Southeast Europe Programme SEE/A/246/4.2/X

Donauregionen+

Geodatabase Structure

Preliminary version

(1.6.2010)

PREFACE

Development of Geographical Information System (GIS) represents different approach to spatial data. GIS is a set of tools which are oriented to collect and store data about territory and land use in optimal way by joining together the spatial and table data about necessary territorial elements (features).

Data are organized in geographical databases according their fundament and topology (polygon, line and point) in separate themes (layers) which content the form and location (shape) of each element and list of descriptive data (attributes). This approach enables the user not only to collect and store both types of data in a new compact way but also to create the spatial and/or attribute queries, selections and simple or sophisticated analyses within separate layer and/or group of layers.

GIS is also the perfect tool for presentation of partial outcomes and final results on display by production of high quality maps, cartograms, schemes and charts.

ArcGIS Desktop and ArcGIS Server are the basic geographical products used in Donauregionen+ project for different purposes.

ArcGIS Desktop is powerful software product for collecting, storing, querying, analyzing and presenting geographical data now accessible to each project partner as end-user and professional public as well in the future.

ArcGIS Server is used as a presentation and querying tool for world wide public and project publicity via internet without needs of ArcGIS Desktop.

The Donauregionen Geographical Database is divided into four General Schemes focused on:

- Settlement Structure and Human Resources,
- Transport and Technical Infrastructure,
- Natural Conditions,
- Economy.

Now it practically contains all necessary territorial planning data from five former project partner countries Slovakia, Hungary, Serbia, Bulgaria and Romania. Currently the database is under the actualization process and the data from three new partner countries Croatia, Moldova and Ukraine are also completed and stored.

According the project geographical database structure the data are stored in personal geodatabases format in two-dimensional geographical coordinates (longitude, latitude), decimal degrees with fraction. The spatial reference system is ETRS 89 (WGS 84) with ellipsoid GRS 80. The output projection is ETRS 89 Lambert Azimuthal Equal Area in scale precision up to 1:200 000.

BASIC PRINCIPLES

Presented Donauregionen**+** geographical database structure was created according the geographical data which were collected in the previous project Donauregionen during years 2005 and 2008. The main problem was to unify different geographical layers with different shape types, projections and topological quality.

The main task was to define geographical database structure which will be independent on the ArcGIS data format:

- ESRI – Shapefile (i.e. DBF, SHP, SHX, PRJ, CPG files),
- ESRI – Personal Geodatabase,
- ESRI – File Geodatabase,
- ESRI – ArcInfo Coverage.

Geographic data for project elaboration should be created in the following coordinate systems:

- National coordinate systems with corresponding PRJ file including National to WGS 84 projection parameters (shift of Earth geoid centre),
- WGS 1984,
- ETRS 1989.

Geographic and/or attribute data should match the xBase file format convention in English language:

Field Name definition (limitation):

- Only upper alphanumeric characters (A – Z, 0 – 9 and "_") can be used,
- Maximum name length 10 characters (i.e. NUTS3_NAME),
- Does not begin with number (i.e. 2_ND).

Attribute data are stored in the supported national language codepages:

- Windows 1250 Central European (HR, HU, MD, RO, RS, SK),
- Windows 1251 Cyrillic (BG, UA).

Local names in Cyrillic alphabet are also stored in Latin alphabet transcription.

GIS data should be produced (finalized) in ArcGIS or ArcView GIS:

Correct topology:

- No overlap or gaps for polygon data,
- No useless dangle or pseudo nodes for polyline data,
- No duplicate for point data,
- If possible done by defining ArcGIS topology rules.

Project formats:

- MXD project format for ArcGIS version 9.2 and higher,
- APR project format for ArcView GIS version 3.2 and higher.

GENERAL SCHEME – SETTLEMENT STRUCTURE AND HUMAN RESOURCES

SETTLEMENT STRUCTURE

NUTS 0 – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Polygon
ID	Numeric	4	Identification number
NUTS0	Character	2	NUTS 0 (country) code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – România • RS – Srbija • SK – Slovensko • UA – Ukraine
NUTS0_NAME	Character	12	NUTS 0 name according Eurostat

NUTS 0 Boundary – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Polyline
ID	Numeric	4	Identification number
NUTS0	Character	5	NUTS 0 (country) code according Eurostat; boundary stores the code of both neighbouring NUTS 0 in alphabetical order delimited by | e.g. "HU|SK"
LEVEL	Numeric	1	Level of the boundary in the national administrative hierarchy: • 0 – NUTS 0 (Country) boundary
MEANING	Numeric	1	Meaning of boundary: • 1 – Boundary line and coastline • 2 – Boundary line on land • 3 – Boundary line on water • 4 – Coastline without administrative meaning; used for lines between coastal water area and land area of the same administrative unit

NUTS 1 – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Polygon
ID	Numeric	4	Identification number
NUTS1	Character	3	NUTS 1 code according Eurostat
NUTS1_NAME	Character	32	NUTS 1 name according Eurostat
NUTS0	Character	2	NUTS 0 code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – România • RS – Srbija • SK – Slovensko • UA – Ukraine
NUTS0_NAME	Character	32	NUTS 0 name according Eurostat

NUTS 1 Boundary – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Polyline
ID	Numeric	4	Identification number
NUTS1	Character	7	NUTS 1 (state) code according Eurostat; boundary stores the code of both neighbouring NUTS 1 in alphabetical order delimited by | e.g. "HU*n*|SK*n*"
LEVEL	Numeric	1	Level of the boundary in the national administrative hierarchy: • 0 – NUTS 0 (Country) boundary • 1 – NUTS 1 (State) boundary
MEANING	Numeric	1	Meaning of boundary: • 1 – Boundary line and coastline • 2 – Boundary line on land • 3 – Boundary line on water • 4 – Coastline without administrative meaning; used for lines between coastal water area and land area of the same administrative unit

NUTS 2 – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Polygon
ID	Numeric	4	Identification number
NUTS2	Character	4	NUTS 2 code according Eurostat
NUTS2_NAME	Character	32	NUTS 2 name according Eurostat
NUTS1	Character	3	NUTS 1 code according Eurostat
NUTS1_NAME	Character	32	NUTS 1 name according Eurostat
NUTS0	Character	2	NUTS 0 code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – România • RS – Srbija • SK – Slovensko • UA – Ukraine
NUTS0_NAME	Character	12	NUTS 0 name according Eurostat

