## NATIONAL ACADEMY OF SCIENCES OF UKRAINE

SI "Institute of Regional Research named after M.I. Dolishniy of the NAS of Ukraine"



# PROMOTING THE EUROPEAN INTEGRATION PROCESSES IN THE EASTERN PARTNERSHIP COUNTRIES: NATIONAL AND REGIONAL POLICY INSTRUMENTS

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The monograph addresses a set of existing problems and current challenges faced in the process of the Eastern Partnership policy implementation both on national and regional levels. It offers a range of mechanisms and instruments of achieving the policy objectives and targets for the post-2020 Eastern Partnership agenda developed on the basis of the Joint Communication **"Eastern Partnership policy beyond 2020: Reinforcing resilience –** an Eastern partnership that **delivers for all" and the Joint Staff Working Document "Recovery, resilience and reform: post 2020 Eastern Partnership priorities". Special attention is focused on the issues related to cross-border cooperation, sectoral cooperation, and integrated border management.** 

For the representatives of central and local authorities, researchers, entrepreneurship entities, representatives of non-governmental organizations, and other individuals interested in the issues of enhancing the economic integration of Eastern Partnership countries with the EU.

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# НАЦІОНАЛЬНА АКАДЕМІЯ НАУК УКРАЇНИ

ДУ "Інститут регіональних досліджень імені М. І. Долішнього НАН України"



# СПРИЯННЯ ЄВРОІНТЕГРАЦІЙНИМ ПРОЦЕСАМ У КРАЇНАХ СХІДНОГО ПАРТНЕРСТВА: ІНСТРУМЕНТИ НАЦІОНАЛЬНОЇ ТА РЕГІОНАЛЬНОЇ ПОЛІТИКИ

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Сприяння євроінтеграційним процесам у країнах Східного партнерства: інструменти національної та регіональної політики: монографія / НАН України. ДУ "Інститут регіональних досліджень імені М.І. Долішнього НАН України"; за редакцією Христини Притули та Іоана Хорги. Львів, 2022. 224 с. (Серія "Транскордонне співробітництво").

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У монографії розглянуто комплекс сучасних проблем та викликів, що виникають у процесі реалізації політики Східного партнерства як на національному, так і на регіональному рівнях. Запропоновано низку механізмів та інструментів досягнення політичних цілей і завдань програми Східного партнерства на період після 2020 року, розроблених на основі Спільного Повідомлення «Політика Східного партнерства після 2020 року: посилення стійкості – Східне партнерство, яке приносить результати усім» та Спільного робочого документу "Відновлення, стійкість і реформи: пріоритети Східного партнерства на період після 2020 року". Особлива увага приділена питанням транскордонного співробітництва, галузевого співробітництва та інтегрованого управління кордонами.

Для представників центральних та місцевих органів влади, науковців, суб'єктів підприємництва, представників неурядових організацій та інших осіб, зацікавлених у питаннях активізації процесів економічної інтеграції країн Східного партнерства з ЄС.

Автори несуть повну відповідальність за зміст опублікованих матеріалів.

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Olena Nykyforuk, Nataliia Kudrytska

## **INTRODUCTION**

The 6<sup>th</sup> Eastern Partnership (EaP) Summit was held on 15 December 2021 in Brussels, where the leaders of Ukraine, Moldova, Georgia, Armenia, Azerbaijan, the EU, and the EU Member States welcomed the Joint Declaration based on values, partnership, resilience, prosperity, solidarity, and joint ownership<sup>1</sup>. The annex to the Joint Declaration summarises policy objectives and targets for the post-2020 Eastern Partnership agenda on **the basis of the Joint Communication "Eastern Partnership policy beyond 2020**: Reinforcing resilience – an Eastern Partnership that delivers for all", the Joint Staff Working Document "Recovery, resilience and reform: post 2020 Eastern Partnership priorities", and as a result of the comprehensive consultation with and contributions from Member States, Eastern partner countries and other Eastern Partnership stakeholders. These policy objectives and targets are structured around two pillars: 1) governance and 2) investment (to be supported by the economic and investment plan with country specific flagship initiatives to be taken forward with each of the partner countries).

The second pillar includes such priorities as resilient, sustainable and integrated economies; environmental and climate resilience and a resilient digital transformation. The major tasks include:

- Strengthening the business environment, and facilitating trade and investment through the acceleration of the implementation of the deep and comprehensive free trade areas (DCFTAs) and other trade arrangements, further deepening of economic integration with and among the partner countries, accession to the Common Transit Convention for interested partner countries, etc.

- Providing the sustainable, rules-based and secure transport interconnectivity through the completion of extended indicative core TEN-T network covering all modes of transport (road, rail, air, maritime and waterborne, including inland waterways), and investments to upgrade 3,000 km of priority roads and railways along the extended TEN-T network, with the aim of completing it by 2030.

- Investing in people and knowledge societies with the provision of 70,000 individual mobility opportunities for students and staff, researchers, young people and youth workers. Education reform will remain a strategic priority and will be directed at the promotion of youth employment, employability, entrepreneurship and skills, including addressing brain drain.

- Investing in Research and Innovation (R&I) including through policy reforms, increasing gross R&I expenditure and supporting the green and digital transitions through smart specialisation strategies and technology transfer.

<sup>&</sup>lt;sup>1</sup> European Council (2021). Joint Declaration of the Eastern Partnership Summit. Retrieved from https://www.consilium.europa.eu/en/press/press-releases/2021/12/15/eastern-partnership-summit-joint-declaration/

Three flagship initiatives of the Economic and Investment Plan presented at the Eastern Partnership Summit are especially important for Ukraine<sup>2</sup>. The first one is related to the modernization of border checkpoints and border infrastructure. For that matter, it is essential to conclude the agreement on automobile transport liberalization. The second initiative covers digital transformation and IT infrastructure. Diya Public Services Portal used by over 11 million Ukrainians, has put Ukraine among the leaders in digital services. Diya.City will be launched next to create the most powerful IT hub in Eastern Europe, and other ambitious investment projects are underway. The third initiative is in energy efficiency and hydrogen fuel domains, which are quite important for Ukraine and its energy security. It will help gaining full energy independence and achieving climate neutrality.

The monograph addresses the set of existing problems and current challenges in the implementation of Eastern Partnership policy both on national and regional levels and suggests a range of mechanisms and tools designated to achieve priorities jointly determined by the Eastern Partnership countries. Special attention is paid to the issues of cross-border cooperation, sectoral cooperation, and integrated border management.

The research of Prof. Horga regarding the development of border research and crossborder cooperation from the perspective of European studies should be emphasized as it outlines the retrospective of cross-border cooperation research development in the EU-Ukraine cross-border space. The features of cross-border cooperation of Moldovan regions are covered by the research of Dr Ludmila Rosca. Key challenges faced by cross-border cooperation today are outlined by Prof. Anatoliy Kruglashov and PhD Nataliia Nechaieva-Yuriichuk. Moreover, the authors regard key problems of CBC on the example of Chernivtsi oblast. They evaluate the challenges and prospects of CBC and propose some practical recommendations aiming at overcoming existing barriers and shortages of bordering **regions' and local communities' cooperation.** 

Evaluation of the efficiency of applied tools is an essential component of the implementation of any policy. For that matter, the methodological approach to evaluating the impact of Euroregional cooperation on the socio-economic development of border regions offered by PhD Yaroslava Kalat is of practical importance. It contributes to evaluating the development level and capacity of Euroregional cooperation and detecting the prospective threats to the economic security of border regions participating in a Euroregion.

The study of Olha Demedyuk covers the major stages of cross-border cooperation evolution in the European Union since the end of World War II, when it emerged as a means to overcome economic, political, cultural disparities, and physical borders, till the early 2020s, when the newest program period started with a launch of a new instrument to finance external activity to integrate numerous previous instruments into European Territorial Cooperation (INTERREG).

<sup>&</sup>lt;sup>2</sup> President of Ukraine Official Website (2021). The President of Ukraine addressed the plenary session of the 6<sup>th</sup> Eastern Partnership Summit in Brussels. Retrieved from https://www.president.gov.ua/news/prezident-ukrayini-vistupiv-na-plenarnomu-zasidanni-shostogo-72077

The concept of depressed areas in the context of cross-border and interregional cooperation is outlined by Prof. Anatoliy Mokiy, Arsenii Yanovych, and PhD Stepan Koshkarov. Their research determines the regional criteria of depression in Ukraine in accordance with the current Ukrainian legislation and examines the experience of Poland, Hungary, and Slovenia in differentiation in terms of the level of their socio-economic development. It provides an overview of the current approach to the classification of regions of Ukraine from the point of view of differential regional policy and emphasizes the **completion of the process of territorial communities'** consolidation.

The progress of European integration processes in the Eastern Partnership countries is determined by the level of convergence with the EU policies. In particular, gradual harmonization of domestic and EU transport legislation is fostered by extended cooperation in the framework of the Eastern Partnership (EaP) transport panel, which is also oriented at securing the development of EaP regional transport panel compatible with the TEN-T network. The development of national transport corridors network will boost the volumes of freight transportation through the territory of Eastern Partnership countries by national transport companies and **the country's competitiveness in the g**lobal transport services market. In this regard, Dr Khrystyna Prytula, PhD Anna Maksymenko, Iryna Kyryk and Oleksiy Zaika analyze the main trends in the development of transport services both on international and domestic Ukrainian markets and outline their role in boosting the regional economic development. Their analysis of the dynamics and structure of freight transportation and freight transportation.

Dr Olena Nykyforuk and PhD Nataliia Kudrytska emphasize on the need to develop transit capacity from the viewpoint of the **country's favorable geopolitical position as it is** located at the crossroads of trade routes between Europe and Asia and has considerable capacity in its Black Sea ports, high railway capacity, and developed transport network in latitudinal and meridional directions. Transport development is becoming even more urgent in the present economic environment when transnational freight flows and flows of capital are increasing, and so are the physical speed of movement and the speed of information dissemination. Transit is one of the guidelines of Ukraine's integration into the European transport system and an important source of replenishment of the State budget. However, at the present stage of Ukraine's development, the sharp decline in the **country's volume of transit traffic of goods and passengers due to the influence of many** factors is an important problem.

In the context of mapping the integrated border management, Dr Oksana Yurynets and Dr Lidiya Lisovska develop a methodological approach to the choice of a territorial **customs body for customs clearance of export and import products of enterprises in the** context of anti-crisis management, which is based on the implementation of a number of consecutive stages. The authors identify problems in the functioning of the customs system of Ukraine and offer a system of urgent tools to eliminate them.

The renewal and technological modernization of transport and infrastructure are determined as the main drivers of Ukraine's integration into the world economy by the strategy **"Drive Ukraine 2030"**. The transport and infrastructure spheres must unite Ukraine and ensure its effective integration into the European and world transport

systems. When addressing the issue, Prof. Anatoliy Pasichnyk and PhD Volodymyr Pasichnyk offer a method to analyze the infrastructure of the Ukrainian network of international transport corridors and the parameters of the arrangement of the Ukrainian customs border with checkpoints for automobiles. The analysis shows that to increase the efficiency of the country's transit potential, the infrastructure and capacity of highways and checkpoints on the customs border require a further increase in capacities for the transportation and processing of export-import flows by updating and modernizing the existing elements of the transport system and arranging new checkpoints on the customs border in accordance with European standards. The authors emphasize the expediency of the introduction of modern intensive transport technologies based on reduction of time of transportation and service of the basic types of cargoes, development of uniform rules and indicators for all elements of transport infrastructure and types of transport.

The monograph is prepared by a team of authors following the International Conference "Promotion of EU Knowledge in Boosting Local Economic Growth in the Process of EU Integration: Best Practices of Eastern Partnership (EaP) Countries" (21-22 October 2021, Lviv, Ukraine) within the framework of the project "Boosting Local Economic Growth in Border Regions in the Process of EU Integration: Best Practices of Eastern Partnership (EaP) Countries" (Nº 599948-EPP-1-2018-1-UA-EPPJMO-SUPPA) implemented under Jean Monnet – Support to Associations – ERASMUS+ Programme. Project duration: 01-09-2018 – 28-02-2022.

## **IOAN HORGA**

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The role of research in CBC area at the Eastern border of EU in the development of European Studies

## Abstract

The paper underlines the development of border research and cross-border cooperation from the perspective of European studies. It shows that in the EU Member States neighbouring the Eastern border, the research has an emphasized dynamic, especially in Romania, in **the universities of Iaşi and Oradea, but also in Poland,** in the universities of Lublin and Rzeszów. In the neighbouring Eastern states on the EU border, the universities of Lviv and Chernivtsi are the most dynamic in Ukraine, along with those **in Chişinău,** in Moldova.

**Key words:** CBC, Eastern Border, European Studies, Neighbourhood Countries, EU Member States.

## Introduction

Accumulations of knowledge in all fields from universities and research institutes in Western Europe on the issue of internal and external borders of the EU and especially on the CBC have been an important incentive for the academic environment in the countries in the accession process. In contrast to the accumulations in Western Europe, where some distinct stages are going on, in Central and Eastern Europe, the accumulations in the field of European Studies are almost coincident with those in the mono-disciplinary fields (geography, history, economy, sociology, political sciences) or at a relatively short distance of several years. We can say that we are practically witnessing a convergent explosion of border research and cross-border cooperation between the mono-disciplinary and interdisciplinary fields of European Studies. The issue of European borders and crossborder cooperation has gained scale in the context of the beginning of the negotiations for the accession of CEEC to the European Union. From the perspective of European Studies, this problem, at least until the accession of these states, had been more of a multidisciplinary aspect (especially the research of the History of European Integration, European Economy, Political Science and European Public Administration, etc.), in which each field advances its own set of knowledge tools.

When discussing the academic contribution from CEEC to the study of frontiers and CBC, we should especially note the contribution of the specialists from Hungary. They were among the first, especially the Hungarian geographers, who in the context of the opening of borders after 1990 advanced research on this issue, having a great merit that, beyond some minor nuances of nostalgic nature after the former Austro-Hungarian Empire, did not remain "prisoners of history", but they were the promoters of the postnational model of borders, emphasizing their permeabilization and the development of cross-border cooperation projects. Basically, there is no university centre in Hungary, which has not plunged into this new orientation, of course with its specificities.

#### Ioan Horga

In Debrecen<sup>3</sup> and Miskolc<sup>4</sup> the role of promoters belonged to geographers. Also, the Hungarian Academy of Sciences formed a group of researchers, who joined this trend<sup>5</sup>. The Hungarian authors have also focused on what will be the future Eastern border of the EU. The involvement of Professor István Süli-Zakar from Debrecen in the creation of the Carpathian Euroregion and then in the research related to this topic is well known. The Carpathian Euroregion was created in 1993 and comprised administrative units from Hungary, Poland, Romania, Slovakia, and Ukraine. The theme of it will represent, in our opinion, the gateway from a national approach to a post-national approach of border issues for the Hungarian academic environment.

With the entry into the period of accession to the European Union, some of the Hungarian authors examining border issues under the impact of the evolution of the field of European Studies and especially the young generation affirmed after 2004–2007, who comes in contact with the evolutions in this field, will develop research, which even

<sup>&</sup>lt;sup>3</sup> István Süli-Zakar and Ioan Horga, Regional Development in the Romanian-Hungarian Cross-Border Space. From National to European Perspective (Debrecen: Debreceni Egyetem Kossuth Egyetemi Kiadó, 2006), István Süli-Zakar, Neighbours and Partners on the Two Sides of the Borders (Debrecen: Debreceni Egyetem Kossuth Egyetemi Kiadó, 2008); Ioan Horga and István Süli-Zakar, Challenges and Perspectives in the Regional and Euroregional Issues in the New Europe (Oradea-Debrecen: Editura Universității din Oradea, 2006); Ioan Horga & István Süli-Zakar (eds), Cross-Border Partnership. With Special Regards to the Hungarian-Romanian-Ukrainian Tripartite Border (Debrecen: University of Debrecen Press; Oradea: Oradea University Press 2010); Béla Barany, Hungarian-Romanian and Hungarian-Ukrainian Border Regions as Areas of Co-operation along the External Borders of Europe (Pecs: Centre for Regional Studies of Hungarian Academy of Sciences, 2005); Klára Czimre, Cross-Border Co-operation: Theory and Practice (Debrecen: Debreceni Egyetem Kossuth Egyetemi Kiadó, 2006); Klára Czimre, "Cross-Border Co-operation in Europe: Scientific Research", in "Europe from Exclusive Borders to Inclusive Frontiers", ed. Gerard Delanty, Dana Pantea, and Károly Teperics, Eurolimes (Oradea: Oradea University Press) 4 (2007): 78; István Süli-Zakar and Klára Czimre, "Carpathian Euroregion: Borders in the Region - Cross-Border Co-operation (Debrecen: Kossuth Egyetemi Kiadó, 2001); Klára Czimre, "Recovery or Discovery? Models and Motives of Cross-Border Co-operation along the Eastern Border of Hungary after 1989–1990", in "The European Borders at Hundred Years after the First World War", ed. Cristina-Maria Dogot, Klára Czimre, and Renaud De LA Brosse, Eurolimes (Oradea: Oradea University Press) 26 (Autumn 2018): 97-112; Gábor Kozma, "Characteristic Features of the Economic Management of local Authorities in the Western and the Eastern Border Areas of Hungary", in Neighbours and Partners on the two sides of the Borders, ed. István Süli-Zakar (Debrecen: Debreceni Egyetem Kossuth Egyetemi Kiadó, 2008), 19–26; Gábor Kozma, "The Use of Cross-Border Co-operation and Border Location in Place Marketing", in "From Smaller to Greater Europe: Border Identitary Testimonies", ed. Mircea Brie and Kozma Gábor, Eurolimes (Oradea: Oradea University Press) 2 (Autumn 2006): 74–79.

<sup>&</sup>lt;sup>4</sup> Károly Kocsis, Judit Sansum Molnár, Gábor Michalkó, Zsolt Bottlik, Balázs Szabó, Dániel Balizs, György Varga, "International Migration into Europe – An Old-New Challenge from the Afro-Asian Neighbourhood", in "Migration at the European Borders", ed. Florentina Chirodea, Marta Pachocka, and Kozma Gábor, *Eurolimes* (Oradea: Oradea University Press) 23-24 (Spring-Autumn 2017): 167–190; Károly Kocsis, "Historical Predecessors and Current Geographical Possibilities of Ethnic Based Territorial Autonomies in the Carpathian Basin" in *Autonomies in Europe: Solutions and Challenges*, ed. Zoltán Kántor (Budapest: Nemzetpolitikai Kutatóintézet [NPKI – Research Institute for Hungarian Communities Abroad], 2014), 83–121; Károly Kocsis, Monika Mária Váradi, "Borders and Neighbourhoods in the Carpatho-Pannonian Area", in *The Ashgate Research Companion to Border Studies*, ed. Doris Wastl-Walter (Farnham: Ashgate, 2011), 585–605.

<sup>&</sup>lt;sup>5</sup> Gábor Lux, Gyula Horváth, *The Routledge Handbook to Regional Development in Central and Eastern Europe* (London: Routledge, 2017); Erőss Ágnes, Károly Kocsis, Tátrai Patrick, "Changing Permeability – Different Patterns of Cross-Border Relations: Comparative Research of Berehove/Beregszász (UA) and Oradea/Nagyvárad (RO)", in Creating Economic and Social Neighbourhoods across Political Borders, ed. B. Filep, A. Kovács, T. T. Sikos, and D. Wastl-Walter (Komárno, Slovakia, 2009), 1–14. CD-ROM.

remaining in the sphere of geography, economy or social sciences, will carry a strong interdisciplinary or transdisciplinary imprint specific to the domain of European Studies. We are thinking of the representatives of the Department of Social Geography and Regional Development<sup>6</sup> from the University of Debrecen, who, together with colleagues from the Department of International Relations and European Studies from the University of Oradea, established in 2006 the Institute of Euroregional Studies, A structure of interdisciplinary research dedicated to the study of borders and cross-border cooperation.

The new EU border, after 2007, brings before the Hungarian researchers the challenge of studies on the border and the CBC with major implications and for the development of European Studies, having the Hungarian–Ukrainian cross-border relations as an object at the Eastern border, and Hungarian–Serbian and until 2013 the Hungarian–Croatian ones, at the southern border.

The Polish researchers were also very active in the field of border and CBC studies after 1990. Similarly, like in the case of Hungary, there were the geographers who set the tone first through studies especially referring to the Western border of Poland. The schools in Gdansk<sup>7</sup> or Lodz<sup>8</sup> were noted here. Unlike Hungary, the issue of borders and cross-border co-operation has quickly reached the concerns of Polish specialists in European Studies. It is worth noting the activity of the Polish economists, who started research projects concerning, in particular, the Czech–Polish or Slovak–Polish border (Katowice University of Economics)<sup>9</sup> or at the borders of Eastern Poland in general by involving

<sup>&</sup>lt;sup>6</sup> Klara Czimre, "Quantity or Quality? Cooperation Activity Index: Theoretical and Practical Cross-Border Cooperation Evaluation Methods", in Constantin-Vasile Toca, Ioan Horga, Luminita Soproni, *Achievement, Contemporary Approches and Perspectives in the Evaluation of Cross-Border Cooperation,* Debrecen University Press, 2017, pp. 205-220; Istvan Papp, Janos Penzes, Development Paths of Settelemnts in Border Area of Szabolcs-Szatmar-Bereg County (Hungary), in Constantin-Vasile Toca, Ioan Horga, Luminita Soproni, *Achievement, Contemporary Approches and Perspectives in the Evaluation of Cross-Border Cooperation*, Debrecen University Press, 2017, pp. 15-25

<sup>&</sup>lt;sup>7</sup> Delia Bar-Kołelis and Jan A. Wendt, "Comparison of Cross-Border Shopping Tourism Activities at the Polish and Romanian External Borders of European Union", *Geographia Polonica* 91, no. 1 (2018): 113–125; Agnieszka Derlaga and Jan Wendt, "Cross-Border Co-operation between the Republic of Romania, Ukraine and Moldova", in *Regional Transborder Co-operation in Countries of Central and Eastern Europe – A Balance of Achievements*, ed. Jerzy Kitowski, *Geopolitical Studies* 14 (2006): 141–158; Alexandru Ilieş, Jan Wendt, Dorina Ilieş, Vasile Grama, "Romanian/Ukrainian Borderland (Northern Sector) Typology Determined by the Administrative Territorial Units (NUTS 3)", *Central European Policy and Human Geography* 2 (2011): 7–15; Renata Anisiewicz and Tadeusz Palmowski, "Small Border Traffic and Cross-Border Tourism between Poland and the Kaliningrad Oblast of the Russian Federation", *Quaestiones Geographicae* 33, no. 2 (2014): 79-86; Tadeusz Palmowski, "Problems of Cross-Border Cooperation between Poland and the Kaliningrad Oblast of the Russian Federation", *Quaestiones Geographicae* 16, no. 4 (2010): 67–79.

<sup>&</sup>lt;sup>8</sup> The journal *Regions and Regionalism* (editor proof, Marek Koter) was published at University of Łódź, which had several issues on borders and cross-border cooperation, i.e.: Marek Koter and Krystian Heffner, "The role of Ethnic Minorities in Border Regions. Forms of their Composition. Problems of Development and Political Rights", *Regions and Regionalism* 1, no. 6 (2003); Marek Koter and Krystian Heffner, *Borderlands or Transborder Regions: Geographical, Social and Political Problems* (Governmental Research Institute, Silesian Institute in Opole, 1998); Marek Sobczyński, *The Role of Borderlands in United Europe: Historical, Ethnic and Geopolitical Problems of Borderlands* (Państwowy Instytut Naukowy-Instytut Ślęski w Opolu, 2005).

<sup>&</sup>lt;sup>9</sup> Małgorzata Dziembała "Do EU Cross-Border Cooperation Programmes Contribute to Competitiveness and Cohesion? The Case of the Polish-Czech Borderland", *Yearbook of the Institute of East-Central Europe* 16, no. 3 (2018): 39–67; Małgorzata

universities of Bialystok<sup>10</sup> and Lublin<sup>11</sup>.

Regarding the Eastern border of the EU, especially the one with Ukraine, we must note the involvement of the University of Rzeszów in cross-border projects<sup>12</sup> and in the development of research regarding cross-border cooperation with Ukraine within the Institute of Political Sciences<sup>13</sup> and, especially in the last decade, we must note Warsaw Business School activity<sup>14</sup>.

Let us then take into account the activity of the academic environment in Slovakia in CBC projects and research regarding border with Ukraine, noting in particular the **universities of Prešov**<sup>15</sup> and Košice. In fact, in Košice, there were the headquarters of the Association of Universities of the Carpathian Region (ACRU) and where the universities, together with those of Prešov and Trenčin, were important vectors of coagulation. ACRU – in almost two decades of activity – was not only the convergence factor between the universities from the future Eastern border of the EU (Hungary, Poland, Romania, Slovakia, Serbia and Ukraine) in a time when the EU had not yet started the enlargement

Dziembała, "Do EU Cross-Border Cooperation Programmes Contribute to Competitiveness and Cohesion? The Case of the Polish-Czech Borderland", *Rocznik Instytutu Europy Środkowo-Wschodniej* 16, no. 3 (2018): 39–67.

<sup>10</sup> The University of Bialystok is the initiator of the project Border Universities network (established in 2013) that involves the following universities: The I. Kant Baltic Federal University in Kaliningrad; Baranavicki State University (Belarus); A. S. Pushkin Brest State University (Belarus); Janka Kupala Grodno State University (Belarus), Ivan Franko National University of Lviv (UA), Ternopil National Economic University (UA); Vytautus Magnus University in Kaunas (LIT); Voronezh State University (RUS), Smolensk Branch of the Russian Presidential Academy of National Economy and Public Administration (Rus). The activity stopped in 2014 because of the conflict in Eastern Ukraine. Now this network is activated within the framework of I Erasmus K107 with exchanges of professors and students, but without exchanges between EU and Russia (https://sup.uwb.edu.pl/en/gallery.html). As well, the University of Byałistok organised the conferences like "Friendly border" as a necessary element of strengthening the relations between the Polish and Russian societies, 10-11 October 2011; Smolensk – Minsk – Bialystok: Regional Aspect of the Eastern Partnership of the European Union, October 19-20, 2010. Białystok Self-Government Academy is conducting research on the cross-border cooperation in Middle Eastern Poland, which, on the one hand, aims at theoretical development, while on the other hand, at analysis of practical dimension of cross-border cooperatin (Faculty of Economics and Poland", Finance, "Cross-Border Cooperation in Middle Eastern accessed January 24, 2019, http://www.weiz.uwb.edu.pl/cross-border-cooperation).

<sup>11</sup> Bogumiła Mucha-Leszko and Magdalena Kąkol, "EU Economic Frontiers Determined by its International Trade Position and trade Policy", in "The Geopolitics of the European Frontiers", ed. Dorin I. Dolghi, Alexandru Ilieş, István Süli-Zakar, *Eurolimes* (Oradea: Oradea University Press) 10 (Autumn 2010): 151–162.

<sup>12</sup> Project PL-SK/KAR/IPP/III/124 (2013-2014), "People and the Nature – Transferring Knowledge and Experience in the Carpathian Euroregion", Project co-financed from the EU Regional Development Fund as a part of Poland-Slovakia Cross-Border Cooperation Program; Project WTSL.02.03.00-84-147/10-0, "Support for Regional Cross-Border E-Cooperation", Project co-financed by Cross-Border Cooperation Programme Poland–Slovak Republic 2007–2013; Project INTERREG IIIA/TACIA CBC 2004–2006, "Rzeszów-Lviv Cooperation Bridge", funded by the University of Rzeszów, the City of Rzeszów and the European Regional Development Fund, in partnership with Ivan Franko University of Lviv within the framework of the Neighbourhood Programme Poland–Belarus–Ukraine.

