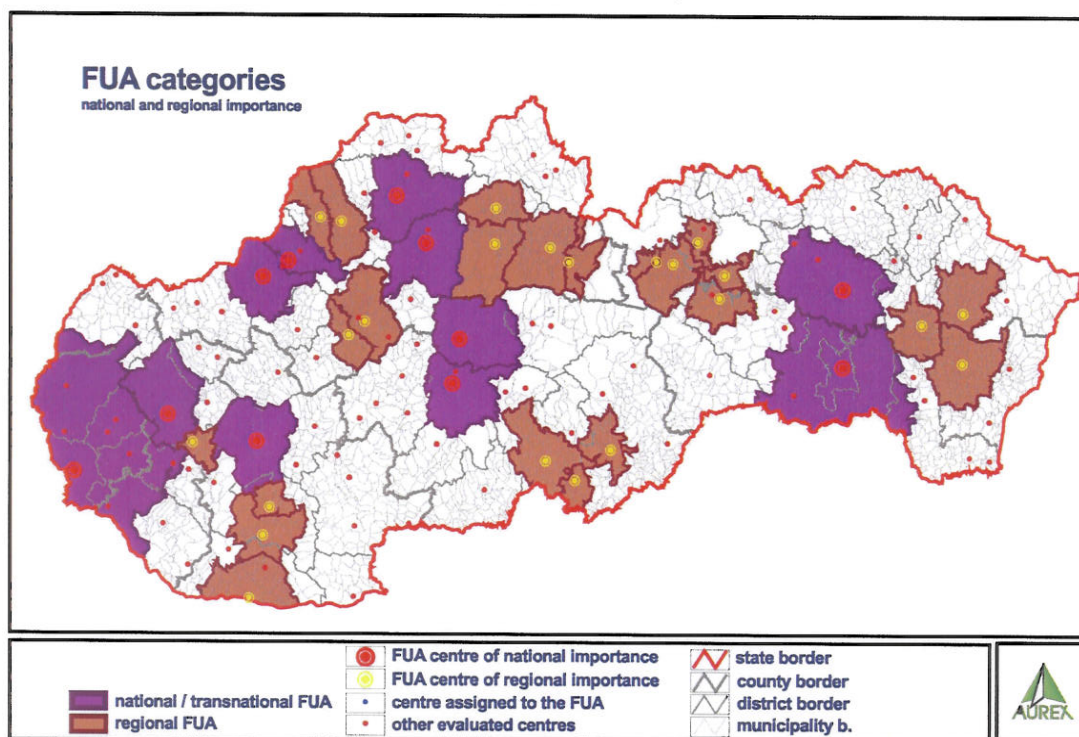


All of the FUA of category A and 17 FUA of category B meet the criterion defined in the ESPON Project 1.1.1, which lays down the minimum size of FUA, i.e. a core with above 15 thousand inhabitants and FUA with a number of inhabitants above 0.5% of the total population (which is about 27 thousand inhabitants under Slovak conditions). The following FUA of category B do not meet this criterion: Levoča, Šurany, Filákov, Liptovský Hrádok, Svit and Nováky.



Regarding the other FUA evaluated, the following 22 FUA of significance category C and D meet the quantitative criterion laid down by the ESPON Project 1.1.1:

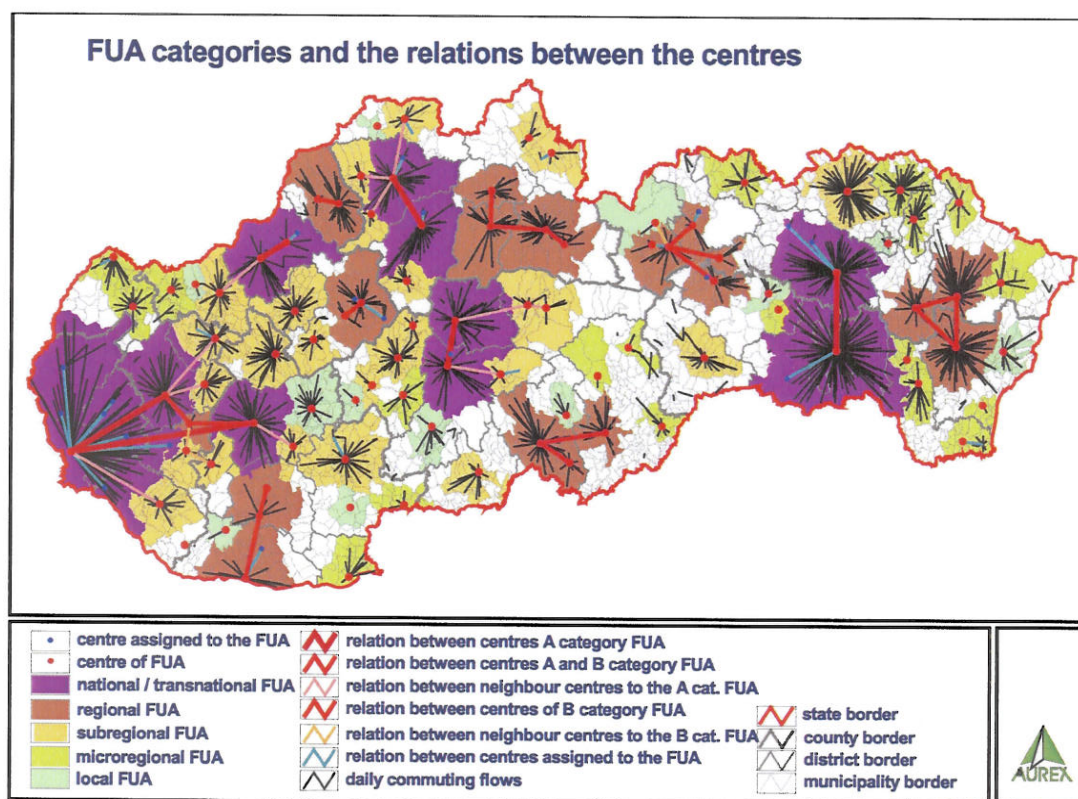
Quantitative category	Significance category	FUA name	No. of FUA inhabitants in 2004	Proportion of centre inhabitants from FUA in %
C	C	Brezno	31,065	73
C	D	Snina	33,254	64
C	D	Trebišov	35,677	64
C	C	Partizánske	39,316	63
C	D	Senica	33,787	62
C	C	Šaľa	42,456	58
C	C	Hlohovec	42,849	55
C	C	Rožňava	35,050	55
C	C	Detva	27,477	55
C	D	Žiar nad Hronom	37,126	54
B	C	Bardejov	62,664	53
C	C	Bánovce nad Bebravou	39,352	53
C	C	Galanta	33,266	49
B	C	Levice	74,013	49
B	C	Piešťany	65,918	46
C	C	Nové Mesto nad Váhom	47,197	45
B	C	Topoľčany	65,799	44

B	C	Čadca	62,414	43
C	D	Stará Ľubovňa	38,272	43
B	C	Dunajská Streda	58,398	41
C	D	Skalica	38,111	40
C	E	Zlaté Moravce	39,827	39

## 7. Centres-FUA relations

The evaluated centres and the FUA defined around them show mutual relations between each other. The relations between the centres and their hinterlands (FUA) are already showing and the tendencies for their further expansion and strengthening result from the origination of cooperation relations created within the meaning of the theory of formation of agglomerations or urban regions. The mutual connections between centres and their hinterlands were evaluated within analytical works for the Slovak Spatial Development Perspective, whilst current as well as potential relations between centres were proven that form the basis for the formation of agglomeration systems.

The highest level of interurban relations was proven between the most significant urban centres in the SR and other centres in their surroundings. The concerned territory of the city of Bratislava has shown the highest level of mutual relations in various aspects (not just centripetal), when a developed agglomeration was formed around the city of Bratislava, between the Bratislava and Trnava centres and the Malacky, Pezinok, Modra, Senec and Šamorín centres. This agglomeration is expanding towards the Nitra centre and towards the centres situated between Trnava and Nitra (Sereď, Galanta, Šaľa), Dunajská Streda, Hlohovec and Piešťany, including their FUA. The most significant agglomeration in the SR was thus formed and further expands around the city of Bratislava, which is gradually outgrowing the state borders.





