

The Spatial Development Concept of Interregional Co-operation in the Danube Space SEE Eol/A/246/4.2/X

# WP6 **CROSSDAUBE STRATEGY DEVELOPMENT**

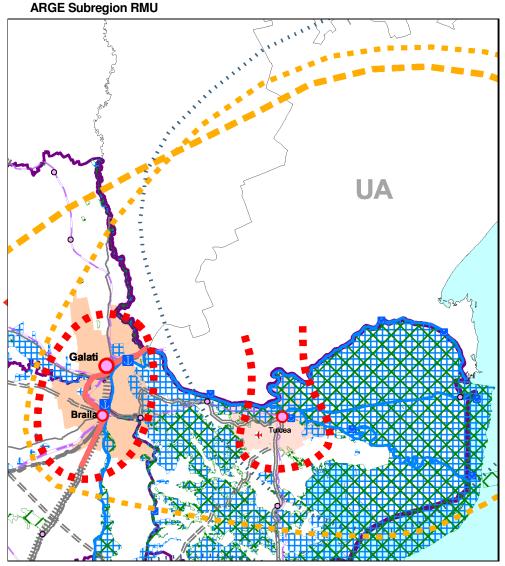




**EUROPEAN UNION** 

## Cross Danube Region Galati-Braila - draft -

## 1. Identification of the area of CDR



RMU Subregion is situated on the territory of Romania, Moldavia and Ukraine, including also the Danube Delta. Most of the area lies in Moldavia and Ukraine, which were not project partners in the previous DONAUREGIONEN project.

Most important centers of the region are Galati, Braila and Tulcea cities. According to previous results on the DR project, this area is economically stagnating.

In the RMU subregion can be found two crossborder regions.



#### **Crossborder Region Galati-Braila**

## Delimitation of CDR area according to time accessibility – not yet done

Delimitation of CDR area: In our proposal, the CDR belongs to the contact area between 3 Romanian counties: Galati, Braila and Tulcea, belonging to the RMU subregion.

The region is dominated by the urban agglomeration area Galati-Braila, with influence much over the limits of the CDR. The region has 50 local administrative units, out of which 5 are urban localities: 1 in Galati county: Galati municipality county residence, 2 in Braila county: Braila municipality county residence and lanca city, 2 in Tulcea county: Macin and Isaccea cities.

#### • Defined area of CDR consist of:

- balanced area (NUTS 3 regions where is CDR located): Galati, Braila and Tulcea counties
- self area of CDR: the local administrative units belonging to the CDR (52-54??)

#### General information about CDR

#### Elements conditioning the development

These territories are traditionally influenced by the Danube river. Galati-Braila area, with its 2 ports that were once the most important Romanian ports until the end of the XIX-th century, has a complex development potential, not enough valorized after the 2<sup>nd</sup> world war period.

The events that followed, with the blockage of Sulina channel, represented a regression factor in the development of these ports and implicitly of their territorial role, as fluvial and maritime ports.

The revitalization of the European Transport Corridor no.VII represents a chance for the development of this area, in accordance with its function of naval transport and pole of diffusion in the Romanian area of imported goods from Arabian, Asian and Mediterranean counties.

#### 2. Analytical description of current situation of CDRs within four general schemes

Description in terms of four general schemes

#### **Natural Conditions**

In this CDR are declared protected areas the following categories:

- Biosphere Reserve Danube Delta, partial in the CDR
- National Park Muntii Macinului (Macinului Mountains), 11321 hectares, totally included in the CDR
- Natural Park Balta Mica a Brailei (Braila Small Pound), partial in the CDR
- Natural Park Lunca Joasa a Prutului, partial in the CDR
- Natural reserves and monuments:
  - Sand dunes from Hanu Conachi (199 hectares), Galati county
  - o Garboavele Forest (230 hectares), Galati county
  - The fossil place Tirichina Barbosi (1 hectare), Galati county
  - Prut islet (62 hectares), Galati county
  - Potcoava Pound (49 hectares), Galati county
  - o Talabasca Pound (139 hectares), Galati county
  - o Valea Fagilor Forest (154 hectares), part of the National Park Macinului Mountains
  - Dealul Bujorului fossil place (8 hectares), Tulcea county
  - Niculitel forest (11 hectares), Tulcea county
  - Traian Lake (326 hectares), Tulcea county
  - Muchiile Cernei Iala (1891 hectares), Tulcea county
  - Chervant Priopcea (568 hectares), Tulcea county
  - Consul Mountain (328 hectares), Tulcea county

## CROSSDANUBE STRATEGY DEVELOPMENT - Development strategy for subregion RMU: Crossdanube region Galati-Braila Sarica Hill (120 hectares), Tulcea county

- Cocos Monastery (4.6 hectares), Tulcea county
- Natura 2000 sites:
  - Special Protection Areas (SPA):
    - Danube Delta and the Complex Razim-Sinoe
      - Macin Niculitel
    - Old Danube Macin Branch
    - Babadag Forest
    - The Meadow of Low Siret
    - The Meadow of Prut Vladesti Frumusita
    - Maxineni
    - Small Pound of Braila
    - Ianca Plopu Sarat
  - Special Areas of Conservation (SCI)
    - Danube Delta
    - Macinului Mountains
    - Macin Branch
    - North of Dobrogea Plateau
    - Low Meadow of Prut
    - Garboavele Forest
    - Sand dunes from Hanul Conachi
    - Small Pound of Braila

## Settlement structure and human resources

The CDR has 5 urban localities and 49 communes.

	Braila county	Tulcea county	Galati county	Total CDR
Urban localities	2	2	1	5
Rural localities	16	16	17	49
Total localities	18	18	18	54

The average size of a commune according to the number of inhabitants is the following:

Braila county	Tulcea county	Galati county	CDR	Romania
3250	2866	5540	3885	3495

In the region there are 2 municipalities with population between 100000 and 300000 inhabitants (Braila and Galati) and 2 cities (Ianca in Braila county and Macin in Tulcea county) as cities of average size (10000 – 200000 inhabitants). Isaccea (Tulcea county) is a small town with only 5337 inhabitants.

The actual settlement network is composed by:

- 2 municipalities:
  - Galati: the residence of Galati county, belonging to the category of big towns, with 291608 inhabitants in 2008
  - Braila: the residence of Braila county, also belonging to the category of big cities, with 212981 inhabitants in 2008
- 2 cities belonging to the category of average size:
  - Ianca (Braila county) 11196 inhabitants in 2008
  - Macin (Tulcea county) 10924 inhabitants
- 1 town considered of small size:
  - Isaccea (Tulcea county) 5337 inhabitants in 2008

The spatial distribution of the settlement network is inadequate to a balance setting, due to the peripheral emplacement of the 2 county residences Galati and Braila. Most urban localities belong to the Danube couloir, from which their historical development is linked to.

The average size of communes according to the number of inhabitants shows in the Galati – Braila CDR higher values than the national ones. This is happening because of the communes from Galati county, but the communes from Braila and Tulcea have lower values than the national ones.

From 49 communes, 47 have less than 10000 inhabitants. Only 2 communes from Galati county (Liesti and Pechea) have more than 10000 inhabitants.

Most communes (38) have less than 5000 inhabitants and belong to Tulcea and Braila counties.

The size of communes, according to their number of inhabitants, is the following:

Size, inhabitants	Galati county	Braila county	Tulcea county	Total CDR
1000-2999	1	7	9	17
3000-4999	9	7	5	21
5000-9999	5	2	2	9
More than 10000	2	-	-	2

#### Classification of the settlements network

The classification of urban and rural localities is according to their importance in the network and their territorial role. The rank of a locality is the result of its actual importance and in perspective within the network from administrative, politic, social, economic and cultural point of view, in relation to the size of the polarized influence area.

