

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre

Rasic, Ivana

Conference Paper

Introduction of Nomenclature of Territorial Units for Statistics in Croatia

43rd Congress of the European Regional Science Association: "Peripheries, Centres, and Spatial Development in the New Europe", 27th - 30th August 2003, Jyväskylä, Finland

Provided in Cooperation with:

European Regional Science Association (ERSA)

Suggested Citation: Rasic, Ivana (2003): Introduction of Nomenclature of Territorial Units for Statistics in Croatia, 43rd Congress of the European Regional Science Association: "Peripheries, Centres, and Spatial Development in the New Europe", 27th - 30th August 2003, Jyväskylä, Finland, European Regional Science Association (ERSA), Louvain-la-Neuve

This Version is available at: https://hdl.handle.net/10419/115958

${\bf Standard\text{-}Nutzungsbedingungen:}$

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



Introduction of Nomenclature of Territorial Units for Statistics in Croatia

Ivana Rasic
Institute of Economics Zagreb
Trg. J. F. Kennedya 7, 10000 Zagreb, Croatia
<u>irasic@eizg.hr</u>

Abstract

The paper presents the process of introduction of the Nomenclature of Territorial Units for Statistics (NUTS) in Croatia. It discusses all criteria that should be applied during and constraints that disabled reaching optimal solution. First constraint was the EUROSTAT's recommendation that the establishment of the Nomenclature of Territorial Units for Statistics should be based on the existing administrative division of the state territory. According to the main criteria (population size) the entire territory of the Republic of Croatia represents NUTS level I, existing counties NUTS level III, whereas the existing municipalities and cities fulfil criteria for NUTS IV level regions. As there are no administrative territorial units that correspond to NUTS level II, which is the main framework for the implementation of regional policy and the analysis of regional problems and analyses, the most suitable solution is the formation of this level by combining counties. The biggest problem is how to define the NUTS II level.

- 1. Aggravating circumstance is the fact that a longer-lasting division of real regional units, which could serve as the basis for regional development policy has never been established in the Republic of Croatia. By this fact alone, the dividing of the territory of the Republic of Croatia to second level statistical units brings with about a sensitive issue of regionalisation of Croatia and leads to political debates. Besides, the existing monitoring of statistical data on lower levels is not satisfactory, so that problem of data as the basis for quality economic analysis appeared.
- 2. In Croatia there are neither a set of regional boundaries nor a clearly defined regional policy. By introducing NUTS it would be possible to establish regional statistics as a basis for the formulation of regional policy.

In the remainder, the paper discusses main criteria which should be considered during the process of establishment of regions as subjects of regional policy. It presents how regionalisation depends on the criteria used and how different professions use different criteria. At the end, the final proposal of the Decision on the Nomenclature of Territorial Units for Statistics is presented.

Key words: regional policy, regionalisation

Introduction

The discussion about regional policy begins with its definition, its purpose and its subject. A precondition to formulating implementing and monitoring of regional policy measures is the existence of established regional boundaries. Division proposals depend on criteria used. Politicians and various professions use different criteria, in order to achieve the optimal territorial structure that could enable same or at least similar effects of certain policy measures within the same territorial unit, and could be easily monitored. After the need for regional policy has been justified, it has to be identified, if the Republic of Croatia does have its regional policy. Croatia is exceptionally heterogeneous country; regional differences in economic and social development are great and without clear defined regional policy will probably continue to increase in future. Croatia has begun to develop its regional policy few years ago, mostly under the external pressure, in order to fulfil requirements for EU accession. One of the requirements Croatia has to fulfil is to divide its territory according to the Nomenclature of Territorial units for Statistics. This process is overlapping with the need to establish territorial units in Croatia that would be suitable for implementing and monitoring regional policy measures. There are three main levels of NUTS regions, and the second level is main framework for the implementation of regional policy. As there are no administrative territorial units which correspondent to that level, the criteria should be, besides the criteria of population size, all criteria relevant from the point of view of the most effective regional policy. Establishment of regions is necessary precondition that have to be fulfilled in order to make the basis for formulation and implementation of regional policy. But there is still an array of actions that have to be taken.

1. Regional policy – what is it all about?

Regional policy is understood as policy aimed at reducing differences in economic and social development between regions. It is made up of set of measures that are used to manage all aspects of regional development. The main question that comes out is how to justify regional policy?

The main argument pro is that spontaneous development of regions will bring about suboptimal economic development. According to the market failure argument the market forces cannot reduce differences between regions because the mobility of factors of production and starting conditions varies greatly. If development takes place

spontaneously, there appear few centres of economic growth with the biggest concentration of population, whereas differences between urbanised and rural regions continue to increase as does the differences between the large and smaller cities. These disparities are usually defined in terms of unemployment rate and income per capita, and are aggravated by structural changes, which have social and economic consequences.

As has been mentioned before, regional policy targets specific territory aiming at adjusting and balancing development of specific territorial economic entities – regions. In order to be able to influence and manage the development of the territory, its borders need to be set as and the extent of its economic influence onto the surrounding areas established. For the purpose of implementing regional policy it is therefore necessary to define and establish its subject, i.e. regions.