Similar development and tendencies are also evident around the most significant centres, including:

- Trenčín – which attracts the Považie settlement zone from Nové Mesto nad Váhom up to the Považská Bystrica – Púchov agglomeration,
- Žilina – which, together with the Martin-Vrútky centre, forms a powerful agglomeration that expands towards Kysuce (up to Čadca), Rajec and Turiec,
- Banská Bystrica – which, together with the Zvolen centre, forms a significant agglomeration of Central Slovakia, covering the entire Upper Považie region, as well as the territory up to Detva and Hriňová,
- Košice and Prešov, which, together with the other adjacent centres, form the second most significant agglomeration within Slovakia and which holds a significant position in the current, as well as expected international development relations within the Carpathian region and the north-western part of it.

Similar relations and tendencies of forming mutual relations are also evident between centres and their FUA at the regional level. The representation of these relations is apparent from the enclosed diagram.

## 8. International FUA connections

The polycentric settlement concept was declared as a political proclamation by ESDP. Subsequently, the ESPON project dealt with the issues of polycentric settlement concept in its action 1.1.1, Potentials for polycentric development in Europe, in more detail. Regarding Slovak territory, 27 FUA were evaluated within this project. In addition, 16 “PUSH” areas (Potential Urban Strategic Horizons) were specified regarding Slovak territory on the basis of 45 minute isochrones with respect to the FUA centres. 8 FUA were included as possible Potential Integration Areas – PIAs.

From the total number of 27 FUA evaluated by ESPON regarding the SR, the Bratislava FUA was classified as a MEGA - Metropolitan European Growth Area of the third category, 6 FUA were classified as FUA of trans-national or national significance (Trnava, Nitra, Žilina, Banská Bystrica, Prešov and Košice) and 20 FUA were classified as FUA of regional significance.

The currently processed PlaNet CenSE Project took over the final evaluation from the ESPON Project 1.1.1 and modified and specified some of the evaluations and categorizations of FUA in individual countries. In the Slovak Republic, this project included the Trenčín FUA into the category of trans-national or national significance. Within the development strategy, the project, at the same time, delimited a “cooperation network” between the Bratislava and Trnava FUA, together with the Vienna, Győr and Brno FUA, the Košice FUA with the Miskolc FUA and the Žilina FUA with the Ostrava FUA with potential relations to other FUA situated in Poland.

From the point of view of the cross-border polycentricity typology as defined in the ESPON Project 1.1.1, the following could be stated regarding the territory of the Slovak Republic:

In terms of **morphological aspects** (physical proximity), the following FUA could be seen as developing and potential polycentric systems:

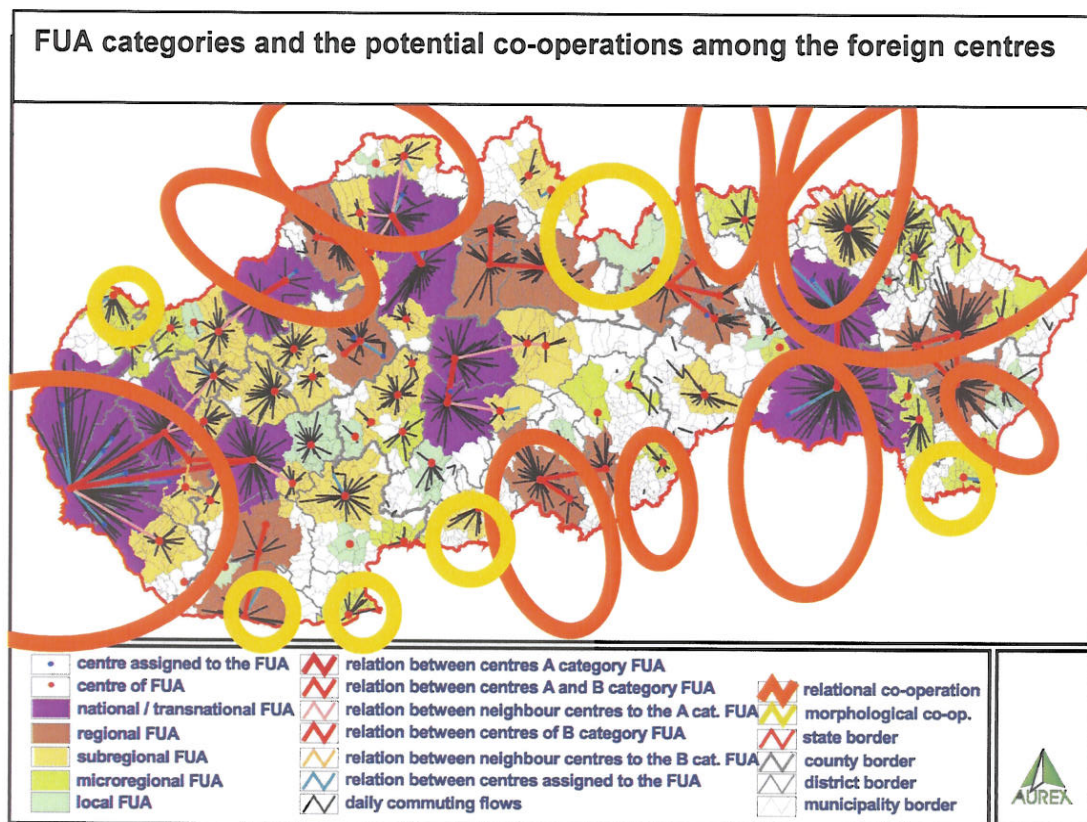
- Komárno – Komárom, Štúrovo – Ostrihom, Veľký Krtíš – Balašské Ďarmoty on the Slovak-Hungarian border,
- Kráľovský Chlmec/Čierne nad Tisou – Čop on the Slovak-Ukraine border, Vysoké Tatry – Zakopane, Nowy Targ on the Slovak-Polish border,
- Skalica/Holíč – Hodonín on the Slovak-Czech border.

The following FUA are also developing a higher potential for development in terms of **relational aspects**:

- Bratislava and Trnava with Vienna, Brno and Gyor (SR – Austria – Czech Republic – Hungary)
- Lučenec and Fiľakovo with Šalgótarján (SR – Hungary)
- Tornaľa with Ózda (SR – Hungary)
- Košice with Miskolc (SR – Hungary)
- Sobrance with Uzgorod (SR – Ukraine)
- Prešov, Vranov nad Topľou and Humenné with Rzeszów and L'vov (SR – PL – Ukraine)
- Bardejov and Svidník with Krosno and Rzeszów (SR – PL)
- Stará Ľubovňa with Nowy Sacz (SR – PL)
- Žilina and Čadca with Ostrava, Bielsko Bialou and Katowice (SR – PL – Czech Republic)
- Trenčín and Dubnica nad Váhom with Zlín (SR – Czech Republic).

**Interurban polycentric** development (relation of small municipalities from one side of a border towards a larger city on the other side of a border) is already starting to show regarding the Bratislava city and FUA towards adjacent municipalities in Austria (Wolfstaal, Hainburg, Marcheg, Angern) and partially also in Hungary (Mosonmagyaróvár).

The above-mentioned connections are shown on the enclosed diagram.





## **9. Slovak Spatial Development Perspective 2001 and polycentric settlement concept**

The 9. Slovak Spatial Development Perspective 2001 (KURS 2001) is a national regional planning document, which is approved by the government, the binding part of which is issued in a government decree.

KURS 2001 declares the main goals of the regional development of the Slovak Republic and the priorities of them in the national, as well as European context. In its conceptual level, it declares recommendations for the layout and hierarchy of the structure of settlement, nodes of urban and economic agglomerations in international and national connections, as well as the development design of the main urbanistic axis in the Slovak Republic. At the same time, it identifies the requirements of industrial concepts for the spatial layout and functional exploitation of Slovak territory and proposes the concept for the protection and revitalization of cultural and natural heritage and land planning, including the ecological stability of the Slovak Republic. The concept further identifies the progress of development trends regarding recreation and travel, as well as the concept for public transport and technical facilities from the national point of view of regional development.