According to Law no.351/2001 for the approval of the National Spatial Plan Section IV – The Settlements Network, in Galati-Braila Cross-Danube Region are identified:

- localities of rank I: municipalities county residence of national importance or with regional pole and potential influence at European level. The two rank I urban localities in the area are Galati and Braila, both situated on a transport network of European interest (the Danube, corridor VII):
  - Galati municipality:
    - Is situated on the Danube terraces, where Siret river flows into the Danube. The minimum altitude is 3 m in the Eastern part of the Danube and 75 m in the Northern part
    - Is documentary attested since 1445, as important commercial center, continuously inhabited
    - Its development is due to its geographic position that conditioned its certain functions: custom point, manufacturing centre, exchange center.
    - Nowadays has 291608 inhabitants and has complex socio-economical functions, is the most important urban center of the area, with regional influence because of its complex function of industrial, commercial, tourist, university center.
    - Since many years local initiatives tried to shape Galati metropolitan area. The urban agglomeration Galati-Braila (14 localities from Galati county, together with 7 from Braila and 3 from Tulcea counties) is proposed to form Cantemir metropolitan area.

#### • Braila municipality:

- Is situated on the same part of the Danube, like Galati municipality (on the left side).
- Is an old settlement, knowing periods of prosperity and of decline, having as main function the trade.
- Its radial urban structure (semi-ring shaped) was projected by the 1898 town plan, by Dufour engineer.
- Its importance is due to its port transport function, but also industrial and cultural.

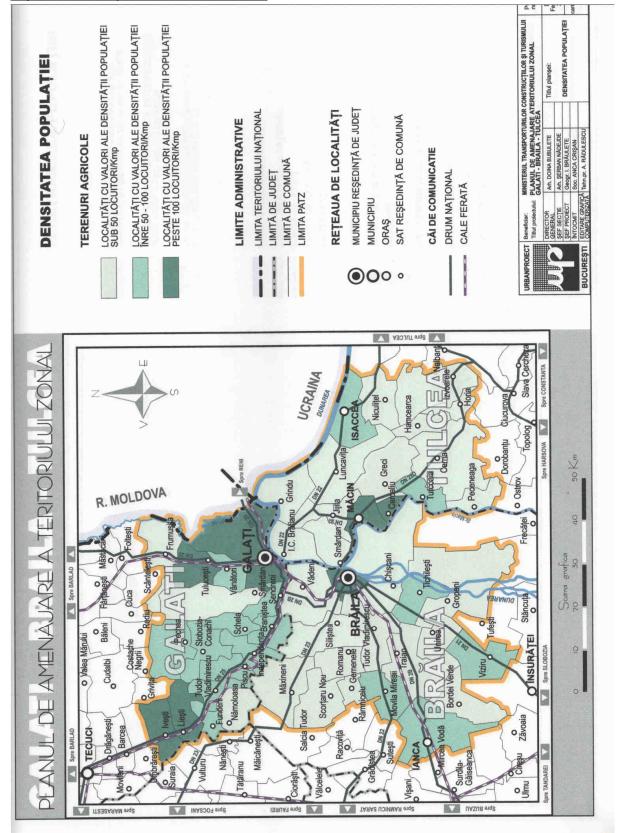
- localities of IIIrd rank: cities like lanca, Macin, Isaccea:
  - o lanca city:
    - Is situated in Braila plain
    - It was declared city in 1989.
  - Macin city:
    - Is a city-port situated on the right side of the Old Danube branch
    - Despite to its advantageous geographical position, its port, custom, commerce and administrative functions didn't achieve their maximum potential.
    - After 1877 is declared urban commune
    - Nowadays it has a mixed function of local importance, with a regressive development.
  - o Isaccea city:
    - Is a city-port situated on bottom of the hills belonging to Niculitel plateau.
    - Is situated on the place of the old citadel of Noviodunum, with important military role between the XVI and XIX centuries
    - It is declared city after 1878
    - Nowadays it has an industrial-agricultural profile, with a regressive development.