2. Region, regionalisation

Discussion about regional policy should begin with a discussion about what should be considered as region. Region is mostly defined as area or division with or without definite boundaries and characteristics (Oxford-Advanced Learner's Dictionary of Current English, 1986). There are region within the country or cross borders regions. The two important aspects of regions within the country are delimitation of space on the basis of one or more criteria and administrative function of a region as an administrative level below that of nation state. The scope of a region is usually based on natural boundaries, historical boundaries and administrative boundaries (European regional statistics-Reference guide, 2002).

The regionalisation therefore depends on the criteria used. During the division of territory, different profession use different criteria -usually one criterion or a very narrow set of criteria. A criterion can be a single one, which is justified if the goal of the division is very clear and directly follows from the application of that particular criterion. Agronomists will therefore have their own classification, foresters, geographers, spatial planners their own as well, and so on. Basis agronomists' criteria are soil and climate characteristics which define the phyto-ecological and vegetation factors in the cultivation of agricultural cultures. The purpose is to achieve such a division that will allow the bearers of agricultural policy to stimulate the most suitable use of the farming land and the development of other agriculture-related activities

(Basic, Bogunovic and Husnjak, 2000). On the other hand, basic criteria for foresters would be the soil type, forest type and their distribution. For transport experts the basic criteria are the transport corridors and road types, which, again, depend on the type of traffic. Archaeologists would divide the territory depending on the density of archaeological sites from various historical periods, while demographers take various demographic indicators. For geographers, on the other hand, the basic criteria are natural-geographic characteristics of the region. Given that the natural-geographical characteristics of the territory change very slowly, such division of territory is just as valid today as it was a hundred, two hundred and more years ago (Spatial planning strategy of the Republic of Croatia, 1997).

Criteria may be numerous. Their application reflects the need to consider the same issue from various aspects. The basic starting point of, for example, spatial planners is the land use. As the territory can be shared by various users and can be used for various purposes, the goal of spatial planning is to secure the conditions for the protection and management of the territory as a valuable and finite natural good, in order to make possible balanced, economic, social and cultural development of the country's territory. For that purpose the country's territory needs to be divided into entities suitable for rational and effective use of the territory. The basis for the preparation of spatial plans is the structural analysis of all permanent and changeable components that define the territory. The main criteria for the division of the state territory into territorial entities having common characteristics are the physiognomic characteristics of the territory, which predetermine the use of space and the development of economic activities. In this manner the spatial planners point to priority activities, that should be the basic force behind the overall economic development. Naturally, while doing so, environment needs to be protected and available resources rationally used (Spatial planning strategy of the Republic of Croatia, 1997).

3. Region as a subject of regional policy

As subjects of regional policy regions should be defined in a manner so as to ensure that regional policy measures have the same effect in every part of a particular region and that measures can be easily monitored (Human Development Report - Croatia 2002, to appear in 2003). For the national regional policy propose it is most appropriate that regions are at once part of the administrative structure of a country. In that way region

can be seen as a round-up of populations or places with sufficient similarities to comprise a logical unit for administrative purposes. A region is then a result of the understanding that spatial differences require appropriate administrative structures. It is also desirable that regions have appropriate boundaries considering acceptability to the people administered, homogeneity of territorial unit and suitable size (European regional statistics – reference guide, 2002). Therefore, country's territory needs to be divided in such a manner that the established economic entities, i.e. regions, are the most suitable subjects of the regional policy. For example, a measure that stimulates the development of a specific economic activity typical for the coastal region will not have any effect in the continental part of the country. Whether one talks of regions or smaller territorial units, this division requires multi-criteria judgment and decision-making. Therefore it is important to take note of the characteristics of the regional geographic base, which includes economic and transport aspects, the direction of inhabitants' gravitation, antagonisms between the regions and central towns etc., with a goal of establishing logical and sustainable economic territorial entities (Human Development Report - Croatia 2002, to appear in 2003)

4. Regional Policy in Croatia – Is It That Necessary?

First of all, it has to be determined whether a need for regional policy really exists. Are there significant differences in economic and social development between regions? In order to answer those questions it is necessary to identify regions and after that to analyse their differences.

Republic of Croatia covers 56,539 sq km of continental surface (including Adriatic Islands) and 31.421 sq km of the Adriatic Sea along the coast. According to the Population Census taken in 2001, the population size is 4.437.460 inhabitants (Population, Household and Apartment Census, 2001). It can be said that Croatia is a Central European, a Pannonian, a Danube-basin, a Per alpine and a Mediterranean country. The border countries are Slovenia, Hungary, Bosnia and Hercegovina, Serbia and Montenegro, and Italy (sea border). Due to its geographic and traffic position, cultural and economic influences arising from wider surroundings, natural and geographic features, Croatia appears exceptionally heterogeneous. Continental Pannonian and Peri-pannonian area covers 53,7 percentage of whole state territory, while coastal area covers 31,4. The remaining 14,9 percentage of state territory