NUTS 2 Boundary – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Polyline
ID	Numeric	4	Identification number
NUTS2	Character	9	NUTS 2 (administrative regions within states) code according Eurostat; boundary stores the code of both neighbouring NUTS 2 in alphabetical order delimited by | e.g. "HU*nn*|SK*nn*"
LEVEL	Numeric	1	Level of the boundary in the national administrative hierarchy: • 0 – NUTS 0 (Country) boundary • 1 – NUTS 1 (State) boundary • 2 – NUTS 2 (Regions within states) boundary
MEANING	Numeric	1	Meaning of boundary: • 1 – Boundary line and coastline • 2 – Boundary line on land • 3 – Boundary line on water • 4 – Coastline without administrative meaning; used for lines between coastal water area and land area of the same administrative unit

NUTS 3 – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Polygon
ID	Numeric	4	Identification number
NUTS3	Character	5	NUTS 3 code according Eurostat
NUTS3_NAME	Character	32	NUTS 3 name according Eurostat
NUTS2	Character	4	NUTS 2 code according Eurostat
NUTS2_NAME	Character	32	NUTS 2 name according Eurostat
NUTS1	Character	3	NUTS 1 code according Eurostat
NUTS1_NAME	Character	32	NUTS 1 name according Eurostat
NUTS0	Character	2	NUTS 0 code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – România • RS – Srbija • SK – Slovensko • UA – Ukraine
NUTS0_NAME	Character	12	NUTS 0 name according Eurostat

NUTS 3 Boundary – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Polyline
ID	Numeric	4	Identification number
NUTS3	Character	11	NUTS 3 (counties and greater metropolitan areas) code according Eurostat; boundary stores the code of both neighbouring NUTS 3 in alphabetical order delimited by | e.g. "HU*nnn*|SK*nnn*"
LEVEL	Numeric	1	Level of the boundary in the national administrative hierarchy: • 0 – NUTS 0 (Country) boundary • 1 – NUTS 1 (State) boundary • 2 – NUTS 2 (Regions within states) boundary • 3 – NUTS 3 (counties and greater metropolitan areas) boundary
MEANING	Numeric	1	Meaning of boundary: • 1 – Boundary line and coastline • 2 – Boundary line on land • 3 – Boundary line on water • 4 – Coastline without administrative meaning; used for lines between coastal water area and land area of the same administrative unit

LAU 1 – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Polygon
ID	Numeric	4	Identification number
LAU1	Character	8	LAU 1 code according Eurostat
LAU1_NAME	Character	32	LAU 1 name according Eurostat
NUTS3	Character	5	NUTS 3 code according Eurostat
NUTS3_NAME	Character	32	NUTS 3 name according Eurostat
NUTS2	Character	4	NUTS 2 code according Eurostat
NUTS2_NAME	Character	32	NUTS 2 name according Eurostat
NUTS1	Character	3	NUTS 1 code according Eurostat
NUTS1_NAME	Character	32	NUTS 1 name according Eurostat
NUTS0	Character	2	NUTS 0 code according ISO 3166-1 Alpha-2: - BG – Balgarija - HU – Magyarország - HR – Hrvatska - MD – Moldova - RO – România - RS – Srbija - SK – Slovensko - UA – Ukraine
NUTS0_NAME	Character	12	NUTS 0 name according Eurostat

LAU 1 Boundary – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Polyline
ID	Numeric	4	Identification number
LAU 1	Character	15	LAU 1 (district) code according Eurostat; boundary stores the code of both neighbouring LAU 1 in alphabetical order delimited by | e.g. "HU*nnnnn*|SK*nnnnn*"
LEVEL	Numeric	1	Level of the boundary in the national administrative hierarchy: 0 – NUTS 0 (Country) boundary 1 – NUTS 1 (State) boundary 2 – NUTS 2 (Regions within states) boundary 3 – NUTS 3 (Counties and greater metropolitan areas) boundary 4 – LAU 1 (District) boundary
MEANING	Numeric	1	Meaning of boundary: 1 – Boundary line and coastline 2 – Boundary line on land 3 – Boundary line on water 4 – Coastline without administrative meaning; used for lines between coastal water area and land area of the same administrative unit

LAU 2 – Layer data structure (Polygon)

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Group (Polygon & Point)
ID	Numeric	4	Identification number
LAU2	Character	11	LAU 2 code according Eurostat
LAU2_NAME	Character	32	LAU 2 name according Eurostat
STATUS	Character	1	LAU 2 status: • C – City • T – Town • M – Municipality
LEVEL	Numeric	1	LAU 2 level: • 0 – centre of NUTS 0 (Capital) • 1 – centre of NUTS 1 (State) • 2 – centre of NUTS 2 (Region) • 3 – centre of NUTS 3 (County) • 4 – centre of LAU 1 (District) • 5 – centre of LAU 2 (Municipality)
LAU1	Character	8	LAU 1 code according Eurostat
LAU1_NAME	Character	32	LAU 1 name according Eurostat
NUTS3	Character	5	NUTS 3 code according Eurostat
NUTS3_NAME	Character	32	NUTS 3 name according Eurostat
NUTS2	Character	4	NUTS 2 code according Eurostat
NUTS2_NAME	Character	32	NUTS 2 name according Eurostat
NUTS1	Character	3	NUTS 1 code according Eurostat
NUTS1_NAME	Character	32	NUTS 1 name according Eurostat
NUTS0	Character	2	NUTS 0 code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – România • RS – Srbija • SK – Slovensko • UA – Ukraine
NUTS0_NAME	Character	12	NUTS 0 name according Eurostat

LAU 2 Boundary – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Polyline
ID	Numeric	4	Identification number
LAU2	Character	23	LAU 2 (municipality) code according Eurostat; boundary stores the code of both neighbouring LAU 2 in alphabetical order delimited by | e.g. "HU*nnnnnnnnn*|SK*nnnnnnnnn*"
LEVEL	Numeric	1	Level of the boundary in the national administrative hierarchy: • 0 – NUTS 0 (Country) boundary • 1 – NUTS 1 (State) boundary • 2 – NUTS 2 (Regions within states) boundary • 3 – NUTS 3 (Counties and greater metropolitan areas) boundary • 4 – LAU 1 (District) boundary • 5 – LAU 2 (Municipality) boundary
MEANING	Numeric	1	Meaning of boundary: • 1 – Boundary line and coastline • 2 – Boundary line on land • 3 – Boundary line on water • 4 – Coastline without administrative meaning; used for lines between coastal water area and land area of the same administrative unit