Macin and lanca were cities-market, with role of exchange at the contact of big geographical regions or at the intersection of major transport axes. Galati and Braila are port-cities, with continuity. The only city settled on the basis of local resources is lanca.

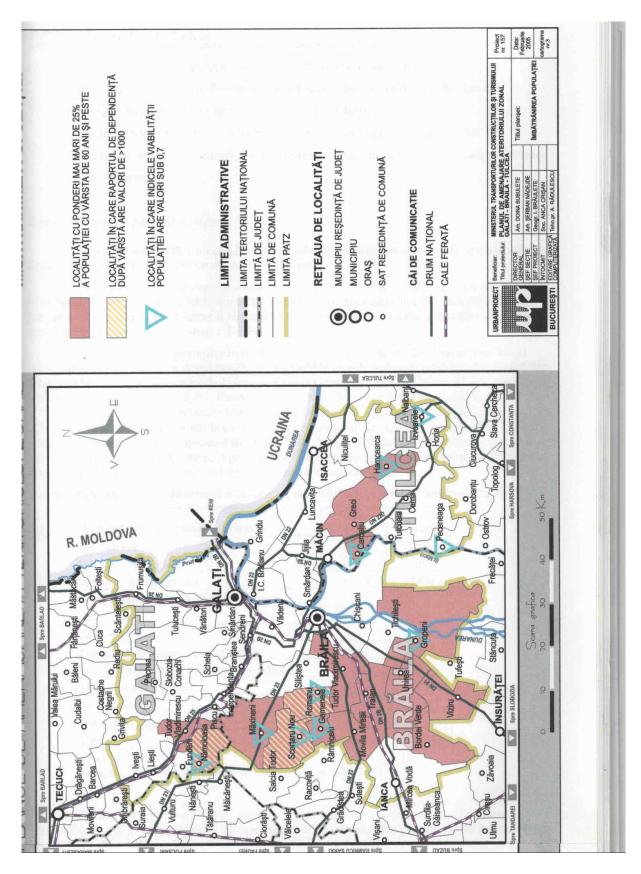
#### **Disfunctions**

- the concentration of the population in Galati and Braila municipalities, as well as their peripheral localization
- gap in the system of relations between localities, due to the lack of bridges (ex. Galati and Braila municipalities with localities from Tulcea county)

#### Population density in the CDR Galati-Braila



#### CROSSDANUBE STRATEGY DEVELOPMENT - Development strategy for subregion RMU: Crossdanube region Galati-Braila <u>Population ageing in the CDR Galati-Braila</u>



#### **Transport infrastructure**

#### Road network

In the area there are 7 national roads, out of which 2 are European (E87 and E584). There are also county and communal roads (secondary roads).

The length of public roads in the area is of approx. 1246 km, with a density of approx.38% (more than at national level: 33 km/100 km2).

From total public roads, 38% are national roads, 51% are county roads and 11% communal roads.

The national roads are mostly modernized and have a good technical state. The local roads (county and communal) are modernized only in a low percentage, having an unsatisfactory technical state, couldn't ensure a good traffic.

#### Railway network

The CDR area has a railway network of 70 km length, out of which 38 km (54.3%) are electrified, 12 km (17.1%) are lines with one way and 58 km (82.9%) lines with 2 ways.I

The territory of CDR is crossed by the following sectors of railroads:

- 700: Bucuresti-Urziceni-Braila-Galati electrified double railway on the sector lanca-Braila-Galati
- 704: Marasesti-Tecuci-Barbosi-Galati electrified double railway on the sector Barbosi-Galati and non-electrified double railway on the sector Tecuci-Barbosi
- 703: Galati-Barlad simple, non-electrified railway on the sector Galati-Barlad

#### Air transport

In the CDR area there is a local airport in Galati, with small airplanes and helicopters, used for passengers and goods, for agriculture works or as aviation trainings. The closest airport is in Tulcea.