comprises a narrow mountain area of Lika and Gorski Kotar, which is of great importance for the general regional structure of Croatia. In each of these three areas there can be established a bigger or smaller regional division and bigger or smaller differentiation of certain parts. The regions are distinguished by certain cultural, geographical and historical differences. Geographic and political position of Croatia in Europe contributed to such a diversity. So did influences from different economic and political systems during its history. Both, the effects of complex civilisation influences and the natural geographic varieties have contributed to heterogeneity of Croatian territory. The Mediterranean area was under the influence from Italo-Venetian area, Pannonian and Peri- pannonian area was under the influence from the Ugro-Pannonian area and the Germanic Central Europe (Human Development Report Croatia 1999, 1999). The territory of the Republic of Croatia has been re-tailored innumerable times during its history, so that a longer-lasting division in real regional units, which could serve as the basis for regional development policy and for the territorializing of all systems of state functioning, has never been established. The existing administrative division of the country's territory into 21 counties which does not take into consideration the natural and geographic factors, the existing economic structure, or some traditional divisions of Croatian territory, isn't the most appropriate one (Human Development Report - Croatia 2002, to appear in 2003). That division could not be compared with division of the Croatian territory into big regional units. It could be only seen as country's narrower sub-regional division. Lack of regional statistics disables serious analysis of differences in economic development between regions, there is no system of monitoring statistical data needed for implementation, control, evaluation of regional policy measures. For example, the data on GDP and other data needed for construction of other economic indicators have not been collected at the county's level. Estimation of GDP by counties in 2000 using the constant average labour productivity assumption shows that there are great differences in GDP per capita between the counties (see Annex; table 1). Most prominent is the dominant role of core and capital city regions; there is no centre that rivals the capital city. According to before mentioned estimation GDP per capita of the Croatian capital city Zagreb in 2000 was 58 percentages above the national level. GDP per capita above national level had also been reached in the County of Istria (21 percentage above) and the County of Primorje-Gorski Kotar (23 percentage above), both in northern coastland of Croatia. Those facts support the thesis that the concentrations of infrastructure, business services, skilled

workers, higher standard accommodation have been located within few capital and other major urban centres. On the other hand, beyond the cities there are many rural areas characterized by increasing unemployment and falling employment opportunities within agriculture. Regional differences in economic and social development in Croatia are already great and without clear defined regional policy will probably continue to increase in future.

5. Establishment of Nomenclature of Territorial Units for Statistics in Croatia

Hence come requirements for establishment regions as subject of regional policy and creation and implementation of policy targets those territorial entities. Those requirements are overlapping with process of establishment Statistical regions in candidate countries as well as in countries involved in Stabilisation and Accession Process as Croatia is. After Croatia had applied for EU membership in February this year, the foreign ministers of EU member-countries decided in Luxembourg that the European Commission will start defining its opinion about Croatia's application for membership in the European Union. Croatia could very soon receive a comprehensive questionnaire from the European Commission, containing some 4,000 questions which are to be answered. Based on a country's answers and other sources, the European Commission gives its opinion and recommendations on its ability to become a candidate for EU membership.

To be in line with the European Union regional policy, Croatia has to classify counties, municipalities and towns according to the model used by the makers of European union's regional policy. For that purpose it is necessary to be familiar with the Nomenclature of Territorial Units for Statistics used in regional statistics division of Member States' territories into individual territorial units (Human Development Report - Croatia 2002, to appear in 2003).

Since Croatia lacks systematic regional statistics as the basis for formulation, implementation and monitoring of regional policy and its measures, by dividing the Croatian territory into statistical regions it would be possible to establish regional statistics, as well as to harmonise data and assure their comparability. The regions of comparable size (in terms of population) belong to the same NUTS level, and it is therefore possible to make comparisons and various conclusions regarding different aspects of development of the regions. Only by analysing the data collected using a

common methodology in regions of the same level it is possible to compare counties, groups of counties, municipalities and cities, calculate certain indicators and monitor effects of regional developments measures. To satisfy EUROSTAT requirement for introduction of Nomenclature of Territorial Units for Statistics, the Croatian Bureau of Statistics formed a Working Group comprising experts and representatives of several Ministries. The task of the Group was not to propose new administrative territorial organization, but rather to propose the Decision on the Nomenclature of Territorial Units for Statistics (Human Development Report - Croatia 2002, to appear in 2003). First of all it should be emphasised that NUTS regions are normative regions and the nomenclature is based on the existing institutional division of a country. Normative regions reflect political will; their boundaries are fixed in terms of the remit of local authorities and the size of the regions population regarded as corresponding to the economically optimal use of necessary resources to accomplish their tasks (European regional statistics – reference guide, 2002). They are clearly defined and usually have statutory existence in the administrative structure of a country. Thus the recommendation is that during the preparation of the Proposal for Division of the Territory of the Republic of Croatia in Territorial Units for Statistics the present administrative division of state territory in counties and cities/municipalities should be respected. Disregarding county boundaries would render the collection of data and the implementation and monitoring of regional policy difficult, increase the possibility of political disagreements and impinge upon the existing administrative division of the country. The analysis of the administrative structure of the state territory was done first. Then followed the analysis of the average size (in terms of population) of the units of the various existing administrative levels to determine where these levels belong in the NUTS hierarchy. As has been acknowledged by the Working group, the Nomenclature of Territorial Units for Statistics is a hierarchical system which divides the territories of EU Member States into three basic levels NUTS I, NUTS II and NUTS III and additional two levels NUTS IV and NUTS V. Each country is divided into a whole number of regions at NUTS I level. Each of these is then subdivided into regions at NUTS II level, and these into regions at NUTS III level. The criterion is, above all, the population size and it's based on averages. Particular regions of a country belonging to the NUTS I level may therefore be smaller than 3 and larger than 7 million inhabitants. The average population size of regions belonging to NUTS level II is between 800.000

and 3.000.000 inhabitants. Two further levels have been defined to meet the demand for

statistics linked to definition, implementation and monitoring of local policy as agricultural, urban policies, and the growing need for information at local level. It is municipalities or clusters of municipalities that appear NUTS IV and NUTS V levels. Only the last and smallest level (NUTS V) has been fixed for all Member States, and they usually correspond to municipalities (European Regional Statistics – Reference Guide, 2002).