<sup>13</sup> Anna Kołomycew, "The Multi-Sector Partnership Involvement in the Polish–Ukrainian Cross-Border Cooperation Development", in Enhancing Cross-Border Cooperation between the European Union and Ukraine with Regard to Regional Development, Investments and Social Capital Development in the Cross-Border Region, ed. Vladimir Benč (Prešov: Slovak Foreign Policy Association, 2014), 60–70.

<sup>14</sup> In 2016, the European Centre of Excellence at Warsaw School of Economics on *European Union's Security and Stability in a New Economic, Social & Geopolitical Settlement (CEWSE*) was launched, and the Jean Monnet project no. 574518-EPP-1-2016-1-PL-EPPJMO-CoE.

<sup>15</sup> Vladimir Benč, Enhancing Cross-Border Cooperation between the European Union and Ukraine with Regard to Regional Development, Investments and Social Capital Development in the Cross-Border Region (Prešov: Slovak Foreign Policy Association, 2014).

process to the East and had not launched the neighbourhood policy, and in which the first steps were taken from a national approach to a post-national border. The association provided not only the connections between the universities in border areas, with all the necessary background for students and professors exchanges, organizing conferences related to the university-to-university conferences etc. ACRU was also a mini-laboratory for the involvement of the universities in this region in cross-border cooperation and research projects.

In the Baltic area, the activity of the research carried out by the University of Tartu<sup>16</sup> is noteworthy, not only regarding the border of the Baltic countries with Russia, but also the development of projects and partnerships with universities from Belarus and Ukraine located in the Eastern border area of the EU.

In line with the same regional trend of a period marked by the national footprint of border approaching, followed by a post-national transition period and continued with the Europeanization of the perspective on borders, the border research and the CBC in Romania were marked, on one hand by the synchronization with the regional trend, and on the other hand by customizations.

## Evolution of the reflection on borders and CBC in Romania

If we talk about the synchronization, then we can say that in Romania we are witnessing the three periods in the evolution of the reflection on borders and CBC, but with many particularities.

First, the period of national footprint was one of the longest in the region. Romanian researchers have hardly given up on approaching the national perspective of borders. In 1996-2000, there was even a certain crisis in this reflection, in the context of which the traditionalists<sup>17</sup>, who also had a favourable political ascendant, were very active regarding the studies of the national perspective on the borders. It is the period when the new generations of researchers going abroad seek to come up with learned approaches. During this period, the studies on the new structures of cross-border cooperation, such as Euroregions, which were considered as a true "Trojan horse" for the sovereignty of the state, **didn't even start**.

Secondly, the transition period from a national to a post-national perspective, due to the evolutions mentioned above, was in our opinion the shortest in the region, because the process of Romania accession to the EU began to bear fruit, therefore, there was no longer

<sup>&</sup>lt;sup>16</sup> Triin Vihalemm and Anu Masso "The Formation of Imagined Borders in post- Soviet Estonia: Diaspora or Local Community?" *Journal of Borderlands Studies* (Taylor & Francis Group) 17, no. 2 (2002): 35–17; Piia Tammpuu and Anu Masso, "Transnational Digital Identity as an Instrument for Global Digital Citizenship: The Case of Estonia's E-Residency", in *Information Systems Frontiers* (Springer US, 2019), 1–14; Gulnara Roll, "Regional Development and Cross-Border Cooperation in the EU Eastern Periphery. Case of the Estonian – Russian Border", *Journal of Nordregio* no 1 (2009): 1–9.

<sup>&</sup>lt;sup>17</sup> Ilie Bădescu and Dan Dungaciu, *Sociologia și geopolitica frontierei* [Border sociology and geopolitics], vol. 1-2 (București: Ed. Floare albastră, 1995).

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time for the period of balance between national and post-national. But we assist at an almost direct dive in the third stage, that of the Europeanization of reflection, which begins to be visible from the years 2001–2002, when adequate masters' programs, adequate **courses supported by the "Jean Monnet" program and a lot of young researchers** appeared, at first in geography<sup>18</sup>, history<sup>19</sup>, economy<sup>20</sup>, and the issue of European reflection on borders and cross-border cooperation started to be addressed. More than that, genuine scientific joint ventures with specialists from the region – the Poles (Gdansk, Lodz), Hungarians (Debrecen) - emerged, and steps were being taken towards Moldova and **Ukraine (Iaşi).** 

Thirdly, we are witnessing the outline of three poles of European reflection on the borders and on the CBC in Romania: Iaşi and Oradea.

Center for European Studies (CES), Jean Monnet Center of Excellence from Iaşi has published articles specializing in border issues and the CBC, in general, and the eastern border of the EU, in particular, in the Journal of Eastern European Studies and CES Working Papers. It also published books dedicated to these topics.

The CES has initiated a number of projects on the issue of the eastern border of the EU and the CBC funded by the Jean Monnet Program or the Romania-Ukraine-Moldova

<sup>&</sup>lt;sup>18</sup> Alexandru Ilieş, *România. Euroregiuni* [Romania. Euroregions] (Oradea: Editura Universității din Oradea, 2004); Alexandru Ilieş, Jan Wendt, Dorina Ilieş, Vasile Grama, "Romanian/Ukrainian Borderland (Northern Sector) Typology Determined by the Administrative Territorial Units (NUTS 3)", in *Central European Policy and Human Geography* 2 (2011): 7–15; Alexandru Ilieş, Olivier Dehoorne, Dorina Camelia Ilieş, "The Cross-Border Territorial System in Romanian–Ukrainian Carpathian Area. Elements, Mechanisms and Structures Generating Premises for an Integrated Cross-Border Territorial", in *Carpathian Journal of Earth and Environmental Sciences* 7, no. 1 (2012): 27–38; Nicolae Popa, *Borders, Cross-Border Regions and Regional Development in Middle Europe* (Timişoara: West University of Timişoara, 2006); Nicolae Popa, "Frontières et régions transfrontalières en Roumanie, entre territoires, cultures et fonctions", *Geographica Timisiensis* 13, no. 2 (2004): 75–99.

<sup>&</sup>lt;sup>19</sup> Nicolae Păun and Adrian Ciprian Păun, *Istoria construcției europene* (Cluj-Napoca: EFES, 1999); Ioan Horga, *Challenges and Perspectives in the Regional and Euroregional Issues in the New Europe* (Oradea: Oradea University Press, 2006); István Süli-Zakar and Ioan Horga, *Regional Development in the Romanian-Hungarian Cross-Border Space: From National to European Perspective* (Debrecen: Debreceni Egyetem Kossuth Egyetemi Kiadója, 2006); Ioan Horga and Mircea Brie, "Europe between Exclusive Borders and Inclusive Frontiers", *Studia Universitatis Babeş-Bolyai. Studia Europaea* 55, no. 1 (2010): 63–86; Ioan Horga and Ariane Landuyt, *Communicating the EU Policies beyond the Borders: Proposals for Constructive Neighbour Relations and the New EU's External Communication Strategy* (Oradea: Oradea University Press, 2013); Ioan Horga and Ana Maria Ghimiş, "Romania – Part of the EU's Eastern Frontier: Opportunities versus Responsibilities", in *Studia Universitatis Babeş-Bolyai. Studia Europaea* no. 1 (2014): 101–113; Ioan Horga and Claudiu A. Pop, "Border Area from Borderland Proximity Communities to CBC Communities. Case Studies: Bihor – Hajdú Bihar Borderland Area", in "Territorial Marketing at the European Borders", ed. Luminiţa Şoproni, Klára Czimre, and Khristina Prytula, *Eurolimes* (Oradea: Oradea University Press) 25 (Spring 2018): 149–162.

<sup>&</sup>lt;sup>20</sup> Gabriela Drăgan, "Deepening the Economic Integration in the Eastern Partnership: From a Free Trade Area to a Neighbourhood Economic Community?" *Eastern Journal of European Studies* 6, no. 2 (2015): 9-26; Ioana Sandu and Gabriela Drăgan, "Political Options and Economic Prospects within the Eastern Partnership", *CES Working Papers* 8, no. 2 (2016): 289–302; Gabriela Carmen Pascariu, Adrian Pop, George Angliţoiu, and Alexandru Purcăruş, *Romania and the Republic of Moldova: Between the European Neighbourhood Policy and the Prospect of EU Enlargement* (Pre-Accession Impact Studies III) (Bucureşti: IER, 2005); Gabriela Carmen Pascariu and Ramona Frunză, "Eastern versus Southern Peripherality in the EU: The Study from the Perspective of Centre-Periphery Model", in *Transformations in Business and Economics* 10, no. 2B (2011): 590–611.

Cross-Border Cooperation Program. It also organized conferences on topics specific to the issue of the EU's eastern border.

The Institute of Euroregional Studies (ISER), Jean Monnet Center of Excellence from Oradea has published over 50 articles on the issue of the EU's eastern border and the CBC in the 30 volumes of the Eurolimes journal. Also, the last 10 volumes of Eurolimes had a representative from Moldova or Ukraine among the three publishers to integrate researchers from these countries on the EU border in the EU area of research on border issues and to make a transfer of know-how. Articles devoted to the problems of the Eastern border or the Eastern Partnership were published in the Annals of the University of Oradea, the International Relations and European Studies Series, in the 12 published volumes, as well as articles by researchers from Moldova, Georgia and Ukraine. At the same time, under the aegis of ISER, a number of volumes and articles dedicated to the EU's Eastern border and the Eastern Partnership appeared.

ISER has initiated a number of projects on the issue of the eastern border of the EU and the CBC funded by the Jean Monnet Program with institutions from Bucharest, Warsaw School of Economics, ECSA Moldova or Institute of Regional Research of the NAS of Ukraine from Lviv.

From those presented it is clear that the European Commission as an external driver played an essential role in this direction through the Action (Jean Monnet Program), which financed a number of projects from 2001 to 2005/2006 focusing on borders and cross-border cooperation in Romania.

Fourthly, the Romanian reflection activity from the perspective of the European Studies produces the projects, education and knowledge in the field of borders and CBC, which not only polarize local researchers on an interdisciplinary level around them, but are also a factor that coagulates researchers from the region, whose results are published in international journals. For instance, Journal of Eastern European Studies is published in **Iaşi**; the Eurolimes journal (28 volumes) has been published in Oradea since 2006. In addition, the Institute of Euroregional Studies was founded between the representatives of the academic environment in Debrecen and Oradea, and Centre for the European Studies **in Iaşi**.

Fifthly, looking back at the over 15 years of activity in the field of border studies and cross-border cooperation, it can be said that the Romanian researchers have covered the gap they had as compared to their colleagues in the region and together with them they have brought their contribution not only to the development of the knowledge in this field by an increasingly appropriate synchronization with the research of prominent western-European schools<sup>21</sup>, but they are strongly implicated in multiplying the knowledge to the

<sup>&</sup>lt;sup>21</sup> Jean Monnet Project, Multilateral Research Group Project *Initiative and Constraint in the Mapping of Evolving European Borders (ICMEEB)*, 2011–2013, coordinated by University of Oradea, in partnership with 17 institutions from 14 contrives. From EU's Eastern neighbourhood area was involved: Ukraine (National University Uzhhorod, Yury Fedkovich National University from Chernivtsi), Moldova (State University of Moldova, Chişinău), and Russia (I. Kant Baltic Federal University in Kaliningrad).

researchers beyond the borders of the EU, especially the Eastern one<sup>22</sup>.

Finally, it can be noted that European researchers in Romania have begun to accumulate a great deal of knowledge about the Eastern border of the EU and cross-border cooperation between the EUMS from the East and the countries of the Eastern Partnership. Here, in addition to two poles in **Iaşi and Oradea**, we can note the National School of Political and Administrative Sciences in Bucharest<sup>23</sup>, the Stefan cel Mare University in Suceava<sup>24</sup> and more recently the "Dunărea de Jos" University in Galați.

The experience of the candidate states in Central and Eastern Europe, which became member states in the EU after 2004–2007, in the field of border studies and cross-border cooperation from the perspective of European Studies, will play an essential role in stimulating the development of specific competences, institutes and mentalities in the states at the Eastern EU border, especially Ukraine and Moldova.

If, on the one hand, the academic environment in the states located to the east of the EU border has taken old methods, practices and knowledge from their neighbours and adapted them to the socio-economic environment of the region, the same environment is treated in research projects with specialists in border issues from prominent schools in Western Europe, specifically in Germany, Finland, France and the Netherlands. Through this East-West symbiosis, a mechanism of osmotic transfer of rules, values and knowledge is put into operation. It produces important mutations in the direction of the integration of the academic environment in these East-European states in the European space of education and knowledge in general and the one regarding the role of CBC in particular.

## Knowledge transfer from the EU to the EU's Eastern neighbourhood

In this section we will review the results of this isomorphic action of transferring know-how from the EU to the EU's Eastern neighbourhood, which is part of the **Europeanization beyond Europe process and which "cover**s a wide range of policies and is

<sup>&</sup>lt;sup>22</sup> Jean Monnet Project 587848-EPP-1-2017-1-RO-EPPJMO-NETWORK (2017-2020) *European Union and its Neighbourhood. Network for Enhancing EU's Actorness in the Eastern Borderlands* (ENACTED), coordinated by Alexandru Ioan Cuza University of Iaşi in partnership with University of Oradea and Stefan Cel Mare University from Suceava (Romania), Yury Fedkovich National University from Chernivtsi and Odesa National University and the NGO from Ukraine, Academy of Economic Studies of Moldova, Chişinău, Belarusian State University, Minsk; Economic University from Warsaw and University of Debrecen.

<sup>&</sup>lt;sup>23</sup> Iordan Barbulescu, Mircea Brie, Nicolae Toderas, *Cooperarea transfrontaliera intre Romania si Ucraina, respectiv intre Romania si Republica Moldova. Oportunitati si provocari intre 2014-2020,* Bucuresti, Ed. Tritonic, 2016

<sup>&</sup>lt;sup>24</sup> Marcela Slusarciuc, *Noi arhitecturi ale polilor de dezvoltare cu potential transfrontalier*, Bucuresti, Editura Didactica si Pedagogica, 2016 ; M. Slusarciuc, "Institutional System and Roadmap for Cross-Border Regional Development", in *Border Regions: Area of Cooperation and good Neighbourhoods*, Florentina Chirodea, Khrystyna Prytula, Klara Czimre, eds, *Eurolimes* (Oradea University Press), 29 (2020), : 95-108; Şlusarciuc, Marcela, and Gabriela Prelipcean. "Intervention Priorities for Economic Development in the Crossborder area Romania-Ukraine-Republic of Moldova - A'WOT Analysis Approach". *Eastern Journal of European Studies* 4, no. 2 (2013): 75–94; Şlusarciuc, Marcela, and Gabriela Prelipcean. "Clusters – A Potential model of Development for Cross-border Areas." *Romanian Journal of Economics* 2, no. 48 (2014): 148–160.

based on the explicit **commitment of the EU to extend its acquis beyond memberships**"<sup>25</sup>, and, on the other hand, the institutional change<sup>26</sup> and harmonization with the activity of EU's scholars in different fields<sup>27</sup>, in this case in research on the role of the borders and CBC in the process of Europeanisation. Looking at the overall contributions of researchers regarding the study of the Eastern border and the CBC to this developed border area in the EU's Eastern Neighbourhood, we can say that they tend to reach a higher and higher level of convergence<sup>28</sup> with those developed by the academic environment in the EU member states, being methodologically and theoretically closer to the research of the specialists in the new EU member states.

As expected, the colleagues in Ukraine, especially those in Lviv, Chernitvtsi and Uzhhorod are the most active in research on the Eastern border of the EU and the CBC. In fact, these universities are also the most involved in the programs of cross-border cooperation with neighbouring EU states. Besides these centres, there are new concerns in this direction at the universities of Odesa, Lutzk and Ivano-Frankisvsk, too. As it can be remarked, the universities near the EU border have concerns in the direction of research on the EU Eastern border, which can be explained both by internal driver action (born from the domestic agenda of the respective universities), as well as by the external driver (influence that the universities in the neighbouring countries of the EU had in stimulating joint research).

Ivan Franko National University of Lviv is the most active of the Ukrainian universities on issues regarding the borders, given that, on the one hand, it is located in the Lviv region (*oblast* – old Galicia) and on the other hand it has strong partnerships with universities from Poland located at the Polish–Ukrainian border (Lublin and Rzeszów) and was involved early in 1990 in cross-border cooperation projects. There are a few researchers within this university who have addressed various topics of the Eastern border of the EU<sup>29</sup>; Polish–Ukrainian cross-border cooperation<sup>30</sup> or Ukraine and EU<sup>31</sup>. A

<sup>&</sup>lt;sup>25</sup> Franz Schimmelfennig, "Europenisation beyond Europe", *Living Reviews in European Governance* 10, no. 1 (2015): 6, accessed October May 10, 2019, http://europeangovernance-livingreviews.org/Articles/Ireg-2015-1/.

<sup>&</sup>lt;sup>26</sup> Sandra Lavenex, "The Power of Functionalist Extension: How EU Rules Travel", *Journal of European Public Policy* 21, no. 6 (2014): 885–903.

<sup>&</sup>lt;sup>27</sup> Meri Maghlakelidze, "EAP Countries with European Standards in Border Management: Europenisation Driven by EU's Demands or Domestic Agenda?" *Georgian Journal for European Studies* no. 4-5 (2018–2019): 77–96.

<sup>&</sup>lt;sup>28</sup> The works of Meri Maghlakelidze cited at the previous note may be consulted on the topic of convergence between policies, actions and competences in EU space and that of EU's Eastern neighbourhood: Julia Langbein and Kataryna Wolczuk, "Convergence without Membership? The Impact of the European Union in the Neighbourhood: Evidence from Ukraine", *Journal of European Public Policy* 19, no. 6 (2012): 863–881.

<sup>&</sup>lt;sup>29</sup> Ihor Hrabynskyj. Transformacja struktury handlu zagranicznego Ukrainy z krajami UE i WNP w latach 1992-2006 // Badania naukowe = Academic Research / WSU im. St. Staszica w Kielcach. 2009. Vol.22, No.2. S.23-36; Ihor Hrabynskiy. Rozszerzenie Unii Europejskiej i jego wpływ na zmianę w strukturze handlu zagranicznego Ukrainy z Polską i UE // Stosunki gospodarcze Polski i Ukrainy: szanse i wyzwania / Redakcja naukowa: Andrzej Podraza. – Lublin: Katolicki Uniwersytet Lubelski Jana Pawła II, 2008. S.22-32; Ihor Hrabynskyy, "Expansion of the European Union and Its Influence on Changes in the Structure of Ukraine's Foreign Trade with Poland and the EU", in *Polish-Ukrainian Economic Relations: Chances and Challenges*, ed. Igor Hrabynskyy and Andrzej Podraza (Lublin: Publishing House of Catholic University of Lublin, 2008), 9-19; Ihor Hrabynsky. The Transformation of Foreign Trade Structure of Ukraine

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contribution in this direction was supported by the Jean Monnet Program, which in 2018 **funded 2 modules and the Centre of Excellence "Jean** Monnet", which addresses issues related to the Eastern border and CBC<sup>32</sup>.

Another institution making a very important contribution to the research of the EU Eastern border and of cross-border cooperation is the SI "Institute of Regional Research named after M.I. Dolishnyi of the National Academy of Sciences of Ukraine" (IRR NASU) from Lviv, which has been carrying out joint activities with scientific and educational institutions from Romania, Poland and other EU and Eastern Partnership countries. The IRR NASU performs fundamental and applied research on up-to-date issues of regional and local development in the process of EU integration based on EU member states' experience and opportunities to implement their best practices under Ukrainian reality. It promotes EU studies and EU issues in the course of public policy implementation through cooperation with authorities at all levels and forming the proposals to legislative and regulative acts, issuing the newsletters and scientific reports as well as participation in joint activities. IRR NASU is the research establishment, however at the same time the majority of its employees has the experience of participation in regional development projects under the EU auspice. One of its basic research directions is dedicated to crossborder cooperation. In its framework, IRR NASU develops research projects supported by the National Academy of Science of Ukraine and other national<sup>33</sup> and European donors<sup>34</sup> and suggests proposals to legislative and regulative acts, issuing newsletters, scientific

under the Conditions of Integration into the European Union // The European Union Policy towards Ukraine: Partnership or Membership? / Editor: Andrzej Podraza. Lublin: Publishing House of Catholic University of Lublin, 2006. P.121-135.; Mykhaylo Komarnytskyy, "Education without Borders: Trans-Dniester European College as a Way of Settlement Resolution of Regional Conflict", in *the Program for the Advancement of Research on Conflict and Collaboration Working Papers* (Maxwell School of Syracuse University, Spring 2008): 1–26; Roman Kalytchak, "The State of Research on European Integration in Ukraine", in *Poland in the European Union: Adjustment and Modernisation. Lessons for Ukraine* (Warsaw: University of Warsaw, 2012).

<sup>&</sup>lt;sup>30</sup> Ihor Hrabynskyy, "Social and Economic Problems of Ukrainian-Polish Cross-Border Cooperation" in *Contemporary Socio-Economic Issues of Polish-Ukrainian Cross-Border Cooperation*, ed. Leszek Buller, Hubert Kotarski, and Yuriy Pachkovskyy (Warsaw: Center of European Projects, 2017), 79-93.

<sup>&</sup>lt;sup>31</sup> Roman Kalytchak, "Stronger Together? Ukrainian Cities and European Urban Networks"; *in Ukrainian Yearbook of European Integration Studies.* – 2018; Roman Kalytchak, "Untapped Potential? Ukrainian Cities and the Eastern Partnership", in *Conference Proceedings "The 10th Anniversary of the Eastern Partnership: Lessons Learnt, Current Challenges and Future Perspectives*" Kyiv, 2019; Roman Kalytchak, "External Dimension of Differentiated Integration: The Case of Ukraine" in *Conference Proceedings "Ukraine-EU: Between Political Declarations and Experts' Assessments*". Lviv, 2019

<sup>&</sup>lt;sup>32</sup> Western Ukrainian Research Centre of Excellence in European Studies (2018), coordinated by Oksana Holovko Havrysheva; Jean Monet Module *Economics in European Integration Internal Challenges and External Dimension Ukraine-EU* (2016), Assoc. Prof. Vasyl Zelenko; Module JM *The EU's Subnational Dimension* (2014), Dr. Roman Kalytchak.

<sup>&</sup>lt;sup>33</sup> 2012–2015, Joint Project "'Upper Prut' Euro-region – Region of Multi-Rural Realities", in collaboration with the Institute of Agricultural Economics of Romanian Academy; 2019 – Project "Socio-economic justification of prospects for the development of a network of checkpoints across the state border in the Zakarpatska region".

<sup>&</sup>lt;sup>34</sup> Project - Jean Monnet Support to Associations "Boosting Local Economic Growth in Border Regions in the Process of EU Integration: Best Practices of Eastern Partnership (EaP) Countries", № 599948-EPP-1-2018-1-UA- EPPJMO-SUPPA (2018-2021), coordinated by Khrystyna Prytula.

reports, regional development strategies, scientific and methodical recommendations and analytical reports and scientific publications, especially regarding Ukraine's borders with the EU<sup>35</sup>. Its employees have been involved in implementation of European projects in collaboration with local stakeholders and EU partners.

Yuriy Fedkovych Chernivtsi National University, geographically located around 40 km from the EU border (Romania)<sup>36</sup>, has an experience in the field from a dual perspective – both as a participant of the CBC projects<sup>37</sup> and also as a facilitator of CBC studies in the academic curricular. Within the university, the Department of Political Science and Public Administration and the Department of International Relations at the Faculty of History, Political Science and International Relations are among the leaders as far as border studies and cross-border cooperation are concerned. Both mentioned departments have developed courses and extensively implemented research activities with the focus on the EU eastern borders.

In 2001, the Department of Political Science and Public Administration launched the

<sup>&</sup>lt;sup>35</sup> Khrystyna Prytula and Yaroslava Kalat, "Directions of Cross-Border Cooperation Intensification in the Framework of the Euroregion 'Upper Prut': Ukrainian-Romanian Borderlands" in "Cross-Border Cooperation in Europe between Successes and Limits", ed. Constantin-Vasile Joca, Klára Czimre, and Vasile Cucerescu, Eurolimes (Oradea: Oradea University Press) 21 (Spring 2016): 29–38; Khrystyna Prytula, Yaroslava Kalat, and Natalia Vynar, "Euro-Regional Cooperation as an Important Factor in Overcoming the Depression of Rural Ukrainian-Romanian Border Areas", Agricultural Economics and Rural Development, New Series, Year XIII, no. 2 (2016): 147-158; Khrystyna Prytula, Yaroslava Kalat, Yulia Tsybulska et al., "Modern Challenges of Cross-Border Cooperation Development in Ukraine: Results of Sociological Research", in Socio-Economic Potential of Cross-Border Cooperation: International Collective Monograph, ed. S. Matkovskyy, M. Cierpiał-Wolan (Lviv: Ivan Franko National University of Lviv, Ukraine; University of Rzeszów, Poland, 2017), 113–127; Khrystyna Prytula and Yaroslava Kalat, "Conceptual Aspects of Providing Border Regions' Economic Security in the New Geopolitical Conditions of the 21 Century", in "The European Borders at Hundred Years after the First World War", ed. Cristina-Maria Dogot, Klára Czimre, and Renaud De La Brosse, Eurolimes (Oradea: Oradea University Press) 26 (Autumn 2018): 113–124; Khrystyna Prytula, Yaroslava Kalat, and Olha Demedyuk, "Influence of European Integration Processes on Social and Economic Convergence of Regions in Ukraine-EU Cross-Border Space (on the example of Zakarpatska oblast)", Zeszyty naukowe panstwowej wyzszej szkoly techniczno-ekonomicznej im. Ks. Bronislawa Markiewicza w Jaroslawiu. Współczesne problem zarządzania, no. 13, (2018): 147-158; Khrystyna Prytula, Olha Demedyuk, Yaroslava Kalat et al., Cross-Border Cooperation of Ukraine with the EU Countries: Current Challenges and Possibilities: Monograph, ed. Khrystyna Prytula, (Lviv: SI "Institute of Regional Research named after M. I. Dolishniy of the NAS of Ukraine", 2019); Yaroslava Kalat and Olha Demedyuk, "The Ways to Strengthen Socio-economic Cooperation in the Ukrainian-Romanian Cross-Border Region, " in "Cross-Border Cooperation in EU Member States: Theoretical Studies and Best Practices", ed. Ioan Horga, Iryna Storonynska, and Klára Czimre, Eurolimes (Oradea: Oradea University Press) 27-28 (Spring-Autumn 2019): 259-278; Khrystyna Prytula, Anna Maksymenko, and Olha Demedyuk, "Institutional and legal framework for the development of transport infrastructure in the EU-Ukraine cross-border area", Zeszyty Naukowe WSB w Poznaniu (Scientific Notebooks in Poznan), no. 86(3) (2019): 47-68; Khrystyna Prytula, Olha Demedyuk, and Yaroslava Kalat, "The role of Cross-Border Cooperation in Ensuring the Regional Development of Lvivska oblast (Ukraine)", in "The Border Regions - Areas of Cooperation and Good Neighbourhood. Theoretical Considerations", ed. Florentina Chirodea, Khrystyna Prytula, Klára Czimre, Eurolimes (Oradea: Oradea University Press) 29 (2020): 175-192.