#### River transport network

The river Danube is crossing the CDR from South to east, being fluvial and maritime navigable on the sector Braila-Galati-Tulcea, the main trans-European naval artery (corridor 7). On the Danube's bank, inside the municipalities Galati and Braila, developed important port areas, their activities being commercial, provision, industrial (engineering works, repairing, maintenance naval works).

In order to have a link with Dobrogea there are 3 ferry points at:

- Braila / Smardan, for passengers and cars towards Macin locality in Tulcea county
- Galati / Tiglina, for passengers and cars towards I.C.Bratianu locality in Tucea county
- Galati / fluvial station, for passengers towards Grindu locality in Tulcea county.

#### Combined transport:

In Galati municipality there is a terminal of combined tansport.

#### Free zones

In order to promote international exchanges, to attract foreign capital and to introduce the new technologies and to enhance the possibilities of using local economy resources, the Romanian Government set up Braila and Galati free zones. The opening of the Rhin-Main-Danube channel and the economic potential of Braila and Galati counties, especially of the Big Island of Brails contributed to that.

In the CDR area there are 2 free zones:

- Braila free zone (80 hectares) having 4 perimeters situated in strategic areas in Braila municipality. Here can be combined all transport types: maritime, fluvial, rail and road.
- Galati free zone (135 hectares), on the left side of the Danube, having a modern infrastructure. It contents specific port equipments, rail lines (connected to the national railroad network and with the rail network from R.of Moldavia) and highways allowing the access of cars.

Both free zones have an industrial park.

On the CDR are 2 control and crossing border points:

- Galati (Romania) / Giurgiulesti (Moldova): international traffic of passengers and goods
- Galati (Romania) / Reni (Ukraine): international railway traffic of goods

## **Disfunctionalities**

Road network:

- The CDR area is not crossed by a trans-European road transport corridor.
- The traffic over the Danube is difficult, due to the lack of a bridge both in Braila and Galati.
- The direct link between local and national roads or with commune centers must be improved.

Railway network:

- The CDR area is not crossed by a trans-European railroad transport corridor
- In Tulcea part of the CDR there is no railroad line

Air network:

The CDR area has no airport

Water network:

• Is insufficient to achieve the link between Galati, Braila and Tulca parts of counties.

Border crossing points:

Their endowments are not according to international standards

## **Technical infrastructure**

## Water management

Surface water

- The CDR is situated in hydrographic basin of Prut, Siret and Danube rivers.
- The main watercourses belonging to the area are:
  - Danube river, the main water resource of the region. Upstream Braila and Galati municipalities, its water is polluted by untreated wastewater discharged directly into the river;
  - Siret, Barlad, Prut and Buzau rivers.

The rivers crossing the territory of Tulcea county are tributary of the Danube (Jijila, Greci, Cerna, Peceneaga, Luncavita).

The surface water in the area are not drinking water sources. An important source of drinking and industrial water is Suhurlui barrier lake.

## Water management works

The main water management works, on hydrographic basins, are:

- 1. Barrier lakes ensure the water for population, industry, irrigations, pisciculture and as protection against the floods.
  - a. In the Danube hydrographic basin, there are:
    - i. Pisciculture works at: Jijia, Crapina, Ghiolul Pietrei, Turtucaia, Esna
    - ii. Complex works at: Pecineaga, Traianu, Horia
  - b. in the Prut hydrographic basin: Jidileni and Brates accumulations
  - c. in the Siret hydrographic basin:
    - i. pisciculture accumulations at Maxineni
    - ii. complex accumulations at Malina
    - iii. un-permanently accumulations at Lupele, Schela, Lozova
- 2. Water adductions ensure the water transport into the water supply system of localities. The main such water adductions are:

- a. Suraia Vadu Rosca Vulturu (in Siret meadow), and Salcia-Liesti, ensuring the water supply from underground sources in Galati and Braila municipalities
- b. Chiscani-Braila, taking water from the Danube into the water supply system of Braila municipality
- c. Gropeni-lanca, taking water from the North-Eastern part of Gropeni commune into the water system of Faurei town.