GENERAL SCHEME – TRANSPORT AND TECHNICAL INFRASTRUCTURE

TRANSPORT

ROAD – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Polyline
ID	Numeric	4	Identification number
ICC	Character	2	Country code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – România • RS – Srbija • SK – Slovensko • UA – Ukraine
LABEL	Character	12	Label (national number) of road
CLASS	Character	1	Road class (state classification): • M – Motorway • E – Expressway • 1 – 1st class road – European main road • 2 – 2nd class road – European basic road • 3 – 3rd class road • C – very important city (town) road
PROFILE	Character	1	Current road profile: • F – full profile • H – half profile
STATUS_QUO	Character	1	Road current status: • A – Operational • C – Under construction • P – Planned / Proposed • X – Not operational
TEN_T	Character	6	TEN-T label of road: • T – TEN-T corridor • *RR* – Pan-European corridor written in Roman numbering (see appendix) • PP*nn* – Priority project label e.g. "PP07" (see appendix)
AGR	Character	4	AGR label of road
AGTC	Character	7	AGTC label of road

RAILWAY – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Polyline
ID	Numeric	4	Identification number
ICC	Character	2	Country code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – România • RS – Srbija • SK – Slovensko • UA – Ukraine
LABEL	Character	8	Label (national number) of railway
TYPE	Character	1	Railway type (classification): • H – High Speed Railway • R – Railway
IMPORTANCE	Character	1	Railway importance: • I – International • N – National • R – Regional • L – Local
TRACTION	Character	1	Engine traction: • E – Electric • D – Diesel
TRACK	Character	1	Number of rails: • D – Double rail track • S – Single rail track
STATUS_QUO	Character	1	Railway current status: • A – Operational • C – Under construction • P – Planned / Proposed • X – Not operational
TEN_T	Character	8	TEN-T label of railway: • T – TEN-T corridor • *RR* – Pan-European corridor written in Roman numbering (see appendix) • PP*nn* – Priority project label e.g. "PP07" (see appendix)
AGC	Character	5	AGC label of railway
AGTC	Character	7	AGTC label of railway

WATERWAY/RIVER – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Polyline
ID	Numeric	4	Identification number
ICC	Character	2	Country code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – România • RS – Srbija • SK – Slovensko • UA – Ukraine
NAME	Character	32	Waterway (river) name
TYPE	Character	1	Type of waterway: • R – river • C – canal
CLASS	Character	4	Classification of navigable waterway according AGN
IMPORTANCE	Character	1	Waterway importance: • I – International • N – National • R – Regional • L – Local
STATUS_QUO	Character	1	Waterway current status: • A – Operational • C – Under construction • P – Planned / Proposed • X – Not operational
TEN_T	Character	3	TEN-T label of waterway: • VII – Danube river corridor
AGN	Character	10	AGN label of waterway
AGTC	Character	12	AGTC label of waterway

AIRPORT – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Point
ID	Numeric	4	Identification number
ICC	Character	2	Country code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – Românìa • RS – Srbija • SK – Slovensko • UA – Ukraine
ICAO	Character	4	Airport ICAO code
IATA	Character	3	Airport IATA code
NAME	Character	32	Airport name
TYPE	Character	1	Airport type: • C – civil airport • G – cargo airport • M – military airport • S – sport airport
CATEGORY	Character	1	Airport category (importance): • I – International • C – Community (National) • R – Regional • L – Local
STATUS_QUO	Character	1	Airport current status: • A – Operational • C – Under construction • P – Planned / Proposed • X – Not operational
TEN_T	Character	8	Label of TEN-T airport

PORT – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Point
ID	Numeric	4	Identification number
ICC	Character	2	Country code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – România • RS – Srbija • SK – Slovensko • UA – Ukraine
NAME	Character	32	Port name
TYPE	Character	1	Port type: • S – sea • M – sea/inland • I – inland
CATEGORY	Character	1	Port category (importance): • I – International • C – Community (National) • R – Regional • L – Local
STATUS_QUO	Character	1	Port current status: • A – Operational • C – Under construction • P – Planned / Proposed • X – Not operational
TEN_T	Character	8	TEN-T label of port
AGN	Character	13	AGN label of port
AGTC	Character	12	AGTC label of port
KIND	Character	1	Port kind: • P – Public • N – Non public / Private

TERMINAL – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Point
ID	Numeric	4	Identification number
ICC	Character	2	Country code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – România • RS – Srbija • SK – Slovensko • UA – Ukraine
NAME	Character	32	Terminal name or locality
TYPE	Character	5	Type of terminal: • Ro-LA – Road-Rail-Road terminal • Ro-Ro – Roll-on / Roll-off terminal • L – Logistic centre
IMPORTANCE	Character	1	Terminal importance: • I – International • N – National • R – Regional • L – Local
STATUS_QUO	Character	1	Terminal current status: • A – Operational • C – Under construction • P – Planned / Proposed • X – Not operational
AGTC	Character	1	AGTC label of terminal: • T – AGTC terminal
CAPACITY	Numeric	6.0	Capacity of terminal in tons per year
STORAGE	Numeric	4.0	Storage space of terminal in square metres

BORDER CROSSING – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Point
ID	Numeric	4	Identification number
ICC	Character	5	Country code according ISO 3166; boundary stores the code of both neighbouring countries in alphabetical order delimited by | e.g. "HU|SK"
NAME	Character	32	Border crossing name
TYPE	Character	1	Type of border crossing: • M – Motorway border crossing • E – Expressway border crossing • 1 – 1st class road border crossing • 2 – 2nd class road border crossing • 3 – 3rd class road border crossing • R – Railway border crossing • W – Waterway border crossing • P – Pedestrian border crossing
IMPORTANCE	Character	1	Terminal importance: • I – International • N – National • R – Regional • L – Local
STATUS_QUO	Character	1	Terminal current status: • A – Operational • C – Under construction • P – Planned / Proposed • X – Not operational
TEN_T	Character	8	TEN-T label of border crossing: • T – TEN-T corridor • *RR* – Pan-European corridor written in Roman numbering (see appendix) • PP*nn* – Priority project label e.g. "PP07" (see appendix)
AGR	Character	1	AGG label of terminal: • R – AGR road border crossing
AGC	Character	1	AGC label of terminal: • R – AGC railway border crossing
AGTC	Character	1	AGTC label of terminal: • C – AGTC combined transport border crossing
AGN	Character	1	AGN label of terminal: • W – AGN waterway border crossing

TECHNICAL INFRASTRUCTURE

ELECTRIC ENERGY NETWORK AND INSTALLATIONS

ELECTRIC POWER PLANT – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Point
ID	Numeric	4	Identification number
ICC	Character	2	Country code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – România • RS – Srbija • SK – Slovensko • UA – Ukraine
LABEL	Character	32	Label (name or locality) of power plant
TYPE	Character	1	Power plant type: • N – Nuclear power plant • T – Thermal power plant • H – Hydro-electric power plant • C – Combined cycle plant • W – Wind Farm • B – Bio fuel power plant • O – Other power plant
FUEL	Character	32	Kind of used fuel
STATUS_QUO	Character	1	Power plant current status: • A – Operational • C – Under construction • P – Planned / Proposed • X – Not operational
CAPACITY	Numeric	4.0	Installed power capacity in MW
TEN_E	Character	8	TEN-E label of power plant

