
LENGTH	Float	Link length
NUMLANES	Float	Number of lanes (from transport model)
COST_KM	Float	Link costs per km (in USD; as applied by transport model)
COST_H	Float	Link costs per hour (in USD; as applied by transport model)
COST_FIXED	Float	Fixed Link costs (in USD; as applied by transport model)
IDLE_TIME	Float	Idle time (in hours; as applied by transport model)

Sub-theme NODES:

Currently no layer is available under this sub-theme. Sub-theme dedicated to store point rail infrastructures, such as stations etc., if available.

ROAD

Available sub-themes:

- Links
- Nodes

Sub-theme LINKS: **Currently one layer is available under this sub-theme.**

Layer name:	**ROAD_LINKS**
Feature type:	Lines
Content:	Road network. Layer used for transport modelling with VISUM. Layer is a subset of the overall transport network modelling net used in VISUM.
Spatial coverage:	TRACECA space and adjacent areas
Actuality:	2009
Data source:	TRACECA

Available fields in attribute table:

Field name	Field type	Description
NO	Float	Unique link ID (from transport model)
FROMNODENO	Float	Unique ID of the from-node (start-node) (from transport model)
TONODENO	Float	Unique ID of the to-node (end-node) (from transport model)
TYPENO	Float	Link type (as used by transport model) *Multi lane motorways:* *10.0 = Motorway, 3-lanes, max speed 120, hgv speed 70* *11.0 = Motorway, 3-lanes, max speed 120, hgv speed 70* *12.0 = Motorway, 3-lanes, max speed 120, hgv speed 70* *13.0 = Motorway, 3-lanes, max speed 120, hgv speed 70, forcast* *14.0 = Motorway, 3-lanes, max speed 110, hgv speed 70* *15.0 = Motorway, 3-lanes, max speed 110, hgv speed 70, standard* *16.0 = Motorway, 3-lanes, max speed 100, hgv speed 70* *17.0 = Motorway, 3-lanes, max speed 100, hgv speed 70* *18.0 = Motorway, 3-lanes, max speed 100, hgv speed 70* *19.0 = Motorway, 3-lanes, max speed 100, hgv speed 70, special cases (like ramps etc.)* *Two lane highways:* *20.0 = highway, 2-lanes, max speed 110, hgv speed 60* *21.0 = highway, 2-lanes, max speed 110, hgv speed 60* *22.0 = highway, 2-lanes, max speed 100, hgv speed 60* *23.0 = highway, 2-lanes, max speed 100, hgv speed 60* *24.0 = highway, 2-lanes, max speed 100, hgv speed 50* *25.0 = highway, 2-lanes, max speed 90, hgv speed 60, standard* *26.0 = highway, 2-lanes, max speed 90, hgv speed 60, forcast* *27.0 = highway, 2-lanes, max speed 80, hgv speed 60* *28.0 = highway, 2-lanes, max speed 70, hgv speed 50* *29.0 = highway, 2-lanes, max speed 70, hgv speed 60, special cases (like ramps etc.)*

Available fields in attribute table:

Field name	Field type	Description
		Highways: *30.0 = highway, 1-lane, max speed 110, hgv speed 60* *31.0 = highway, 1-lane, max speed 100, hgv speed 60* *32.0 = highway, 1-lane, max speed 90, hgv speed 50* *33.0 = highway, 1-lane, max speed 80, hgv speed 50, standard* *34.0 = highway, 1-lane, max speed 70, hgv speed 40* *35.0 = highway, 1-lane, max speed 60, hgv speed 30* *36.0 = highway, 1-lane, max speed 50, hgv speed 20* *37.0 = urban highway, 1-lane, max speed 60, hgv speed 50* *38.0 = urban highway, 1-lane, max speed 50, hgv speed 40* *39.0 = urban highway, 1-lane, max speed 40, hgv speed 30* *Arterial roads:* *40.0 = arterial road, 1 lane, max speed 90, hgv speed 50* *41.0 = arterial road, 1 lane, max speed 80, hgv speed 50* *42.0 = arterial road, 1 lane, max speed 70, hgv speed 40* *43.0 = arterial road, 1 lane, max speed 60, hgv speed 40* *44.0 = arterial road, 1 lane, max speed 50, hgv speed 30* *45.0 = arterial road, 1 lane, max speed 40, hgv speed 20* *46.0 = arterial road, 1 lane, max speed 30, hgv speed 20* *47.0 = arterial road, 1 lane, max speed 40, hgv speed 30* *48.0 = urban arterial road, 1 lane, max speed 30, hgv speed 20* *49.0 = urban arterial road, 1 lane, max speed 20, hgv speed 20*
LENGTH	Float	Link length
NUMLANES	Float	Number of lanes (from transport model)
COST_KM	Float	Link costs per km (in USD; as applied by transport model)
COST_H	Float	Link costs per hour (in USD; as applied by transport model)
COST_FIXED	Float	Fixed Link costs (in USD; as applied by transport model)
IDLE_TIME	Float	Idle time (in hours; as applied by transport model)

Sub-theme NODES:

Currently no layer is available under this sub-theme. Sub-theme dedicated to store point road infrastructures, if available.

TRACECA

Available sub-themes:

- Projects
- ROUTES
- WESTERN_NIS

Sub-theme PROJECTS: **Currently there are two layers available under this sub-theme.**

Layer name: **PROJECTS_LINE**
Feature type: Lines
Content: Linear TRACECA investment projects
Spatial coverage: TRACECA space
Actuality: 2010
Data source: TRACECA

Available fields in attribute table:

Field name	Field type	Description
CODE	Text	Unique project code
NAME	Text	Project name
MODE	Text	Project mode: road or rail
TYPE	Text	Project type: new link or upgrading
TRAC_ROUTE	Float	Route ID of route where project is located

Layer name: **PROJECTS_NODE**
Feature type: Points
Content: Punctual TRACECA investment projects
Spatial coverage: TRACECA space
Actuality: 2010
Data source: TRACECA

Available fields in attribute table:

Field name	Field type	Description
CODE	Text	Unique project code
NAME	Text	Project name
MODE	Text	Project mode: air, intermodal, maritime, road

Available fields in attribute table:

Field name	Field type	Description
TYPE	Text	Project type: new link or upgrading
TRAC_ROUTE	Float	Route ID of route where project is located

Sub-theme ROUTES: **Currently there are six layers available under this sub-theme.**

Layer name: **TEN-T_PRIOR_RAIL_EXISTING**
Feature type: Polygons
Content: Corridors of existing TEN-T rail routes. Layer used just for mapping.
Spatial coverage: Eastern Europe
Actuality: 2010
Data source: RRG GIS Database

No user defined fields are associated with this layer.

Layer name: **TEN-T_PRIOR_RAIL_PLANNED**
Feature type: Polygons
Content: Corridors of planned or ongoing TEN-T rail projects. Layer used just for mapping.
Spatial coverage: Eastern Europe
Actuality: 2010
Data source: RRG GIS Database

No user defined fields are associated with this layer.

Layer name: **TEN-T_PRIOR_ROAD_EXISTING**
Feature type: Polygons
Content: Corridors of existing TEN-T road routes. Layer used just for mapping.
Spatial coverage: Eastern Europe
Actuality: 2010
Data source: RRG GIS Database

No user defined fields are associated with this layer.

Layer name: **TEN-T_PRIOR_ROAD_PLANNED**
Feature type: Polygons
Content: Corridors of planned or ongoing TEN-T road projects. Layer used just for mapping.
Spatial coverage: Eastern Europe
Actuality: 2010
Data source: RRG GIS Database

No user defined fields are associated with this layer.

Layer name:	**TRACECA_ROUTE_RAIL**
Feature type:	Polygons
Content:	Corridors of TRACECA rail routes. Layer used just for mapping.
Spatial coverage:	TRACECA
Actuality:	2010
Data source:	TRACECA

No user defined fields are associated with this layer.