3. Dams and regulations – necessary to protect agains the floods. The main such works in the area are on Siret, Prut and Danube rivers and on Geru, Chineja, Taita and Buzau smaller rivers.

## Water supply

From 54 local administrative units belonging to the CDR, 49 have centralized (state) water supply, the others being supplied from phreatic layer, in wells.

The main aspects regarding the drinking water supply in urban and rural localities are:

**Galati municipality**: the water sources are represented by the Danube river and the water catchment points from Vadu Rosca and Salcia-Liesti

Braila municipality: the water sources are represented by the Danube river (Chiscani point) and underground water catchment point Vadu Rosca

lanca town: water is supplied by the adduction Gropeni-Ianca-Faurei, from the Danube river

Isaccea town: the water supply system is represented by the underground water

Macin town: its water source is the surface (the Danube river) and underground water (wells).

Rural localities are mostly (44 from 49) supplied with drinking water in centralized (state) system.

As a general aspect, in the CDR Galati-Braila, in 2009, the total simple length of the drinking water system is of 2198.4 km, out of which 1142.9 km in urban localities. By counties, Braila has 538.8 km in urban area and 309.1 in rural area, Galati county has 540 km in urban area and 376.7 in rural area an Tulcea county has 64,1 km in urban area and 369.7 km in rural area.

#### Sewage system and domestic water treatment

In 2009, from 54 local administrative units, 15 have sewage systems. Wastewater treatment had only 3 localities: Isaccea (Tulcea county) and Ianca (Braila county) towns and Movila Miresii (Braila county). All 5 urban localities in the CDR and only 5 rural localities have sewage systems.

At the level of the CDR, the total length of the sewage network was in 2004 of 848.2 km, out of which 808.8 km in urban area.

## **Disfunctions**

The main disfunction is connected to the wastewater treatment in Braila, Galati and Macin localities. Here, the eviction of wastewater is directly into the Danube, affecting the quality of the river.

A major problem is represented by the bad quality of wastewater treatment stations, affecting the environment.

Also, the lack of sewage systems in the localities having state water supply systems is a problem, as well as lack of both systems in most localities of the area.

#### **Electric network**

The CDR area has a low hydro-energetic potential, the main sources to produce electric energy being Galati and Braila.

- Main challenges:
  - select the relevant data for analysis of CDR from existing analysis of NUTS 3 region
  - ensure the compatibility of data from both sides of CDR ensuring the consistent analysis of the CDR

## 3. Identification of relevant CDR stakeholders

Outputs from WP5

## Local Stakeholders

Relevant stakeholders: major municipalities, self-governing regions, physical planning organizations, research organizations and experts, potential investors, local entrepreneurs etc.

## **Braila county**

- Braila City Hall
- Braila County Council
- Braila Prefecture
- The South-East Agency for Regional Development
- Braila Directorate for Agriculture and Rural Development
- The House for Health Insurance of Braila county
- Braila Employment Agency
- Braila Center for the Development of Small and Medium Enterprises

## Galati county

- Galati City Hall
- Galati Prefecture
- Galati County Council
- Galati Chamber of Commerce
- The House for Health Insurance of Galati county
- The University "Dunarea de Jos " Galati ("Lower Danube")

## Tulcea county

- Tulcea City Hall
- Tulcea Prefecture
- Tulcea County Council
- Danube Delta Biosphere Reserve Authority
- Danube Delta National Institute for Research and Development
- County Center for Resources and Educational Assistance
- Autonomous Directorate "The Administration of Sulina Free Zone"

## 4. Identification of relevant documents

The differences between the countries in which the CDR is located must be taken into account for the purpose of identification the relevant document as sources of strategic objectives and projects. The differences could occur in used planning methods, methods of physical planning, structure of public administration etc.