ELECTRIC STATION – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Point
ID	Numeric	4	Identification number
ICC	Character	2	Country code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – România • RS – Srbija • SK – Slovensko • UA – Ukraine
LABEL	Character	32	Label (name or locality) of electric station
VOLTAGE	Numeric	3	Input voltage in kV: • 750 • 500 • 400 • 330 • 220 • 120 • 110
STATUS_QUO	Character	1	Electric station current status: • A – Operational • C – Under construction • P – Planned / Proposed • X – Not operational
FRAMEWORK	Character	1	Electric power line framework: • T – Transmission framework • D – Distribution framework
POWER	Character	16	Electric power in kVA
TEN_E	Character	8	TEN-E label of electric station

POWERLINE – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Polyline
ID	Numeric	4	Identification number
ICC	Character	2	Country code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – România • RS – Srbija • SK – Slovensko • UA – Ukraine
LABEL	Character	32	Label of power line section
VOLTAGE	Numeric	3	Power line voltage in kV: • 750 • 500 • 400 • 330 • 220 • 120 • 110
VOLT_LEVEL	Character	14	Voltage level power line: • Above 500 kV • 380 - 499 kV • 300 - 379 kV • 220 - 299 kV • Bellow 220 kV
STATUS_QUO	Character	1	Power line current status: • A – Operational • C – Under construction • P – Planned / Proposed • X – Not operational
FRAMEWORK	Character	1	Power line framework: • T – transmission framework • D – distribution framework
TEN_E	Character	4	TEN-E label of power line: • EL – TEN-E power line • EL*nn* – Priority project label e.g. "EL07" (see appendix)

GAS AND OIL SUPPLY AND DISTRIBUTION

GAS FACILITY – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Point
ID	Numeric	4	Identification number
ICC	Character	2	Country code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – România • RS – Srbija • SK – Slovensko • UA – Ukraine
LABEL	Character	32	Label (name or locality) of gas pipeline facility
TYPE	Character	1	Type of gas pipeline facility: • CS – gas compression station • US – underground storage facility • LNG – LNG terminal
STATUS_QUO	Character	1	Gas pipeline facility current status: • A – Operational • C – Under construction • P – Planned / Proposed • X – Not operational
LEVEL	Character	1	Gas pipeline pressure level: • V – very high pressure • H – high pressure
CAPACITY	Numeric	6.0	Capacity of gas facility in cubic metres
TEN_E	Character	8	TEN-E label of gas facility

GAS PIPELINE – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Polyline
ID	Numeric	4	Identification number
ICC	Character	2	Country code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – România • RS – Srbija • SK – Slovensko • UA – Ukraine
LABEL	Character	32	Label of gas pipeline section
LEVEL	Character	1	Gas pipeline pressure level: • V – very high pressure • H – high pressure
STATUS_QUO	Character	1	Gas pipeline current status: • A – Operational • C – Under construction • P – Planned / Proposed • X – Not operational
CATEGORY	Character	1	Gas category: • T – transit gas pipeline • M – main gas pipeline
PRESSURE	Numeric	4.1	Gas pipeline operation pressure in MPa
DN	Numeric	4.0	Diameter of pipeline in millimetres
TEN_E	Character	4	TEN-E label of gas pipeline: • NG – TEN-E gas line • NG*nn* – Priority project label e.g. "NG07" (see appendix)

GAS PRODUCTION REGION – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Polygon
ID	Numeric	4	Identification number
ICC	Character	2	Country code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – România • RS – Srbija • SK – Slovensko • UA – Ukraine
LABEL	Character	32	Label (name or locality) of gas production region

REFINERY – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Point
ID	Numeric	4	Identification number
ICC	Character	2	Country code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – România • RS – Srbija • SK – Slovensko • UA – Ukraine
LABEL	Character	32	Label (name or locality) of refinery
STATUS_QUO	Character	1	Refinery current status: • A – Operational • C – Under construction • P – Planned / Proposed • X – Not operational
CAPACITY	Numeric	6.0	Capacity of refinery in cubic metres per day
PRODUCT	Character	32	Products of refinery
TEN_E	Character	8	TEN-E label of refinery

OIL PIPELINE – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Polyline
ID	Numeric	4	Identification number
ICC	Character	2	Country code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – România • RS – Srbija • SK – Slovensko • UA – Ukraine
LABEL	Character	32	Label of oil pipeline section
STATUS_QUO	Character	1	Oil pipeline current status: • A – Operational • C – Under construction • P – Planned / Proposed • X – Not operational
DN	Numeric	4.0	Diameter of pipeline in millimetres
TEN_E	Character	1	TEN-E label of oil pipeline: • T – TEN-T pipeline

OIL DEPOSIT REGION – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Polygon
ID	Numeric	4	Identification number
ICC	Character	2	Country code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – România • RS – Srbija • SK – Slovensko • UA – Ukraine
LABEL	Character	32	Label (name or locality) of oil deposit region
TEN_E	Character	8	TEN-E label of oil deposit region

WATER PROTECTION AND MANAGEMENT

WATER FACILITY – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Point
ID	Numeric	4	Identification number
ICC	Character	2	Country code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – România • RS – Srbija • SK – Slovensko • UA – Ukraine
LABEL	Character	32	Label (name or locality) of water facility
TYPE	Character	1	Water pipeline facility type: • R – water tank reservoir • T – water-tower reservoir
STATUS_QUO	Character	1	Water facility current status: • A – Operational • C – Under construction • P – Planned / Proposed • X – Not operational
CAPACITY	Numeric	6.0	Capacity of water facility in cubic m

WATER PIPELINE – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Polyline
ID	Numeric	4	Identification number
ICC	Character	2	Country code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – România • RS – Srbija • SK – Slovensko • UA – Ukraine
LABEL	Character	32	Label of water pipeline section
TYPE	Character	1	Water pipeline type: • D – long-distance • R – Regional • M – main distribution
STATUS_QUO	Character	1	Water pipeline current status: • A – Operational • C – Under construction • P – Planned / Proposed • X – Not operational
DN	Numeric	4.0	Diameter of pipeline in millimetres