The Croatian territory has been divided into 21 counties and 122 cities and 426 municipalities. Given that, and according to the results of the Population Census taken in 2001, the population size of Croatia is 4.437.460 inhabitants, the criterion according to which the statistical regions of the first level must count between 3.000.000 and 7.000.000 inhabitants does not allow the division of Croatia into more than one NUTS level I region. Croatia as a whole needs to be considered a NUTS I level region. A question imposed itself on whether the counties, cities and municipalities as existing administrative units of the territory fulfil the criteria for one of the remaining NUTS levels. The average population size of Croatian counties is 211.308 inhabitants (21 counties), which fulfils the criteria only for the establishment of statistical regions of the third level. As there is neither obligation nor the need to introduce the NUTS IV level, this level should not be included in the Nomenclature. Since the criterion for the formation of territorial units of the fifth level is the smallest administrative unit criterion, Croatian cities (122) and municipalities (424) represent the territorial units of that level (Human Development Report Croatia 2002, to appear in 2003).

Next stage that should be done is checking whether regional data are collected and disseminated on the basis of this regional division. As has been emphasised Croatia lacks regional statistics by counties, existing monitoring of statistical data on lower level is not satisfactory, and there is a problem of data as the basis for quality economic analysis and serious analysis of differences in economic development between regions. For example, the GDP on the county level has never been calculated.

As there are no administrative units that would correspond to NUTS level II, which is simultaneously the main framework for the implementation of regional policy and the one competent for the analysis of regional problems, the most suitable solution was the formation of this level by combining counties (NUTS III level), In this way the existing administrative division of the country's territory is not undermined. The standard level, on which the data are available is NUTS II, certain data are collected on NUTS III level, while almost nothing has been collected on the NUTS level I. The exemption are the

data on territorial units that deviate significantly from the NUTS, and as such are not stored in the region data base (European regional statistics – reference guide, 2002). It is precisely for this reason that the great doubts came about regarding the division of Croatian territory into statistical regions of the second level. As the total population size of the Republic of Croatia is 4.437.460 inhabitants, and the average population size of NUTS level II regions must be between 800.000 and 3.000.000 inhabitants, it is easy to see that the total number NUTS II regions cannot be greater than five. If the division into six NUTS level II regions were put into place, an average region would count 739.576 inhabitants, which would not comply with EUROSTAT (Human Development Report Croatia 2002, to appear in 2003).

So there are various combinations of formation NUTS II regions by combining the counties which would comply with the EUROSTAT criteria. The question is what has to be achieved by that division, what additional criteria should be taken into account and what would be the optimal territorial structure of the Croatian economy. By dividing territory into regions NUTS II level the main framework for implementation of regional policy will be created. So the main point is to form regions to ensure that regional policy measures have the same effect in every part of a particular region and that the measures can be easily monitored. Regions need to have suitable size, homogeneity, cognizable regional identity, mentality, customs, social conveniences. Therefore it is also necessary to respect homogeneity criteria of regions, i.e. regional statistical units, natural and geographic diversity, historical tradition and geopolitical situation, the structure of the economy and development of individual regional identities, as well as suitable size of the territory. Homogeneous regions are those regions that share some uniform characteristics (economic, social), i.e. territory whose parts show fewer differences among themselves when compared with the units of the neighbouring territory (Uzelac, 2001, p. 290). This is the process of identifying the similarities within regional units of a territory.

In order to reach the most suitable formation of NUTS II regions (by combining the counties) followed criteria had to be considered: homogeneity from the point of view of the most effective regional policy, physiognomic characteristic of a region, central place criterion, historical tradition and the criterion of existing economic homogeneity (Human Development Report - Croatia 2002, to appear in 2003). The next step is to find the most appropriate division respecting those criteria. Limitation that have narrowed the space for detailed socio-economic and geographic analyses and decisions making

are above all existing administrative division of Croatian territory in counties, which are grouped to form NUTS II level. The existing monitoring of statistical data on lower levels is not satisfactory, and the problem of data as a basis for quality economic analysis appeared. The best way was to identify all possible solution according to the main criteria for formation of NUTS II regions, and then to find the solutions which satisfy or all most of the remained criteria. As result came thirteen versions for the establishment of statistical regions of the second NUTS level (see Appendix; table 2.), which differ in the number of NUTS level II statistical regions and by counties contained by individual regions (Human Development Report - Croatia 2002, to appear in 2003).

