








The Spatial Development Concept of Interregional Co-operation in the Danube Space  
DONAUREGION+

## WP7 COMPREHENSIVE STRATEGY – methodology – part B – NATIONAL SCENARIOS

7<sup>th</sup> Workshop - of the DONAUREGION+ project  
24<sup>th</sup> and 25<sup>th</sup> November 2010  
Bratislava, Slovak Republic  
Vojtech Hrdina

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## B) National scenarios

### 1) The starting points for creation of national scenarios

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**Projected scenarios for development of individual Donau subregions will be derived from ideas rooted in national development scenarios of individual states (i.e. state development trends) as well as from scenarios/development trends of regions that comprise each respective Donau subregion**

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**Any basic scenario-related considerations should originate from the past ideas of maintaining development in the last ten to twenty years**

**It should be an expert's examination of how sustaining of existing development ought to be perceived in the timeframe of the next ten to twenty years**

**It should be determined whether or not sustaining of current development gives reason for optimism or pessimism in development of given subregion.**

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## Optimistic scenario

**Optimistic scenario works with an assumption of optimal utilization of all possible resources and potentials for further development of given region**

**It is well in correlation with optimistic development of EU and its cohesion policies, supporting cohesion oriented scenario of EU-27 European territories (scenario called also as „Danubian Europe“)**

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## Pesimistic scenario



**This model is built around an assumption of high concentration and locking of cities and regions away from other cities and regions**

**The main development of this scenario lies in concentrated development on the local level in strong competition with other territorial units**

**This scenario also assumes lower and much slower economic development, partly caused also by having fewer options to utilize various support funds in the given territory**

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## Realistic scenario

Development assumptions under realistic scenario are derived both from realistic estimates of options for generating new economic activities and from approved and expected infrastructure development activities.

**This scenario operates with assumptions of development in major settlement centers, as well as with support and development of centers in rural areas**

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## B) National scenarios

### 2) Scenario processing methods

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### 2) Scenario processing methods

#### 1)

it is needed to specify relevant indicators, characterizing the quality of environment according to general schemes that would likely also represent a possible qualitative development in wider perspective  
(based on knowing the actual conditions in subregion, as resulting from WP4 data evaluation)

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### 2) Scenario processing methods

#### 2)

based on time series data (obtained from WP4) for chosen indicators it is recommended to apply mathematical and statistical method of extrapolation, in order to construct new data and hence interpret possible future development

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### 2) Scenario processing methods

#### 3)



evaluation of indicators' development as addressed in WP5 and its prolongation till 2030

#### 4)

based on interpretation of possible development of indicators, according to both methods (point 2 and 3), to express scenarios in compliance with their characteristics as previously formulated

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### 2) Scenario processing methods

#### 5)

to characterize individual scenarios of corresponding subregions in text form, supplemented by numerical values/tables and/or graphical schemes

#### 6)

to express scenarios hypotheses (in form of a table), which should also encompass mutual confrontations/connections between the utility-oriented characteristics of each scenario

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## B) National scenarios

### 3) Characteristic of the scenarios

A short description and comments on the scenarios  
according to the general schemes Natural conditions,  
Spatial structure and human resources, Transport and  
technical infrastructure, Economy structure  
for all types of scenarios  
optimistic, pesimistic and realistic scenarios

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### 3) Characteristic of the scenarios

#### Natural conditions

Land use  
Nature conservation and landscape protection  
Air quality and pollution  
Water quality and pollution  
Waste