SEWAGE TREATMENT PLANT – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Point
ID	Numeric	4	Identification number
ICC	Character	2	Country code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – România • RS – Srbija • SK – Slovensko • UA – Ukraine
LABEL	Character	32	Label (name or locality) of sewage treatment plant
STATUS_QUO	Character	1	Sewage treatment plant current status: • A – Operational • C – Under construction • P – Planned / Proposed • X – Not operational
CAPACITY	Numeric	6.0	Capacity of plant in cubic metres per day

SEWER PIPELINE – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Polyline
ID	Numeric	4	Identification number
ICC	Character	2	Country code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – România • RS – Srbija • SK – Slovensko • UA – Ukraine
LABEL	Character	32	Label of sewer pipeline section
STATUS_QUO	Character	1	Sewer pipeline current status: • A – Operational • C – Under construction • P – Planned / Proposed • X – Not operational
DN	Numeric	4.0	Diameter of pipeline in millimetres

FLOOD PROTECTION – Layer data structure (Point)

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Point
ID	Numeric	4	Identification number
ICC	Character	2	Country code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – România • RS – Srbija • SK – Slovensko • UA – Ukraine
LABEL	Character	32	Label (name or locality) of flood protection
TYPE	Character	1	Type of flood protection: • D – water dam • B – barrage • P – polder
STATUS_QUO	Character	1	Flood protection current status: • A – Operational • C – Under construction • P – Planned / Proposed • X – Not operational
CAPACITY	Numeric	6.0	Capacity of water dam in cubic metres

FLOOD PROTECTION – Layer data structure (Polyline)

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Polyline
ID	Numeric	4	Identification number
ICC	Character	2	Country code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – România • RS – Srbija • SK – Slovensko • UA – Ukraine
LABEL	Character	32	Label (name or locality) of flood protection
TYPE	Character	1	Type of flood protection: • W – flood wall • C – canal
STATUS_QUO	Character	1	Flood protection current status: • A – Operational • C – Under construction • P – Planned / Proposed • X – Not operational

FLOOD RISK AREA – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Polygon
ID	Numeric	4	Identification number
ICC	Character	2	Country code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – România • RS – Srbija • SK – Slovensko • UA – Ukraine
LABEL	Character	32	Label (name or locality) of flood risk area

TELECOMMUNICATION NETWORK

TELECOMMUNICATION FACILITY – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Point
ID	Numeric	4	Identification number
ICC	Character	2	Country code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – România • RS – Srbija • SK – Slovensko • UA – Ukraine
LABEL	Character	32	Label (name or locality) of telecommunication facility
CATEGORY	Character	2	Category of telecommunication facility: • M – main centre • T – transit centre • MW – microwave centre
STATUS_QUO	Character	1	Telecommunication facility current status: • A – Operational • C – Under construction • P – Planned / Proposed • X – Not operational
E_TEN	Character	8	e-TEN label of telecommunication facility

TELECOMMUNICATION NETWORK – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Polyline
ID	Numeric	4	Identification number
ICC	Character	2	Country code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – România • RS – Srbija • SK – Slovensko • UA – Ukraine
LABEL	Character	32	Label of telecommunication section
CATEGORY	Character	1	Category of telecommunication section: • T – terrestrial telecommunication section • M – microwave telecommunication section
MATERIAL	Character	1	Material of telecommunication section: • O – optical fibre • C – coaxial • "-" – unknown
STATUS_QUO	Character	1	Telecommunication section current status: • A – Operational • C – Under construction • P – Planned / Proposed • X – Not operational
E_TEN	Character	4	e-TEN label of telecommunication route: • C – e-TEN telecommunication route • C*nn* – Priority project label (*NN* = 01 – 99)

GENERAL SCHEME – NATURE CONDITIONS

NATURA 2000 – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Group (Polygon & Polyline & Point)
ICC	Character	2	Country code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • RO – România • SK – Slovensko
SITE_CODE	Character	9	Natura 2000 site code
SITE_NAME	Character	64	Natura 2000 site name
HABITAT	Character	4	Habitat directive site type: • pSCI – Site of community importance – proposed • SCI – Site of community importance • SAC – Special area of conservation
BIRD_SITE	Character	3	Bird directive site: • SPA – Special protected area
AREA_HA	Numeric	9.2	Site area in hectares

NATURE PROTECTED AREA – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Group (Polygon & Polyline & Point)
ID	Numeric	4	Identification number (according WDPA)
ICC	Character	2	Country code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – România • RS – Srbija • SK – Slovensko • UA – Ukraine
SITE_NAME	Character	64	Site name (according WDPA)
CATEGORY	Character	4	Protection category according IUCN: • I.a – Strict nature reserve • I.b – Wilderness area • II – National park • III – Natural monument • IV – Habitat / Species management area • V – Protected Landscape / Seascape • VI – Managed Resource protected area • N/A – Not available / Not known • P – Proposed / Recommended
AREA_HA	Numeric	9.2	Site area in hectares

RAMSAR WETLAND – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Group (Polygon & Polyline & Point)
ID	Numeric	4	Identification number
ICC	Character	2	Country code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – România • RS – Srbija • SK – Slovensko • UA – Ukraine
SITE_CODE	Character	6	Ramsar wetland site code
SITE_NAME	Character	64	Ramsar wetland site name
DATE	Date	8	Date of designation
AREA_HA	Numeric	9.2	Site area in hectares

WORLD HERITAGE SITE – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Group (Polygon & Polyline & Point)
ID	Numeric	4	Identification number (according WHC)
ICC	Character	2	Country code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – România • RS – Srbija • SK – Slovensko • UA – Ukraine
SITE_NAME	Character	64	World heritage site name
TYPE	Character	2	Type of world heritage site: • C – Cultural • CD – Cultural in danger • M – Mixed (Cultural / Natural) site • N – Natural • ND – Natural in danger
INSCRIPTION	Numeric	4	Year of inscription to the WHL
DANGER	Numeric	4	Year of inscription to the WHL in danger
DELISTED	Numeric	4	Year of description from the WHL
CRITERIA	Character	29	List of criteria according WHC that site meets e.g. "1; 2; 3; 4; 5; 6; 7; 8; 9; 10"
AREA_HA	Numeric	9.2	Site area in hectares