The initial proposal included a division in two NUTS level II statistical regions: Panonian Croatia that would encompass all the counties from the County of Karlovac in the west to the Counties of Osijek-Baranja and Vukovar-Srijem in the east, and the Adriatic Croatia which would encompass the rest of the country (see Appendix; picture 1). Both of these territorial entities are characterised by a high degree of diversification of economic structure, heterogeneity of natural-geographic base of the territory, and separate historical traditions.

"Adriatic" Croatia includes all the coastal counties from the County of Istria, through Counties of Primorje - Gorski Kotar and Lika-Senj, all to the County of Dubrovnik-Neretva. The area from County of Zadar to the County of Dubrovnik-Neretva, by its natural-geographic characteristics, economic structure as well as by its historical tradition, differs to a greater extent from the remaining area of the so-called Adriatic Croatia than do its counties among themselves. The same is with the remaining statistical region wich encompass the rest of the country.

The Eastern part (Pannonian area) is more homogeneous and characterised by an agricultural economic structure, while greater degree of heterogeneity has been identified in central part (Peri-Pannonian) which encompasses Zagreb as its centre, cities of Karlovac, Sisak, Bjelovar which gravitate towards it, and the northern part, Zagorje, Podravina and Medimurje.

Statistical data, such as GDP per capita, would pertain only to those two NUTS level II units. Given that each one of those two units contains areas which greatly differ among themselves in development levels, data obtained in such a manner would not reveal much. In the "Adriatic unit" the differences in the development levels of Istria and Kvarner on the one side and the southern Dalmatian area on the other would not be

visible from the indicators, which would be calculated for the entire unit and would be, just as on the continent, of insignificant or no use to the bearers of development policy. As such they would not be a suitable subject of regional policy and are accepted only as a starting point for further division of the territory.

The proposal of division into three level II statistical regions, Eastern Croatia, Central Croatia and Adriatic region is not acceptable either (see Appendix; picture 2.,). The heterogeneity of continental part of the country was reduced by forming two regions Eastern Croatia (Pannonian Area) and Central Croatia, while the Adriatic region stands over with all aforementioned differences.

To find an optimal solution, detailed socio-economic and geographic analyses had to be carried out. The main task was to identify regions with a more homogeneous economic and social structure as well as developed cultural and historical tradition. Complying with the given criteria and fighting various difficulties brought about by various requests, the number of acceptable proposals was narrowed to those which are characterised by division of territory into five NUTS II regions. Main argument was that in a country which is heterogeneous like Croatia, it's most suitable to have as many NUTS II level regions as possible. Besides the classification of overall Croatian territory into less than five statistical units of the second level do not satisfy all the aforementioned criteria. NUTS II regions should be "adapted" so as to be the most suitable subject possible for development policy.

5.1. Final Proposal

In the final proposal Croatia as NUTS level I is divided into five NUTS level II regions (Northern Croatia, Central Croatia, Eastern Croatia, Western Croatia and Southern Croatia), 21 NUTS level III regions and 546 NUTS V regions (of which 122 cities and 424 municipalities) (see table 3, see Annex; table 4, picture 3)

Table 3. Average size of statistical regions on individual NUTS levels

Level	NUTS I	NUTS II	NUTS III
Average population size	4.437.460	887.492	211.308

Source: Calculated on basis of Croatian Bureau of Statistics Data: "Population, household and apartment Census, 31 October 2001", http://www.dzs.hr/Popis%202001/popis20001.htm

Northern Croatia has been designed as a separate statistical region made up from the Counties of Medimurje, Krapina-Zagorje, Varazdin and Koprivnica-Krizevci. That northern part is characterised by a higher degree of economic development, developed trades and crafts activity, small and medium enterprise, orientation towards international co-operation with neighbouring countries, and as such it was deemed that this area should be considered a separate territorial economic entity. Since the homogeneous economic structure of this area, calls for special development policy measures demanding suitable statistical monitoring, it was decided to separate it as an individual territorial unit for statistics.

By combining the City of Zagreb, the Counties of Zagreb, Karlovac, Sisak-Moslavina and Bjelovar-Bilogora the territorial unit for statistics Central Croatia was formed. This territorial unit encloses an area suitable for industrial development and as such needs to be statistically monitored separately. With the exception of the County of Bjelovar-Bilogora, these counties complement Zagreb with their economic structure, which guarantees rich and structured exchange and a development policy substantiated by appropriate data. Although area around Karlovac (centre of the County of Karlovac) and Sisak (centre of the County of Sisak-Moslavina) are in great extent underdeveloped, the main argument for putting them together in Central Croatia is central place criterion. Those areas strongly incline to Zagreb.

Eastern Croatia, a territorial unit for statistics formed by the County of Virovitica-Podravina, the County of Pozega-Slavonia, the County of Brod-Posavina, the County of Osijek-Baranja and the County of Vukovar-Srijem, fulfills all the three criteria. Due to similar economic structure, common consequences from the war and development difficulties, it has been concluded that this area needs specially tailored development policy and statistical monitoring.