<sup>&</sup>lt;sup>36</sup> Many thanks to Ms. Nadia Bureiko, Head of NGO Quadrivium, who helped me to collect and revise the information about research in the CBC in Chernivtsi and Odesa.

<sup>&</sup>lt;sup>37</sup> For instance, 'Cross border educational exchanges in European Studies - favourable framework in the diminishing of the border effects at the Eastern frontier of the EU', https://cedes.uaic.ro/

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Jean Monnet Chair for European Studies<sup>38</sup> that later was expanded and in 2011 transformed to the Research Institute of European Integration and Regional Studies<sup>39</sup>. Among the main objectives of the Institute, its activities largely focus on political, economic and social developments in the border **regions, the European integration "Upper Prut"**, **Ukraine's cooperation with the bordering EU countries within the European integration** process, etc. Furthermore, the Department of Political Science and Public Administration also successfully implemented a research project entitled "Ukraine – Romania – Moldova: Historical, Political and Cultural Aspects of Relations in the Context of Contemporary European Processes"<sup>40</sup>. The project aimed at fostering the research in the field of border studies and CBC, on the one hand, and at enhancement of the academic and professional network between the three countries, on the other hand.

Also, professor Anatoliy Kruglasov with his group of researchers was very active to conduct the researches in the historical, political and cultural aspects of the relation between Ukraine – Romania – Moldova in the contemporary European Processes Context<sup>41</sup>, and especially in the cross-border cooperation in the Bucovina region, at the border with Romania and Moldova<sup>42</sup>.

Similarly, the field of border studies and CBC is actively promoted by the Department of International Relations. The main research activities in this direction are carried out through the activities of the Centre for Romanian Studies<sup>43</sup> and Anton Kokhanovskyi

<sup>42</sup> Anatoliy Kruglashov, "Interethnic Relations Stability on the Ukraine-R. omania Border: A Case Study of the Chernivtsi Region", in *Ethnicity and Intercultural Dialogue at the European Union Eastern Border*, ed. Mircea Brie, Ioan Horga, and Sorin Şipos (Cambridge: Cambridge Scholars Publishing, 2013), 296–320; Anatoliy Kruglashov, "Euroregion Upper Prut: Studies and Activities", in "Cross-Border Governance and the Borders Evolutions", ed. Alina Stoica, Carlos E. Pacheco Amaral, István Süli-Zakar, *Eurolimes* (Oradea: Oradea University Press) 16 (Autumn 2013), 27–39; Anatoliy Kruglashov, "Troublesome Neighborhood: Romania and Ukraine Relationships", *New Ukraine. A Journal of History and Politics* no. 11 (2011): 114–125; Anatoliy Kruglashov, "Euroregion – The Potential of Interethnic Harmonization", *Kärnten documentation. Die Rolle der Volksgruppen im erweiterten Europa und beigrenzüberschreiten den Kooperationsmodellen*, Band 20/21 (Klagenfurt, 2006), 164–171; Pavlo Molochko, "Current Trends of Cross-Border Cooperation of Ukraine and Romania", in "Cross-Border Governance and the Borders Evolutions", *Eurolimes* (Oradea: Oradea: University Press) 16 (Autumn 2013): 179–192; Yevheniya Yuriychuk, "Information Space of 'New Bordering Areas' in Ukraine" in *Na pograniczach. Kultura – Literatura – Media: Monografia* [On the borderlands: culture, literature, media], ed. Yevheniya Yuriychuk, Anna Chudzik, and Robert Lipelt, Seria: Na pograniczachkulturinarodów. Tom VIII. Red.naukova (Sanok: Państwowa Wiższa Szkoła Zawodowaim. Jana Grodka w Sanoku, 2017), S. 159–173.

<sup>&</sup>lt;sup>38</sup> Department of Political Science and Public Administration, Jean Monnet Chair, http://www.politicalscience.chnu.edu.ua/index.php?page=ua/jeanmonnet

<sup>&</sup>lt;sup>39</sup> More details about the Institute are available upon the link: http://rieirs.org.ua/index.php/uk/pro-nas/pro-instytut

<sup>&</sup>lt;sup>40</sup> The research results were published in the collection of the scientific papers 'Ukraine – Romania – Moldova: Historical, Political and Cultural Aspects of Relations in the Context of Contemporary European Processes', http://www.politicalscience.chnu.edu.ua/index.php?page=ua/03publications/001URM

<sup>&</sup>lt;sup>41</sup> Dupa 2007 la Yuriy Fedkovych Chernivtsi National University au fost organizate anual pana in 2014 conferinte cu aceasta topica cu participarea cercetatorilor din regiunea de frontiera romano-ukrainiana -moldoveana. Lucrarile prezentate au fost publicate in seria de volume cu titlul *Ukraine-Romania-Moldova : Historical, Political and Cultural Relations Ukraine -Relations in the Contemporary European Proceses Context,* vol I -IV, Chernivtsi, 2007-2011

<sup>43</sup> More information the activities of the Centre for Romanian Studies is available on here https://www.facebook.com/%D0%A6%D0%B5%D0%BD%D1%82%D1%80-

Centre for Polish Studies via fruitful partnerships with the universities in both Romania and Poland, academic exchange programmes, various international conferences, joint publications, etc. There are also several NGOs in Chernivtsi, which conduct research and policy-oriented activities in the field of border studies and CBC and closely cooperate with the University, for instance, Bukovinian Centre for Political Science, Institute for Political and Geopolitical Research, Quadrivium<sup>44</sup>, etc.

Uzhhorod National University, being located in the westernmost point of Ukraine and in the Zakarpatia region bordering four EU member states (Hungary, Poland, Slovakia and Romania), is naturally involved in the issue of border studies and cross-border cooperation. The impulse of the research in these fields is provided, on the one hand, by internal drivers – the environment in which it operates from a socio-economic and cultural point of view, the number of CBC projects in which it is involved, a trained human resources, etc. On the other hand, this stimulus is also given by the action of external drivers, who come less directly from the EU<sup>45</sup> and more from projects coming from EU member countries, either as European funding<sup>46</sup> or from funding from neighbouring states<sup>47</sup>. The convergence of these projects led to the creation of a group of researchers with concerns in the field of study of the frontiers in Central and Eastern Europe, the

<sup>%</sup>D0%A0%D1%83%D0%BC%D1%83%D0%BD%D1%81%D1%8C%D0%BA%D0%B8%D1%85-

<sup>%</sup>D0%A1%D1%82%D1%83%D0%B4%D1%96%D0%B9-1480006655635061

<sup>&</sup>lt;sup>44</sup> One of Quadrivium's research projects, for instance, entitled 'Bukovyna as a Contact Zone' aims at exploring the self-identification layers in Bukovina and various factors, which better contribute to attachments and loyalties in the Ukrainian-Romanian borderland (http://bukovyna.quadrivium.org.ua/). The project initiative 'Harmonization of interests of cross-border cooperation subjects as a factor of local development in the border regions of Ukraine' seeks to analyse expectations and perceptions vis-à-vis the cross-border cooperation projects and their added value (http://quadrivium.org.ua/index.php/harmonization-of-interests-of-cross-border-cooperation-subjects-as-a-factor-of-local-development-in-the-border-regions-of-ukraine/?lang=en).

<sup>&</sup>lt;sup>45</sup> There is one of the first Jean Monnet modules focused on CBC and Regional Development (2005–2008) here, coordinated by Professor Miroslava Lendel.

<sup>&</sup>lt;sup>46</sup> Partnership in the Jean Monnet Project, Multilateral Research Group Project *Initiative and Constraint in the Mapping of Evolving European Borders (ICMEEB)*, 2011–2013, coordinated by University of Oradea; Project Jean Monnet A – 3111, 2005 *Efficiency of Regional and Euroregional Structures at the New EU Border*, coordinated by University of Oradea; International Research and Practical Conference, Contemporary socio-economic issues of Polish – Ukrainian Cross-border cooperation (15–17.11. 2017), in partnership with University of Rzeszów and Ivana Franca University from Lviv, funded by CBC Program PL-UA BY 2014–2020 (https://www.uzhnu.edu.ua).

<sup>&</sup>lt;sup>47</sup> The cycle of conferences reunited under the general theme *Trans-Border Dialogue* that started to develop in 2014 and in whose framework are organized yearly conferences in partnership with the University of Prešov, being financed by the Research Center of Slovak Foreign Policy Association (https://www.uzhnu.edu.ua); the project *Cross-Border Cooperation at the Time of Crisis on Neighbor's Soil* (2015–2016, coordinated by the University of Warsaw, in partnership with Uzhhorod N. University, Research Center of Slovak Foreign Policy Association, Institute of Ethnology of Academy of Sciences of the Czech Republic, Geographical Institut of Hungarian Academy of Sciences, being funded by Visegrad Found (Cross-border Cooperation at the time of Crisis on Neighbor's Soil, accessed November 14, 2018, http://www.migracje.uw.edu.pl/ projects/cross-border-cooperation-at-the-time-of-crisis-on-neighbors-soil-2/).

border regions development and the CBC<sup>48</sup>

Projects<sup>49</sup> and research activities<sup>50</sup> related to CBC are in the process of active development at Odesa I. I. Mechnikov National University (ONU) located in the southeast of the EU border. The majority of them refer to the collaboration between Ukraine, Romania and Moldova in the Danube area<sup>51</sup>, as well as to Ukrainian-Polish CBC. Within the ONU, the Faculty of International Relations, Political Science and Sociology (FIRPS) has emerged over the past 25 years as a regional hub for research and teaching on the European studies and CBC studies. The FIRPS is a home to English-language master programme in International Relations, Social Communications and Regional Studies. Its goal is to prepare future professionals, who could potentially join national or even European services or diplomacies. For such young professionals, an access to the CBC **studies is a key not only to understand tomorrow's policies in the field, but also envision** and shape them.

The Department of International Relations at the FIRPS has a strong tradition of **studying the CBC in Black Sea region as a whole and "near Odesa" especially. From the** perspective of higher education, CBC focus has been reflected in a number of projects and partnerships of ONU such as promotion of good governance in the neighbourhood and the **exchange of best practices with partner universities. ONU's staff has participated as** partners in different international projects concerning CBC (e.g., Horizon-2020 Project **"Knowledge Exchange and Academic Cultures. Europe and the BSR", Erasmus+** Jean **Monnet "Neighbourhood Enlarg**ement and Regionalism in Europe / **NearEU",** Interregional Program European Neighbourhood and Partnership Instrument Fostering Sustainable and Autonomous Higher Education Systems in the Eastern Neighbouring Area (ATHENA) (2012-2015), a TEMPUS Joint Project - Curricular Reform (JPCR) European Neighbourhood Policy Law and Good Governance (EUNEG) (2012-2015)). In the context of CBC, the Erasmus+ Project "Rethinking Regional Studies: The Baltic-Black Sea (BBSR, 2017-2021) led by Tartu University is the most important project. In

<sup>&</sup>lt;sup>48</sup> Members of the group: Miroslava Lendel, Mykolia Palincsak, Lesya Hazuda. Lesya Hazuda, "Cross-Border Cooperation as Factor of Development of Bordering Territories", *International Journal of New Economics and Social Sciences* 1, no. 3 (2016): 193–199.

<sup>&</sup>lt;sup>49</sup> Jean Monnet Project Module *European Union and Ukraine Relations in Focus: Neighbours or Members?* (2013–2016), coordinated by professor Sergey Yakubovskiy.

<sup>&</sup>lt;sup>50</sup> Olga Brusylovska, "Cross-Border Cooperation of the EU with Ukraine", in *Gospodarka w Sieciach Relacji* [Economy in network relationships], ed. R. Sobiecki (Lublin: Catholic University of Lublin, 2014), 57–64; Olga Brusylovska, "Territorial and cross-border cooperation of the EU with Russia, Ukraine and Moldova", *Warsaw East European Review*, no. 5 (2015), 27-40; Olga Brusylovska, "The Idea of European Integration and the Cross-Border Cooperation of Ukraine with the EU", in *Ukraine Analytica* 4, no. 6 (2016): 44–50; Olga Brusylovska, Iryna Maksymenko. "East – West Border: Possibilities of Ukraine's CBC with Poland and Romania". In *Old Borders – New Challenges, New Borders – Old Challenges. De-Bordering and Re-Bordering in Contemporary Europe*, ed. J. Janczak, 45-74. Series of the Collegium Polonicum, Band 34. Logos Verlag, 2019.

<sup>&</sup>lt;sup>51</sup> Special by the Centre for Regional Studies (a NGO), i.e. Ihor Studennikov, "Cross-Border Cooperation between Ukraine and Moldova: Achievements, Opportunities and Problems", in *Danube Financing and Capacity Building Dialogue*, Chişinău, 26-27 September 2017, accessed May 23, 2019, http://metis-vienna.eu/wp-content/uploads/2017/10/lgor-Studennikov-UA-MD-CBCChisinau\_26-Oct-2017.pdf.

the frames of the mentioned project, IR Department develops fruitful cooperation with **'Poznan University team' with their leader J. Janczak, one of the most known European** specialists in contemporary CBC. A teaching activity undertaken by Prof. Olga Brusylovska **at partner University AMU (Poznan, Poland, course** "Politics and Change in Central **Eastern Europe", 1.03.** – 23.06.2021, 60 hours) is one of the spillover effects of this project. Prof. Brusylovska was also an organizer of the international conference "Politics and Change in Central and Eastern Europe" for MA, PhD and young researchers (June 7, 2021), where several presentations demonstrated growing interest in CBC studies in Ukraine and abroad.

Looking at what has been achieved in Ukraine in research areas on the Eastern border and the CBC, there is a relatively optimistic evolution at this border starting mainly from its own impulses, where the action of internal drivers is most visible. There is also a contribution of external drivers, especially from neighbouring countries through partnerships, but we consider that it is still modest, with the exception of the Polish–Ukrainian border and Bukovynian border between Romania and Ukraine, where there is a more consistent activity. Regarding the contribution of the EU through funded research projects aimed at the two topics – the Eastern border and CBC at this border, we find that it is modest in 2007–2013<sup>52</sup>, followed by an increasing trend between 2014–2020<sup>53</sup>.

The Republic of Moldova offers some particularities regarding the contribution to border research and cross-border cooperation due to its size and the fact that the human resource is concentrated almost entirely in the capital in Chisinau. First of all, there is no distinct contingent of researchers to develop border and CBC studies from the perspective of European Studies, there are some colleagues that developed this topic within the Moldova State University from Chisinau<sup>54</sup> or the B.P. Haşdeu University from Cahul<sup>55</sup>. Also, Academy of Economic Studies of Moldova has developed projects related to the CBC

<sup>&</sup>lt;sup>52</sup> Among the 24 projects funded by Jean Monnet Program between 2007–2013, only two are for the universities in EU border area.

<sup>&</sup>lt;sup>53</sup> Among the 42 Jean Monnet projects between 2014–2018, 10 are realised by universities in border area.

<sup>&</sup>lt;sup>54</sup> Grigore Vasilescu, Cristina Morari, "Neighbourhood or Europeanity: Dilemma of Disputed space – Republic of Moldova", in *European Borders at Hundred Years after the First World War*, ed. Cristina Maria Dogot, Klara Czimre, Renaud de la Brosse, *Eurolimes* (Oradea University Press), 26 (Autumn 2018): 143-158; G. Vasilescu, C. Morari, Rethinking European Neighborhood Policy: Challenges and Opportunities for the Republic of Moldova. In: *EURINT 2018: Reflecting on Europe's (dis)order: Scenarios for the EU's future*, Volume 5, 2018, p.136-145; Cristina. Morari, EUrole in the Republic of Moldova European integration within Eastern Partnership. In: *CES Working Papers*, Iasi, 2016, VOLUME VIII, ISSUE 3. p. 410-425; Morari C., Vasilescu G. External and internal dimensions in the European integration process. The case of the Republic of Moldova. În materialele culegerii ştiințifice "Eastern Europe.Regional Studies", Chişinău: CEP, USM, 2017, 355 p. ISBN 978-9975-71-954-4, p. 293-302; Stercul N. *The Republic of Moldova in the context of the 2030 Eastern Partnership scenarios //*http://www.ape.md/en/2020/03/natalia-stercul-republica-moldova-in-contextul-scenariilor-parteneriatului-estic-2030/

<sup>&</sup>lt;sup>55</sup> Nicolae Dandis, "Cross-Border Cooperation – A Strategic Dimension of European Neighbourhood Policy at the Eastern Frontier of the EU", in "Europe and the Neighbourhood", ed. Dorin I. Dolghi, Gilles Rouet, and Zsolt Radics, *Eurolimes* (Oradea: Oradea University Press) 7 (Spring 2007): 35–48.

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at Eastern EU Borders<sup>56</sup>. Even though it does not have such direct concern as the issue of borders or the CBC, we note a new perspective from the Association of Contemporary European Studies of Moldova (ECSA Moldova), which developed projects<sup>57</sup> and initiated research addressing the issue of borders in the wider area of the Eastern Partnership<sup>58</sup>.

Discussing the impact of drivers on stimulating the research, on the one hand, from the perspective of the internal drivers, we can see that there is little concern – a reduced human resource with concerns in this direction, the environment in which the socioeconomic and cultural activity is little interested in these topics, the relative number of CBC projects in which academic environment is involved. From the perspective of the external drivers we observe an ambivalent situation – there are very few European projects that fund research of the Eastern border of the EU and the CBC involving the entities from the Republic of Moldova; on the other hand, the entities from the Republic of Moldova benefited from the expertise of the EU's academic environment, in this direction, especially that of Romania.

Researches in Belarus on the Eastern border of the EU and the CBC are being developed among the geographers. There is no research on these topics from the perspective of European Studies, which here is confused with those in the political sciences. Universities in the border area with the EU are involved in cross-border projects<sup>59</sup> with partners from Poland and Lithuania, but there are few studies in this thematic area and those confined to the field of European Studies<sup>60</sup>.

## Conclusions

First of all, there is a disproportion between the general dynamics of the research in the EU Member States neighbouring the Eastern border, in their favour, and the dynamics

<sup>&</sup>lt;sup>56</sup> Jean Monnet Round Table "Regional and cross-border development in Moldova in the framework of the European Neighboring Policy", 13-14 March 2015; Jean Monnet Conference "Moldova towards EU's regional and cross-border development", 6-7. 12. 2018; Jean Monnet Conference "Moldova towards EU's regional and cross-border development", 22-23.08. 2019

<sup>&</sup>lt;sup>57</sup> Jean Monnet Project: 564725-EPP-1-2015-1-MD-EPPJMO-SUPPA, Deepening Understanding, Information and Communication of the European Union in the Eastern Partnership (2015-2018).

<sup>&</sup>lt;sup>58</sup> Carlos E. Pacheco Amaral, Gaga Gabrichidze, Ioan Horga, Anatoliy Kruglashov, Ewa Latoszek, Marta Pachocka, and Vasile Cucerescu, *EU Relations with Eastern Partnership: Strategy, Opportunities and Challenges* (Chişinău-Chernivtsi-Tbilisi: Print-Caro, 2016); Carlos E. Pacheco Amaral, Gaga Gabrichidze, Ioan Horga, Anatoliy Kruglashov, Ewa Latoszek, Marta Pachocka, Vasile Cucerescu, *EU Association Agreements with Georgia, Moldova and Ukraine: Through Cooperation towards Integration* (Chişinău-Chernivtsi-Tbilisi: Print-Caro, 2017); Carlos E. Pacheco Amaral, Gaga Gabrichidze, Ioan Horga, Anatoliy Kruglashov, Ewa Latoszek, Marta Pachocka, Vasile Cucerescu, *The European Union and the Eastern Partnership: The Security Challenges* (Chişinău-Chernivtsi-Tbilisi: ECSA Moldova, 2018).

<sup>&</sup>lt;sup>59</sup> Border Universities Network (established in 2013), part of which are Baranavicki State University (Belarus); A. S. Pushkin Brest State University (Belarus); Janka Kupala Grodno State University (Belarus).

<sup>&</sup>lt;sup>60</sup> Alena E. Dostanko, Olga I. Chuprys, "Euroregions as a Part of Trans-Border Cooperation of Belarus: Legal and Sociological Aspects" in *Regional Formation and Development Studies* 13, no. 2 (2014): 16–24; Alena E. Dostanko, "Neighbouring Policy of the EU: Instruments of Cooperation for Ukraine, Moldova and Belarus", *Belarusian Journal of International Law and International Relations* no. 3 (2004): 39–42.

of the states located at the Eastern part of this border on entire Eastern border in the area established in the current research. Starting from Białystok, Lublin and Rzeszów in Poland, Prešov in Slovakia, Debrecen in Hungary, Oradea, Suceava, Iaşi and Galaţi in Romania, we have 9 universities in which teams of researchers work together in various fields, who are involved in the development of cross-border projects and obviously in border and CBC research. If we look at the neighbourhood beyond the border, we find an increased dynamic in Lviv, Chernivtsi and Uzhhorod, being affirmed in Odesa and Chişinău.

Secondly, if we discuss the development of border research and cross-border cooperation from the perspective of European studies, we can see that in the EU Member States neighbouring the Eastern border, the research has an emphasized dynamic, especially in Romania, in the universities of Iaşi and Oradea, but also in Poland, in the universities of Lublin and Rzeszów. In the neighbouring Eastern states on the EU border, the universities of Lviv and Chernivtsi are the most dynamic in Ukraine, along with those in Chişinău, in Moldova.

Thirdly, when discussing the involvement of external drivers, in this case the **European Union, through the support of the "Jean Monnet" program, we note** the disproportion, on the one hand, between neighbouring EU Member States on the Eastern border, and on the other hand, between the neighbouring states. For example, Romania has the most important infrastructure in the development of research on the study of borders and CBC on the Eastern border, taking into account the universities "Alexandru Ioan Cuza" of Iaşi and the University of Oradea, which held the first and third positions in the country in 2018 in terms of the number of projects funded by Jean Monnet. Over 80% of the projects funded in these universities are related to border research and CBC. Also, "Ştefan cel Mare" University in Suceava has recently developed Jean Monnet projects on the topic under discussion. By comparison, Poland, Slovakia and Hungary do not have this research infrastructure created through projects supported by the Jean Monnet Program.

Looking at the support from the "Jean Monnet" program in the neighbouring states of the Eastern border, we observe that, except for Ukraine, where there are 12 projects funded at universities at the border with the EU (the most active centre is Lviv), from that only 4 are oriented towards the study of the EU border to CBC. Neither Moldova nor Belarus financed the projects specifically oriented on the topic under discussion.

Finally, discussing the involvement of external drivers, in this case the EU Member State neighbouring the Eastern border, by supporting Eastern actors in development and research projects, we find a slightly contradictory situation, namely that, although Romania has the most important infrastructure in the development of research on the study of the borders and the CBC at the Eastern border, its contribution to the development of projects and research related to the problems of the Eastern border and the CBC is similar to that of Poland from all the Member States discussed. Only after 2010, the Romanian universities mentioned above began to be active in development of research projects with entities from Moldova and Ukraine.<sup>61</sup> It is worth noting the involvement of the University of Prešov in research projects with the University of Uzhhorod.

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Impact of European projects on economic development in the Republic of Moldova: good practices for cross-border cooperation
## Abstract

The results of the investigation of complex phenomena – cross-border cooperation and transnational cooperation – are presented in this article. The following priorities are highlighted: Joint Operational Programme Romania-Ukraine-Republic of Moldova; Joint Operational Programme Black Sea Basin; transnational cooperation programme South-East Europe, in which the beneficiaries from the Republic of Moldova also participated. The priorities of the mentioned programs are focused on satisfying the survival needs of the citizens of the rural localities and the cities of Moldova. It is about building and repairing roads, kindergartens, primary schools, landscaping, providing energy to public spaces, etc. For the Republic of Moldova, even the opening of public food outlets for the needy and the elderly is a major problem for local authorities. The author follows how the mentality of citizens, especially those in rural areas, changes; how the competitiveness of projects developed by groups of specialists from various fields increases. In conclusion, it is mentioned that the impact of the projects carried out by the Republic of Moldova in partnership with Romania is significant. In addition, people are convinced of the real benefits in the localities of the country: new small and medium-sized enterprises appear in the agricultural sector, schools, kindergartens, study and rest Centers for young people with limited possibilities, for the elderly, etc are repaired and become functional.

**Key words:** cross-border cooperation, transnational cooperation, development, partner, Romania, European Union.

## Introduction

European integration is a priority objective of the foreign policy of the Republic of Moldova. At the moment, we note the existence of favorable conditions for the promotion of policies that serve this objective: the institutions of state power place European values at the basis of its activity. In this context, it increases the value of the activity of various non-governmental organizations, institutions responsible for educating young people, forming an active attitude towards the problems faced by Moldovan society.

Analyzing the impact of European projects on social life in the Republic of Moldova, in all its segments, the author proposes to start with the historical moment of the adoption of the Declaration of Independence, August 27, 1991, because until this date the leadership of the Soviet state was promoting an anti-Romanian policy. It followed a decade complicated by the armed conflict in the Dniester, in which the citizens of the Republic of Moldova had to assimilate a huge volume of information about their own identity, about the origins of culture. I personally only then understood why everything was forbidden and classified even in cross-border areas with Romania. There is one more aspect: both the Republic of Moldova and Ukraine, as elements of a federation, were not international relations enities, had no right to their own foreign policy, their interests were settled in

Moscow as the political center.

The relevance is justified by the practical significance of cross-border cooperation. Territorial and cross-border cooperation are means used to achieve the goals of increasing the quality of life. The effectiveness of cross-border cooperation depends on the coordination of all actors involved in the process, but also on cooperation at all levels, combined with the existence of an appropriate legal framework. Malfunctioning at one of the levels can lead to its failure. At the moment, we find the existence of favorable conditions for the promotion of policies that serve this objective: the institutions of state power place European values at the base of its activity. In this context, it increases the value of the activity of various non-governmental organizations, of the institutions responsible for the education of young people, of forming an active attitude towards the problems faced by the Moldovan society.

# Applied methodology

In researching the phenomenon of cross-border cooperation, in order to achieve the proposed goals, we apply the systemic, structural-functional and institutional approach. A useful method is that of content analysis, with the help of which we have understood the nature of European policies: of Social Cohesion and of the European Partnership and Neighborhood Instrument. Based on the presence of various levels of economic development, even within the Union, we applied the comparative study. Moreover, this method allowed us to observe the impact of European projects on the change for the better in the living conditions and activity of the citizens of the Republic of Moldova, especially those in rural areas. The comparative study allows any researcher to observe the change in the socio-cultural environment. The latest EU documents show that if European citizens do not notice a change for the better in their lives following the implementation of programs and policies, then all discussions, speeches about the future of a united Europe **are reduced to** "zero". This extremely valuable conclusion for the leaders of the institutions of democratic states must be updated and applied in the process of designing and implementing new European projects in the immediate vicinity.

The knowledge of the constructive, creative potential of the dialectical method and the application of its principles - interdisciplinarity and complementarity – were of a special significance for the development of scientific research. The analysis of the phenomenon of cross-border cooperation in the dynamics of social life, allowed us to describe the multidimensional nature of the impact, which manifests itself not only at the institutional level, infrastructure, but also the spiritual one, in attitude, approach, appreciation. In the conclusions of the study, generalizing the results of the investigation, we find that the implemented European projects changed the mentality of Moldovans, who perceived the influence of European values and understood the need to respect and promote them.