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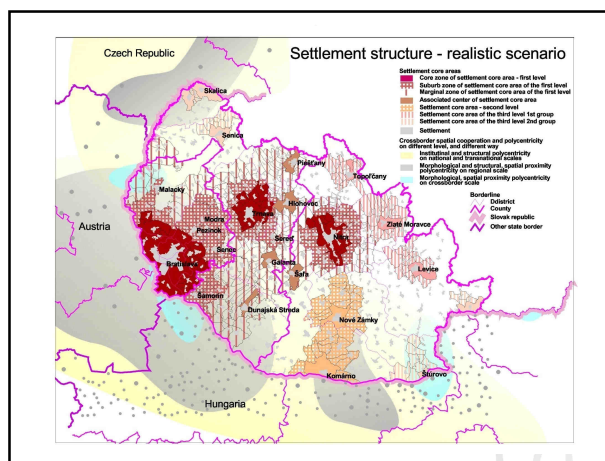
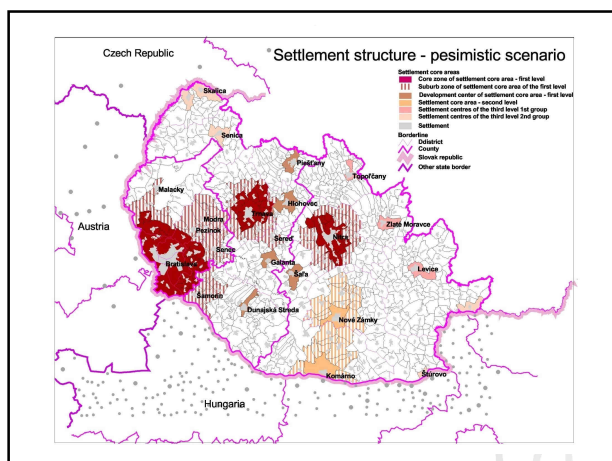
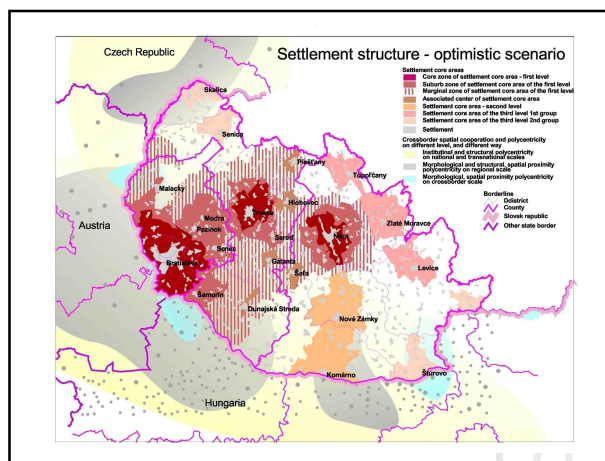
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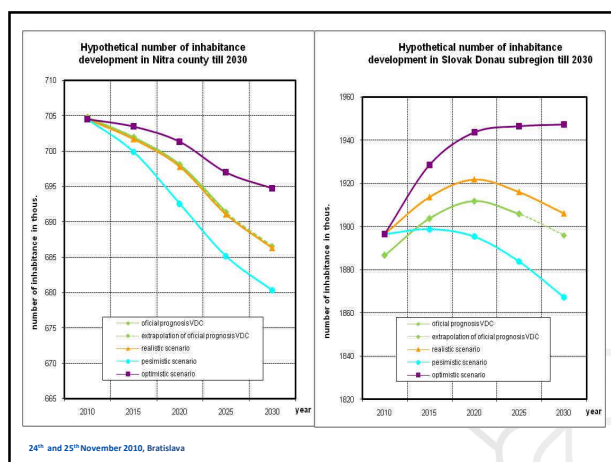
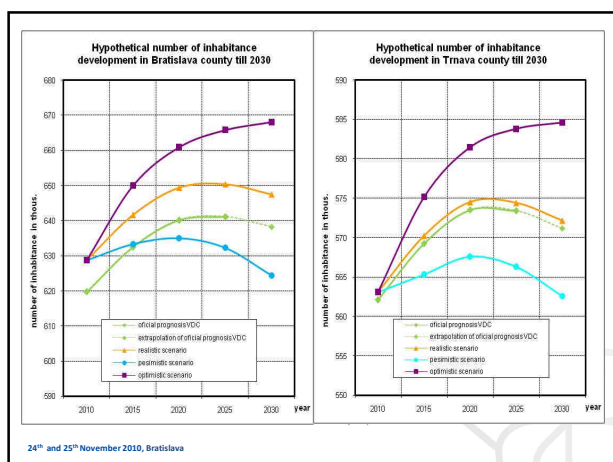
### 3) Characteristic of the scenarios