KURS 2001 defined the system of settlement centroids as spatial urban systems representing agglomerations and urban regions up to territories polarized by local centres in terms of commuting to work. According to their significance, settlement centroids are hierarchically classified into three levels. Accordingly, development axes are also classified into three hierarchical levels.

The Slovak Spatial Development Perspective 2001 defines the binding principles and directions that particularly regulate the requirements of industrial concepts for the spatial layout and functional exploitation of the Slovak Republic and its regions in accordance with the principles of permanent sustainable development, environmental protection and natural and cultural heritage.

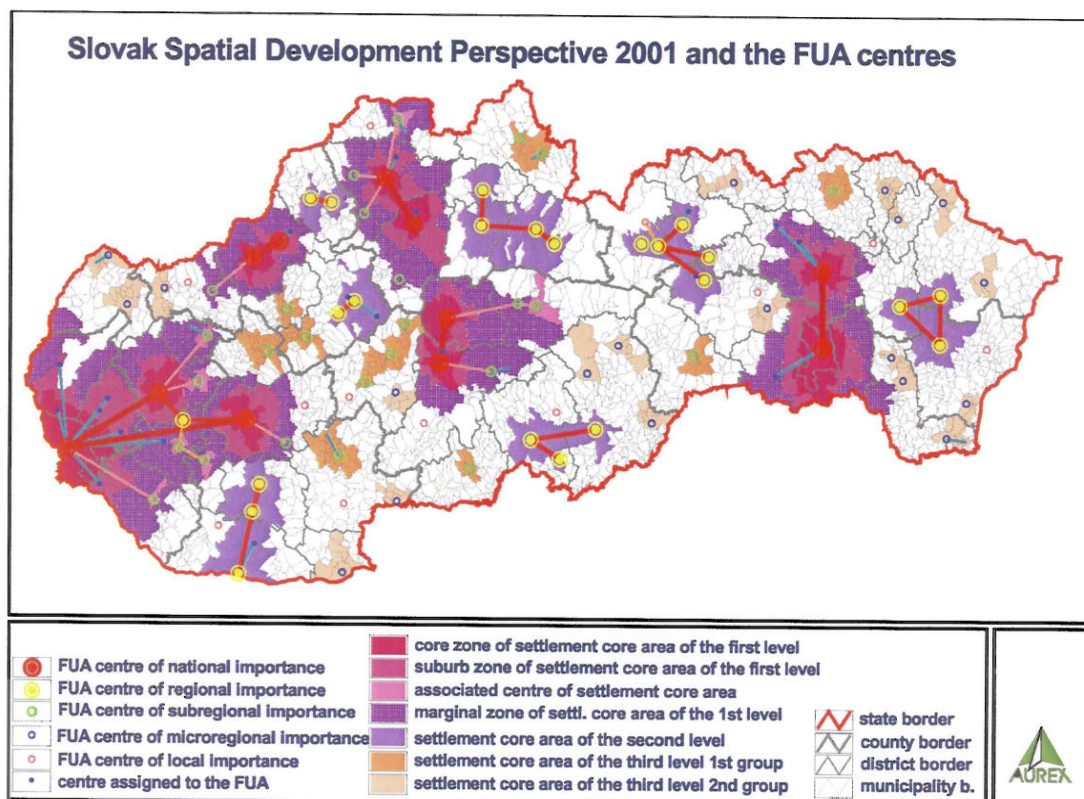
On the basis of results from KURS 2001, the basic goals for current land planning policy could be defined as follows:

- Promoting the development of the economic basis and strengthening its competitiveness and efficiency;
- Promoting the balanced development of settlement, including the development of rural areas;
- Securing the parity of access to infrastructures;
- Protecting and forming the environment and the natural and cultural heritage;
- Promoting integration and cohesion;
- Securing sustainable development.

The centres and their FUA that were evaluated within the polycentric concept, basically underline the hierarchy and determination of the above-mentioned urban structures in KURS 2001.