## The results of the investigation

In recent decades, cooperation at European Union borders has undergone a nuanced process, supported by new Community policies. These are: European Cohesion Policy at the internal borders, and European Neighborhood Policy at the external borders. European Cohesion Policy is aimed at bridging the gap between developed and least developed Member States, and the objectives of the European Neighborhood Policy diversify the Union's forms of cooperation with its neighbors. The Republic of Moldova and other states benefit from the Eastern Partnership Programme and the neighbourhood policy programmes. In accordance with the Treaty on European Union "the Union shall develop a special relationship with neighbouring countries, aiming to establish an area of prosperity and good neighbourliness, founded on the values of the Union and characterised by close and peaceful relations based on cooperation" (Art. 8 para.(1)). In this context, the Union provides support for European territorial cooperation (etc.) programmes, known as Interreg programmes, within its cohesion policy and with funding from the European Regional Development Fund (ERDF). For 30 years, Interreg has been supporting actions carried out jointly by several member states or by member states and non-EU countries.

The overall objective of Interreg is to participate in supporting the harmonious development of the EU territory by mobilising cooperation and creating development opportunities, while promoting solidarity among the citizens of different nations in addressing common challenges. Alongside the objective "investment for employment and growth", the Interreg objective is an important one for achieving cohesion policy, which can 'support [...] the joint use of facilities and human resources, as well as all types of infrastructure, across borders, in all regions'. The Interreg program imposes the requirement of accountability of administrative authorities of any level: national, regional and local. It provides for the creation of 6 million new jobs, or 8.6% of the labour market in cross-border regions.

Cross-border cooperation aims to respond to common challenges identified in border regions and exploit untapped growth potential. The main challenges include: "low accessibility, in particular in terms of connectivity of information and communication technologies (ICT) and transport infrastructure, declining local industries, an inadequate business environment, lack of networks between local and regional governments, low levels of research and innovation [...], environmental pollution, risk prevention [and] negative attitudes towards citizens of neighbouring countries".

During the fifth implementation period of the Interreg Programme - 2014-2020, the budget amounted to 10.1 billion euros, about 2.75% of the total cohesion policy budget. During this period, Interreg covered three cooperation components. Cross-border cooperation (Interreg V-A) included the programmes between neighbouring regions. Many of these are bilateral programmes, but there are also programmes involving up to five member states. Typically, the selected operations involve beneficiaries from at least two

participating countries, one of which must come from an EU Member State. Eligible areas are at the NUTS 3 level in terms of population and may also cover the NUTS 3 regions of Norway, Switzerland, Liechtenstein, Andorra, Monaco and San Marino. Transnational cooperation (Interreg V-B) proviodes programs covering broader areas of cooperation, focusing on transnational issues such as flood management, transport and communication corridors, international economic activities, research links and urban development. The eligible areas are located at the level of NUTS 2. Interregional cooperation (Interreg V-C) comprises four exchange programs between all Member States on spatial planning (ESPON), integrated urban development (URBACT), capitalization of cohesion policy activities (Interreg VC) and technical support for all Interreg programs (INTERACT).

The Interreg V-A 2014-2020 with 88 cooperation programs and a budget of almost 7.4 billion euros is the largest component representing 73% of the total budget of Interreg. Cross-border cooperation at internal borders, with the exception of the outermost regions, is the main element of Interreg V-A with 53 cooperation programs and a budget of 6.3 billion euros. Cohesion policy objectives and budget for 2014-2020 include investments for growth and job creation, budget - 341.7 billion euros and European territorial cooperation, budget - 10.1 billion euros.

For the period 2021-2027, the total budget of Interreg decreased to 8 billion euros as a result of a reduction in both the total budget of cohesion policy and the part allocated to Interreg, the latter falling from 2.75% to 2.4%. This period was characterized by an additional component dedicated to the outermost regions. Interreg VI-A, cross-border cooperation, will continue to receive most of the funding from Interreg, benefiting from 5.8 billion euros.

The internal border regions eligible for co-financing under Interreg A are the NUTS 3 level regions located along the EU's internal land borders and external borders, as well as the regions located along the maritime borders separated by a maximum of 150 kilometres. Member States may influence the Commission's decision on eligible regions. For all regions, Interreg support is in addition to that provided by general, national or regional ERDF programs. According to the Commission, there are almost 2 million cross-border workers in the Interreg V-A regions, of which 1.3 million cross the border to work and the rest - to study. For example, 450,000 people living in France work in a neighboring country; the equivalent figures for Germany and Poland are - 270, 000 and 140, 000 respectively. Many of the border regions generally have worse results economically than other regions in the same Member State. Access to public services, such as hospitals and universities, navigating between different administrative and legal systems is often complex and expensive. The number of citizens of the Republic of Moldova is considerable in the examples given, respectively we can say that they benefit from the services provided by the respective states, by their institutions. As with the general ERDF programs, cooperation programs are implemented under shared management. In this context, the role of the Commission is to approve the programs developed by the Member States and to facilitate their implementation, as well as to monitor and evaluate those programs. For

each cooperation program, a managing authority, a certifying authority and an audit authority are designated. Specifically for Interreg, a joint secretariat has been set up to act as an information center to assist applicants in the process of submitting and evaluating project funding applications; the managing authority and the joint secretariat shall be the main authorities responsible for the cooperation programs. The final objective of the monitoring committee of the program concerned is to select the operations to be cofinanced. Each spring, the managing authorities shall submit to the Commission annual implementation reports for each cooperation program. These include data on the progress of the common performance indicators, on the specific performance and outcome indicators of the programs and on the degree of achievement of the milestones, as well as financial data. Cross-border cooperation, both at inter-state level and at regional or local level, has been in the attention of the European institutions in the process of EU evolution. In order to streamline this collaboration and direct the many existing initiatives in a unitary way, an attempt was made to create a normative framework, including models of partnership and association agreements. The European Union encourages and stimulates the development of partnerships in cross-border cooperation. The EU's interest is not only in the harmonious development of the regions on either side of the border or the security interest in the development of a cooperative and stable neighboring region, but also in strengthening the European spirit and identity among its citizens beyond their nationalethnic identities. "The financial instruments and non-financial efforts (e.g., promoting standards to increase competitiveness, methodical approaches, implications for adjusting the regulatory framework, etc.) of European partners in border areas are consistent and designed for a long period of time".

Until the launch of the European Neighborhood Policy (ENP), the European Union and its neighbors had developed cooperative relations, which could be appreciated as asymmetrical relations based on partnership and cooperation agreements. Subsequently, the Eastern countries have developed deeper relations moving from these agreements to a new level of partnership, which has led to their association with the EU. When the ENP was launched, the bilateral relations established by the European Union through this policy were expressed in certain categories of political and legal acts as follows: partnership and cooperation agreements (with eastern neighbours) and association agreements and the Euro-Mediterranean partnership (with southern neighbours in the first phase). At the time, in the southern area, the ENP was a complement to the existing Euro-Mediterranean partnership. In the East, the ENP aimed to exploit, develop and implement the provisions contained in the pre-existing agreements. The partnership and cooperation agreements set an agenda for implementing legislative reforms and indicative regulation, but without imposing fixed deadlines. The deadlines were set in other documents, such as: country or monitoring reports and action plans drawn up on the basis of signed Association Agreements. The European Union's relations with neighbouring states are based on the European Neighbourhood Policy, the results of which were noted by the European Commission as positive in 2003. The positive effect is then reported by

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the European Parliament and the Council of the European Union. In the assessment made by the Commission for the European Parliament and the Council of the European Union: "the ENP has strengthened relations with partner countries and brought tangible benefits to both the EU and its partners, including the launch of regional initiatives and support to democratisation in the European neighbourhood". Under the influence of the European Neighbourhood Policy the concept of the external border of the European Union tends to acquire new forms of expression. On the one hand, we see a loosening of contacts between the two sides of the border. Such a trend is amplified by cross-border cooperation mechanisms, through Euroregions, but also by European instruments successfully implemented at the external border.

The European Association of border regions (AEBR) in its work respects and promotes four principles: the principle of partnership, the principle of subsidiarity, the principle of programming and the principle of institutional equivalence. The principle of fair and equal partnership is the cornerstone in the field of cross-border cooperation. It contains two components: vertical and horizontal partnership. At the level of vertical partnerships, existing relations are sometimes identified hierarchically under legal relationship at the following levels: EU, national, regional and local in the border area. Horizontal partnerships refer to the relationships between these partners (organisations, structures) and similar entities on the other side of the border. This principle is based on the equality of both parties, regardless of the size of the country, its geographical and economic importance or the number of the population. In order to develop this partnership, impediments such as differences at administrative level or those of skills and funding possibilities must be overcome. The principle of subsidiarity refers to the active involvement of local and regional actors in the process of cross-border cooperation, and programming implies "the existence of a common cross-border development concept or programme". The preparation of joint cross-border development policies and programmes and the implementation of cross-border projects shall be determined by and depend on the active participation of all actors involved, including at regional or local level, on both sides of the border. Institutional equivalence calls for cross-border cooperation without taking into account differences in administrative organisation on both sides of the border.

Cross-border cooperation is one of the important multi-purpose instruments that also involves mobilising financial resources in joint projects. The key component of regional development policy - cross-border cooperation - aims to ensure economic growth and balanced and sustainable development of border regions. The main objectives of the cross-border cooperation policy are:

a) Promoting cooperation between regions, communities and authorities on both sides of the borders in solving common problems by designing and implementing cross-border strategies and projects that contribute to the development of those communities in terms of increasing living standards and economic development;

b) Promoting good neighbourliness, social stability and economic progress in the border regions by financing projects devoted to decentralization of responsibility and by

promoting local initiatives carried out within the framework of local strategies".

A similar approach to cross-border cooperation is taken by states that are not members of the European Union. From the perspective of the internal and external policy of the Republic of Moldova, we identify the following long-term objectives of cross-border cooperation: creating more bilateral advantages; improving physical and economic infrastructure; developing human resources of the region; deepening cultural and educational ties; preparing for EU accession; environmental protection, etc. Serving the objectives of cross-border cooperation - deepening cultural and educational ties - and preparing for integration into European structures by promoting the EU's positive values and image are top priories of the Jean Monnet Chair Project "European Union: a **comprehensive concept**". 620918-EPP-1-2020-1-MD-EPPJMO-CHAIR (EUDIPSEC). The project includes activities to teach and promote European values, fundamental human rights, as set out in the European Charter of fundamental human rights: dignity, freedom, equality, solidarity, citizenship and Justice (Rosca, 2019).

Cross-border cooperation – an important instrument of EU foreign policy – is the subject of a lecture of the university course "European diplomacy: instruments and policies"; it is a research direction of the project coordinator. Promoting the positive image of the EU and ensuring stability, democracy and prosperity in the close neighbourhood of the EU are objectives that we must jointly achieve because integration into the EU can only be achieved by assimilating this model of regional integration. The attractiveness of the EU can be described by those changes, which occurred in the districts and villages, cities of Moldova, whose local administrations, and citizens benefited from financial support in the realization of their ideas, their development projects. At present, more than ever in the Republic of Moldova we can see the changes to the infrastructure: roads, schools, nursery schools, centres for children with disabilities, homes for the elderly, the disabled, etc., who often bear the pressure of poverty without their fault. The project is implemented with the financial support of the European Commission.

In the EU financial year 2007-2013, the European Union's cross-border cooperation with neighbouring states, including the Republic of Moldova, was part of the framework provided by the European Neighbourhood and Partnership Instrument. As a member of the EU, Romania had a position as a direct partner of the Republic of Moldova in the ENP. The European policy to support the strengthening of political and economic relations with neighbouring states continued to be a priority, being included in the cooperation, association and partnership plans. During the period 2007-2013, in the ENP, cross-border cooperation played an important role in the proximity of border regions, which most often face development differences and socio-economic disparities. In this direction, the following priorities and objectives of this policy are included:

1. To promote harmonious economic and social development in regions located on any part of the common borders. Particular attention shall be paid to local trade and investment, the promotion of joint ventures, tourism, investment in local infrastructure and cooperation in the energy, transport and communications sectors;

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2. To take on common challenges in areas such as environment, public health, prevention and fight against organised crime. Actions include joint planning and surveillance activities but also better management of Natural Resources and waste;

3. To guarantee secure and efficient borders by improving border-specific operations and procedures, by strengthening the security of the international logistics chain or even by improving infrastructure and equipment at the borders;

4. To promote inter-human actions at local cross-border level by improving civil society contacts. Educational, social and cultural cooperation can play a key role in promoting democracy and community values.

The Republic of Moldova is an active participant in several cross-border cooperation programs. Cross-border cooperation programmes are among a few European programmes in which local authorities in the Republic of Moldova benefit directly from the financial support of the European Union. Cross-border cooperation programmes were introduced in the Republic of Moldova before 2007 through the TACIS programme, which was composed of national, regional and cross-border cooperation programmes.

In the macroeconomic context, the economy of the Republic of Moldova after a difficult transition began to recover in 2000, followed by the global economic crisis of 2008, the consequences of which seriously affected the branches of the national economy. In 2010 there was an economic growth. There was talk in the corridors of authorities that we have positive results in the field of relaunching the national economy. The most important macro-financial assistance, from this period, from the EU for the Republic of Moldova is the Grants Program worth 90 mln euro established in 2010 and executed in 3 tranches in 2010-2012. The 2008-2009 grant aimed at several objectives: reforming public financial management, public debt management, the financial sector and the governance of the national bank, ensuring convergence with EU public procurement practices (Emerson et al., 2021). As we see, it is aimed at the public sector, the training of officials responsible for such activities.

But at the end of 2014, due to the "theft of the billion" Moldova lost 12% of GDP and trust of development partners, financial support from the European institutions was also interrupted. In 2015, the drought, the unfavorable economic environment at the regional level, the slow structural reforms and the insignificant progress of the business environment prevented the stable recovery of the economy (Emerson et al., 2021). The results of cross-border cooperation for the financial year 2007-2013, 2014-2020 must also be analyzed from the perspective of the purpose of local economic policies: economic performance and increasing the quality of life among the population of the territory. In this context, we mention that in recent decades, Romania has consistently contributed to this goal, managing the implementation of the Joint Operational Program Romania-Ukraine-Republic of Moldova 2007-2013, the global objective of which is to improve the economic, social and environmental situation in the area by intensifying contacts between partners and the 18 national government programs. The POC program is oriented towards the implementation of action plans comprised of 3 priorities: a) Towards a more competitive

economy in the border area, materialized by the objectives: improving economic performance by diversifying and sustainably modernizing the economy in the border area; improving productivity and competitiveness in urban and rural areas, developing cooperation initiatives in the field of transport, border infrastructure and energy networks. b) Environment and preparedness for emergencies, providing for finding long-term solutions to environmental problems in the border area, especially those problems associated with emergencies where a coordinated approach is essential. It is also about the management of water resources and waste, very important for the sustainable development of the Republic of Moldova. c) Promoting activities between people. Eligible actions are considered: Support for local and regional administration, civil society and local communities; Cultural, social and educational exchanges.

All priorities are important for the Republic of Moldova, all provide financial support to the actions of local, rational, national public authorities, non-governmental organizations, teachers, leaders, artistic groups, free artists, intellectuals, etc. Initially, the citizens of the Republic of Moldova did not have the necessary skills for the elaboration and final drafting of projects. With the help of colleagues from Romania, organizers of various scientific conferences, round tables, groups of professionals have mastered the discipline - Management of European projects – in Moldovan universities. We can follow this situation according to other statistical data: in the first call for project proposals, the institutions of the Republic of Moldova submitted 112 projects. Twice as many projects were submitted in the second tender - 272 projects. After the evaluation process, 134 projects were selected for implementation. Of these, 116 projects had partners from the Republic of Moldova. The projects involving partners from the Republic of Moldova amounted to 22 million euros. If we divide the submitted projects into the three priorities, **then we find that Priority 1** "Towards a more competitive economy in the border area" are more requested, followed by Priority 3 "Promoting activities between people".

Within this program, the Republic of Moldova also participated in 6 major investment projects (LIP) implemented by central public authorities. These are the projects: Interconnection pipeline of the natural gas transmission system in Romania **(Iaşi) with the natural gas transmission system of the Republic of Moldova (Ungheni),** Improving the response capacity of the Mobile Emergency Resuscitation and Extrication Service (SMURD), Prevention and protection against floods in the upper basins of the Siret and Prut rivers (EAST AVERT) etc. Thus, in addition to the budget from the open project proposals tenders, 11 million euros were allocated to the beneficiaries / partners from the Republic of Moldova for the implementation of the activities provided within the major investment projects (LIP).

Based on a rich empirical material, researchers estimate that the Republic of Moldova remains **Romania's** "preferred" partner in the context of implementing all cross-border cooperation programs. It benefits from most projects funded by the trilateral POC and ODA funds. The results of all economic cooperation programs and projects convince us **that** "effective and sustainable cross-border cooperation will generate a high level of

interaction between the EU and neighboring states, leading to the creation of a safer and more predictable regional space" (Bărbulescu et al., 2015).

The central objective of The Black Sea Basin Joint Operational Program 2007-2013 was to develop strong regional partnerships in close cooperation in the Black Sea Basin regions. This objective promoted local development, common values, equal opportunities, reduction of gender discrimination, capitalization of women's contribution to economic and social development, improving the sustainability of environmental activities, cultural integration, and mutual exchanges between communities in the Black Sea basin.

The program aims to achieve three important objectives: 1. Supporting cross-border partnerships for economic and social development based on the shared use of resources; 2. Exchange of resources and skills for environmental protection and conservation; 3. Supporting cultural and educational initiatives in order to create a common cultural environment in the Black Sea basin. Each priority objective is materialized in various actions: 1.1 Strengthening access and connection between regions of new information, communications, transport and trade; 1.2 Creation of a tourism network to promote the initiative capacity for the elaboration and implementation of local development policies; 2.1 Strengthening the common knowledge and information bases that are needed to solve the problems related to the protection of river and maritime systems; 2.2: Promoting research, innovation and public awareness in the field of protection and conservation of protected areas. 2.3 Promoting cooperation in order to modernize technologies and management of solid waste and wastewater; 3.1: Promoting the cultural network and the exchange of education in the Black Sea basin region.

The participation of the Republic of Moldova in the Black Sea Basin Program was considered very successful in terms of the number of project proposals submitted, the partners involved and the budget used. Regarding the level of participation, the beneficiaries and partners from Moldova had a share of 16% of the total budget in the first project tender. This was considered to be the third highest participation rate compared to the other partner countries. After the evaluation process, 62 projects were selected. Of these, 40 applications had partners from the Republic of Moldova. Projects involving Moldovan partners received 3.5 million euros. Regarding the number of applications submitted by applicants from the Republic of Moldova, the most requested was Priority 1. "Supporting cross-border partnerships for economic and social development based on shared use of resources", followed by Priority 2 "Exchange of resources and skills for the protection and conservation of the environment". The achievements registered within this Program were exposed in the volume: "Geopolitical and historical-geographical problems of the Black Sea Basin". "The strategy of transforming the Greater Black Sea Region into a pillar of Security and Stability is corroborated with the strategy of the fight against terrorism. The fight against terrorism and organized crime, while boosting competition for energy resources and their transport routes, has brought the Black Sea area to the forefront of European and Euro-Atlantic organizations. Regional cooperation for development based

on regional integration, democratization, economic growth of the parties and the region would be a solution for the region" (Rosca, 2019).

The aim of the South East Europe Transnational Cooperation Program 2007-2013 was to create transnational partnerships in areas of strategic importance in order to improve the process of territorial, economic and social integration and to support cohesion, stability and competitiveness. In line with the Lisbon and Gothenburg agendas, transnational cooperation has focused on the following priority areas: innovation, environment, accessibility areas and sustainable growth.

Priority Axis 1. Supporting innovation and entrepreneurship means raising the level of competitiveness of regional development. The area of cooperation is undergoing fundamental changes in economic and production patterns since the changes of 1990. Some regions, especially state capitals, are adapting well to the new challenges. Others are trying to reorient themselves to find the right strategies to capture the opportunities of the world market. The program selects actions related to encouraging innovation, entrepreneurship, the knowledge-based economy and strengthening integration and economic relations in the field of cooperation (Roscovan et al., 2010).

Priority Axis 2. Protecting and improving the environment - is a key pillar of EU cohesion policy. This is reflected in the Gothenburg priorities and emphasizes the need to protect and improve environmental resources as a precondition for sustainable growth. Southeast Europe is known as an area with a rich biodiversity, severely affected by industrialization. The aim is to overcome the constraints imposed by national barriers, to prevent future threats and to identify opportunities to develop joint transnational actions for the protection of nature and people within this area.

Priority Axis 3. Improving accessibility. Accessibility is considered one of the main requirements for economic development and growth and for territorial cohesion. It facilitates the movement and interaction of people and the exchange of goods and ideas. Existing networks are, in most cases, very fragmented or are planned only for the interior of the countries. In most cases, these networks are of low quality with a high congestion of the existing infrastructure. Without the development of viable alternatives, they cannot cope with the ever-increasing need for transport.

Priority Axis 4: Developing transnational synergies for sustainable growth areas. The main objective of this segment of transnational collaboration is materialized by finding preventive measures and development factors of a specific cross-sectoral nature, which interconnect the economic, environmental, social and governance aspects in urban and regional development.

Eligible beneficiaries of the Program: local and regional authorities, nongovernmental organizations and non-profit organizations, chambers of commerce, universities, educational institutions, public institutions, professional associations, public institutions with responsibilities in promoting tourism, associations of local municipalities and urban administrations, environmental agencies and those involved in water resources management, administrations of national parks and protected natural areas, inspectorates

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for emergencies, public medical institutions. The applicant had to be based in one of the eligible areas of the program. Each partner was to implement a part of the activities of the joint project on the territory of its state. The total budget of the program for seven years was approximately 206.69 million euros and was unique for the eight participating states.

Given that the ENPI funds were used after the signing of the financing agreement, in December 2012, in the first three calls for project proposals, the participants from the **Republic of Moldova had the status of "10% partners" in 7 projects. In April 2013, an** additional call for project proposals for the ENPI was launched for partners in the Republic of Moldova, in which 15 projects were implemented, the financial support of which amounted to 1 million euros. Regarding the number of applications submitted by applicants from the Republic of Moldova, Priority **Axis 2.** "Environmental protection and **improvement**" was the most requested, **followed by Priority Axis 1.** "Supporting innovation and entrepreneurship" and Priority Axis 4. "Development of transnational synergies for areas of sustainable growth".

The partnerships created and funded under this program provide a favorable framework for fostering mutual trust between the participating states and for contributing to the development of the spirit of multilateral cooperation. In the context of all these programs, the Republic of Moldova has achieved outstanding results in terms of the level of representativeness and funds accessed, as well as the large number of partnerships developed. These programs have had synergies with the country's strategic documents, increased social and economic cohesion at regional and local level, intensified cooperation and knowledge transfer between public institutions, local and regional authorities.

It should be noted that in the period 2007-2013 Moldovan beneficiaries were involved in 171 projects from all cross-border and transnational cooperation programs. These programs have contributed to the socio-economic development of the Republic of Moldova by supporting the agricultural sector, entrepreneurship, social protection initiatives and others, which, in their entirety, presented the areas covered by these programs. Following the completion of these initiatives, the authorities of the Republic of Moldova in cooperation with the Austrian Development Agency decided to verify and evaluate the impact of cross-border cooperation programs from 2007-2013 on the social and economic development of the Republic of Moldova. The impact assessment aims to measure the level of achievement of program results and to prepare an inventory of effects in the areas covered by the program. Thus, the evaluation measures whether the cross-border cooperation programs for the period 2007-2013 have achieved the planned objectives in terms of their impact, effectiveness, efficiency, sustainability and relevance.

Based on the achievements and failures of the Financial Action - 2007-2013, the citizens of the Republic of Moldova, authors and managers of European projects, central and local public authorities had to respond to new challenges and define priorities for the period 2014-2020, taking into account a set of criteria such as EU political, economic and program conditionalities. During this period, the following issues had a major significance: cross-border cooperation strategies; cross-border security infrastructure; Joint

Operational Program Romania-Ukraine and the Republic of Moldova. The priorities of the cross-border cooperation programs were: economic and social development; environment, public health, safety and security; mobility of people, goods and capital.

## Romania - reliable partner of the Republic of Moldova

Romania, as an EU member state, is among the beneficiaries of the opening of the Republic of Moldova, being stimulated by the new European framework. Cross-border cooperation programs and the implementation of the ENP at the Romanian-Moldovan border are based on new foundations and various tools. At national level, cross-border cooperation is regulated taking into account the formal framework of European regulations. Against the background of the adoption of the framework legislation on crossborder cooperation by the Eastern European states, the conclusion of bilateral and multilateral agreements has been intensified, including between Romania and its neighbors. "Different types of agreements, protocols, international treaties, conventions have been identified to provide a regulatory framework that allows for cross-border cooperation at the local, inter-regional, intergovernmental and multinational levels" (Roscovan et al., 2010). These are documents with a regulatory role in the field of crossborder cooperation: good neighborly agreements at borders; agreements on specific areas of cross-border cooperation; agreements to set up specialized structures for coordinating cross-border cooperation policies; agreements constituting the foundations for crossborder cooperation between local / regional authorities.

The EU's competences are exercised in accordance with the principle of subsidiarity, which provides for "the protection of the decision-making and action capacity of the Member States" and "legitimizes the Union's intervention in the event that the objectives of an action cannot be sufficiently achieved by the Member States". This means streamlining cooperation and bringing the exercise of competences closer to the citizens. Cross-border cooperation from this perspective is no longer exclusively a state policy but is transferred to regional and local authorities, to regional associations, transnational companies, etc. The regional authorities on the Romanian borders with the Republic of Moldova and the development associations have a significant role in the development of cross-border cooperation. Under Romanian law, regional and local public authorities in **border areas** "may enter into cross-border cooperation agreements with similar structures in neighboring states". Cross-border cooperation is part of regional development policy. From this perspective, European and national regional development policies are able to stimulate cross-border cooperation both in terms of legal regulations and in terms of creating an institutional framework. The institutional framework is needed both in terms of coordination and representation of regional interests in national or European structures (2015 Annual Action Plan). Financial support programs for cross-border cooperation under the European Neighborhood Policy have stimulated local and regional initiatives, including regional associations such as Euroregions on Romania's borders with Moldova

through the European Neighborhood and Partnership Instrument.

Romania's contribution to the development of the Republic of Moldova is also supported through specific ODA interventions carried out by the Ministry of Foreign Affairs. Development assistance is provided by Romania both bilaterally and trilaterally or multilaterally - through programs and projects with other EU Member States, the European Commission or multilateral organizations. For the financial perspective for the period 2014 - 2020, the Ministry of Foreign Affairs has updated its concept regarding the financing of interventions through ODA. Under the new approaches, ODA interventions target the following measures: coordination with other foreign policy instruments, such as those related to political dialogue, trade and economic relations, etc.; increasing the impact, the visibility of the Romanian development assistance; promoting and capitalizing on the Romanian expertise capitalized in public institutions, non-governmental organizations and those in the private sector; based on carefully monitored and evaluated results (Roscovan et al., 2010).