#### Spatial structure and human resources

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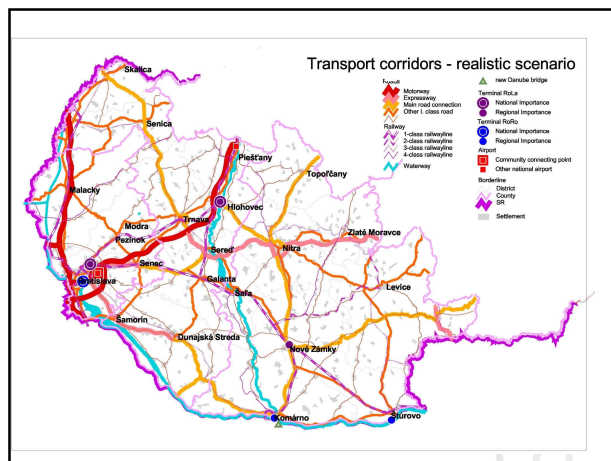
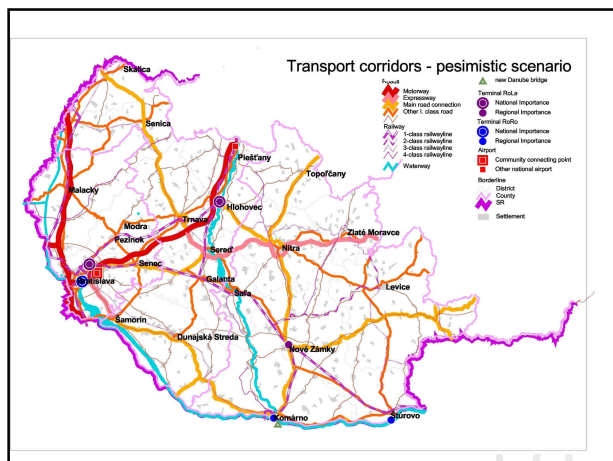
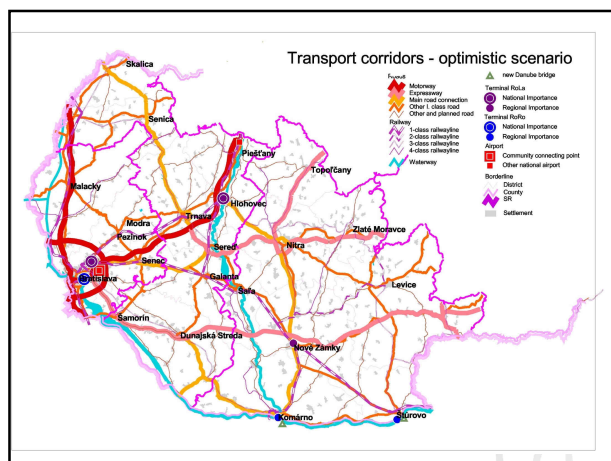


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**3) Characteristic of the scenarios**  
**Transport and technical infrastructure**

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### 3) Characteristic of the scenarios Economy structure

Diversification of subregion's economic basis  
Gross Domestic Product (in PPS)  
Unemployment rate  
Regional sector structure of economy  
SME  
Foreign direct investments

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### B) National scenarios 4) Hypotheses of the three scenarios

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|                           | optimistic scenario   | pessimistic scenario  | realistic scenario  |
|---------------------------|---|---|---|
| <b>natural conditions</b> | <ul style="list-style-type: none"> <li>considerable drop in the amount of agricultural and forest lands</li> <li>endangerment of natural conservation areas due to extensive development of settlements and tourism</li> <li>endangerment of wetlands and extinction of original species</li> <li>excessive increase of emissions into air and streams</li> <li>high risk of deterioration of the water sources</li> <li>mounting problems with waste production</li> </ul> | <ul style="list-style-type: none"> <li>preservation of the most suitable agricultural lands</li> <li>minimal intervention into the systems of natural conservation areas</li> <li>assumption of original biodiversity preservation</li> <li>considerable reduction of emission levels</li> <li>improvement of water quality in streams</li> <li>lower waste production</li> </ul> | <ul style="list-style-type: none"> <li>balanced ratio between loss of agricultural land and expansion of built-up municipality areas</li> <li>re-evaluation of legislative protection of valued territories</li> <li>extinction threat in case of certain biotopes and animal species</li> <li>gradual systematic decrease of emissions</li> <li>stagnation of water bodies quality</li> <li>stabilization of waste production and introduction of separated and biologically decomposable waste</li> </ul> |
| <b>economy</b>            | <ul style="list-style-type: none"> <li>GDP will grow and draw near the EU average</li> <li>Diversified development of economic infrastructure</li> <li>Growth of SME (small and medium-sized enterprises)</li> <li>Unemployment rate below the average of Slovakia</li> <li>Attractive conditions for foreign direct investments</li> </ul>   | <ul style="list-style-type: none"> <li>GDP falls behind the European average</li> <li>region sensitive to structural changes</li> <li>a drop in the number of enterprises and business units</li> <li>unemployment rate of Nitra and Trnava counties above the all-Slovakia average</li> <li>loss of attractiveness for foreign direct investments</li> </ul>                     | <ul style="list-style-type: none"> <li>GDP slowly approaching the European average (with low dynamics)</li> <li>Low dynamics in movement towards new economy structure</li> <li>unemployment rate is the lowest in Bratislava, remaining territories a bit below all-Slovakia average</li> <li>number of enterprises and business units growing moderately</li> <li>stagnation of foreign direct investments</li> </ul>   |
| <b>transport</b>          | <ul style="list-style-type: none"> <li>development of complete network of highways and high speed communications (motorways)</li> <li>successfully finished reconstruction of railroad network</li> <li>development of high-speed railway connection between Bratislava and Nitra</li> <li>constructed Bratislava Airport, airports in Piešťany and Nitra are being developed</li> <li>two new bridges are erected over the river Danube – Komárno, Šurany</li> </ul>       | <ul style="list-style-type: none"> <li>extension of highway D1 and D2, D4 under construction only in areas of state border</li> <li>high speed motorways partially constructed in the area of Bratislava suburbs</li> <li>successfully finished reconstruction of railroad network</li> <li>reconstruction of Bratislava Airport</li> </ul>                                       | <ul style="list-style-type: none"> <li>extension of highway D1 and D2, a connection passage through Male Karpaty is still missing on D4</li> <li>high speed motorways constructed solely to the extent for the purposes of Bratislava agglomeration</li> <li>successfully finished reconstruction of railroad network</li> <li>reconstruction of Bratislava Airport, development of the airport in Piešťany gets partial support</li> </ul>   |