Layer name:	**TRACECA_ROUTE_ROAD**
Feature type:	Polygons
Content:	Corridors of TRACECA road routes
Spatial coverage:	TRACECA
Actuality:	2010
Data source:	TRACECA

No user defined fields is associated with this layer.

Sub-theme WESTERN_NIS: **Currently there are three layers available under this sub-theme.**

(layers generated in the framework of the WESTERN_NIS project)

Layer name:	**FREIGHT_VILLAGES**
Feature type:	Points
Content:	Location of freight villages. Freight villages include logistics centres, airprts, ports, and road-rail transhipment points.
Spatial coverage:	Eastern Europe, Russia
Actuality:	2010
Data source:	RRG GIS Database

Available fields in attribute table:

Field name	Field type	Description
TERMINALID	Float	Unique point ID
COUNTRY	Text	2-digits ISO country code: *BG = Bulgaria* *MD = Moldova* *RO = Romania* *RU = Russia* *TR = Turkey* *UA = Ukraine*

Available fields in attribute table:

Field name	Field type	Description
LABEL	Text	Name of freight villages
OPERATION	Float	Status of freight villages: *1.0 = Under operation* *2.0 = Planned*

Layer name: **ILC_POLY**

Feature type: Polygons

Content: Delimitation of international logistics centres (ILC) (patch boundaries). Delimitations comprise existing and planned ILC´s.

Spatial coverage: Western NIS countries: Armenia, Azerbaijan, Georgia, Moldova, Ukraine

Actuality: 2009

Data source: Western NIS

Available fields in attribute table:

Field name	Field type	Description
NAME	Text	Name of International Logistics Centre (ILC)
COUNTRY	Text	2-digits ISO country code: *AM = Armenia* *AZ = Azerbaijan* *GE = Georgia* *MD = Moldova* *UA = Ukraine*
SHAPE_LEN	Float	Length of polygon boundary
SHAPE_AREA	Float	Polygon area

Layer name: **ILC_PTS**

Feature type: Points

Content: Center points of international logistics centres (ILC). Point locations comprise existing and planned ILC´s.

Spatial coverage: Western NIS countries: Armenia, Azerbaijan, Georgia, Moldova, Ukraine

Actuality: 2009

Data source: Western NIS

Available fields in attribute table:

Field name	Field type	Description

Available fields in attribute table:

Field name	Field type	Description
NAME	Text	Name of International Logistics Centre (ILC)
DESC_	Text	Additional description of International Logistics Centre (ILC)
COUNTRY	Text	2-digits ISO country code: *AM = Armenia* *AZ = Azerbaijan* *GE = Georgia* *MD = Moldova* *UA = Ukraine*
ABBR	Text	Short name/abbreviation

VISUM

Available sub-themes:

- Networks
- Transport analysis zones

Sub-theme NETWORKS: **Currently there are two layers available under this sub-theme.**

Layer name:	**LINKS_VOLUMES**
Feature type:	Lines
Content:	Results of baseline traffic modelling run with VISUM. This layer contains all modes of transport, i.e. roads and railways, pipelines, and different types of ferries and virtual modelling links. Individual modes can be extracted via the TYPENO attribute.
Spatial coverage:	TRACECA space, Central and Eastern Europe, Central Asia, Middle East
Actuality:	2010
Data source:	TRACECA

Available fields in attribute table:

Field name	Field type	Description
NO	Float	Unique link number (from transport model, corresponds to the one of layer TRANSPORT_NETWORKS, see below)
FROMNODENO	Float	Unique ID of the from-node (start-node) (from-to direction, from transport model, corresponds to the one of layer TRANSPORT_NETWORKS, see below)
TONODENO	Float	Unique ID of the to-node (end-node) (from-to direction, from transport model, corresponds to the one of layer TRANSPORT_NETWORKS, see below)
TYPENO	Float	Link type (from-to drection, as used by transport model, corresponds to the one of layer TRANSPORT_NETWORKS, see below) *Multi lane motorways:* *10.0 = Motorway, 3-lanes, max speed 120, hgv speed 70* *11.0 = Motorway, 3-lanes, max speed 120, hgv speed 70* *12.0 = Motorway, 3-lanes, max speed 120, hgv speed 70* *13.0 = Motorway, 3-lanes, max speed 120, hgv speed 70, forcast* *14.0 = Motorway, 3-lanes, max speed 110, hgv speed 70* *15.0 = Motorway, 3-lanes, max speed 110, hgv speed 70, standard* *16.0 = Motorway, 3-lanes, max speed 100, hgv speed 70* *17.0 = Motorway, 3-lanes, max speed 100, hgv speed 70* *18.0 = Motorway, 3-lanes, max speed 100, hgv speed 70* *19.0 = Motorway, 3-lanes, max speed 100, hgv speed 70, special cases (like ramps etc.)*

Available fields in attribute table:

Field name	Field type	Description
		Two lane highways: *20.0 = highway, 2-lanes, max speed 110, hgv speed 60* *21.0 = highway, 2-lanes, max speed 110, hgv speed 60* *22.0 = highway, 2-lanes, max speed 100, hgv speed 60* *23.0 = highway, 2-lanes, max speed 100, hgv speed 60* *24.0 = highway, 2-lanes, max speed 100, hgv speed 50* *25.0 = highway, 2-lanes, max speed 90, hgv speed 60, standard* *26.0 = highway, 2-lanes, max speed 90, hgv speed 60, forcast* *27.0 = highway, 2-lanes, max speed 80, hgv speed 60* *28.0 = highway, 2-lanes, max speed 70, hgv speed 50* *29.0 = highway, 2-lanes, max speed 70, hgv speed 60, special cases (like ramps etc.)* *Highways:* *30.0 = highway, 1-lane, max speed 110, hgv speed 60* *31.0 = highway, 1-lane, max speed 100, hgv speed 60* *32.0 = highway, 1-lane, max speed 90, hgv speed 50* *33.0 = highway, 1-lane, max speed 80, hgv speed 50, standard* *34.0 = highway, 1-lane, max speed 70, hgv speed 40* *35.0 = highway, 1-lane, max speed 60, hgv speed 30* *36.0 = highway, 1-lane, max speed 50, hgv speed 20* *37.0 = urban highway, 1-lane, max speed 60, hgv speed 50* *38.0 = urban highway, 1-lane, max speed 50, hgv speed 40* *39.0 = urban highway, 1-lane, max speed 40, hgv speed 30* *Arterial roads:* *40.0 = arterial road, 1 lane, max speed 90, hgv speed 50* *41.0 = arterial road, 1 lane, max speed 80, hgv speed 50* *42.0 = arterial road, 1 lane, max speed 70, hgv speed 40* *43.0 = arterial road, 1 lane, max speed 60, hgv speed 40* *44.0 = arterial road, 1 lane, max speed 50, hgv speed 30* *45.0 = arterial road, 1 lane, max speed 40, hgv speed 20* *46.0 = arterial road, 1 lane, max speed 30, hgv speed 20* *47.0 = arterial road, 1 lane, max speed 40, hgv speed 30* *48.0 = urban arterial road, 1 lane, max speed 30, hgv speed 20* *49.0 = urban arterial road, 1 lane, max speed 20, hgv speed 20* *Special mode:* *50.0 = River ferry* *Railway lines:* *60.0 = premium rail link, 4-tracks* *61.0 = premium rail link, double-tracks* *62.0 = rail link, double-tracks* *63.0 = rail link, slow, double-tracks* *64.0 = premium rail link, single-track* *65.0 = rail link, single track* *66.0 = rail link, slow, single track* *67.0 = rail uncertain* *68.0 = rail link, single track, forcast* *69.0 = ral link, double track, forcast* *Ferries and pipelines:* *71.0 = RoRo ferry* *73.0 = Rail ferry* *76.0 = Crude oil pipeline* *77.0 = Crude oil tanker*