Territorial unit of Western Croatia, uniting the Counties of Primorje-Gorski Kotar, Lika-Senj and Istria is characterised by significant physiognomic differences. However, thanks to the complementarities of its economies, it has been deemed that these counties form a territorial unit in which gathered data shall be relevant for monitoring, evaluating and improving development policy. Besides, a territorial unit formed in such a manner complies with the criteria for regional divisions used in the last 50 or so years. It has to be emphasised that Western Croatia has three very distinct sub-regions, Istria, Kvarner and Lika-Gorski Kotar area, each one requiring special regional development policy measures. Hence regional policy measures cannot have the same effect in every part of

the region and that the measures cannot be easily monitored. By forming this statistical region an exception is made, and that criterion has not been satisfied. The reasons for this are partly the existing county boundaries, and partly the gravitation of the Lika-Gorski Kotar area towards the littoral and a habitual tendency to classify these three areas into the same entity. It is difficult to give good reasoning to explain why they have been combined into one, but even more difficult to answer the question on how to separate them.

Territorial unit of Southern Croatia consisting of four Dalmatian counties, namely the County of Split-Dalmatia, the County of Zadar, the County of Sibenik-Knin and the County of Dubrovnik-Neretva fulfils also the physiognomic and historical criteria, as well as the criteria of historical division used in the last 50 or so years. These counties are characterised by similar economic structure and achieved level of development.

This kind of classification of the overall Croatian territory on the NUTS II level has satisfied all the aforementioned criteria, and the main argument for adopting such it is the criterion of homogeneity of regions from the development policy management point and the request that, in a country as heterogeneous as Croatia, there be as many such regions as possible. NUTS II regions have been "adjusted" so as to be the most suitable subject possible of development policy. Such an approach respects the existing administrative organisation of the state's territory. The method of classifying the countries into NUTS II level is also crucial for the reason that during the preparation of regional development assistance programmes, which Croatia will propose to the EU and for which it will ask financial assistance, the territorial coverage shall be established in the NUTS II level. There were claims that the division on the NUTS II level had to be established in such a manner to have as many as possible underdeveloped statistical territorial units and therefore satisfy the criteria for the use of the EU Structural Funds. However, GDP per capita in Croatia is significantly lower than 75% of the EU average. The amount of GDP per capita in purchasing power standards, calculated on the EU level, for the year 2000 was 22.603 EUR (Infobase Europe, 2003). Estimated GDP per capita in Croatia for the same year was 4.501,75 EUR (see Appendix; table 1) which is 19,9 percentage of the EU average. This would be the case in every NUTS level II unit established within Croatia. Besides, several NUTS level III units that need not necessarily to be from the same level II statistical territorial unit can apply for the participation in regional development initiatives and programmes.

The purpose of this division is to establish a regional statistical system as a prerequisite for inclusion into the European statistical system and for receiving information important for monitoring and managing the overall social and economic development of the country. Former manner of collecting and monitoring data on levels lower than national is not sufficient, given that on the settlement, municipality and county levels only the register of business units is kept and a very narrow set of indicators is collected.

The goal of these divisions is to render the pursuit of development policy easier and that in order to do so certain indicators are necessary. EU membership candidate countries do not use the term NUTS for these regions but rather the term Statistical regions. The proposal has been sent to EUROSTAT. Should the EUROSTAT deem this proposal acceptable, the Croatian Bureau of Statistics and other state administration bodies will have to establish the Nomenclature. By the end of 2004 the processing of statistical data will have been completed for the whole system, so that by 2005 regional data can be released in line with the requests by the domestic users and EUROSTAT. Although the proposal was accepted by the majority of experts, by the fact that there are no traditionally set regions in Croatia, the division of the Republic of Croatia in second level brought about sensitive issue of regionalization of Croatia and inevitably lead to various political manipulation. The most prominent ones were those from the ranks of regional parties who of course were intended to secure particular regions for themselves.

6. Conclusion - Towards a Croatian Regional Policy

The regional policy in Croatia is about be formed, mainly under the influence of the new needs that emerged from the EU accession process. Croatian regional policy has been variously run by ministries of public works and construction, of spatial planning, of agriculture, of economics etc. Till nowadays regional development initiatives have been hampered by disputes over ministerial responsibilities, the need to reform administrative structures and the lack of institutional infrastructure for regional policy and of financial resources. Regional policy has begun to develop mainly as a result of external pressure rather than domestic needs for a sound regional development. That could be an obstacle, because it has been shown that both structural assistance and regional policy can only be effective when they are directly associated with national

regional policy. By introducing the Nomenclature of Territorial Units for Statistics, an important step has been made, not only for the reapprochement towards the European Union, but also for establishment regional statistics, which has not until present existed in Croatia, as well as to harmonise regional data and assure their comparability as a basis for the formulation of regional policy and adoption of important development decisions (Human Development Report – Croatia 2002, to appear in 2003). The improvement of statistical system of regional data monitoring will be possible to make. Without clear defined extent of territory it isn't possible to implement policy, monitor effects of its measures and make evaluation. This will allow the preparation of the Strategy for Regional development on National level, and subsequently the formulation, implementation and monitoring of the effects of the Croatian regional development policy.