MAN AND BIOSPHERE RESERVE – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Group (Polygon & Polyline & Point)
ID	Numeric	4	Identification number (according MaB)
ICC	Character	2	Country code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – România • RS – Srbija • SK – Slovensko • UA – Ukraine
SITE_CODE	Character	6	MAB site code
SITE_NAME	Character	64	MAB site name
BIOME	Character	62	Major ecosystem type: • ? – Boreal forests / Taiga • ? – Deserts and xeric shrublands • ? – Flooded grasslands and savannas • ? – Lake • ? – Mangrove • ? – Mediterranean forests, woodlands, and scrub • ? – Montane grasslands and shrublands • ? – Rock and Ice • ? – Temperate broadleaf and mixed forests • ? – Temperate coniferous forests • ? – Temperate grasslands, savannas, and shrublands • ? – Tropical and subtropical coniferous forests • ? – Tropical and subtropical dry broadleaf forests • ? – Tropical and subtropical grasslands, savannas, and shrublands • ? – Tropical and subtropical moist broadleaf forest • ? – Tundra
ALT_AVG	Numeric	4	Average altitude in metres above sea level
ALT_MIN	Numeric	4	Minimum altitude in metres above sea level
ALT_MAX	Numeric	4	Maximum altitude in metres above sea level
YEAR	Numeric	4	Year of designation
AREA_HA	Numeric	9.2	Site area in hectares

CORINE LAND COVER – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Polygon
ID	Numeric	4	Identification number
ICC	Character	2	Country code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – România • RS – Srbija • SK – Slovensko • UA – Ukraine
LEVEL1	Numeric	1	Nomenclature Level 1: • 1 – Artificial surfaces • 2 – Agricultural areas • 3 – Forests and semi-natural areas • 4 – Wetlands
LEVEL2	Numeric	2	Nomenclature Level 2: • 11 – Urban fabric • 12 – Industrial, commercial and transport units • 13 – Mine, dump and construction sites • 14 – Artificial non-agricultural vegetated areas • 21 – Arable land • 22 – Permanent crops • 23 – Pastures • 24 – Heterogeneous agricultural areas • 31 – Forests • 32 – Shrub and/or herbaceous vegetation association • 33 – Open spaces with little or no vegetation • 41 – inland wetlands • 42 – Coastal wetlands

(continuation)

CORINE LAND COVER – Layer data structure   (continuation)

Field Name	Field Type	Field Length	Field Description
LEVEL3	Numeric	3	Nomenclature Level 3: • 111 – Continuous urban fabric • 112 – Discontinuous urban fabric • 121 – Industrial or commercial units • 122 – Road and rail networks and associated land • 123 – Port areas • 124 – Airports • 131 – Mineral extraction sites • 132 – Dump sites • 133 – Construction sites • 141 – Green urban areas • 142 – Sport and leisure facilities • 211 – Non-irrigated arable land • 212 – Permanently irrigated land • 213 – Rice fields • 221 – Vineyards • 222 – Fruit trees and berry plantations • 223 – Olive groves • 231 – Pastures • 241 – Annual crops associated with permanent crops • 242 – Complex cultivation • 243 – Land principally occupied by agriculture, with significant areas of natural vegetation • 244 – Agro-forestry areas • 311 – Broad-leaved forest • 312 – Coniferous forest • 313 – Mixed forest • 321 – Natural grassland • 322 – Moors and heathland • 323 – Sclerophyllous vegetation • 324 – Transitional woodland shrub • 331 – Beaches, dunes, and sand plains • 332 – Bare rock • 333 – Sparsely vegetated areas • 334 – Burnt areas • 335 – Glaciers and perpetual snow • 411 – Inland marshes • 412 – Peatbogs • 421 – Salt marshes • 422 – Salines • 423 – Intertidal flats

TERRITORIAL SYSTEM OF ECOLOGICAL STABILITY (TSES) – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Group (Polygon & Polyline & Point)
ID	Numeric	4	Identification number
ICC	Character	2	Country code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – România • RS – Srbija • SK – Slovensko • UA – Ukraine
CODE	Numeric	4	TSES code
TYPE	Character	1	TSES type: • CE – Bio centre • CO – Bio corridor • O – Other areas of ecological stability
IMPORTANCE	Character	1	TSES importance: • T – Trans-Regional Importance • R – Regional Importance • L – Local Importance

LANDFILLS – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Point
ID	Numeric	4	Identification number
ICC	Character	2	Country code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – România • RS – Srbija • SK – Slovensko • UA – Ukraine
LABEL	Character	32	Label (name or locality) of landfills
CLASS	Character	1	Classes of landfills (according DG Envi): • H – Hazardous waste • N – Non-hazardous waste • I – Inert waste
IMPORTANCE	Character	1	Landfills importance: • I – International • N – National • R – Regional • L – Local
STATUS_QUO	Character	1	Landfills current status: • A – Operational • C – Under construction • P – Planned / Proposed • X – Not operational

WASTE INCINERATOR – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Point
ID	Numeric	4	Identification number
ICC	Character	2	Country code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – România • RS – Srbija • SK – Slovensko • UA – Ukraine
LABEL	Character	32	Label (name or locality) of waste incinerator
CLASS	Character	1	Classes of waste incinerator: • H – Hazardous waste • N – Non-hazardous waste • I – Inert waste
IMPORTANCE	Character	1	Waste incinerator importance: • I – International • N – National • R – Regional • L – Local
STATUS_QUO	Character	1	Waste incinerator current status: • A – Operational • C – Under construction • P – Planned / Proposed • X – Not operational

POLLUTION – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Point
ID	Numeric	4	Identification number
ICC	Character	2	Country code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – România • RS – Srbija • SK – Slovensko • UA – Ukraine
LABEL	Character	32	Label (name or locality) of pollution source
RELEASE	Character	1	Release of pollution • W – Water • A – Air • L – Land
SOURCE	Numeric	1	Source of pollution (according E-PRTR): • 1 – Energy sector • 2 – Production and processing of metals • 3 – Mineral industry • 4 – Chemical industry • 5 – Waste and waste water management • 6 – Paper and wood production processing • 7 – Intensive livestock production and aquaculture • 8 – Animal and vegetable products from the food and beverage sector • 9 – Other activities
POLLUTANT	Character	1	Pollutant: • H – Heavy metals • C – Chlorinated organic substance • I – Inorganic substances • O – Other organic substances

WATER SOURCE – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Point
ID	Numeric	4	Identification number
ICC	Character	2	Country code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – România • RS – Srbija • SK – Slovensko • UA – Ukraine
LABEL	Character	32	Label (name or locality) of water source
SORT	Character	1	Water source sort: • W – Water spout • M – Mineral spout • T – Thermal spout
TYPE	Character	1	Water source type: • Spring • Well
YIELD	Numeric	6.2	Yield of water source in litres per second

WATER (MANAGEMENT) PROTETION AREA – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Group (Polygon & Polyline)
ID	Numeric	4	Identification number
ICC	Character	2	Country code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – România • RS – Srbija • SK – Slovensko • UA – Ukraine
LABEL	Character	32	Label (name or locality) of protection area