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|                             | optimistic scenario  | pessimistic scenario  | realistic scenario  |
|-----------------------------|--|---|---|
| <b>settlement structure</b> | <ul style="list-style-type: none"> <li>high level of urbanization</li> <li>formation of agglomeration with international reach (Bratislava-Trnava-Nitra)</li> <li>stabilization of agglomeration N. Zámky-Komárno with international reach</li> <li>creation of local agglomerative spaces (Levice, Topoľčany, Zlaté Moravce)</li> <li>development of centers, and their suburbs, around regional centers (Skalica, Holič, Senica, Myjava, Šurany and Šahy)</li> <li>developed cross-border territorial interconnections (Bratislava – cross-border areas in Austria and Hungary, Komárno-Komárom, Šurany-Ostihom, Skalica-Holíč-Hodonín)</li> </ul> | <ul style="list-style-type: none"> <li>settlement development oriented mostly to Bratislava agglomeration, to a lesser extent also around regional capitals and their suburbs</li> <li>stabilization in remaining territories, even moderate decline around largest cities of subregion (Nové Zámky, Levice, Komárno, Topoľčany)</li> <li>anticipated growth of marginalised territories southeastern part of the subregion</li> <li>more significant cross-border territorial connections</li> <li>developed cross-border territorial interconnections only in vicinity of Bratislava</li> </ul> | <ul style="list-style-type: none"> <li>settlement development oriented mostly to Bratislava agglomeration, along with Trnava and Nitra agglomerations</li> <li>agglomeration near Nové Zámky-Komárno being developed to a lesser extent</li> <li>other regional centers exhibiting only centripetal effects on their immediate surroundings</li> <li>cross-border territorial cooperation in vicinity of Bratislava, and similar being partly developed near agglomeration Nové Zámky-Komárno, Skalica-Holíč</li> </ul> |
| <b>demography</b>           | <ul style="list-style-type: none"> <li>gradual increase of natality till 2025</li> <li>trend towards lower mortality rate</li> <li>gradual increase of immigration and decrease of emigration</li> <li>moderate aging of the population</li> </ul>   | <ul style="list-style-type: none"> <li>gradual increase of natality till 2025</li> <li>trend towards lower mortality rate</li> <li>gradual increase of immigration and decrease of emigration</li> <li>considerable aging of the population</li> </ul>  | <ul style="list-style-type: none"> <li>gradual increase of natality till 2025</li> <li>trend towards lower mortality rate</li> <li>stabilization of emigration</li> <li>gradual aging of the population</li> </ul>  |

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### C) Conclusions and recommendations

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- brief summarization of results and description of previous activities (part A and B)
- suggestions for improvement of territorial cohesion in Donau subregions based on the results from scenario analyses
- formulation of policy options that will express basic principles and goals supporting territorial cohesion of Donau subregions

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**Coordination recommendations and policy options,  
within the framework of D+strategy, will contain:**

- **spatial -**
- **transport -**
- **environmental -**
- **socio-economic coordination and policy options**

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**Thank you for your  
attention ...**

Vojtech Hrdina, [hpp@szm.sk](mailto:hpp@szm.sk)

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