In order to accelerate the association process of the Republic of Croatia with the European Union, Croatia had to answer questions regarding principles, institutions and instruments of its regional policy. Fulfilment of those tasks have to be done not only for receiving direct assistance, but also for further economic and social development of the country. A defined strategy for regional development has to be prepared, clear regional policy goals have to be set and the institutional support for regional policy established. On national and regional levels there will be a need for the establishment of bodies that will be competent for regional policy and development issues in Croatia, as well as for suitable cooperation with the European Union. It is also necessary to apply EU structural adjustment policy principles: programming; partnership; additionality; management, monitoring and coordination (General provisions on the Structural Funds, 1999). Although direct assistance from Structural funds is available only to Member States, the familiarity with and the application of those principles are preconditions for participation in numerous initiatives already available to Croatia or which will be made available in the near future. Despite the fact that by dividing Croatian territory into statistical regions the prerequisites for improving regional statistics are established, there is still an array of actions that need to be taken.

REFERENCES

Basic, F., Bogunovic, M., Husnjak, S.(2000) *Croatian Agricultural Regions and Subregions*, Institute for General Production of Plants and the Institute for Pedalogy, Zagreb.

European Regional Statistics – Reference Guide (2002), Eurostat. Web page. http://europa.eu.int/comm/eurostat. Accessed on 2003/03/23.

General Provisions on the Structural Funds (1999). Web Page. http://europa.eu.int/scadplus/leg/en/lvb/160014.htm. Accessed on 2002/07/11.

Human Development Report - Croatia 1999 (1999), UNDP, Sveucilisna tiskara d.o.o., Zagreb

Human Development Report - Croatia 2002 (to appear in 2003), UNDP, Zagreb Infobase Europe. Web Page. http://www.ibeurope/Database/Resources/R050regdp.htm Accessed on 2003/05/03.

Oxford-Advanced Learner's Dictionary of Current English (1986). Oxford University Press, Oxford:

Population, Household and Apartment Census (2002). Croatian Bureau of Statistics. Web Page. http://www.dzs.hr/Popis%202001/popis20001.htm Accessed on 2002/09/16. Strategy of the Republic of Croatia (1997), Ministry of Environmental Protection and Physical Planning, Zagreb

Uzelac Marinovic, A. (2001). Spatial Planning, Dom i Svijet, Zagreb.

APPENDIX

Table 1 Disparities in GDP per capita between the Counties, estimation, 2000

	Population size	Estimated per capita GDP (EUR)	per capita GDP/per capita GDP of Republic of Croatia Ratio
City of Zagreb	779.145,00	7.120,77	1,58
County of Primorje-Gorski Kotar	305.505,00	5.519,82	1,23
County of Istria	206.344,00	5.451,31	1,21
County of Dubrovnik-Neretva	122.870,00	4.347,17	0,97
County of Osijek-Baranja	330.506,00	4.347,76	0,97
County of Varazdin	184.769,00	4.320,30	0,96
County of Koprivnica-Krizevci	124.467,00	4.118,42	0,91
County of Virovitica-Podravina	93.389,00	4.016,64	0,89
County of Medimurje	118.426,00	3.880,39	0,86
County Pozega-Slavonia	85.831,00	3.848,28	0,85
County of Karlovac	141.787,00	3.754,83	0,83
County of Lika-Senj	53.677,00	3.731,88	0,83
County of Bjelovar-Bilogora	133.084,00	3.704,80	0,82
County Split-Dalmatia	463.676,00	3.711,46	0,82
County of Krapina- Zagorje	142.432,00	3.591,94	0,80
County of Sisak-Moslavina	185.387,00	3.527,49	0,78
County of Zagreb	309.696,00	3.007,06	0,67
County of Zadar	162.045,00	3.511,50	0,78
County of Sibenik-Knin	112.891,00	3.206,39	0,71
County Brod-Posavina	176.765,00	3.134,22	0,70
County of Vukovar-Srijem	204.768,00	3.133,42	0,70
The Republic of Croatia	4.437.460,00	4.501,75	1,00

Source: Calculated on the basis of Croatian Buraeu of Statistics data

Table 2 Proposals for the division into territorial units on the NUTS II level

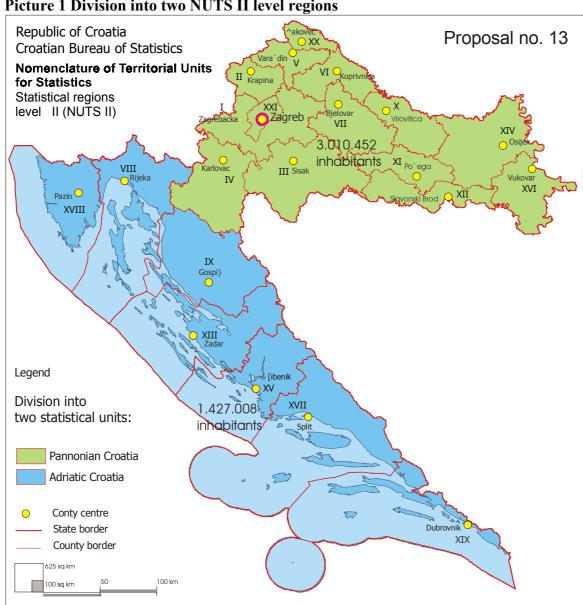
	Average population size criterion (number of inhabitants)		Other independently defined criteria		
Proposal	Given EU criteria	Average size of a unit (number of inhabitants)	Territorial units satisfy (YES) / do not satisfy (NO) the population size criterion	Territorial units satisfy (YES) / do not satisfy (NO) / Partially satisfy the criteria	Number of statistical regions
no. 1		887 492	YES	YES	5
no. 2		887 492	YES	Partially	5
no. 3		887 492	YES	Partially	5
no. 4		887 492	YES	Partially	5
no. 5		887 492	YES	Partially	5
no. 6	From 800 000	887 492	YES	Partially	5
no. 7	to 3 000 000	1 109 365	YES	NO	4
no. 8		1 109 365	YES	NO	4
no. 9		1 479 153	YES	NO	3
no. 10		1 479 153	YES	NO	3
no. 11		1 479 153	YES	NO	3
no. 12		1 479 153	YES	NO	3
no. 13		2 218 730	YES	NO	2