At the other hand, implementation of regional policy of the EU is a promise of integration strategic planning methods and documents in countries participating on project.

The relevant documents will be mainly:

- Social and economic development programmes of self-governing regions and major municipalities
- Physical planning documents mainly at the level of self-governing regions
- · Sector strategies (e.g. tourism, development of SME, transport, protecting against natural disasters etc.).
- · Crossborder development strategies of Euro regions
- · Operational programmes, mainly programmes of cross border cooperation

## Existing strategic, spatial planning documents at European level, national level, regional NUTS3 level or local level

## **Tulcea county**

- 21 Local Agenda Local Plan of Sustainable Development of Tulcea county
- Local Strategy of Sustainable Development in Tulcea Municipality
- Environmental Action Plan for Tulcea county, 2008
- Strategic plan for the development of a sustainable tourism in Danube Delta
- Sustainable tourism in the Biosphere Reserva Danube Delta. Development of the potential for a sustainable tourism in a wetland Natura 2000. Case study: Danube Delta.
- The strategy for the socio-economic development of Isaccea city 2006-2013
- Planul strategic pentru dezvoltarea turismului durabil în Delta Dunării document inițiat în cadrul proiectului de cooperare "Dezvoltarea potențialului pentru un turism durabil într-o zonă umedă Natura 2000: studiu de caz Delta Dunării" - ROE / 041 / 06 între Consiliul Județean Tulcea, Administrația Rezervației Biosferei Delta Dunării şi firma WES Brugge (Belgia). Varianta MAI 2009, supusă consultării publice.
- Raport de mediu la Planul Strategic ptr.dezvoltarea turismului durabil în Delta Dunării, iunie 2010
- Leaflet: Turism durabil în rezervația biosferei delta dunarii. Dezvoltarea potențialului pentru un turism durabil într-o zonă umedă Natura 2000: Studiu de caz – Delta Dunării. Proiect de parteneriat Tulcea – Bruges
- Strategia de dezvoltare economico-socială locală a orașului Isaccea 2006-2013

## Braila county

- The Strategy for the development of Braila County 2008-2013
- The Strategy for the development of Braila Municipality 2008-2013
- Environmental local action plan for Braila county
- Zonal Spatial Plan Braila Periurban

## Galati county

- The Strategy for the development of Galati County
- Environmental local action plan for Galati county
- 21 Local Agenda The Local Plan of Sustainable Development for Galati county

## 5. SWOT analysis

- Summary SWOT for CDR
- Base: SWOT from WP5
- serve for identification of potential bottlenecks and development factors for strengthening the cross Danube linkages

## 6. Summary of strategies in structure of: objectives, priorities and activities

Identified strategic objectives and development projects will be summarized in logical structure: **objectives** fulfilled through **priorities**, priorities realized by **activities**. Each objectives or each point in the structure will be clearly assignable to source document.

After identification of the objectives, their division into sectors (general schemes) will follow.

Situations, where objectives from different documents are contradictory, could occur. The important task of the working groups will be to identify the existing disparities and to propose the solution.

## 7. Map outputs

- Each CDR sector will be presented by specific map:
  - map of natural resources

## CROSSDANUBE STRATEGY DEVELOPMENT - Development strategy for subregion RMU: Crossdanube region Galati-Braila — map of spatial structure

- map of transport infrastructure
- map of technical infrastructure
- set of cartograms and cartodiagrams describing main social and economic development factors
- The base for the elaboration of the maps: GIS prepared within WP 4 and WP 5.

The scale of maps will be 1:200 000.