POUND LOCK – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Polyline
ID	Numeric	4	Identification number
ICC	Character	2	Country code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – România • RS – Srbija • SK – Slovensko • UA – Ukraine
LABEL	Character	32	Label (name or locality) of pound lock
STATUS_QUO	Character	1	Pound lock current status: • A – Existing • C – Under construction • P – Planned / Proposed • X – Destroyed

SPA – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Point
ID	Numeric	4	Identification number
ICC	Character	2	Country code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – România • RS – Srbija • SK – Slovensko • UA – Ukraine
LABEL	Character	32	Label (name or locality) of spa

SEISMIC AREA – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Point
ID	Numeric	4	Identification number
ICC	Character	2	Country code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – România • RS – Srbija • SK – Slovensko • UA – Ukraine
LABEL	Character	32	Label (name or locality) of seismic area

SETTLEMENT – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Polygon
ID	Numeric	4	Identification number
ICC	Character	2	Country code according ISO 3166-1 Alpha-2: • BG – Balgarija • HU – Magyarország • HR – Hrvatska • MD – Moldova • RO – România • RS – Srbija • SK – Slovensko • UA – Ukraine
NAME	Character	32	Settlement name
STATUS	Character	1	Settlement status: • C – City • T – Town • M – Municipality

FOREST – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Polygon
ID	Numeric	4	Identification number
ICC	Character	2	Country code according ISO 3166-1 Alpha-2: - BG – Balgarija - HU – Magyarország - HR – Hrvatska - MD – Moldova - RO – România - RS – Srbija - SK – Slovensko - UA – Ukraine

WATER AREA – Layer data structure

Field Name	Field Type	Field Length	Field Description
SHAPE	BLOB	-	Group (Polygon & Polyline)
ID	Numeric	4	Identification number
ICC	Character	2	Country code according ISO 3166-1 Alpha-2: - BG – Balgarija - HU – Magyarország - HR – Hrvatska - MD – Moldova - RO – România - RS – Srbija - SK – Slovensko - UA – Ukraine
NAME	Character	32	Water area name
TYPE	Character	1	Water area type - L – Lake - W – Waterbody

CURRENTLY UNDOCUMENTED LAYERS

SETTLEMENT – polygon SK, UA

VEGETATION – polygon MD, UA

HYDROGEOLOGICAL PROTECTION ZONE – polygon SK – spas, water sources

WATER SUPPLY RESERVOIR – point RS

DRINKING WATER RESOURCE – polygon RS (by NUTS)

WATER WITHDRAWAL FROM SURFACE STREAM – point RO

SLAGHEAP – point SK

TRANSFER STATION FOR ZONAL ECOLOGICAL WASTE DISPOSAL – point RO

WASTE DISPOSAL AREA – polygon RO

MAJOR UNDERGROUND WATER POLLUTION SOURCE – point SK

WATER QUALITY – point RO – degraded water, polluted water

KARST – polygon HU, BG; point RO (caves)

GENERAL SCHEME – ECONOMY

There are no geographical layers necessary for General Scheme Economy because all economy data can be displayed by joining (or linking) them to NUTS 0, NUTS 1, NUTS 2 and NUTS 3 layers which are described in General Scheme Settlement Structure and Human Resources.

List of Acronyms

AGC   European Agreement on Main International Railway Lines
               (http://www.unece.org/trans/conventn/legalinst.html)

AGN   European Agreement on Main Inland Waterways of International Importance
               (http://www.unece.org/trans/conventn/legalinst.html)

AGR   European Agreement on Main International Traffic Arteries
               (http://www.unece.org/trans/conventn/legalinst.html)

AGTC   European Agreement on Important International Combined Transport Lines and Related
               Installations (http://www.unece.org/trans/conventn/legalinst.html)

CDDA   Common Database on Designated Areas
               (http://biodiversity.eionet.europa.eu/activities/products/cdda)

CORINE   CORINE Land Cover
               (http://www.eea.europa.eu/publications/COR0-landcover)

DG Envi   Directorate General for the Environment
               (http://ec.europa.eu/environment/waste/landfill_index.htm)

E-PRTR   The European Pollutant Release and Transfer Register
               (http://prtr.ec.europa.eu/MapSearch.aspx)

e-TEN   Trans-European Network on Communications
               (http://ec.europa.eu/information_society/activities/eten)

IATA   International Association for Air Transport
               (http://www.iata.org)

ICAO   International Organization for Civil Aviation
               (http://www.icao.int)

IUCN   International Union for Conservation of Nature
               (http://www.iucn.org)

LAU   Local Area Units – Administrative Units of former NUTS Level 4 and 5 defined for EU27
               (http://ec.europa.eu/eurostat/ramon/nuts)

MAB   UNESCO Man and Biosphere Reserve Programme
               (http://www.unesco.org/mabdb/br/brdir/directory/database.asp#country,
               http://www.unesco.org/mabdb/bios1-2.htm)

Natura2000 Network of Nature Protection Areas of EU27 countries
               (http://ec.europa.eu/environment/nature/natura2000/index_en.htm)

NUTS   Nomenclature of Territorial Units for Statistics defined for EU27, EFTA and CEC countries
               (http://ec.europa.eu/eurostat/ramon/nuts)

PP   Trans-European Network Priority Project on Transport and Energy
               (http://tentea.ec.europa.eu/en/ten-t_projects/30_priority_projects,
               http://ec.europa.eu/energy/infrastructure/studies/ten_e_en.htm)

RAMSAR   Ramsar Convention on Wetlands
               (http://www.ramsar.org, ramsar.wetlands.org)

TINA   Transport Infrastructure Needs Assessment
               (http://www.tinavienna.at/)

TEN   Trans-European Networks
               (http://ec.europa.eu/ten)

TEN-E   Trans-European Network on Energy
               (http://ec.europa.eu/energy/infrastructure)

TEN-T   Trans-European Network on Transport
               (http://ec.europa.eu/transport/infrastructure)

WDPA   World Database on Protected Areas
                (http://www.wdpa.org)

WHC   World Heritage Centre, World Heritage Committee, World Heritage Convention
                (http://whc.unesco.org)

WHL   World Heritage List
                (http://whc.unesco.org/en/list, http://whc.unesco.org/en/danger)

Appendixes

List of Pan-European Corridors (Helsinki Corridors):