Connections between the centres and their potential relations and urban structures within KURS 2001 are shown on the enclosed diagram.





## 10. Summary

Settlement in the Slovak Republic following historical development, as well as the development of current tendencies, could be qualified as a polycentric system of settlement. This system is formed by a framework of medium-size cities (within the dimension of territory and the conditions of the Slovak Republic). It was particularly formed during the second half of the twentieth century and based on the principles of a central settlement system.

It could also be alleged that the formed polycentric settlement concept is quantitatively changing. The relation between the central city and its peripherals, as well as the relation between individual centres, is changing in favour of both sides within the meaning of forming better partnership relations. In rural areas situated in the close hinterland of the largest cities, cooperation and mutual collaboration is shown by complementing urban functions. It does not only concern the development of housing in the municipalities situated close to cities, but also the development of certain production activities. On the other hand, the development of rural areas in more remote territories is becoming complicated and the further development of them is not clearly defined due to the collapse of their economical basis, respectively the economical basis of the previously profiting cities on which these municipalities were dependent. In these cases, land planning and regional policies face a new significant challenge directed towards the formation of appropriate models and policies in order to solve this situation. It is assumed that the polycentric concept could mean a conceptual solution for these areas, as with the polycentric concept at the sub-regional and local levels.

A natural dual phenomenon has formed part of the development in cities during the past 15 years, when the competition between cities has deepened on one side and mutual relations between them have been growing on the other side. Even though it currently seems that competitive relations still prevail between cities, cooperative relations between them are also showing to a greater extent, particularly as a



consequence of the economic development of individual cities, the growth of a qualitative service infrastructure and last but not least as a consequence of liberated international relations.

All of these phenomena lately run more or less spontaneously, without any major systematic controlling inputs of the decisive sphere. Leaving the development of cities and municipalities to a spontaneous development that is only contingent on market mechanisms, however, results in an increase of disparities in various areas, between regions at the national level as well as within individual regions. The more systematic application of polycentric principles upon the simultaneous acceptance of market mechanisms in the economic area lays a theoretical assumption for balancing disparities at all hierarchical levels (international, national and regional).

The facts promoting the polycentric concept in settlement were analyzed within the project "Polycentric Settlement Concept as an Instrument for Securing Functional Complexity at the Regional and Local Levels" (hereinafter referred to as "POLY"). The centres and their hinterlands were defined (Functional Urban Areas – FUA) and evaluated from several aspects. The project evaluated the centres and FUA of various size and significance in the Slovak settlement system and classified them into significance categories from the national to international, regional, sub-regional and local points of view. Comparison of the results gained by the analyses within this project and results of the ESPON Project 1.1.1 Potentials for polycentric development in Europe shows that the FUA identified in ESPON as the areas of national to trans-national importance correspond to the part of FUA identified as the most significant in the POLY project. As a consequence of more detailed examination, the POLY project has also included other FUA in the category of the most significant ones, particularly concerning those FUA around centres that form joint agglomerations of the highest significance and of a national to international character. The FUA specified in the project were based on the commuting criterion. The adherence of several centres and their FUA was, however, proven within the meaning of forming higher urban clusters – agglomerations or urban regions.

The project processed has deepened the knowledge regarding the formation of FUA under Slovak conditions and regarding the polycentric concept of its settlement system. For the purpose of its further progress, mechanisms will need to be created that affect the allocation of economic activities into such areas that their effects underlie the quantitative and qualitative growth of individual centres, as well as their hinterlands, and promote the reduction of regional disparities. The first steps in this direction are declared in the basic spatial conceptual documents concerning regional planning. In reference to these documents, the strategic documents of regional policy should subsequently accept the polycentric concept. The chance of transferring the polycentric concept idea into practice, affecting the conceptual and rational development of settlement in accordance with the principles of permanent sustainability, is great, if based on the collaboration of spatial and regional policy.

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**POLYCENTRIC CONCEPT OF SETTLEMENT DEVELOPMENT AND URBAN DEVELOPMENT OF THE SLOVAK REPUBLIC**

Contribution for

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