Available fields in attribute table:

Field name	Field type	Description
		78.0 = Natural gas pipeline *Transhipment and virtual functional connector links:* *81.0 = Connection roads and RoRo ferries* *83.0 = Connecting rails and rail ferries* *85.0 = Intra-zonal connection road-rail* *87.0 = transhipment of oil* *89.0 = transhipment of gas* *97.0 = other virtual connection* *98.0 = virtual connection by land* *99.0 = Virtual maritime connection*
LENGTH	Float	Link length (from-to direction)
VOLVEHPR~1	Float	Link loads (from-to direction) (units: tons per day) (0.0 = zero link loads)
T0_PRTSY~2	Float	Link travel time (from-to direction) (units: hours/minutes/seconds) (unloaded network)
R~FROMNODENO	Float	Unique ID of the from-node (start-node) (to-from direction, from transport model, corresponds to the one of layer TRANSPORT_NETWORKS, see below)
R~TONODENO	Float	Unique ID of the to-node (end-node) (to-from direction, from transport model, corresponds to the one of layer TRANSPORT_NETWORKS, see below)
R~TYPENO	Float	Link type (to-from drection, as used by transport model, corresponds to the one of layer TRANSPORT_NETWORKS, see below) *Multi lane motorways:* *10.0 = Motorway, 3-lanes, max speed 120, hgv speed 70* *11.0 = Motorway, 3-lanes, max speed 120, hgv speed 70* *12.0 = Motorway, 3-lanes, max speed 120, hgv speed 70* *13.0 = Motorway, 3-lanes, max speed 120, hgv speed 70, forcast* *14.0 = Motorway, 3-lanes, max speed 110, hgv speed 70* *15.0 = Motorway, 3-lanes, max speed 110, hgv speed 70, standard* *16.0 = Motorway, 3-lanes, max speed 100, hgv speed 70* *17.0 = Motorway, 3-lanes, max speed 100, hgv speed 70* *18.0 = Motorway, 3-lanes, max speed 100, hgv speed 70* *19.0 = Motorway, 3-lanes, max speed 100, hgv speed 70, special cases (like ramps etc.)* *Two lane highways:* *20.0 = highway, 2-lanes, max speed 110, hgv speed 60* *21.0 = highway, 2-lanes, max speed 110, hgv speed 60* *22.0 = highway, 2-lanes, max speed 100, hgv speed 60* *23.0 = highway, 2-lanes, max speed 100, hgv speed 60* *24.0 = highway, 2-lanes, max speed 100, hgv speed 50* *25.0 = highway, 2-lanes, max speed 90, hgv speed 60, standard* *26.0 = highway, 2-lanes, max speed 90, hgv speed 60, forcast* *27.0 = highway, 2-lanes, max speed 80, hgv speed 60*

Available fields in attribute table:

Field name	Field type	Description
		28.0 = highway, 2-lanes, max speed 70, hgv speed 50 *29.0 = highway, 2-lanes, max speed 70, hgv speed 60, special cases (like ramps etc.)* *Highways:* *30.0 = highway, 1-lane, max speed 110, hgv speed 60* *31.0 = highway, 1-lane, max speed 100, hgv speed 60* *32.0 = highway, 1-lane, max speed 90, hgv speed 50* *33.0 = highway, 1-lane, max speed 80, hgv speed 50, standard* *34.0 = highway, 1-lane, max speed 70, hgv speed 40* *35.0 = highway, 1-lane, max speed 60, hgv speed 30* *36.0 = highway, 1-lane, max speed 50, hgv speed 20* *37.0 = urban highway, 1-lane, max speed 60, hgv speed 50* *38.0 = urban highway, 1-lane, max speed 50, hgv speed 40* *39.0 = urban highway, 1-lane, max speed 40, hgv speed 30* *Arterial roads:* *40.0 = arterial road, 1 lane, max speed 90, hgv speed 50* *41.0 = arterial road, 1 lane, max speed 80, hgv speed 50* *42.0 = arterial road, 1 lane, max speed 70, hgv speed 40* *43.0 = arterial road, 1 lane, max speed 60, hgv speed 40* *44.0 = arterial road, 1 lane, max speed 50, hgv speed 30* *45.0 = arterial road, 1 lane, max speed 40, hgv speed 20* *46.0 = arterial road, 1 lane, max speed 30, hgv speed 20* *47.0 = arterial road, 1 lane, max speed 40, hgv speed 30* *48.0 = urban arterial road, 1 lane, max speed 30, hgv speed 20* *49.0 = urban arterial road, 1 lane, max speed 20, hgv speed 20* *Special mode:* *50.0 = River ferry* *Railway lines:* *60.0 = premium rail link, 4-tracks* *61.0 = premium rail link, double-tracks* *62.0 = rail link, double-tracks* *63.0 = rail link, slow, double-tracks* *64.0 = premium rail link, single-track* *65.0 = rail link, single track* *66.0 = rail link, slow, single track* *67.0 = rail uncertain* *68.0 = rail link, single track, forcast* *69.0 = ral link, double track, forcast* *Ferries and pipelines:* *71.0 = RoRo ferry* *73.0 = Rail ferry* *76.0 = Crude oil pipeline* *77.0 = Crude oil tanker* *78.0 = Natural gas pipeline* *Transhipment and virtual functional connector links:* *81.0 = Connection roads and RoRo ferries* *83.0 = Connecting rails and rail ferries* *85.0 = Intra-zonal connection road-rail* *87.0 = transhipment of oil* *89.0 = transhipment of gas* *97.0 = other virtual connection*

Available fields in attribute table:

Field name	Field type	Description
		98.0 = virtual connection by land *99.0 = Virtual maritime connection*
R~LENGTH	Float	Link length (to-from direction)
R~VOLVEHPR~1	Float	Link loads (to-from direction) (units: tons per day) (0.0 = zero link loads)
R~T0_PRTSY~2	Float	Link travel time (to-from direction) (units: hours/minutes/seconds) (unloaded network)

Layer name:	**TRANSPORT_NETWORKS**
Feature type:	Lines
Content:	Input networks for traffic modelling with VISUM software. This layer contains all modes of transport, i.e. roads and railways, pipelines, and different types of ferries and virtual modelling links. Individual modes can be extracted via the TYPENO attribute.
Spatial coverage:	TRACECA space, Central and Eastern Europe, Central Asia, Middle East
Actuality:	2010
Data source:	TRACECA

Sub-theme TRANSPORT_ANALYSIS_ZONES: **Currently there is one layer available under this sub-theme.**

Layer name:	**TAZ**
Feature type:	Polygons
Content:	Regional subdivision of countries. Regions used as transport analysis zones for traffic modelling with VISUM. The layer already contains some base information on each region. As far as possible, regions represent official statistical units as used by the National Statistical Offices of the countries; however, in order to achieve a harmonized balanced sub-division of the entire modelling area, some regions are artifical regions, subdividing or merging existing statistical entities into new ones.
Spatial coverage:	TRACECA space, Central and Eastern Europe, Central Asia, Middle East
Actuality:	2010
Data source:	TRACECA

Available fields in attribute table:

Field name	Field type	Description
NO	Float	Unique region number (as used by transport model) (to be used to join additional tabular data)
CODE	Integer	Unique numeric country code
NAME	Text	Region name (as far as possible official region names as used by National Statistical Offices)
TYPENO	Float	Region type: *0.0 = Pakistan* *1.0 = TRACECA country* *2.0 = Other regions in Russia (non adjacent)* *3.0 = Adjacent regions in non-TRACECA countries*
CNTRY_NAME	Text	Country namen
POP_ADMIN	Float	Region population
AREA	Float	Region area
CENTRALI~1	Float	flag indicating centrality (density) of a region: *1.0 = Region with highest centrality* *2.0 = Region with medium centrality* *3.0 = Region with low centrality*
DENSITY	Float	Population density of the region (inhabitants per square km)