The analysis of the evolution of Romania's general contribution to the implementation of the specific objectives of development cooperation highlights the fact that the value of budget allocations for ODA interventions varied annually depending on the value of GNI (gross national income). From a thematic point of view, projects funded through the MFA-managed budget focus mainly on the following priority areas of intervention: transition to democracy (state reconstruction, democratic governance, administrative reform, support for civil society, media, conflict resolution) ; supporting agriculture and sustainable economic development in the context of climate change; environmental protection and support for activities to promote sustainable energy in the context of climate change. Also, health and education are considered secondary areas, but if we analyze the dynamics of financial allocations by areas and sectors of intervention, we will note that in the case of the Republic of Moldova, a number of projects specific to the two areas are funded.

Priority directions for bilateral cooperation are the following: infrastructure – continuation of infrastructure projects in the field of energy to ensure the interconnection of national electricity and natural gas systems; design and construction of new bridges over the Prut; creation of industrial parks in several districts of the Republic of Moldova; agriculture and environment – strengthening sanitary-veterinary control; specific projects for environmental protection; education – extension of scholarship programs for study in Romania, especially in the case of qualifications not covered in the Republic of Moldova; training of public administration specialists in Romania; health – extension of the emergency intervention service in the Republic of Moldova - SMURD 2; investments for dialysis centers in major hospitals; renovation and endowment of surgical and treatment blocks in the main hospitals in the Republic of Moldova.

In the case of the Republic of Moldova, cross-border cooperation in justice was achieved through the implementation of projects that provided legal assistance in order to support the deepening of relations with the EU. The Romanian Ministry of Justice

provided legal assistance in the field of probation, and in the field of strengthening national structures in the legal domain, such as those related to the fight against corruption and cross-border crime. Some measures related to the transfer of experience from Romania to the Republic of Moldova aimed at awarding scholarships and organizing study visits in areas such as penitentiary management and the digitization of courts. In the field of justice, cross-border cooperation between the two countries is supported by the active involvement of civil society. For example, between November 2014 and August 2015, the Romanian Center for European Policies implemented the project "Strengthening the CNI's capacities, as well as intensifying the exchange of experience between DNA and CNA" financed by the Official Development Assistance Unit of the MFA. The project aimed at achieving a transfer of good practices consisting of institutional, technical and legislative solutions tested by the National Integrity Agency in Romania. The importance and the need to transfer practices regarding the institutional consolidation of DNA from Romania to the counterpart authorities in the Republic of Moldova has been often invoked in recent years by some political parties, civil society and the media in the Republic of Moldova. In this sense, it can be stated that DNA has become a reference institution for the Republic of Moldova.

In education, in addition to the program offering scholarships in pre-university and university education in Romania, in recent years the paradigm of bilateral cooperation in ensuring institutional convergence between the two states has undergone a significant change. Starting with 2014, the Romanian Ministry of Education and Scientific Research has been providing methodological assistance and expertise to the Ministry of Education of the Republic of Moldova for the reform of vocational and technical education, elaboration of methodologies and quality assessment standards in vocational secondary and higher education, taking over and adapting National Qualifications Framework and the National Register of Qualifications. Some of the priorities for bilateral cooperation are already supported through ODA-funded projects or through MRDPA programs. The two ministries are working together to develop a Protocol on bilateral cooperation in the field of education, which will make greater use of the dimension of cross-border cooperation in education (intensification of all forms of mobility, development of common procedures and approaches in education and training).

The specific objectives of cross-border cooperation established by the EEAS Programming Document 2014-2020 Business Development and SMEs were: promoting cooperation between the public and private environment; consolidation of economic clusters; strengthening competitiveness; promoting and supporting entrepreneurship; support for the development and modernization of enterprises in specific sectors (e.g. tourism, agriculture, fisheries); supporting education, research, technological development and innovation - developing cooperation between enterprises and training institutions for innovation and research & development, joint educational planning; promoting skills development and lifelong learning; supporting local cooperation in education; promoting and supporting research and innovation; promoting local cultures and preserving

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historical heritage; promoting local cultures and history; supporting traditional techniques of local economic development; promoting social inclusion and combating poverty; support for the development of social services; improving access to social services; promoting gender equality and equal opportunities; support for the integration of immigrants and vulnerable groups; promoting employment and supporting labor mobility; stimulating the employability of young people; support for good local and regional governance; increasing the capacity of local / regional authorities and communities and concluding partnerships between the private sector and academia; coordination of planning activities, support for regional integration; promoting legal and administrative cooperation; environmental protection, mitigation and adaptation to climate change; joint actions for the protection of the environment and the efficient management of the maritime space and resources; conservation and sustainable use of natural resources, including biodiversity; support for sustainable waste and wastewater management; joint action and cooperation in addressing the challenges of climate change, including modeling the impact of climate change and developing appropriate (common) measures; support for energy and resource efficiency (including the use of energy from renewable sources); improving the accessibility of regions, developing sustainable transport and communications networks and systems; improving the mobility of people and goods; development of transport services and infrastructure; ICT infrastructure development, data exchange and interoperability; common safety and security challenges; support for the development of the health system; improving access to health; preventing and combating organized crime; law enforcement, police and customs cooperation (exchange of intelligence and information, etc.); support for joint activities to prevent natural and man-made disasters, as well as joint actions in emergency situations; promoting and cooperating in energy security and sustainable energy, generating sustainable energy; energy transmission and distribution systems; promoting border management and border security, mobility and migration management; support for border efficiency and security; improving cross-border infrastructure and crossing point equipment; improving border management operations, customs and visa procedures. I have completely reproduced the priority tasks in order to give more chances to future applicants, authors of projects, to offer ideas, areas of integration. Simply reading these goals, understanding their content will show wonderful pictures about the future of villages, cities, districts of Moldova. The programs were selected according to the needs defined at various levels, focusing on a maximum of 4 achievable goals.

Bilateral cooperation between the governments of the Republic of Moldova and Romania during this period is characterized by several conditionalities, including the unclear position of the heads of the institutions of our state regarding the priority objectives of foreign policy; the loss of confidence of development partners caused by bank fraud; the ignorant attitude of some political forces in Moldova towards Romania and its legitimate representatives. These conditionalities of bilateral-intergovernmental cooperation programs and cross-border cooperation programs were updated at the meeting of presidents Claus Iohanes and Maia Sandu, on the occasion of the 30th anniversary of bilateral cooperation. The president of Romania noted: "cooperation along the governmental and parliamentary lines has seen a turnaround, and the members of the executives have already had numerous meetings applied, in which they discussed the sectoral priorities. Cooperation continues at an intense pace and at the moment. All this shows that we are taking advantage of the opportunities for in-depth bilateral cooperation at the presidential, governmental and parliamentary level, in order to advance the bilateral agenda and the European integration of the Republic of Moldova".

In Romanian culture there is an important proverb for every citizen, social group, community: "One can find a true friend only when in need". Even in the complicated period (2014-2020), Romania contributed to solving the major problems faced by the **citizens of the Republic of Moldova** and meeting their primary needs through various ways. **In the Republic of Moldova**, primary needs can easily be distinguished from secondary interests at the level of development of villages, district centers and even municipalities. For example, the program that included the renovation, at times, the reconstruction of a 100 kindergartens guided by the Romanian ambassador in our country led to a major change in the lives and mentality of the citizens of these localities. They were given new conditions for study, which encouraged them to dream of performance.

The culture of implementation of programs and projects is a key aspect in strengthening cross-border cooperation. The effectiveness, efficiency, relevance and adequacy of interventions are criteria that indicate the level of culture of project implementation in a particular community or area of intervention. The culture of government intervention is strengthened over time, and in the case of cross-border cooperation, "contamination" is implied throughout the area of intervention.

Another factor, which has generated the existing state, refers to the principles and "rules of the game", often understood differently or the obligation to apply them is questioned. Even if the working language of the program is English, the meanings of some concepts are understood differently. The phenomenon is a result of the lack of knowledge regarding the management of public interventions, and also of the lack of necessary experience. From the perspective of national authorities, the phenomenon of differentiated or erroneous understanding of concepts and principles related to program and project management has diminished because, over time, cross-border cooperation bodies have become accustomed to clarifying possible conceptual differences. However, at the level of project management and implementation teams, differentiated understanding of approaches and principles remains a significant issue. It is expected that with the acquisition of experience in the implementation of European-funded projects, as well as through the diversification of funding sources, the degree of use of unitary meanings of concepts and principles related to project management will increase. In this sense, the Romania - Moldova POCs for 2014 - 2020 were easier to implement compared to the previous financial period. The low level of implementation culture in the case of crossborder cooperation interventions is also explained by the existence of different regulatory

#### procedures.

Based on the fact that, over time, the European Commission has encouraged Member States and third countries to use the principle of complementarity of funds and programs that serve to achieve the same intervention objectives, it is important that in the case of cross-border cooperation between Romania and Moldova, this urge becomes a guide. In this sense, the last five years allow us to witness an opening of the access of the Republic of Moldova to various programs and initiatives of the European Commission. According to the particular provisions of each program, the Republic of Moldova has access to the Transnational Danube Program 2014 - 2020, the Erasmus + Program, the European Program for Agriculture and Rural Development for the countries neighboring the European Union (ENPARD) and others. It is important to know that with the progress of the implementation of the Association Agreement, as well as the Agreement on the creation of the Free Trade Area, the Republic of Moldova will benefit from a gradual expansion of access to other EU-funded programs and initiatives based on the principle "more for more". In the autumn of 2021, there were essential changes in the bilateral relations of the Republic of Moldova with Romania highlighted and capitalized with maximum efficiency by the presidents Claus Iohanes and Maia Sandu, by the governmental delegations, who met in Bucharest. The purpose of the meeting was to strengthen the bilateral Strategic Partnership for the European integration of the Republic of Moldova and to advance the reform processes. The President of Romania mentioned at the press conference: "We have a very rich agenda for the next period. I spoke today with the President about all areas where we have joint projects, of impact, especially in terms of energy interconnection and strengthening energy security, development of transport infrastructure, prospects for continuing to provide non-reimbursable assistance to the Republic of Moldova through a new Agreement, the development of communications and cooperation in the field of education". Regarding the Transnistrian issue, the position of the neighboring state remained unchanged: "Romania supports a comprehensive, peaceful and lasting settlement of the Transnistrian conflict, respecting the sovereignty and territorial integrity of the Republic of Moldova, within its internationally recognized borders and without affecting its European future". The two presidents' political consultations "will strengthen excellent and substantial bilateral cooperation at the political, economic and sectoral levels and will stimulate the advancement of joint projects of strategic interest in the fields of energy, transport, health, education or information society". In the coming period, the emphasis will also be on projects that connect Chisinau with the space of the European Union through Romania in order to bring real and concrete benefits to all citizens of the Republic of Moldova. Members of the government delegation, Foreign Ministers Nicu Popescu and Bogdan Aurescu, signed the document entitled "Roadmap" on priority areas for cooperation between the Republic of Moldova and Romania. The document aims at ensuring the irreversibility of the European integration process of the Republic of Moldova. It contains four basic elements: strengthening the language, history and culture community; strengthening common infrastructure through

the construction of bridges, the abolition of roaming and energy interconnections; unconditional support for the reform process and European integration; economic and social development by ensuring modern public institutions and independent justice.

## Conclusions

Regional development cooperation is a condition for the security, stability and sustainable development of any region of the contemporary world. Since the beginning of the third millennium, these phenomena have been analyzed, perceived in their dialectical interaction. For the contemporary world, for the segment of international relations, the cooperation for sustainable development of each actor and of the whole society is recommended. The history of mankind traversed by numerous devastating wars repeatedly justifies this thesis. Over the course of three decades, Moldova's presence in the arena of international relations has been supported by its main partner - Romania. We still feel this support in all segments / areas of domestic and foreign policy, especially since globalization determines us to appreciate them in their dialectical interaction. Traveling through the villages and cities of Moldova, I quantified those positive changes that followed the implementation of numerous European projects for cooperation development, cross-border cooperation, intergovernmental and transnational projects. Appreciating their interventions both quantitatively and qualitatively, we justify the thesis about the irreversible nature of the pro-European path of our country. All projects funded by the European Commission within the 3 programs analyzed, have led to an increase in the number of citizens who know, respect and promote European values and fundamental human rights. In our opinion, the impact of the analyzed programs is more considerable than mentioned in the "Study to assess the impact of EU cross-border cooperation programs on the socio-economic development of the Republic of Moldova" because the authors of the research do not quantify the change of mentality in Moldova compared to the activities carried out within the mentioned programs.

At the moment, the government in Chisinau has managed to regain the lost trust of development partners and although it faces many difficulties, it manages to bring its leaders closer to its neighbors, first of all Romania, and to be positively appreciated by the leaders of the European institutions. As a result of these changes, the Agreement between the Republic of Moldova and the European Union was signed on the participation of the Republic of Moldova in the EU Framework Program "Horizon Europe" concluded in Brussels on October 27, 2021. Thus, on December 3, 2021, the launch of the European Union Framework Program for Research and Innovation "Horizon Europe" was organized in Chisinau. We are convinced that teachers and researchers in the Republic of Moldova will successfully seize new opportunities.

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Chernivtsi region cross-border cooperation: global challenges versus local opportunities

# Abstract

Globalization brought growing differentiation and polarization worldwide. It grants unprecedented chances of economic growth and social well-being but not for all nations and people. It causes also more tensions and conflicts, wars including. Europe no way seems to be a lucky island in the storming ocean of contemporaneity. Ukraine looks around for more secure and stable environment facing Russian aggression since 2014 till now. Our country tries to follow European and Euro-Atlantic course, where good neighborhood and prosperous partnership with our neighbors are of great importance and priority. In order to achieve most important strategic goals, the central and regional authorities have to pay closer attention towards international relations, while making regions and local communities of Ukraine directly engaged in those process. Cross-border cooperation was and is amidst important venues and tools of promoting better interstate relations while considerably complementing towards local and regional economy growth and social progress. They also are important for bridging up neighboring states and their societies.

This chapter considers key challenges CBC has faced recently. The authors also regard key problems of CBC on the example of Chernivtsi oblast. They evaluate challenges and prospect of CBC and propose some practical recommendations aiming at overcoming **existing barriers and shortages of bordering regions' and local communities' cooperation.** 

Key words: global insecurity, cross-border cooperation, Ukraine, Chernivtsi oblast.

## Introduction

Globalization is a process with multidimensional characteristics. It brings about a lot of new perspectives and chances to all of mankind, like economic growth, rapid technological progress, avalanche of new information together with lifting up many of the traditional barriers in the international relations and people-to-people communication. Simultaneously, it contributes into sharpened disparity, marginalization of some countries and regions, thus, paving a way towards new conflicts and wars worldwide.

Many countries and nations are concerned with paradoxes and controversies of the globalized world and look around for a proper solution of too many challenges and threats they face now. Amidst them as a remedy for those problems they try prospect and means of the regional integration and as a part of them also more vivid cross-border cooperation. The latter is no way a panacea for some tensions and conflicts, still alongside with some other tools and instruments of interstate relations, CBC contributes to betterment of interrelated countries' economy, strengthens mutual trust and promotes closer partnership between states, their regions and local communities.

Ukraine ignores neither CBC potential, nor perspectives of good neighborhood with countries around. Being placed in a very vulnerable position since 2014 because of Russian aggression, we have to deal with hybrid war unprecedented and unpredictable conditions.

They moved our country on the forefront of insecurity zone in Europe, questioning its statehood, sovereignty, peace and prospect. That is why we have to analyze any aspects, which make us weaker or threatened, and find out all means, which might make us stronger and consolidated. CBC is among the mechanisms able to enhance our economy and social order and lift up national politics to a new, higher level of self-sustainable dynamic. The chapter considers main trends of Ukraine's CBC with neighboring states, taking into account a case of Chernivtsi region. This case is worthy of close consideration as far as the region itself is situated on the border with Romania and Moldova, has rich records of cross-border cooperation engagements and could exemplify both pros and cons of the current situation with this type of interstate relations duly.

While theory and practice of CBC has a long history of academic scrutiny, the case of the regional engagement in those processes remain underresearched and require new research and discussion (Kruglashov, 2013). The topics of what is the influence of the global and regional crisis on cooperation of bordering regions, how it affects CBC and what is reaction from key actors of CBC on new challenges and opportunities of the contemporaneous process are covered the least of all. Those issues are central for this chapter.

# Borderland as destiny and potential to develop

Chernivtsi oblast is one of the Ukrainian borderland territories with the traditions deep-rooted in the history. They are marked with certain regional peculiarities. Most important of them are defined with multicultural and polyconfessional flavor of the region (Kruglashov, 2010). Those features contributed towards creation of the special regional identity and culture of the tolerance, founded in time of Austrian Empire and survived, though with many changes and distortions, till contemporaneous time (Kruglashov et al., 2019). In all of the historical periods, the territory of nowadays Ukraine's region has been situated on the frontier of some competing regional and European powers. It provokes a lot of military skirmishes and wars, which have deeply affected the territory of the region. Despite them active and not-stop trade and movement of goods have been actively flourishing there for centuries. So, as for a region itself, active cross-border interaction and cooperation in different spheres are of the founding and most characteristic importance, starting from local governance and management and concluding with peculiarities of trade and infrastructure.

**Even if we don't take the period till 1940 into further detailed consideration,** Chernivtsi oblast remained in position of the borderland after the end of the World War II. That status of the western outskirt has been preserved after the breakdown of the USSR and proclamation of Ukraine's independence. The key factors of a situation inside the region were formed by different political actors, both domestic (Ukrainian) and foreign ones (Republic of Moldova and Romania, first of all) (Bohatyrets, 2016).

During the first decades of independence, mainly cross-border interaction in frame of three neighboring states was observed. It hardly seemed to be a well-developed

cooperation. All of those states - Ukraine, Republic of Moldova and Romania, were actively building up their new foreign and domestic policy in the sharply changing realities of the post-communist countries. Their attention was concentrated on crucial political, social, economic, ethnic, cultural etc. issues and required full concentration on newly set up and reconsidered national interests. Sometimes they were confronting each other. Especially hot issues of the existing state borders and ethnic minorities' rights and duties poisoned their relationship. Fortunately for all of them, those points gradually lost their damaging and oppressing influence. Because of that, further development of political situation confirmed the importance of cross-border cooperation in the region (Kruglashov, 2011). Still the stance of neighboring countries to their diasporas abroad and respectfully ethnic minorities protection is one of the most irritating points. It leads to many intensive debates and sometimes vicious suspicions in their relations for years (Ryabinin, 2019). The idea of creating a common space for active and fruitful cross-border cooperation like European Union has first emerged at time of negotiations between Ukraine and Romania concerning the signing of basic Ukrainian-Romanian political agreement in 1997 (Dohovir pro osnovy dobrosusidstva i spivrobitnytstva mizh Ukrayinoyu ta Rumuniyeyu, 1997). Two new Euroregions were constituted in accordance with those legal provisions and political compromises reached by the contacting parts: "Upper Prut" and "Low Danube" Euroregions. The following up evolution of Euroregion "Upper Prut" demonstrates both benefits and challenges of such type of interstate cooperation.



## Figure 1. Euroregion "Upper Prut"

Source: https://www.researchgate.net/figure/The-Upper-Prut-Euroregion-1-Regional-polarisation-cores\_fig38\_277713994

After uneasy completion of the legal framework and designing an institutional shape of "Upper Prut" Euroregion, there was some slow while steady progress there. The first fundamental steps in Ukrainian-Moldavian-Romanian cooperation were done in scientific sphere. From the early beginning till nowadays the academic dialog is fundamental for productive discussion of the international partners and their beneficial cooperation. Aiming at best results of them, Yuriy Fedkovych Chernivtsi National University settles a number of cooperation agreements with the Moldavian (Kishinev and Belts) and Romanian universities (Suceava, Iasi, Oradea etc.) (Yuriy Fedkovych Chernivtsi National University, 2021), where all sides benefit from that cooperation.

Cooperation in the sphere of business was launched also at the end of the 1990s, including international exhibitions and symbolic days of Euroregion "Upper Prut" in all of its administrative units (Hakman, 1999). Also ecological problems, problems of sustainable development are to be mentioned among the agreed priorities. In the begging of Euroregional building process, Ukraine attempts at making Upper Prut Euroregion focused on environmental issues and advocates this move as the prospective profile of the CBC in its frame (Vovkanych et al., 2014). Romania however did not accept that move as the focal point and priority for this CBC institution activity. It paid special attention to the issues of ethnic minorities rights preserving, namely Romanians in Ukraine (Yarmystyi, 2020).

Since the beginning of the XXI century, the situation in the bordering regions has changed drastically. First of all, the activity of all sides in promoting the idea of Euroregional cooperation and in realization of the common projects in its frames decreased. The last trend can be explained by different reasons, firstly, some difficulties and complications stemmed from the irregularity of institutional interaction in the framework of "Upper Prut" Euroregion (Hakman, 2021). Secondly, a change with Romania's political and geo-economical status, when this country became the member of the European Union and NATO. The last step influenced the tripartite relations Ukraine -Republic of Moldova - Romania in all spheres and affected their CBC subsequently. New programs and projects implemented by the Euroregion were mainly financed by the EU and the requirements to its implementation were due to the EU rules and laws (for example, PHARE CBC 2004-2006, Operational Program "Ukraine - Republic of Moldova - Romania" etc.). It did not correspond to Ukrainian legislature, causing delays and problems for effective projects' management and their timely implementation. There was a lack of attention to the CBC opportunities from Ukrainian central and regional authorities. It's well observed even in some official documents like 2020 Regional Development Strategy (Romanenko, 2018).

A beginning of the third decade of XXI century might be considered as a turning point of the World history, the consequences of that are not fully discovered and recognized yet. As famous political analyst, CNN expert on international relations Fareed Rafiq Zakaria stressed, humanity had crossed an extremely important boundary with the Covid-19 pandemic, the consequences of which depended both on the objective situation in the world and on people's reaction to it (Zakaria, 2021). The Covid-19 pandemic outburst

both demonstrates weaknesses and tests strengths of social-political systems in all states on one side (Storonyanska et al., 2020). Moreover, we can emphasize the growing role of innovative information technologies, which have changed the approach not only to individual or even collective communication, but also to interstate relations overall (Nechaieva-Yuriichuk, 2020). The latter plays an important role in contemporary CBC. So, the question of influence of the pandemic on the CBC, according to the authors, needs more accurate empiric research. Still in some cases it stimulates openness for closer cooperation in uncertain times for many countries and their societies. A combination of those unexpected challenges has clouded the regional and global agenda lately. At the same time, security in Europe is undermined by the consequences of ongoing Russian aggression against Ukraine. As one of many results of all socio-political upheavals against the background of the Covid-19 pandemic, the approaches to understanding and interpreting the very term security have changed recently (Troyan et al., 2021).

The EU capacity and authority has been diminished by series of crisis, which prompted strengthening of Euroskepticism and Europhobic moods. Finally, outburst of Covid-19 also influenced the format and frames of the cross-border cooperation. It's worthy mentioning that Chernivtsi oblast was the first one in Ukraine where the first victims of Covid-19 were found (BBC, 2020). The regional authorities paid a lot of attention to the new dangerous situation. They tried imposing quarantine restrictions which had to protect the population from the further spreading of dangerous viruses. But it does not work as well as expected, unfortunately. Moreover, 2021 became the year with the greatest restrictions imposed in the region: lock-downs affected many spheres: from education institutes' functioning to some limitations imposed on peoples' mobility and infrastructural precautions in Ukraine (Hakman et al., 2021).

Also, the European Union and Romania as the Member State imply their restrictions to all categories of population, who aim at crossing the interstate border. A number of common projects, especially in educational and cultural spheres, were frozen and their implementation postponed until better times (Bebko, 2020). For instance, it negatively affected recruitment of foreign students, exchange of students and teachers via ERASMUS projects, summer schools, conferences and seminars etc. all over the world, not only in Chernivtsi region (Igor Sikorsky Kyiv Polytechnic Institute, 2021). So far the educational and research activities have shifted to the on-line format. Those changes touched upon traditional trade sphere, which suffered a lot. However on-line trade and services have increased tremendously and their owners and staff prosper (Panfilova, 2020).

So, last year seemed to be wasted with regard to CBC cooperation in the region. In general, it looks like we are trying to get forward with them, but at the same time, unfortunately, are involved in a rollback-movement. Still, it does not mean that this type of the interstate relations is dead or it does not function at all, despite obviously unfavorable conditions. The driving force and very stimulus for CBC remain actual and they are in place (Kyfyak et al., 2020). They are first of all defined by well-grounded expectations of faster economic growth, supported with infrastructural betterment, bigger social stability, more robust technological advancement. Last but not least, it brings about greater security

and political stability for Ukraine's sake and not only for it.

The meaning of CBC for Ukraine in regard to the European integration should be mentioned as well (Fisanov, 2019). In our country, one should admit CBC as a part of a wider national strategy of the European and the Euro-Atlantic integration. It is important because of the engagement of the local communities and regions in the realization of both strategic goals regularly. They are deeply intertwined and have beneficial synergy as far as fundamental interests of the state and citizens are concerned. So, making our citizens mobilized for active participation in the European and Euro-Atlantic course implementation, combing their personal, societal and national aspirations with this type of cooperation helps Ukraine in reforming the country from bottom up. Moreover, good relations and fruitful cooperation with our European neighbors' regions contribute considerably into the best resolution of some deep-rooted problems of our bilateral and multilateral relations inherited from the past confrontations and trauma. They are largely originated and centered on borders and borderlands debated issues. It paves a way to creation of the mutual trust and openness towards each other, should local and regional partnerships and interaction prosper and flourish. When the EU member-states are friendly predisposed to Ukraine and their societies look to our country as desirable and trustworthy partner, the very prospect of European and Euro-Atlantic integration of Ukraine becomes more optimistic and well-grounded, for sure.

## Hardships and obstacles to discover and overcome

From those general considerations let's go on with more detailed analysis of CBC in the region. What are the most important characteristics of CBC in the Chernivtsi region? First of all, we are to consider its legal foundations and their impact. Now in Ukraine experts and politicians discuss draft of the new Law on the CBC. It's well understood that the old version of the Law (Zakon Ukrayiny "Pro transkordonne spivrobitnytstvo", 2004) does not work properly and for various reasons seemes to be overtly outdated. Furthermore, one can see that despite some improvements of the legal regulation in the draft of a new Law (Ligazakon, 2015), some principal issues there remained unattained again, including lack of the provisioned competences for the local self-government, mainly with regard to the empowerment of the respectful communities to deal with their foreign partners and the role of civic society in CBC institutes respectfully. So, the existing legal foundation for CBC seems to be incomplete and it corresponds neither to the decentralization process, nor the further advancement of Ukraine towards the Western alliances and Communities. Obviously, there is some more room for expanding competences of local communities and authorities to deal with their foreign partners, and diminishment of too complicated bureaucratic control upon CBC cooperation from the central governmental bodies (Zybareva et al., 2019). Some issues of new district authority's roles and functions in the interaction with their counterparts are open question too. Finally, major part of the international activities and competences are still kept by the Regional State Administration on the level of the regions (oblast). It contradicts the very logic of decentralization process and its conceptual ground. The actual role of the Regional Councils seems to be of secondary importance, while in the EU member states their position is quite opposite legally and functionally.