I	(North-South) Helsinki – Tallinn – Riga – Kaunas and Klaipėda – Warsaw and Gdańsk • Branch A: (via rail Hanseatica) – Sankt Petersburg – Riga – Kaliningrad – Gdańsk – Lübeck • Branch B: (via Baltica/E 67) – Helsinki – Warsaw
II	(East-West) Berlin – Poznań – Warsaw – Brest – Minsk – Smolensk – Moscow – Nizhny Novgorod
III	Brussels – Aachen – Cologne – Dresden – Wrocław – Katowice – Kraków – Lviv – Kiev • Branch A: Berlin – Wrocław
IV	Dresden/Nuremberg – Prague – Vienna – Bratislava – Győr – Budapest – Arad – București – Constanța / Craiova – Sofia – Thessaloniki / Plovdiv – Istanbul
V	(East-West) Venice – Trieste / Koper – Ljubljana – Maribor – Budapest – Uzhgorod – Lviv – Kiev • Branch A: Bratislava – Žilina – Košice – Uzhgorod • Branch B: Rijeka – Zagreb – Budapest • Branch C: Ploče – Sarajevo – Osijek – Budapest
VI	(North-South) Gdańsk – Katowice – Žilina • Branch A: Katowice – Brno
VII	(Northwest-Southeast) The Danube River
VIII	Durrës – Tirana – Skopje – Sofia – Plovdiv – Burgas – Varna – Constanța
IX	Helsinki – Vyborg – St. Petersburg – Pskov – Gomel – Kiev – Ljubashevka – Chişinău – București – Dimitrovgrad – Alexandroupolis Major sub-alignment: Sankt Petersburg – Moscow – Kiev • Branch A: Klaipeda – Vilnius – Minsk – Gomel • Branch B: Kaliningrad – Vilnius – Minsk – Gomel • Branch C: Ljubashevka – Rozdilna – Odessa
X	Salzburg – Ljubljana – Zagreb – Beograd – Niš – Skopje – Veles – Thessaloniki • Branch A: Graz – Maribor – Zagreb • Branch B: Budapest – Novi Sad – Beograd • Branch C: Niš – Sofia – Plovdiv – Dimitrovgrad – Istanbul (via corridor IV) • Branch D: Veles – Prilep – Bitola – Florina – Igoumenitsa

List of TEN-T Priority Projects:

01	Railway axis: Berlin – Verona / Milano – Bologna – Napoli – Messina – Palermo
02	High-speed railway axis: Paris – Brussels – Köln – Amsterdam – London: PBKAL
03	High-speed railway axis: South-West Europe
04	High-speed railway axis: East
05	Betuwe line (Completed)
06	Railway axis: Lyon – Trieste – Divaca / Koper – Divaca – Ljubljana – Budapest – Ukraine
07	Motorway axis: Igoumenitsa / Patra – Athena – Sofia – Budapest
08	Multimodal axis: Portugal / Spain – rest of Europe
09	Railway axis: Cork – Dublin – Belfast – Stranraer (completed 2001)
10	Malpensa airport (completed 2001)
11	The Øresund Bridge (completed 2000)
12	Railway / Road axis: Nordic Triangle
13	Road axis: United Kingdom – Ireland / Benelux
14	West coast main line
15	Galileo
16	Freight railway axis: Sines / Algeciras – Madrid – Paris
17	Railway axis: Paris – Strasbourg – Stuttgart – Wien – Bratislava
18	Waterway axis: Rhine / Meuse – Main – Danube
19	High-speed railway: interoperability in the Iberian Peninsula
20	Railway axis: Fehmarn belt
21	Motorways of the Sea
22	Railway axis: Athena – Sofia – Budapest – Wien – Praha – Nürnberg / Dresden
23	Railway axis: Gdansk – Warszawa – Brno / Bratislava – Wien
24	Railway axis: Lyon / Genova – Basel – Duisburg – Rotterdam / Antwerpen
25	Motorway axis: Gdansk – Brno / Bratislava – Vienna
26	Railway / Road axis: Ireland – United Kingdom – Continental Europe
27	Railway axis "Rail Baltica": Warsaw – Kaunas – Riga – Tallinn – Helsinki
28	Railway axis "Eurocaprail": on the Brussels – Luxembourg – Strasbourg
29	Railway axis: Ionian – Adriatic intermodal corridor
30	Inland Waterway Seine – Scheldt

List of TEN-E Priority Projects:

Electricity networks – axes for priority projects

Electricity priority projects already agreed:

EL01	France – Belgium – Netherlands – Germany
EL02	Borders of Italy with France, Austria, Slovenia and Switzerland
EL03	France – Spain – Portugal
EL04	Greece – Balkan countries – UCTE System
EL05	United Kingdom – Continental and Northern Europe
EL06	Ireland – United Kingdom
EL07	Denmark – Germany – Baltic Ring

Proposed additional electricity priority projects:

EL08	Germany – Poland – Czech Republic – Slovakia – Austria – Hungary – Slovenia
EL09	Mediterranean Member States – Mediterranean electricity ring

Natural gas networks – axes for priority projects

Natural gas priority projects already agreed:

NG01	United Kingdom – Northern continental Europe, including Netherlands, Denmark and Germany (with connections to Baltic Sea region countries) – Russia
NG02	Algeria – Spain – Italy – France – Northern continental Europe
NG03	Caspian Sea countries – Middle East – European Union (The Nabucco pipeline)
NG04	LNG terminals in Belgium, France, Spain, Portugal and Italy
NG05	Underground storage in Spain, Portugal, Italy, Greece and the Baltic Sea region

Proposed additional natural gas priority project:

NG06	Mediterranean Member States – East Mediterranean gas ring

Questions

Transport (Serbia partner)

1,   What about bicycle routes? Will we collect that data?

2,   What does it mean European main road? In Serbia, there are motorways, 1st and 2nd class roads. But are they equal to European main road? Should we draw e.g. motorway, half profile, actual like one line and motorway, full profile, planned like one line but with same position above first line? Will you read that like: they are in half profile and they will become full profile?

3,   In Serbia, we have planned railways but without definition of importance. Just in AutoCAD drawing there is a layer planned railway. Should we define importance for that entity? Should we draw e.g. regional railway, single rail track, operational like one line and regional railway, double rail track, planned like one line but with same position above first line? Will you read that like: There is a single rail track and it will become double rail track? The same question is for planned electrification when diesel will become electric traction.

4,   Names of river or canal will be in English or Serbian language etc. or both?

5,   In Serbia there is a situation with an airport which is now Local Operational and it will become Regional. Should I put one or two points? Which attribute?

6,   Names of ports will be in English or Serbian language etc. or both?

7,   Terminal storage number 6.0 and 4.0 are what? Because our storage space for Belgrade terminal is 950000 m^2. How can I put that number?

8,   Terminal capacity in Serbia have units are TEU and I think it is related to container capacity or something like that.