Source: Author's fieldwork

Table 4 NUTS statistical regions in Croatia

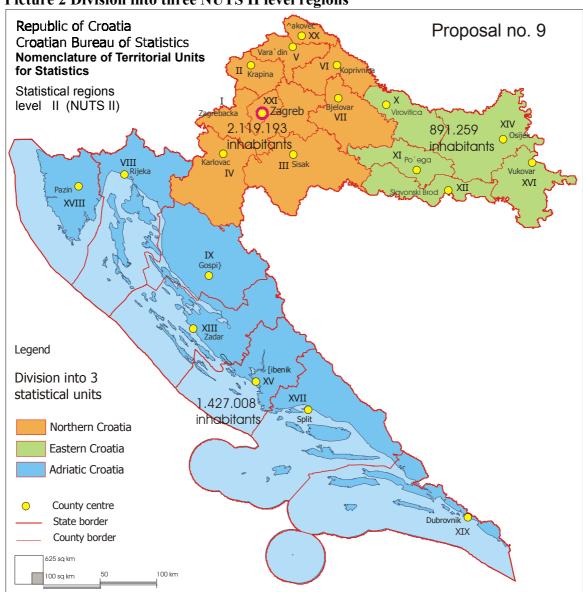
NUTS I	NUTS II	NUTS III	NUTS V Number of cities and municipalities	Population size (2001)
	Northern Croatia	County of Krapina-Zagorje	32	142.432
		County of Varazdin	28	184.769
		County of Medimurje	24	118.426
		County of Koprivnica-Krizevci	25	124.467
		Total	109	570.094
		City of Zagreb	1	779.145
		County of Zagreb	34	309.696
	Central	County of Karlovac	21	141.787
	Croatia	County of Bjelovar-Bilogora	23	133.084
AI.		County of Sisak-Moslavina	19	185.387
DAT		Total	75	1.549.099
CR		County of Virovitica-Podravina	16	93.389
OF		County of Pozega-Slavonia	10	85.831
ELIC	Eastern	County of Brod-Posavina	28	176.765
THE REPUBLIC OF CROATIA	Croatia	County of Osijek-Baranja	42	330.506
		County of Vukovar-Srijem	30	204.768
CHIE		Total	149	891.259
		County of Primorje-Gorski Kotar	35	305.505
	Istria and	County of Lika-Senj	12	53.677
_	the littoral	County of Istaria	39	206.344
		Total	86	565.526
	Southern Croatia	County of Zadar	32	162.045
		County of Sibenik-Knin	18	112.891
		County of Split-Dalmatia	55	463.676
		County of Dubrovnik-Neretva	22	122.870
		Total	127	861.482
		TOTAL	546	4.437.460

Source: Calculated on basis of Croatian Bureau of Statistics Data: "Population, household and apartment Census, 31 October 2001", http://www.dzs.hr/Popis%202001/popis20001.htm



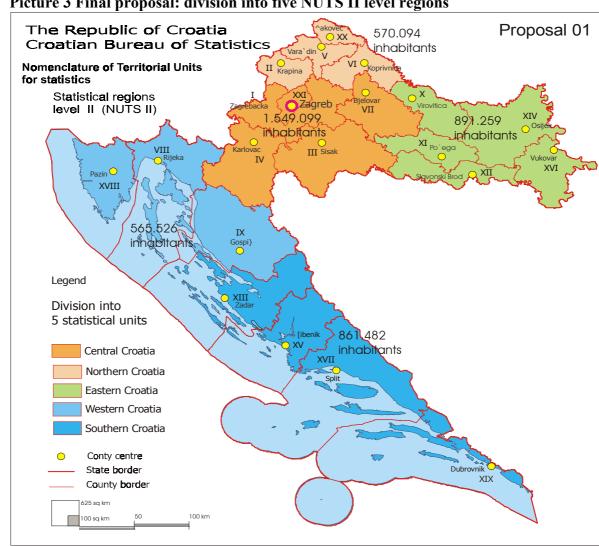
Picture 1 Division into two NUTS II level regions

Source: Ministry of Environmental Protection and Physical Planning, 2002, Zagreb



Picture 2 Division into three NUTS II level regions

Source: Ministry of Environmental Protection and Physical Planning, 2002, Zagreb



Picture 3 Final proposal: division into five NUTS II level regions

Source: Ministry of Environmental Protection and Physical Planning, 2002, Zagreb