Next to follow: some remarks about the institutional architecture and design of the CBC. The most advanced institutional shapes of them are Euroregions amidst many others. They are multilateral and presumably most sophisticated of the rest existing in practice with certain main and secondary borders, executive apparatus, statutory documents and well elaborated procedures. It seems that for some reason, these mechanisms and procedures do not propose a venue for effective and intensive cooperation between cross-border partners. Irregularity of their meetings, lack of communication, non-obliging resolutions adoption, alienation of civil activists and experts from the managing bodies and policy-making process, in general deficit of any activity, those are short-listed symptoms of **"Upper Prut" Euroregion most evident illness. So far, overcoming those institutional** shortages, as well as legal ground deficiencies, should be recognized as one of the main priorities for a new functional CBC.

Whatever importance has both legal foundation and institutional design, the real dynamic and a very prospect of CBC is predetermined with their actors, who make it either prosperous or neglectable. From that point of view, researchers have to define both the actors of that cooperation and the potential and actual influence they have on the process of cooperation of partners and their interaction (Mytrayeva, 2013). The composition and interaction of some most influential local and regional CBC actors are changing in the current reforms. We mean reforms, which are legitimate result of 2014 events, both the Revolution of Dignity and Russian aggression against Ukraine. Some of these reforms are the consequence of Association Agreement of Ukraine with the EU (European Union, 2014). The administrative-territorial reform and the process of decentralization are the most influential for CBC (Pavlyuk, 2018).

On the level of the local and regional actors, we have reached an uncompleted stage of the decentralization reforms. The local communities are the most advanced, which are amalgamated for now. They are functioning more or less well in comparison to the previous situation with the local self-government of Ukraine. At least they are better financed and possess more resources than they had had before the reforms began. We have a system of the new districts, which are still in the process of awaiting a new legal provision for their proper functioning. In comparison with the local communities' legal opportunities, they are in extremely uncertain situation, especially in the sphere of budgeting. Finally, one can observe a mere prospect for completion of the administrativeterritorial reform on the regional level. So, Regional State Administrations and Regional Councils remain in an uncertain situation with regard to changes they have to undergo, and concerning their competencies on foreign activities as well. All of these are reshuffled to an extend ranks and importance of CBC actors. Presumably local actors now are most actively evolved and have a proactive stance towards CBC deals. The district authorities are not so well consolidated and seem to be less active in that respect. At the same time, there is a lot of incomprehensibility and some kind of tensions amid regional actors of CBC,

including their perception of their own importance and performance.

While looking at the case of Chernivtsi oblast, we should mention some other challenges and barriers on the way to successful CBC in the oblast and western Ukrainian regions a whole (Tymechko, 2018). First of all, it is a disparity in some crucial aspects between partners from Ukraine, Moldova and Romania. It is related not only to their economic weight and potential but administrative and political ambitions and aspirations. There we have a clear leading role, a guest to be a leading force in CBC from the Romanian side, namely from Suceava region. City of Suceava and the region have been getting a certain momentum in their progress last decades. Suceava seems to be the most advanced region from all territories belonging to "Upper Prut" Euroregion. Capital city has been advanced with some new enterprises, international trade and communication, rapid development of the International airport, etc. Thus, this region and its authorities try their best to capitalize those positioning twofold. Firstly, it is the most advanced partner in the framework of Euroregion. And secondly, Suceava has kept a key representative position in the Euroregion for years, both for Romania and the EU. Ukraine's regions, Chernivtsi oblast namely also has been trying to be more or less equal with its Romanian counterpart for some years. However, it did not succeed too much. For instance, if to take into consideration the infrastructure possibilities, Suceava airport is something like a "gate into Europe" for many Ukrainian citizens, especially in Chernivtsi region. Just to imagine: in November, 2019, Suceava airport served 385 thousand passengers, 23,000 of them - the citizens of Ukraine (Chernivtsi ray, 2019).

Moldavia's regions are lagging behind all of them. That happened because those administrative units (**"raion"** corresponding to **"**districts" in English) are much smaller **than Romanian "judets" and Ukrainian "oblasts". So far their ability and capacity of** generating some important initiatives are rather limited. Historically, the North of **Moldova is really poor territory. Despite the fact that all "Upper Prut" Euroregion** participants are peripheral and they are not economically the best developed in their respected countries, this similarity changes when we deal with the scope of the Euroregion itself. Comparing all three countries, Romania has the best position for providing activity in frames of CBC. It is a member of the EU and NATO, which makes it's geopolitical and economical status and potential the highest one amid two other countries (Verstyak, Verstyak, 2018). With all reservations possible, it is better advanced now in sense of political and economic development. So, Moldova and Ukraine and their border regions are lagging behind in a comparative perspective (Mikhel, 2021). That is why we have a clear disparity of statuses, potential, preparedness and even dominant approaches towards the very prospect of **cooperation in all three countries' bordering regions.** 

While that unfavorable combination of negative factors is sometimes of temporal character and could be resolved with certain elaborated and united efforts, here we have another obstructing of the right way towards healthier CBC reason, which looks to be predominantly subjective one by its nature. A deadlock situation with the Euroregion **"Upper Prut" activity is the most problematic for fostering our cooperation. Since 2018,** this foundation seems to have been mostly ossifying and does now show up symptoms of

being whatever active. The leaders of all Euroregion members do not make visible and viable attempts of breaking through that protracted stagnation. Sure, there are plenty of factors that might create that tacit neglect of the energy and time investments of regional political and administrative elite into CBC prospect. The result is obvious, however. Euroregion Upper Prut is rather dead than alive. Rehabilitation might take a long period and be too costly.

Fortunately, Chernivtsi oblast authorities try to pay certain attention towards regional strategic interests concerning international cooperation. One can witness it because some formal indicators have been met for now. So, last years some principal documents have been drafted and then approved, which are important as far as CBC is concerned. For example, Regional State Administration proposed and Regional Council adopted the new program on International cooperation, designed for 2021 - 2023 (Chernivetska Oblast State Administration, 2021a). Much more general aims and tasks of interregional cooperation are outlined in the Regional Strategy as well (Chernivetska Oblast State Administration, 2021b). Also, many local communities adopted their respective Strategies, where they make some accent on CBC issues. Those documents cover in general terms the CBC agenda and both regional documents seem to be better than nothing. Some points there could be criticized for the lack of concrete and logic steps towards achievement of proclaimed goals. At the same time, when dealing with the financial aspect of the program, they do not seem suitable and duly complying with the needs and expectation of the local regional actors, who are eager to be actively engaged in the CBC:

The amount of funds to be attracted for the program implementation	2021 (thousands of UAH)	2022 (thousands of UAH)	2023 (thousands of UAH)	Total program implementation costs (thousands of UAH)
The amount of regional budget resources	1750.00	1860.00	1825.00	5435.00

Table 1. Resource	provision of the F	Program on	International	Cooperation

Source: https://bukoda.gov.ua/storage/app/sites/23/Prohramy/dep%20comm/rehionalnaprohrama-rozvytku-mizhnarodnoho-spivrobitnytstva-chernivetskoyi-oblasti-na-2021-2023roky.pdf

The attention there is paid mostly to the meetings of the regional leaders, "round tables", negotiations, international scientific events, celebrations, participation of delegations from "Upper Prut" Euroregion in different events, etc. (Chernivetska Oblast State Administration, 2021a). It is a hampering problem. So, on the one hand, we have got the new legal platform for CBC development, the new strategy on international cooperation. But on the other hand, the program itself is not well detailed and corresponds only partly to actual CBC challenges and chances available over there.

Turning to a bit more optimistic tunes, we would like to state that recently local

communities have been amidst the most proactive actors and agents of CBC in Ukraine. They look around for foreign partners for Chernivtsi oblast, mostly from the EU, Romania, also Poland, Austria, Germany and some other countries in order to get local entrepreneurship involved in more developed international trade. They are looking for new resources of their self-sustainable development. Of those, Voloka, Novoselytsia, Hlyboka, Nedoboivtsi and some other local communities of Chernivtsi oblast are most prone and **advanced to the international cooperation. These examples of local leaders'** success stories motivate other territorial communities to move forward, encouraging their heads and local councilors to take part in whatever available programs of CBC cooperation, in the framework of Eastern Partnership, some other instruments provided by the EU support. The newly founded local communities become more and more active with the search for reliable partners from abroad nearby. Their activity is growing with regard to the applications in the framework of Ukraine – Romania, Ukraine – Moldova programs, Eastern Partnership instruments and so on (Hakman, 2021).

For last years the number of new initiatives caused mainly by the Covid-19 pandemic have emerged in CBC in the region. For example, in July 2021, the new cross-border **project "Improving the quality of medical services for minimally invasive proce**dures in the Romania-**Ukraine border region" was presented in Chernivtsi regional clinical hospital. It was introduced in frames of Common Operational program "Romania –** Ukraine 2014-**2020"** (Territorial communities of Chernivetska oblast, 2021). This is the example of one of the projects, which has been implemented in spite of hardships of the pandemic time. The attention to the health insurance and medicine problems get increased and we can ascertain the growing role of CBC (at least between Ukraine and Romania) in solving them.

Traditionally, ethnic minorities issues remain crucial for Upper Prut Euroregion, while sometimes irritating for CBC of Chernivtsi region (Sokolovskyy, 2020). There have been some conflict moments recently, some of them originated from outside players, presumably Russia to spark inter-ethnic conflicts in Chernivtsi oblast, while provoking minorities to take non-loyal actions against Ukraine. Some of those attempts were disguised as fake news and obvious provocation. The educational policy of Ukraine after 2014 also made certain contribution into intensification of some tensions between Romania and Ukraine in that realm. In general, Romania and Ukraine try to avoid concentration on dividing issues on the national and regional level, while keeping their positions to interethnic relations different.

From the point of view of positive changes, Chernivtsi oblast territorial communities seem to be very active. Still, on the other hand, one has to state that in the recent years, in general, the investment climate in the region has not been progressing till now and real investments are not attracted to the region. Many of potentially prospective projects as well as possibilities of much more fruitful cooperation are not realized there (Kyfiak et al., 2019). It is a clear message to regional and central authorities and an indicator of business trust to them.

Also, we would like to touch upon the civil society role and impact on the international cooperation in the region. The chronic disease for the CBC remains the same

year by year. Civil society and its institutions are still regarded as a minor partner for the **authorities, especially for the executives' bodies and to some extent for self**-government too. They are alienated from both agenda-setting and policy-making process. With regard to the example of Chernivtsi Oblast State Administration, the cooperation with civil society does not look like a true priority. The mirror of the Regional State Administration demonstrates marginal role of NGO's by and large. The sphere of CBC and international cooperation is no way an exception there. The records of the activity of the Regional Council and Chernivtsi City Council are hardly more impressive. The lower is the level of authority, the less visible is their cooperation and partnership with NGO's and civil society. Finally, no representative of third sector have been the member of Euroregion Upper Prut commissions for many years. It paves a way to make those bodies formal and overtly bureaucratic, and leads towards growing gap between local communities' and regional NGO's expectations and a process of every CBC institution and structure functioning.

To make CBC advanced, all parties concerned need more cooperation with the civil society institutes. They have to inform citizens about actual gains, pros and cons of the CBC, how they could realize their interests with regard to and through active participation in CBC. Contrary to those expectations, a low activity of the authorities might be registered regarding this type of communication. Sure, lacking channels and tools of participation, so-called ordinary people are ignorant of those issues outright. It revolves in the framework of vicious circle once and again.

So, general balance of the CBC in the region comprises good and bad sides at the present time. In general, it looks like negative trends prevail upon promising ones. There are a lot of problems that remain unresolved and require full attention of all CBC actors and stakeholders. It's a pity that some of them are even unnoticed by the authorities, local political actors and by the central governmental bodies. Those issues are out of priority set for them.

Under those circumstances, it became obvious that Euroregion as the traditional European form of cross-border cooperation needs a new revival impulse for further development in Ukraine, and in Chernivtsi region in particular. From the early beginning of their functioning till nowadays, the activity of those establishments has been limited by the lack of constructive cross-border cooperation experience on the part of administrative staff, representatives of business structures and NGOs of the region. The coordination of their interests and actions is not only poor or bad. It does not exist at all and is far from being set down and properly institutionalized. The move of Regional Council to create that coordinating body in a triangle of Chernivtsi Regional State Administration, Regional Council and City Council did not meet appreciation. No other body could serve as a vehicle or a platform for closer cooperation among public bodies in the region. The content of the Chernivtsi Oblast Regional Development Strategy can be considered as indirect evidence of secondary importance attributed to CBC by the regional authorities.

# Conclusions

Making some generalizations, we are to state that the cross-border cooperation in spite of its huge potential in the region is not developing as fast as possible and does not bring up good and feasible fruits. The main challenges for it remain as follow:

✓ Lack of an elaborated legal framework for the overall financing of projects (lending, concentration of local, regional and budgetary allocations, etc.) (Parkhomenko, 2020). The issue of legal basis of cross-border cooperation has been open for more than 20 **years of Euroregion "Upper Prut" functioning. The legislation of the Euroregion's** participants in some issues differs considerably and the difficulty of reaching the mutual agreement in procedures and mechanisms for cooperation in the legal field is one of the challenges of effective cross-border cooperation.

✓ Lack of funds for co-financing the projects implemented by local (Ukrainian, for example) authorities, institutions and organizations, NGOs including. Even in the conditions of administrative-territorial reform in Ukraine, regional and local authorities have no necessary financial funds for implementing different European projects: obligatory 10 or 15% of co-financing in some cases are unaffordable financial burden for them.

✓ Closer and effective cooperation between the EU and non-EU member states is complicated by different approaches to the project activities of Euroregion participants and by differentiation of socio-economic development of regions, which are participants of CBC. Some differences in the levels of decentralization in the EU, Ukraine, the Republic of Moldova and Romania, respectively, are also worthy of attention.

✓ The CBC partners do not practice joint planning for the development of borderland, which, in general, slows down the progress of other economic initiatives, including the improvement of border infrastructure. Key activities in the region are mainly initiated by individual actors like NGOs, in some cases regional authorities, etc., but there is no strategic vision of cross-border cooperation in the region at least for the next five years.

✓ Involvement of business circles in the development of cross-border cooperation (at least at the level of Euroregion "Upper Prut") remains critically low and with marginal outcomes reached (Yarmystyi, 2020).

The current situation with CBC and especially with regard to "Upper Prut" activity looks gloomy and disappointing. Principal regional actors stand aside of this activity publicly, they do not cooperate regularly with the local business, and they are not interested in stable and regular interaction with civic society activists as well as experts. Being alienated from principal actors and stakeholders of CBC, these tools and instruments of the interstate relations are forgotten and have gone out of use recently. The security concerns and pandemic threats are not pardoning current pitiful situation with CBC. Those issues should be regarded with regional authorities together with all the rest of stakeholders as soon as possible.

Some hopes should be attributed to the adoption of new national legislation on CBC.

However, regional and subregional authorities should reconsider their inept positioning towards interregional interaction and communication with foreign partners. Business circles as well as local and regional traders should be recognized and invited to the process of Upper Prut rehabilitation and reconsideration of all CBC shapes and tools.

Promising signals emerged from some local communities, which got more competences and incentives to move forwards with international ties and CBC in a process of decentralization. Some early birds on the level of newly established districts (raions) have also begun to look around their role in CBC recently.

The resolution of aforementioned and left behind problems and challenges is not a short-term prospect. The cross-border cooperation nowadays is not regarded as the formal **institutional interaction. It's the multilevel teamwork, which includes different actors and** covers various areas. In the XXI century, it needs more vivid and stable both vertical and horizontal communication as well as openness and preparedness from all parties concerned for real partnership promotion and maintenance.

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Methodological approach to evaluating the impact of Euroregional cooperation on socio-economic development of border regions: on the example of Ukraine

### Abstract

The research suggests and substantiates the methodological approach to evaluating the impact of Euroregional cooperation on the socio-economic development of border regions. Unlike the existing methodological approach, the offered one stipulates the analysis of the functioning of Euroregions by the criteria of the financial framework of **border regions' economic development, the maturity of civil society, and the intensity of** interaction between border regions participating in Euroregions; determining the capacity of Euroregional cooperation of border regions based on a set of parameters of natural resources evaluation, distribution of the population, labor resources development, and availability of cross-border infrastructure, etc.; the comparative research of the socio-economic development of regions participating in Euroregions and calculation of the parameter of efficiency of Euroregional cooperation capacity exploitation by border regions. It has contributed to evaluating the development level and capacity of Euroregional cooperation and detecting the prospective threats to the economic security of border regions participating in a Euroregion.

The application of the suggested methodology has revealed the fact that the development of Euroregional cooperation with the participation of Ukrainian border regions is characterized by asymmetric and unequal development, poor use of Euroregional cooperation capacity, low level of cross-border cooperation institutionalization, the sensitivity of border regions to the changes in the internal and external environments, and low impact of Euroregional cooperation on the socio-economic development of border regions of Ukraine.

**Key words:** cross-border cooperation, Euroregion cooperation, border region, socio-economic development, cross-border cooperation evaluation.

### Introduction

The proper level of securing socio-economic development of a state and each region is the basis for sustainable development. It can be achieved through the application of respective mechanisms and the positive impact of some factors on the economic system of a state or a region. Overall, any activity, process, or interaction brings some results in the determined time dimension that can be evaluated as both positive and negative. The positive result shows the efficiency of the phenomenon and fosters further development steps, while the negative one can cause losses and even force to analyze the reasonability of its development or cessation of existence.

Economic efficiency is among the most important parameters in the analysis of a **region's economic condition. Improvement of its level is one of the major economic** development priorities. Moreover, **efficiency is the basis for the region's economic** development. Meanwhile, the Euroregional cooperation efficiency analysis allows outlining

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the steps for its further activation or preventing the loss of opportunities for socioeconomic development of border regions that can be caused by weak cooperation or its absence. Euroregional cooperation constitutes the interaction within the institutionalized cross-border cooperation entities directed at implementation of defined objective, goals, and tasks and expansion of European integration processes and characterized by existing links at all management levels.

The definition of economic efficiency of Euroregional cooperation stipulates the comparison of losses (material and non-material) from the implementation of cross-border activities and projects with the obtained effect or analysis of the expected results to obtained **one's** ratio. The level of meeting the needs of the population is an important efficiency indicator as Euroregional cooperation is predominantly directed at improving the level of life of border region residents. Therefore, economic efficiency of Euroregional cooperation can be understood as the level of economic development of a border region that secures the mentioned effect at the lowest material and non-material costs and fosters meeting the needs and improving the level of life of the population in border regions (Bulyuk, 2008; Markovych, 2014).

It is worth emphasizing that the methodology of cross-border cooperation research can be applied when analyzing Euroregional cooperation. Yet, it is impossible to determine the overall efficiency of Euroregional cooperation (same as cross-border one) through direct methods as it is the multidimensional and heterogenous category not limited to financial results but the one generating the synergy effect in various elements of the regional system. In addition to the results of implemented activities and projects that can be both quantitative and qualitative parameters, the synergy effect combines also the economy on scales, the effect of reducing transaction costs or investment synergy that can be the result of joint use of resources and implementation of tasks (Tkachuk, 2009). Moreover, despite many methodologies developed to determine a region's socio-economic development, evaluation of the impact of Euroregional cooperation is a difficult task due to the actual absence or (as mentioned by Mikula N.) **"poor development" of cross**-border statistics in Ukraine.

Taking into account the wide range of Euroregional cooperation impact directions, it can be analyzed only indirectly (Ratti, & Reichmann, 1993). Overall, indirect evaluation methods can be used in the analysis of border trade parameters, cross-border projects funding, quality of life evaluation in border regions, and investment activity, etc. (Mikula, 2005).

**I.** Shkola and B. Korop argue that the analysis of institutional forms should take into account the effects from implemented projects, attracted international technical assistance funds, and information about all activities undertaken in the framework of their activity, in particular in the process of projects implementation and partnership relations **establishment, as well as improvement of border residents' vit**al activity, etc. (Shkola, & Korop, 2010). Meanwhile, L. Korolchuk suggests the analysis of cross-border cooperation evaluation at all levels of its impact (Korol'chuk, 2008). T. Tereshchenko pays special

attention to the evaluation of Euroregions activity in Ukraine and detects their main impact directions: administrative, social, economic, cultural-educational, infrastructural, environmental, performance-related, and security-related. The researcher also substantiates the principles of analysis and organization of cross-border cooperation monitoring (Tereshchenko, 2005).

Therefore, it is essential to analyze main Euroregional cooperation parameters that characterize its impact on the condition of socio-economic development of a border region, which inevitably impacts economic security as "an integral parameter of socio-economic domain functioning in the country" (Belyayev, Dyba, Bebelo, Zazymko, & Kyrylenko, 2005). Although the condition of the national economy in general has a major impact on the development of a border region, Euroregional cooperation "secures specific conditions to overcome peripherality and problems of border regions development" (Greta, 2006) and thus creates preconditions for economic growth.

### Methodological approach to evaluating the Euroregional cooperation impact on socio-economic development of a border region

Based on the EU experience in examining the development conditon of Euroregional cooperation, this study offers the methodological approach to evaluating the Euroregional cooperation impact on socio-economic development of a border region (see Table 1).

The suggested methodological approach is based on the analysis of the functioning of Euroregions with participating border regions, determining the Euroregional cooperation capacity of border regions, conducting the comparative analysis of the socio-economic development of regions participating in Euroregions, and calculation of the parameter of Euroregional cooperation capacity exploitation by border regions grounded on index methods of evaluation.

Nowadays, the index method is among the most common methods used for rankings, statistical data generalization, and evaluation of various economic activity aspects. It is generally believed that the index method should be applied when analyzing complex phenomena through aggregating with the interrelated phenomena. Therefore, the indices-parameters are relative.

Moreover, the analyzed system of parameters-indicators is evaluated using many heterogeneous parameters. In other words, it consists of incommensurable parameters. In this case, it is worth applying the methods of the input data standardization that stipulates that the vales of indicators are reduced to the standardized values, including by comparing with the determined reference value.

### **Table 1.** Methodological approach to evaluating the Euroregional cooperation impact onsocio-economic development of a border region

	Title	Research methods	Research results
First stage	Analysis of the functioning of Euroregional structures (3 groups of parameters, 10 indicators)	Index and comparative methods. (1) $x_{max,i} = \max_{i} x_{ij}$ (stimulators), or $x_{min,i} = \min_{i} x_{ij}$ (destimulators),	Evaluation of the Euroregional cooperation development level
Second stage	Determining the Euroregional cooperation capacity of border regions (5 groups of parameters, 18 indicators)	(2) $\bar{x}_i = \frac{\sum_{j=1}^m x_{ij}}{m}$ (average reference value), (3) standardized partial indices: [if $x_{max,i}$ , then $z_{ij} = \frac{x_{ij}}{x_{max,i}}$ , if $x_{min,i}$ , then $z_{ij} = \frac{x_{min,i}}{x_{ij}}$ , [if $\bar{x}_i$ , then $z_{ij} = \frac{Z'_{ij}}{x'_{max,i}}$ , $Z'_{ij} = \frac{\bar{x}_i}{ x_{ij} - \bar{x}_i }$ , (4) average indices: $Z_{kj} = \frac{\sum_{i=1}^n z_{ij}}{n}$ , (5) total integral index: $I_{hj} = \sum_{k=1}^l Z_{kj}$ .	Evaluation of the Euroregional cooperation capacity
Third stage	Calculation of the efficiency of the Euroregional cooperation capacity exploitation by border regions	Efficiency coefficient: $E_{PEC} = \frac{I_{PEC}}{I_{LEC}}$	Evaluation of the efficiency of the Euroregional cooperation capacity implementation
Fourth stage	socio-economic	Economic-statistical and comparative methods based on average values of Euroregion parties' parameters.	

Source: developed by the author

The parameters are also divided into stimulators (the growth of their values improves the development condition) and destimulators (the growth of their values aggravates the development condition). Therefore, the maximum parameter value across all regions is the reference value for stimulators in the research and the minimum value – for destimulators.

They will be calculated by the formulas (Kupalova, 2008):

$$x_{max,i} = \max_{i} x_{ij}$$
 (stimulators),

or

$$x_{min,i} = \min_{ij} x_{ij} \quad (\text{destimulators}), \tag{1}$$

where  $x_{max,i}$ ,  $x_{min,i}$  the reference value of the *i* parameters of a stimulator or destimulator, respectively;

 $x_{ij}$  – the values of the *i* parameter for the *j* region;

 $i = 1 \dots n, \ j = 1 \dots m$ 

Yet, if parameters-indicators cannot be attributed to stimulators or destimulators, the reference value is calculated by the following formula:

$$\bar{x}_i = \frac{\sum_{j=1}^m x_{ij}}{m}$$
(2)

where  $\bar{x}_i$  – the average reference value of the *i* parameter of the *j* region.

The standardized partial indicators for all parameters in each region will be calculated by the formula:

$$z_{ij} = \frac{x_{ij}}{x_{max,i}},$$
if  $x_{min,i}$ , then
$$z_{ij} = \frac{x_{min,i}}{x_{min,i}},$$
if  $\bar{x}_{i}$ , then
$$z_{ij} = \frac{z'_{ij}}{x'_{max,i}},$$
(3)

where  $Z_{ij}$  – the standardized partial index of the *i* parameter of the *j* region;

 $x'_{max,i}$  – the reference value for the *i* parameter of the *j* region in the set of partial indices  $Z'_{ij}$  calculated for a group of parameters, where an average parameter value is the reference one;

 $Z'_{ij}$  – the partial index of the *i* parameter of the *j* region that takes into account the deviation from the average value. It is calculated by the formula:

$$Z_{ij}' = \frac{\bar{x}_i}{|x_{ij} - \bar{x}_i|'}$$
(4)

To calculate the average indices across each group of parameters that characterize the individual components of the phenomena under research, the formula of calculating the arithmetic mean can be used:

$$Z_{kj} = \frac{\sum_{i=1}^{n} z_{ij}}{n}$$
(5)

where  $Z_{kj}$  – the average index of the k group of the j region,  $k = 1 \dots l$ .

The calculation of the indices across each group of parameters is based on an algorithm developed by Honcharenko N., Hanova O., and Shuba M. (Holikova, 2013):

1) Determining the set of evaluation indicators.

2) Determining the reference values of the parameters.

3) Calculating the standardized partial indices for all parameters by each region.

4) Calculating the average indices by each group of parameters for each border region.

Next, based on the calculated average indices  $\mathbf{Z}_{kj}$ , the total integral index  $\mathbf{I}_j$  is determined by each h group of parameters for each border region using the sum method. The calculation formula is the following:

$$\mathbf{I}_{hj} = \sum_{k=1}^{\mathbf{l}} \mathbf{Z}_{kj} \tag{6}$$

Thus, the total integral index is calculated to compare a whole set of parameter groups, so it is the consolidated relative parameter that takes into account the determined parametric characteristics of the phenomenon under research. The analysis of all components contributes to detecting the bottlenecks of the object under research and comparing its condition in time – tracing the trends.

In our case, when researching the Euroregional cooperation capacity, the border regions with higher total integral index rates will have a stronger capacity to develop the Euroregional cooperation. If the capacity is low, the situation is opposite  $I_{hj} \rightarrow 0$  (goes to zero). It will be the same when calculating the Euroregional cooperation development level.

### Analysis of the functioning of Euroregional structures

The feature of examining the functioning of Euroregional structures is that only the parameters of joint activity of their participants are taken into account. Moreover, the calculation period can be one year or the entire program period depending on the tasks set. So, the activity of a Euroregion can be analyzed for a year across the launched and finalized projects, held activities, total funds received, or losses in the period. Yet, it does not represent the results of its activity to the fullest extent. Because the feature of attracting funds under Euroregional cooperation is that the money for projects implementation under a program can come in parts even after it is terminated. Therefore, the Euroregional cooperation development level should be analyzed in the program period. Meanwhile, the total amount of projects co-funding under some program / project, the dynamics of monetary inflows, and the total number of implemented projects, etc. should be taken into account. Usually, the program period in the EU corresponds to 7 budgetary years: 2000-2006; 2007-2013; 2014-2020; 2021-2027, etc.

The Euroregional cooperation development level is calculated for the program period. The following are the criteria suggested for the Euroregional cooperation development

level calculation (see Table 2): **financial framework of border regions' economic** development, maturity of civil society, and intensity of interaction between border regions participating in a Euroregion.

Table 2. Parameters of Euroregional cooperation development			
Criterion	Parameters		
Financial framework of border regions' economic	The funds attracted in the framework of Euroregional cooperation, million $\ensuremath{\mathfrak{C}}$		
development	The number of EU financial assistance programs the Euroregions participate in, units		
	The number of directions of securing the socio-economic development of a region in conditions of Euroregional cooperation, units		
Maturity of civil society	The number of the Euroregional cooperation participants, units		
	The share of NGOs in Euroregional cooperation, %.		
	The number of cross-border projects implemented by NGOs, units		
	The number of projects implemented by NGOs in the framework of Euroregional cooperation, units		
Intensity of interaction between border regions	Program / strategies in the framework of Euroregional struc <b>tures' activity</b> , units		
participating in a Euroregion	Joint infrastructural facilities created in the framework of the Euroregional cooperation, units		
	The number of projects implemented in the framework of Euroregional cooperation, units		

Table 2. Paramet	ers of Euroregional	cooperation development	

Source: developed by the author

The criterion of the **financial framework of border regions' economic development** primarily identifies the Euroregional cooperation impact on socio-economic development of a border region. It is explained that Euroregions mostly stimulate socio-economic development of regions through the development programs / strategies, promotion of territories, experience exchange, and education, etc. Yet, the most essential changes take place as a result of attracting and efficient realization of financial resources to solve common problems, including through common hard, soft, or umbrella projects.

The results of analysis by this criterion show that Euroregional cooperation is characterized by the unequal attraction of financial resources both within a Euroregion and by Ukrainian border regions participating in different Euroregions. The inequality is explained by the fact that the EU member states have more opportunities to attract

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financial resources and more programs that allow co-funding from the EU funds, and more efficient economic-organizational mechanisms of their implementation in border regions (cross-border cooperation programs mostly require co-funding from own sources in the amount of 10-30%) compared to Ukraine. In particular, in addition to CBC Program Poland-Belarus-Ukraine 2007-2013, Lubelskie voivodeship used the opportunities of another four programs (including The RITA program launched by the Polish-American Freedom Foundation and implemented through Education for Democracy Foundation), while Volynska oblast participated only in two programs.

In the 2014-2020 program period, among Ukrainian regions, most financial resources were attracted from the EU structural funds through Euroregional cooperation by Lvivska oblast (compared to other oblasts) –  $\bigcirc$  6.323 million. The following were the main funding attraction directions: local culture promotion and historical heritage preservation; regional accessibility improvement, development of climate-proof transport systems and communication networks; tourism, cultural heritage, and arts.

Figure 1 shows the results of analysis of a financial framework for the economic development of Ukrainian border regions participating in Euroregions with the EU member states in the 2014-2020 program period.



 $\blacksquare$  The funds attracted in the framework of Euroregional cooperation, million  $\in$ 

---- The number of the EU financial assistance programs the Euroregions participate in, units

The number of directions of securing the socio-economic development of a region in conditions of Euroregional cooperation, units

# **Figure 1.** The parameters of the financial framework for the economic development of Ukrainian border regions participating in Euroregions with the EU member states in the 2014-2020 program period

Source: calculated based on Keep.ua serves.Site-aggregotor, 2020

The next criterion – the maturity of civil society – determines the impact of Euroregional cooperation on the social and informational frameworks of the socioeconomic development of border regions as it characterizes the level of awareness, interest, and commitment of border regions residents in cross-border cooperation.

The research of the civil society maturity parameters in border regions of neighboring countries shows that Brest oblast has the worst position by the number of NGOs. In particular, there were 2487 NGOs in Belarus in 2013, including 1,567 local ones. Their **number hadn't changed much compared to the previous years** (2,380 NGOs in 2011) (Sinyuk, 2017). Moreover, most of them function within a limited range of interests, which does not create conditions for efficient dialogue between the authorities and society.

Compared to Belarus, the situation in Ukraine is much better. Yet, the number is essentially less compared to the border regions of Hungary and Romania, where there have been 3.14 to 5.54 NGOs for 1,000 of the population on average for the last decade, or in Poland. For instance, Volynska oblast has 2.5 times less NGOs per 1,000 persons than Lubelskie voivodeship. As of 2013, 7,455 NGOs were registered in Lubelskie voivodeship, while in Volynska oblast – 1,560. However, the positive trends with continuous annual growth in the number of NGOs in Ukrainian regions can be observed. In particular, 1.6 NGOs accounted for 1,000 persons in 2013 in Volynska oblast, 7.5 – in 2015, 8.7 – in 2017. In Lvivska oblast, the rate was 2.1 in 2013, 7.7 in 2015, and 8.7 in 2017.

The number of implemented microprojects under the umbrella projects of Euroregions is another parameter that can testify to the maturity of civil society.

The maturity of civil society across Ukrainian border regions participating in the Euroregions with the EU member states in the 2014-2020 program period calculated by the set of determined parameters (the number of the Euroregional cooperation participants, the share of NGOs in Euroregional cooperation, the number of cross-border projects implemented by NGOs, and the number of projects implemented by NGOs in the framework of Euroregional cooperation, units) show that the largest number of cross-border cooperation projects were implemented by NGOs in Zakarpatska oblast (16 projects). NGOs are also proactive in Lvivska (9 projects) and Ivano-Frankivska (8 projects) oblasts. However, NGOs mostly do not cooperate with Euroregional structures, which currently demonstrates a poor interest of the latter in such type of cooperation. Meanwhile, the fact that Euroregional structures attract various government agencies and organizations to the implementation of the cross-border projects shows that the solution to common problems on the regional level should be a top priority (see Figure 2).



The share of NGOs in Euroregional cooperation, %

------ The number of cross-border projects implemented by NGOs, units

## **Figure 2.** The parameters of the civil society maturity across Ukrainian border regions participating in the Euroregions with the EU member states in the 2014-2020 program period

Source: calculated based on Keep.ua serves.Site-aggregotor, 2020

The criterion of the intensity of interaction between border regions participating in a Euroregion shows how closely the participants of Euroregional cooperation interact (the closer cooperation is and the more contacts are, the more cross-border links emerge) and indicates the development of the integration processes. Most often the cooperation takes place in terms of holding joint activities (conferences, roundtables, trainings, etc.), implementing joint projects, creating joint organizations and products (development strategies, cross-border institutions, etc.), and developing joint networks. For instance, we can name the Integrated Functional and Spatial Concept of Euroregion Bug Development Until 2020, European Collegium of Polish and Ukrainian Universities, Carpathian Euroregion Local Development Network, the Bukovyna Center for Economy and Entrepreneurship. The development of joint programs, strategies, concepts, etc. strengthens the institutional-legal framework of the socio-economic development of a border region.

The construction of joint infrastructural facilities that increase the regions' attractiveness for investors and simplify the living activity and movement of the residents of border regions plays an essential role in the context of Euroregional cooperation development. Joint infrastructural facilities include border checkpoints, as well as border, road, and social infrastructure. Among them, it is worth mentioning the Yahodyn-

Dorohusk international checkpoint reconstructed in the 2000-2007 program period with the participation of the Euroregion Bug and a new bridge constructed over the river Western Bug. A project titled Accessible Ukrainian-Polish Borderland: Joint Actions for the Modernization of Road Infrastructure was implemented in the 2014-2020 program period with the participation of the Carpathian Euroregion stipulating the reconstruction of road sections № 0141003 Mostyska–Krakivets in Lvivska oblast (19.1 km) and № 867 Synyava–Hrebenne in Podkarpackie voivodeship (0.7 km) to improve transport accessibility (Euroregion of the Carpathians-Ukraine, 2018).

The number of projects implemented in the framework of Euroregional cooperation is attributed to the parameters of the intensity of interaction between border regions participating in a Euroregion as it shows the cross-border cohesion.

Figure 3 shows the results received in the process of analyzing the intensity of interaction between border regions participating in a Euroregion. In particular, Lvivska oblast demonstrates the highest intensity of cooperation by all parameters.



□ Program / strategies in the framework of Euroregional struttures' activity, units

■ Joint infrastructural facilities created in the framework of the Euroregional cooperation, units

The number of projects implemented in the framework of Euroregional cooperation, units

**Figure 3.** The parameters of the intensity of interaction between border regions participating in a Euroregion in the 2014-2020 program period

Source: calculated based on Keep.ua serves.Site-aggregotor, 2020

### Determining the Euroregional cooperation capacity of border regions

The next stage stipulates the analysis of the Euroregional cooperation capacity by the parameters of evaluating the availability of natural resources and cross-border infrastructure, distribution of the population, and the level of economy and labor resources development (see Table 3).

Criterion	Parameters			
Availability of patural	The share of agricultural lands, %.			
Availability of natural resources	Area covered by forest, %.			
Tesources	The share of protected areas, %			
Distribution of the	Population, thous. persons			
population	The density of the population, persons / km <sup>2</sup>			
Development of labor	The share of the economically active population aged 15-70, %			
Development of labor resources	Unemployment, %			
Tesources	Average wages, €/person			
	Gross Regional product, €/person			
	Region's share in value added, %			
Economy development	Capital investment, million ${f C}$ /person			
Economy development	The number of business entities, thous.			
	The share of unprofitable enterprises, %			
	The foreign trade coverage ratio			
	The number of border checkpoints, units			
Coverage of cross-	Average distance between checkpoints, km			
border cooperation	The number of available EU cross-border cooperation			
with infrastructure	programs, units			
	The number of Euroregional structures, units			

### **Table 3.** The parameters of Euroregional cooperation capacity of border regions

Source: developed by the author

The total integral index  $(I_{PEC})$  is calculated based on the methodology of determining the reference values (calculated by each parameter of a group of regions), calculating the standardized partial indices, and calculating the average indices by each of five groups of parameters to evaluate the Euroregional cooperation capacity of Ukrainian border regions participating in Euroregions.

Based on the calculations of the total integral index of the Euroregional cooperation capacity in 2013, Ukrainian border regions participating in Euroregions can be conditionally divided into three groups: with high capacity ( $I_{PEC} > 3 -$  Harkivska, Donetska oblasts; with average capacity ( $2.5 \le I_{PEC} \le 3$ ) – Odeska, Luhanska, Ivano-Frankivska, Lvivska, Zakarpatska, Chernihivska oblasts; with low capacity ( $I_{PEC} < 2.5$ ) – Chernivetska, Volynska, Vinnytska, and Sumska oblasts.

In 2018, the Euroregional cooperation capacity increased almost in every border oblast, excluding Sumska, Chernihivska, Luhanska, and Donetska oblasts that border the Russian Federation. It emphasizes the importance of the integration direction factor. The distribution by the value of this parameter is the following: the first group includes Harkivska, Odeska, Zakarpatska, and Lvivska oblasts; the second one – Ivano-Frankivska, Donetska, Vinnytska, and Chernivetska oblasts; the third one – Volynska, Chernihivska, Sumska, and Luhanska oblasts.

It is worth mentioning that the Euroregional cooperation capacity increased mostly due to the growing share of almost all border regions in the total value added of Ukraine, excluding Donetska and Luhanska oblasts. There is an improvement in the situation with the foreign economic activity as an essential economic growth factor that boosts the implementation of the labor and resource capacity, the companies' entry to international markets, expansion of a range of foreign partners by establishing foreign economic relations, and improvement of border **regions'** accessibility to the EU funds.

Since 2016, Lvivska, Zakarpatska, and Ivano-Frankivska oblasts have increased the volumes of goods and services export. Among other things, it was fostered by signing the EU-Ukraine Association Agreement. Since the beginning of economic and political crises in Ukraine and under the impact of the Association Agreement, the export activity has reoriented to the EU markets and, albeit insignificantly, the export of goods to the other markets has diversified, boosting primarily the economic security of Ukraine was declining for two years in a row: in 2015 – by 11.2%, in 2016 – by 0.3% (in Ukraine – 26.8% and 4.1%, respectively). However, in 2017, the rate increased in border oblasts compared to 2016 by 19.3% (in Ukraine it increased by 16.8%) (Kalat, 2018). In 2018, export exceeded import in Vinnytska (2.54), Zakarpatska (1.09), Ivano-Frankivska (1.05), Odeska (1.08), Sumska (1.11), Chernivetska (1.43), and Chernihivska (1.56) oblasts. Moreover, the share of unprofitable enterprises declined in all regions.

## Calculation of the efficiency of the Euroregional cooperation capacity exploitation by border regions

The calculation of the parameter of the efficiency of the Euroregional cooperation capacity exploitation ( $E_{PEC}$ ) by Ukrainian border regions in securing their socio-economic development is determined by the ratio of the consolidated integral index of the Euroregional cooperation development ( $I'_{LEC}$ ) against the consolidated integral index of the Euroregional cooperation capacity ( $I'_{PEC}$ ) by the formula:

$$E_{PEC} = \frac{I'_{PEC}}{I'_{LEC}},\tag{7}$$

Based on the suggested methodology, the impact of Euroregional cooperation on the socio-economic development of border regions in the 2014-2020 program period is evaluated. Table. 4 shows the results of calculating the efficiency of the Euroregional cooperation capacity exploitation by Ukrainian border regions.

The results of the research show that Euroregional cooperation is characterized by unequal development and a low level of impact on the socio-economic development of Ukrainian border regions and poor use of its advantages and capacity. The Euroregional cooperation capacity is most efficiently used by Lvivska oblast (€ 6.323 million). Most oblasts that border the EU member states use it only for a third, which indicates the low level of cross-border cooperation institutionalization in Ukraine.

Region	Euroregional cooperation capacity index	Euroregional cooperation development index	Efficiency of Euroregional cooperation capacity
Volynska oblast	0.6231	0.2639	<i>exploitation</i> 0.4236
Zakarpatska oblast	0.7569	0.4432	0.5855
Ivano-Frankivska oblast	0.7375	0.4242	0.575
Lvivska oblast	0.7664	0.8958	1.1689
Odeska oblast	0.7786	0.3056	0.3926
Chernivetska oblast	0.6413	0.0139	0.0217

**Table 4.** The Euroregional cooperation efficiency in securing the socio-economic development across border regions of Ukraine bordering the EU member states, 2014-2020

Source: calculated by the author

### The comparative analysis of the socio-economic development of border regions participating in Euroregions

It is worth conducting the comparative analysis across the regions participating in the Carpathian Euroregion, Euroregion Bug, Lower Danube Euroregion, and Upper Prut Euroregion to examine the socio-economic development of border regions participating in Euroregions, detect the differences, and evaluate social and economic processes in the Ukraine-EU cross-border space.

The preliminarily determined algorithm of calculating average indices by each group of parameters for these regions is used for the analysis. The system of parameters-indicators is also selected. Their components are statistically accessible in all countries of regions participating in the mentioned Euroregions and, in our opinion, they express the impact of Euroregional cooperation on the socio-economic development and quality of life of the population in these regions the most. The best practices of European countries, namely Poland, were taken into account to examine the activity of Euroregions. Therefore, based on the abovementioned and the analysis of scientific studies (Mikula, 2003; Rohova, 2013; Heyets', Kyzym, Klebanova, Chernyak, & Bazhenova, 2006; Euregio Meuse-Rhine, 2013; Euroregion **"Country of Lakes", 2015;** Euroregionu Nysa, 2012; The Carpathian Euroregion, 2016), the following groups of parameters were outlined:

• level of life parameters (indicators: average monthly pension; the share of average monthly health expenditures per capita; the share of average monthly expenditures on food and soft drinks per capita; average residential area per capita; the number of newly registered cars and motorcycles per 1,000 persons);

• economic development of border regions parameters (indicators: GRP per capita; capital investment per capita; the number of tourists staying in accommodation facilities per 1,000 persons; the number of enterprises per 1,000 persons; the number of researchers per 1,000 persons);

• regional labor market development parameters (indicators: unemployment; average monthly wages; migration growth / decline coefficient per 1,000 persons; the share of coverage with vacancies).

Therefore, the research develops a system that includes three groups of parameters. The analysis is carried out based on the average values of parameters of each national party of the region participating in the Euroregion.

The group of the quality-of-life parameters determines the state of wellbeing and the degree of meeting the needs of the population with the necessary material and life benefits. The quality and level of life of the population directly impact social security and vice versa.

Meanwhile, cross-border cooperation, including Euroregional, can be the stabilizing factor in border regions. It can be explained by the fact that, for instance, the functioning of organized border trade and the development of small entrepreneurship foster selfemployment. It leads to the growth of households' income that improves their purchase power and thus improves the level of life of the population.

Today, there are essential imbalances between the border regions of Ukraine and the EU countries, which have aggravated due to military conflicts in the East of Ukraine and the 2014-2015 economic crisis. The analysis of the second group parameters shows that border regions of Poland, Hungary, and Slovakia surpass Ukrainian ones by all parameters, so their development level is much higher.

It is worth paying attention to the fact that the major GDP share in the developed countries accounts for small and medium businesses (up to 70% in the EU). In addition to the fact that small entrepreneurship secures the stability of market relations (it is deemed that the stability of the economic system is achieved when 20-30% of the population in the country run their businesses (Hrynchuts'kyy, Karapetyan, & Pohrishchuk, 2010), it is also characterized by high flexibility and dynamism levels, which helps easy adaptation and readjustment to newly created activity conditions and withstanding the crisis situations. Over half of the total number of small enterprises in Ukraine is concentrated in Kyiv (20.2%), Donetska (7.3%), Dnipropetrovska (7.0%), Harkivska (6.8%), Odeska (5.9%), and Lvivska (5.8%) oblasts. Therefore, the development level in Lower Danube Euroregion and Carpathian Euroregion is somewhat higher than in the two others. Moreover, the development and the use of innovations also secure economic growth.

The last group of the cross-border labor market development parameters contributed to detecting the labor resources outflow to the more favorable development environment, which is the major threat to economic security.

It is worth mentioning that the threat of labor resources outflow is much stronger now, in the first place to the neighboring EU countries. The main reasons include the high cost of living (the results of calculations show that Ukrainians spend twice more funds to buy food that Poles, which is among the highest rates in Europe), low labor remuneration level, and lack of perspectives for further development caused by the economic crisis and high inflation – 124.9% in 2014 – and boosted by the consequences of the Covid-19 pandemic.

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The comparative analysis of socio-economic development of adjoining border regions participating in Euroregions confirms their strong sensitivity to changes in the internal and external environment and close relationship between socio-economic development of a border region and destructive factors of neighboring countries' adjoining border regions development. In the first place, negative factors impact the level of life of the border **regions' residents and the development of the labor market.** 

The research also reveals the trends towards a slight reduction of asymmetry in the development of adjoining border regions lately. Moreover, the growing share of the value added of border oblasts in the total value added of Ukraine and the improvement of foreign economic activity parameters (the entry of the companies to international markets, reorientation of export activity on the EU markets, and expansion of the foreign partners' range) are the positive trends in the socio-economic development of border regions of Ukraine.

Meanwhile, the outflow of labor resources, in the first place to the neighboring EU countries, increasing shadow activity in the economy, the loss of cross-border cooperation development opportunities, the emergence of anti-Ukrainian attitudes, etc. remain to be the essential threats to regional development.

### Conclusions

Based on the experience of the EU countries, the research proves that the asymmetry in the socio-economic development of border regions in neighboring countries and Ukraine can gradually diminish in the process of Euroregional cooperation in case of active development of the latter. Meanwhile, the evaluation shows that Euroregional cooperation is not the major factor boosting the socio-economic development of a border region. Yet, by impacting entrepreneurship and border regions residents, it generates additional opportunities and development factors for a border region. It is worth taking into account in the process of securing the socio-economic development of border regions.

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### Evolution of the cross-border cooperation instruments in the European Union

### Abstract

The research presents the major stages of cross-border cooperation evolution in the European Union since the end of World War II, when it emerged as a means to overcome economic, political, cultural disparities, and physical borders till the early 2020s, when the newest program period started with a launch of a new instrument to finance external activity to integrate numerous previous instruments into European Territorial Cooperation (INTERREG). The instruments used at each stage to foster cross-border cooperation are outlined. The instruments considered include the legal framework development, financial tools application, institutions establishment, cross-border cooperation forms development, joint development strategizing and programing, etc. The Instruments covered by the research comprise those fostered by the EU and those developed by the Council of Europe, having major impact on cross-border cooperation in the EU. The conclusions emphasize the continuously evolving nature of cross-border development policy and instruments in the EU based on the modification of its approaches to create the best possible cooperation conditions.

**Key words:** European Union, cross-border cooperation, legal framework, crossborder cooperation forms, cross-border cooperation funding instruments.

### Introduction

The European Union and the Council of Europe have been promoting the cooperation between local and regional authorities across borders for several decades, since the first signs of positive impact such cooperation has on peace and good neighborhood relations was detected in the 1950s. Their aspiration to boost the socio-economic development of areas close to the border based on their similar or common principles and cultural, historical, economic, etc. heritage evolved into the emergence of relevant legal framework, which serves as the ground for the development of a range of practical tools to secure the long-lasting and mutually advantageous cooperation.

Currently, there are some attempts of Ukrainian authorities to change legislative framework of cross-border cooperation in terms of interpreting the concept of crossborder cooperation as interaction between any local and regional authorities across borders regardless of their location in relation to the border. For that matter, interregional and interterritorial cooperation are considered to be singles out as the types of crossborder cooperation. Therefore, it is very much timely and relevant to examine the origins of cross-border cooperation and the way the concept has been changing over the decades in Europe, where it emerged, as well as the types, forms and trends in cross-border **cooperation** Agreement and EU-Ukraine legislation harmonization rather than the one contradicting the practices of the EU.

### The cross-border cooperation origins

The cross-border cooperation concept that has evolved into territorial cooperation since the early 2000s emerged in Europe after the end of World War II as a means to overcome economic, political, cultural disparities, and physical borders. The Council of Europe, founded in 1949, had the main objective of developing Europe without borders based on fundamental values – rule of law, respect for human rights, and democracy. Personal contacts and links between local and regional authorities were first formalized in the late 1950s when regional groupings that included territories on different sides of the borders in Europe emerged even without any legal or institutional cross-border cooperation frameworks. Later they evolved into Euroregions, now called the first institutionalized forms of cross-border cooperation. Euroregio on the German-Dutch border, Regio Basiliensis on the French-German-Swiss border, and SaarLorLux on the French-German-Luxembourgian border were the pioneer Euroregions (Durà et al., 2018).

The history of the first Euroregions started in 1958 when local authorities of Dutch provinces Gelderland, Overijssel, and Drenthe, and German lands North Rhine-Westphalia and Niedersachsen held the first ever cross-border conference. Later, the associations of local authorities emerged on both sides of the border and became the major drivers of cross-**border cooperation development and the Euroregion's development as a str**ucture. Over time, the first Euroregio bodies were created: in 1966 – working group, in 1970 – cultural commission and secretariats from each side, which became a single secretariat in 1985, and in 1978 – the council of Euroregion, which became the first cross-border parliament assembly in Europe. Next, joint development strategies and programs were developed. When the cross-border cooperation funding program INTERREG was launched in 1990, Euroregio became the foundation of cooperation between neighboring regions and the improvement of their socio-economic development (Perkmann, 2014).

At the same time, namely in 1957, the Council of Europe founded the Conference of Local Authorities, which provided an opportunity to regularly discuss urgent issues related to the economy and main rights and freedoms, including cross-border cooperation. Moreover, the Conference elaborated the first draft intergovernmental agreement that allowed local and regional authorities to formalize relations with adjoining areas of neighboring countries in compliance with national legislation.

The concept of cross-border cooperation was first defined only in 1980 by the Council of Europe in the European Outline Convention on Transfrontier Cooperation between Territorial Communities or Authorities, also called the Madrid Convention by the city it was signed in. In particular, Article 2 of the Convention characterizes cross-border **cooperation as 'any concerted action designed to reinforce and foster neighbourly relations** between territorial communities or authorities within the jurisdiction of two or more Contracting Parties and the conclusion of any agreement and arrangement necessary for **this purpose' (European Outline Convention on Transfrontier Co**-operation between Territorial Communities or Authorities, 1980). It is worth mentioning that the Council of Europe and the European Union use different terminology to define the cross-border

cooperation phenomenon. The Council of Europe uses the word 'transfrontier', while the EU – the word '**cross-border**'. Yet, although the terms are different, they indicate the same phenomenon.

In the 1980s, the European Charter of Local Self-Government was adopted. Article 4 of the Charter provides that "local authorities shall, within the limits of the law, have full discretion to exercise their initiative with regard to any matter which is not excluded from **their competence nor assigned to any other authority", and Article 10** - **that they 'shall be** entitled, under such conditions as may be provided for by the law, to co-operate with their **counterparts in other States' (European Charter of Local Self**-Government, 1985). Therefore, the document created legal grounds for local authorities to carry out cross-border cooperation and be recognized as cooperation entities independent of central authorities.

It is also worth emphasizing that the processes of European integration, which used to develop independently of cross-border cooperation and use different tools, in the 1980s started to intertwine closely with the cooperation of regions of neighboring countries across borders. Namely, when solving the task of creating the single market in the EU (then the EEC), the European Commission first recognized the role of border regions as **'laboratories' for European int**egration, which are the first to experience all positive consequences and shocks from the EU enlargement (Wassenberg et al., 2015).

## Period of active cross-border cooperation development within the EU, emergence of diverse cross-border cooperation forms

The 1990s marked a new stage in the cross-border cooperation development. Firstly, the further establishment of monetary union and introduction of a single currency boosted mobility and fostered cross-border cooperation in Europe. Secondly, institutionalized forms of cooperation in the form of Euroregions, which had been concentrated in the Western Europe before, began being established on the Eastern borders, including with the participation of third countries. Thirdly, at this time a concept of a Europe of the regions began to shape, when regions are considered the basis for the development of economically and socially strong Europe and the model of functioning based on European values because they experience Europe in their everyday lives: they regularly cross the border and maintain constant exchanges with their neighbours' (Wassenberg et al., 2015). In 1994, the European Committee of the Regions started operating as their representative body in the European Union. Fourthly, in 1990s, two Additional Protocols to the European Outline Convention on Transfrontier Cooperation between Territorial Communities or Authorities were adopted. The Additional Protocol to the European Outline Convention on Transfrontier Cooperation between Territorial Communities or Authorities was signed in 1995 with the view to supplement the Madrid Convention with the provisions regarding the possibility of local authorities or communities involved in cross-border cooperation to sign agreements with territorial authorities or communities of other countries and create structures, organizations, or institutions that would operate under the jurisdiction of one

of the parties to the Protocol (Additional Protocol to the European Outline Convention on Transfrontier Cooperation between Territorial Communities or Authorities, 1995). Protocol 2 to the European Outline Convention on Transfrontier Cooperation between Territorial Communities or Authorities concerning interterritorial cooperation signed in 1998 expanded the opportunities for cooperation between authorities and territorial communities because it brings such cooperation beyond the boundaries of neighboring countries and officially acknowledges the rights of regions located far from each other 'to engage in discussions and to draw up, within common fields of responsibility, interterritorial cooperation agreements, in accordance with the procedures laid down in their statutes, in conformity with national law and insofar that such agreement are in keeping with the Contracting Party's international commitments' (Protocol No. 2 to the European Outline Convention on Transfrontier Cooperation between Territorial Communities or Authorities concerning interterritorial co-operation, 1998). Fifthly, in 1990, the EU launched the INTERREG as the cross-border cooperation assistance program covering third countries. Due to substantial financial support, it brought cross-border cooperation from cooperation between the regions of two-three neighboring countries to the cooperation in the framework of macroregions. The first stage of the program lasted from 1990 till 1993. The total funding amount was only € 1 billion and was directed only at the support of cross-border cooperation. The first projects covered various socio-economic development domains, including transport and communications (45%), business and tourism (28%), environment (10%), rural areas (6%), training and other activities (11%). The EU Member States had to co-fund the projects in the amount of 50%. The EU opened 31 operations programs under INTERREG for three types of regions: operation programs for regions on internal and external borders; Objective 1 EU regions and core regions; regions with experience of local stakeholders' participation in cross-border cooperation and bodies, as well as regions with more centralized approach to cross-border cooperation (Looking back on 25 years of Interreg and preparing the future of territorial cooperation, 2015).

The attempts made by the EU to secure its residents the implementation of the right to freedom of movement, including free movement of the labor force, have contributed to the creation of a network of regional employment services. On 22 October 1993, the European Commission adopted the Decision on the implementing of Council Regulation (EEC) Nº1612/68 on freedom of movement for workers within the Community as regards, in particular, a network entitled Eures (European employment services) (Commission Decision, 1993). The network operates as an agency that offers the database of vacancies, labor and accommodation conditions, and tools to search for a job in the EU, European Economic Area, and Switzerland. This year the first formalized cross-border Eures partnership emerged (a few non-formalized partnerships had been functioning before, e.g. between the regions of Belgium and the Netherlands, which later became the cross-border Eures partnership Scheldemond). It was the EURESChannel partnership (originally called EURES HNFK), which included the regions of Hainaut and West Flanders in Belgium, Nord-Pas-de-Calais in France, and Kent in the UK. It has evolved historically because

Flanders has a low unemployment level, many SMEs, and many job offers, unlike Hainaut and Nord-Pas-de-Calais. Traditionally, people from France used to go to Belgium for work, mostly in the textile industry. And the youth from France and Belgium temporarily work in Britain, including with the view to improve their knowledge of English language (European Commission, 2009).

All these changes and achievements in legal, institutional, and financial frameworks of cross-border cooperation have contributed to combining specific advantages of economically different regions in one location and have generated the emergence of another form of cooperation between regions across borders – related to production. In 1991, a procedure of creating the first cross-border industrial park (Access Industrial Park) started with signing the respective agreement between Austria and former Czechoslovakia. Such form of activity offers access to two markets of labor, procurement, and sales markets, opportunities to use cross-border production flows based on simplified procedures, the capacity of the qualified and cost-effective workforce, and beneficial location in the center of Europe in a Vienna-Prague-Munich triangle. By 1995, the construction of necessary infrastructure had been finalized on both sides of the border. In 1996, an incubator and advisory center began operating on the basis of the park. In the first decade of the 2000s, the biomass power plant, cross-border long distance heating network, and photovoltaic power plant started operating here (Access Industrial Park, 2021). The industrial park covers the Austrian Gmünd and Czech České Velenice.

The late 1990s marked the appearance of another production-related cross-border cooperation form – cross-border clusters. Two clusters formed in 1997 – Bio Valley located in the center of Europe combining companies, research institutions, economic development agencies, and NGOs of adjoining regions in France, Germany, and Switzerland and Medicon Valley in Denmark and Sweden that was boosted after the Øresund Bridge was opened in 2000 to reduce the distance between Copenhagen and the Swedish city of universities Malmö – were the first and among the largest. Both clusters operate in pharmaceuticals and medical technology.

### Period of intensified development of cross-border cooperation with neighboring countries. Further development of cross-border cooperation forms

A new era of cross-border cooperation development in the EU started in March 2003 with the Commission issuing the Communication to the Council and the European Parliament entitled Wider Europe – Neighbourhood: A New Framework for Relations with our Eastern and Southern Neighbours (Communication from the Commission to the Council and the European Parliament, 2003). The Communication provides that 'the EU should aim to develop a zone of prosperity and a friendly neighbourhood – a 'ring of friends' - with whom the EU enjoys close, peaceful and co-operative relations. It determines that 'in return for concrete progress demonstrating shared values and effective implementation of political, economic and institutional reforms' the neighboring countries

'should be offered the prospect of a stake in the EU's Internal Market and further integration and liberalisation to promote the free movement of – persons, goods, services and capital' (European Commission, 2003).

On the basis of this Communication, in 2004, after its enlargement, the EU launched a new European Neighborhood Policy (ENP) as a platform for regulation of relations with 16 eastern and southern partners to achieve the closest political association and the strongest economic integration. The policy is dynamic, it was reviewed several times in 2011 and 2015 and adjusted following the changes in socio-economic development and political changes on external borders. The policy stipulates signing the Action Plan with each country that can further evolve into Association Agreements and allocation of respective financial assistance. The European Neighbourhood and Partnership Instrument (ENPI) is the tool to provide financial assistance under the ENP. The Instrument was launched in 2007 to replace MEDA and TACIS.

In 2007, the European Territorial Cooperation (ETC) officially became one of three objectives of the European Cohesion Policy. In this period, the policy was divided into three directions with the respective funding provided by European Regional Development Fund – cross-border cooperation known as INTERREG A that stipulates the development of cooperation between NUTS III regions from at least two EU Member States located directly on the borders, transnational cooperation known as INTERREG B that covers the regions from several EU countries that form larger regions, e.g. Baltic Sea, Central Europe, Alpine Space, etc. (13 programs in total in 2007), and interregional cooperation known as INTERREG C that constitutes a pan-European level and covers all EU countries and regions beyond. INTERREG C for 2007-2013 had three network programs - URBACT II (EU, Norway, and Switzerland) for the development of metropolitan areas, ESPON (EU, Norway, Switzerland, Iceland, and Lichtenstein) for the spatial development of regions, and INTERACT II for education and training of managers and administrators to implement the cooperation programs. Recognition of European Territorial Cooperation as the EU development objective boosted the emergence in 2007 of two more tools for regional development stimulation along the external borders - IPA CBC (EU entry preparation instrument consolidating several previous programs (Phare, ISPA, etc.) and ENPI CBC (neighborhood policy instrument) mentioned before.

Since the end of the first decade of the **XXI** century, the processes of macroregional strategies development for key regions have begun in the EU to consolidate efforts of European countries in overcoming political, economic, humanitarian, and environmental threats and boost socio-economic development. For that matter, a macroregion is defined as 'a grouping of entities covering several Member States or regions, which share certain characteristics and which come together to cooperate on matters of common interest'. In 2009, the first macroregional strategy for the Baltic Sea region was launched. Now there are 4 of them – two around maritime areas (Baltic Sea, Adriatic, and Ionian regions), one around a river basin (Danube region), and another around mountain range (Alpine region). Several features differ macroregional strategies from ordinary cross-border cooperation between neighboring regions. In the first place, it is about geographical scales

and features – they include large areas located close to large rivers, seas, or mountain ranges. Secondly, the strategies are multilateral – they cover at least three EU countries. Thirdly, they are established at the behest of the European Council and regulated by the EU legislation in correspondence with the Action Plan approved by the European Commission and the Council of the European Union (Wassenberg, 2015).

Another very important event for the evolution of cross-border cooperation in Europe happened in 2006 when a legal framework was developed for the existence of another tool of institutional cooperation across borders before the beginning of the 2007-2013 program period. It outlined the opportunities for the functioning of cross-border cooperation groupings with legal personality. Namely, in July, the Council of the European Union and the European Parliament adopted Regulation №1082/2006 on a European grouping of territorial cooperation (EGTC) (Regulation (EC), 2006). The fact that the Regulation was adopted is considered an important step towards the development of territorial cooperation because it provides an opportunity for participation of entities of different levels (central, regional, local authorities, etc.) with broad capacities to develop and implement the territorial cohesion policy on cross-border, transnational, and interregional levels. Moreover, these cross-border structures have become the first institutionalized forms of cooperation that allow for the participation of NGOs and business entities, thus promoting the representation of interests of more parties. The Regulation outlines the main features of these new cooperation forms like their cross-border nature, legal personality, availability of headquarters located at the territory of the EU, opportunity for members to determine the tasks, activity areas, and budget in convention or statute of the grouping, etc. The Regulation stipulated that an EGTC should have at least two EU Member States as its members.

Eurometropole Lille-Kortrijk-Tournai founded on 28 January 2008 on the French-Belgian border became the first EGTC. The long-lasting cooperation (since 1991) of 14 adjoining regions in the framework of the Cross-Border Permanent Interurban Conference (COPIT) evolved into a new form, which significantly fostered the cooperation due to simplified organization procedures and access to EU funding (European Committee of the Regions, 2021). In 2002, a French-Belgian Treaty for cross-border cooperation between local authorities was signed. In 2005-2006, a Working Group composed of 12 members of the French and Belgian Parliaments (6+6) started operating, and a proposal to build up cross-border governance with 14 members was submitted. After Regulation №1082 had been adopted, the CBC participants decided to acquire this new form, and on 19 March 2007, they signed the Common Declaration for the setting up of the Lille-Kortrijk-Tournai Eurometropole (EGTC). In January 2008, the first Assembly meeting was held, and this day is considered the day of founding the first ever EGTC (Pargneaux, 2003).

The promising outlook and good examples of EGTCs urged the Council of Europe to promote the development of similar entities in countries that are not EU Members. Therefore, in late 2009, Protocol No. 3 to the European Outline Convention on Transfrontier Co-operation between Territorial Communities or Authorities concerning Euroregional Co-operation Groupings (ECGs) was adopted (Protocol No. 3 to the

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European Outline Convention on Transfrontier Co-operation between Territorial Communities or Authorities concerning Euroregional Co-operation Groupings (ECGs), 2009). It can be signed by the states that have signed the European Outline Convention on Transfrontier Co-operation between Territorial Communities or Authorities. The Protocol provides that territorial communities or authorities, Member states of the Council of Europe, and other legal persons established for the specific purpose of meeting needs in the general interest, not having an industrial or commercial character, may be the ECG members. Territorial communities or authorities of a state non-party to the Protocol, which shares a border with a party which is or will become the state in which the ECG has its headquarters, may be the ECG members. These groupings, same as EGTCs, have legal personalities and have the most extensive legal capacity accorded to legal persons under the national law. Like EGTCs, they also should operate based on statutes and agreements.

Three new regional forms of cooperation emerged in the late 2010s in the framework of the European Neighborhood Policy. They are designated to boost the socio-economic development of the countries in large geographical areas of Europe, preserve their peculiarities, and overcome the problems generated by the geographical conditions of these areas, including through cross-border cooperation. First, in 2008, the Black Sea Synergy was launched to detect the opportunities and challenges for the areas surrounding the Black Sea that need coordinated actions on a regional level in energy, transport, environment, migration, and security domains. It was launched in Kyiv at the Conference between EU and Black Sea Foreign Affairs Ministers (European Commission, 2021). The Union for the Mediterranean was launched the same year. Overcoming the depopulation, construction of roads and railways, joint prevention of and reaction to natural and industrial disasters, and development of alternative energy sources and small entrepreneurship were determined the major cooperation areas (The Union for the Mediterranean, 2021). In 2009, European Commission decided to promote cooperation in Eastern Europe as well, in the framework of Eastern Partnership, based on signing the agreements on free trade areas with possible visa regimen liberalization. Promotion of democracy and good governance strengthening the energy security, promotion of sector reforms and environment protection, additional funding for projects to reduce socioeconomic imbalances and increase stability in the countries of Eastern Europe and South Caucasus (Armenia, Azerbaijan, Belarus, Georgia, Moldova, Ukraine) were determined as main cooperation priorities (European Union external action service, 2021).

### The recent trends in cross-border cooperation

In 2013, European Union reacted to the active creation of EGTCs by adopting the Regulation 1302/2013 amending Regulation (EC) No 1082/2006 on a European grouping of territorial cooperation (EGTC) as regards the clarification, simplification and improvement of the establishment and functioning of such groupings (Regulation (EU), 2013). The main amendment was that the third countries were allowed to participate in the groupings if they share a common land border with a Member State or are eligible under

another cross-border, sea-crossing, or sea-basin cooperation programme, including where they are separated by international waters.

Overall, the new Regulation offers 4 major changes compared to the previous one (European Union, 2015):

1. EGTC establishment procedure becomes simpler and faster due to formal approval after 6 months from the announcement of the fact of EGTC establishment in all countries, the entities from which are the EGTC participants.

2. EGTC establishment agreement becomes the major document that regulates the issues related to staff, taxation, procurement, and other aspects of their functioning.

3. Public undertakings defined in Directive 2004/17/EC (bodies governed by public law) and undertakings entrusted with the operation of services of general economic interest are granted an opportunity to participate in EGTCs.

4. The possibility of participation of entities from third countries is specified, namely, an EGTC made up of members located on the territory of only one Member State and of one or more third countries (the participants had to represent at least two EU Member States before).

Such amendments generated the emergence of the first EGTC with the participation of the third country in 2015, namely Tisza EGTC between Szabolcs-Szatmár-Bereg megye and Kisvárda municipality in Hungary and Zakarpatska oblast of Ukraine.

In 2014, the European Parliament and the Council of the European Union adopted the Regulation (EU) №232/2014 establishing a European Neighbourhood Instrument (ENI) to replace ENPI 2007-2013 - the previous financial instrument of the European Neighbourhood Policy (Regulation (EU), 2014). This step was made to eliminate the flaws of the previous instrument. Namely, ENPI used the same approach to funding the crossborder cooperation programs with participation of regions from all countries covered by the Instrument, i.e., African, Asian, Eastern European countries. Meanwhile, each of these groups of countries has its political and socio-economic features. Moreover, some programs weren't always territorially well-developed, they included several countries with a much too different set of problems to be solved by joint projects, or they stipulated the funding directions that didn't reflect the real situation in cross-border regions. And overall, the ENPI goals of strengthening democracy, maintenance of human rights, and civil society development for South Mediterranean or reforming in Eastern Europe were achieved only partially. Therefore, a new ENI divided some large less efficient programs into smaller ones. For example, one of the Programs covering Ukraine - Romania-Ukraine-Republic of Moldova (ENPI 2007-2013) functions as two programs under ENI -Romania-Ukraine and Romania-Republic of Moldova.

The recent decade of cross-border cooperation in Europe is also characterized by active EU policy in bringing the clusters beyond national borders to generate new clusters or partnerships. In 2014, the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions entitled For a European Industrial Renaissance was issued (Communication from the Commission to the Council, the

European Economic and Social Committee and the Committee of the Regions, 2014). It emphasized clusters as the tools to promote and simplify cross-sector and cross-border cooperation, as well as methods to develop and internationalize SMEs. The Communication fostered the development of a new EU cluster policy direction - cluster internationalization through intensification of the clusters and business entities network cooperation across borders and beyond the sectors of their activity both in Europe and with the third countries. For this purpose, several initiatives were launched, in particular the European Cluster Collaboration Platform, which provides the companies the opportunity to represent themselves, exchange experience, and search for partners. Under its auspices, various international events are organized to search for partners from EU countries and third countries, often in the third countries. For instance, such an event was held in Ukraine in March 2018 (European Cluster Collaboration Platform, 2021). Moreover, the European Commission helps creating the European Strategic Cluster Partnerships through financial initiatives under the COSME (Clusters Go International) to encourage EU clusters to cooperate across borders and among sectors, especially in new types of activities, and jointly develop strategic outlook and common goals regarding third markets, thus cementing the competitive positions of small and medium companies on a global scale. It provided the ground for the emergence of new initiatives to bring European clusters to cross-border and international levels, including CLUSTRAT 'Boosting innovation through new cluster concepts in support of emerging issues and cross-sectoral themes' under the INTERREG IVB CENTRAL EUROPE (18 partners from Austria, Czech Republic, Germany, Hungary, Italy, Poland, Slovakia, and Slovenia) - the project that stipulates the development of joint strategy and recommendations on joint activities on transnational and macroregional levels (Union of Slovak Clusters, 2021), Vanguard Initiative for New Growth through Smart Specialisation (governments from 26 European regions) that aims to transform regional partnerships and clusters defined by the smart specialization strategies into the global-level clusters (The European Secretariat for Cluster Analysis, 2016), and Innovation Express program under the Baltic Sea Region (BSR) Stars programme supporting transnational projects implemented by cluster organizations of participating countries (Denmark, Finland, Iceland, Lithuania, and Norway) (BSR Stars, 2018).

The development of cross-border smart specialization strategies is the most recent CBC development tool. Many European regions tried to attract EU funds in the last two program periods to examine the opportunities for cooperation with neighboring regions to disclose the innovative and scientific capacity of their territories. It is worth mentioning the KNOWHUB project (Poland, Hungary, Spain, France, Austria, Germany, Bulgaria) under the INTERREG IVC that fostered the exchange of knowledge and experience for more efficient implementation of smart specialization strategies (KNOW-HUB, 2021) and the TR3S project implemented by the entities from Finland, Germany, Poland, Romania, Italy, Estonia, Great Britain, Hungary, and Spain under the same program, which aimed to trace the unique features of each region that reflect its competitive advantages (Online S3, 2016). France and Spain implement the aCCeSS project – 'A Crossborder Cooperation for
**Smart Specialisation' under the INTERREG Poctefa** 2014-2020 to boost the transfer of knowledge and experience from research institutions to entrepreneurship to expand innovative capacity (Interreg Poctefa Access, 2020). In the 2007-2013 program period, Greece and Bulgaria studied the competitive advantages of neighboring regions in these countries and their innovative and scientific capacities to develop grounds to write joint strategies oriented on innovations and entrepreneurship in the following program periods in the project entitled Smart Specialization (EU programs database, 2015).

Spain and Portugal are most successful in this area as their regions created the first ever cross-border smart specialization strategy (RIS3 Galicia, 2018). In 2014, with the view of more efficient use of various financial sources, including regional operational programs and cross-border cooperation programs, the governments of Galicia (Spain) and Norte (Portugal) started the joint process of strategic planning. They created a cross-border Work Group consisting of the representatives of the Galician Innovation Agency and the Regional Coordination and Development Commission of the North. The Work Group developed a joint view of further development and its goals harmonization, as well as common priorities, necessary activities, and the system of cooperation efficiency monitoring.

Over the 30-year history of cooperation between these regions in the framework of Galicia-North Portugal Euroregion preceded the development of the strategy. It was among the first to acquire legal personality and function in the forms of European Grouping of Territorial Cooperation (EGTC). Local authorities and participants of crossborder cooperation are also members of another 2 EGTCs. Since the start of the cooperation, a lot of joint projects and activities have been implemented in innovations, science, and business, thus developing a necessary ground to detect similar features and priorities for writing a strategy. Namely, the joint educational platform consolidating 6 universities was established, the cross-border center for development, cooperation, and business with legal personality CECOTRAN was launched to establish a strong and sustainable network for SMEs cooperation, enabling the exchange of information, experience, and any joint development initiative, and the textile cluster was created. The need to write a joint smart specialization strategy was emphasized in the 2014 Euroregion's Joint Investment Plan in the framework of the Priority Axis 1: An innovative Euroregion advocating innovation and transfer. Based on the analysis carried out on the second stage of writing the strategy (following the Guidelines for Developing a Smart Specialisation Strategy) and diagnostics carried out in the framework of the preparation of regional smart specialization strategies of Galicia and North Portugal, 6 strategic cooperation areas were allocated for these regions, including renewable energy (marine and biomass); agri-, bioand food industry; processing industry; aeronautics; creative industries, ICT, and tourism; and health- active ageing.

Currently, an emergence of a new instrument to finance external activity – Neighbourhood, Development and International Cooperation Instrument (NDICI) – finalizes the evolution of cross-border cooperation in the EU. The cross-border cooperation programs that have been operating under the European Neighborhood Instrument (ENI)

are now integrated into the European Territorial Cooperation (Interreg) for 2021-2027. Its main idea is that most patterns of territorial cooperation between the EU Member States are allied to cooperation with the third countries. It is worth mentioning that the Instrument does not simply replace the ENI but incorporates most funding instruments that have been operating in the EU in the previous program periods (11 out of 20), including the European Development Fund (EDF), European Instrument for Democracy and Human Rights (EIDHR), etc. (Jones et al., 2018). The Instrument provides that the ENI programs are divided into two types of programs – for the countries that have land borders with the EU, and for those with maritime borders (ENI CBC Med, 2018). The total planned funding is –  $\mathfrak{E}$  22 billion. The funds are to be divided among 7 priorities: promoting enhanced partnership towards social and economic prosperity, people-to-people contacts, enhancing regional cooperation, mobility and migration management, security and stability (EU neighbors, 2018).

Figure 1 presents the main stages of cross-border cooperation evolution in the EU.

#### Conclusions

The cross-border cooperation in the EU is continuously changing and evolving. The community tries to react timely to political and socio-economic changes in the Member States and neighboring countries and modify its approaches to create the best possible cooperation conditions. On the one hand, a legal framework of the cross-border cooperation development policy is getting improved, e.g. adoption of the Regulation 1302/2013 that has boosted the establishment of EGTCs with the third countries, and on the other hand, the policy tools are changing to react to specific problems emerging in the process of cooperation more efficiently, e.g. establishment of the European Neighborhood Instrument, which has replaced the previous less efficient one. Such an active EU position, especially in the last 30 years, has boosted various cross-border cooperation initiatives from joint strategizing the development of cross-border regions to establishing cross-border institutions with legal personality, and numerous financial tools to secure their activity.





Source: developed by the author

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# Antidepressant component of regional competition policy in the context of cross-border cooperation

#### Abstract

The article outlines the concept of depressed areas in the context of cross-border and interregional cooperation, presents different approaches of Ukrainian and foreign scholars to the definition of "depressed region". The regional criteria of depression in Ukraine in accordance with the current Ukrainian legislation are determined, the experience of Poland, Hungary and Slovenia in differentiation in terms of the level of their socio-economic development is considered. On the example of population indicators of Ukraine, the processes of depression in certain regions of the state are demonstrated, and an attempt is made to explain the reasons for this situation. An overview of the current approach to the classification of regions of Ukraine from the point of view of differential regional policy is outlined. The completion of the process of creating united territorial communities is emphasized. The key state documents on regional policy are considered, in particular the comparison of prices and sources of financing the State strategy of regional development for 2020-2027 and the State program of development of cross-border cooperation for 2021-2027 is made. Possible ways to solve the problems of depression in the regions of Ukraine are considered.

**Key words**: depressed territories, cross-border cooperation, regional policy, functional territories, population.

#### Introduction

Studies of the origin, course and cessation of depression of spatial development are important and relevant in a transformational economy. These problems become especially relevant with the strengthening of integration processes in Ukraine in the domestic and international dimensions. With the reform of decentralization of power and the revival of European integration, there is a need to revise and update approaches to the classification of regions by level of socio-economic development and mechanisms for antidepressant policy.

#### **Cross-border and interregional cooperation**

Here are the definitions of the following key concepts:

**Cross-border cooperation** - any joint action aimed at strengthening and deepening good neighborly relations between territorial communities or authorities under the jurisdiction of two or more Contracting Parties, as well as concluding for this purpose any necessary agreements or arrangements.

*Interregional cooperation* is a form of interstate relations that involves the integration of border regions of neighboring countries and territories that do not have a

common border and the implementation of transregional programs and projects with the support of central and local authorities.

As you can see, these concepts contain both common and distinctive features. In particular, the process of integration is inherent in both types of international cooperation, but interregional cooperation does not necessarily imply the existence of a common border for the regions. In both cases, the region can act not only as an administrative unit of a state, but also as a full-fledged international economic relations entity.

# Definition of the concept and criteria of depressed regions

Let's take a closer look at the object of antidepressant policy. The discussion on the definition of "depression" at the level of the region or territory has been going on for over two years.

I. Vakhovych and M. Kupyra examine the above-mentioned concept of the economic category "depressed region", summarizing Ukrainian and foreign scientific publications on the interpretation and definition of the essential characteristics of the concept of "depression". Among the important regions, the authors include reducing the suspension of growth in gross regional product or creating a depression expanded from resources, high unemployment, low incomes, reduced competitiveness and investment attractiveness of the territory. Also depressed is considered as incapable of overcoming the internal problems of development without the support of the state region. It should be noted that almost all regions of Ukraine fall under the criteria.

R. Temirliev uses the term "regional depression" considering the management of depressed areas as a socio-economic category with an element of application of general and special rules to all objects and institutions of the depressed "socio-economic system", in fact going beyond territorial boundaries. The scientist substantiates the features of a special legal regime to overcome depression.

I. Zhilyaev draws attention to the ambiguity of the interpretation of "depressed regions" and the methodological approach of G. Haberler, according to which "depression is a state of the economy when the actual consumed or produced income and employment fall or their level is below usual, while lower resources, production capacity and labor are not fully utilized". At the same time, I. Zhilyaev similarly emphasizes the special legal regime of overcoming depression.

In addition to the above-mentioned indicators of spatial depression, it is necessary to take into account the territorial – transport accessibility and remoteness from the centers of economic activity, regardless of their relative size. To some extent, this factor is related to the category of mobility. The transport factor is one of the largest in the process of emergence and development of depression in rural settlements, as well as small towns in mountainous areas and in agro-industrial regions of Ukraine. Mitigating or fully determining the impact of this factor is essential for overcoming depression in Central and Eastern Europe, the Baltic States, and, to some extent, Belarus. Also, the transport

component itself is the basis for the development of depression in the regions of the Russian Federation.

The publication of Russian scientists should be considered in more detail. G. Periv studies the problem of depression in the Eastern Donbass, summarizes the approaches of scientists of think tanks and groups and interprets depression as a decrease in production, low incomes and high unemployment.

In the process of evolution of the official interpretation of this concept in the Russian Federation, the following classification of regions was used: needy, especially needy, northern, equated to northern, donor regions, recipient regions. The official criteria for determining the depressed region based on the ratio of the estimated excess of expenditures over revenues to the sum of expenditures of the Russian Federation were framed and the subsequent selection of regions by the amount of excess or lack of funds for socially important expenditures was carried out.

Essentially similar approaches to the typology of depressed regions in the Russian Federation are given by S. Surkova and V. Shusharina with an emphasis on the connection of depression with the classical provisions of the theory of cycles of "long waves" of N. Kondratiev, as well as with the Russian specifics, when the decline in production occurs without lowering prices in conditions of significant inflation.

The above-mentioned scientists distinguish the following types of depressed regions: purely depressed, old industrial, agro-industrial, mining, background, crisis. The authors propose to use the features of the methodological approach to typology for reproduction and also some indicators of depression (the share of socially-oriented industries, living standards of the population, including cases of migration processes). According to this research, there are acquiring (renting) regions with a share of natural rent in income more than 70%, productive regions with the rent share less than 50%, service regions with the share of services in Gross Regional Product more than 50%.

Foreign scholars study depressed areas mainly in the context of the genesis of socioeconomic growth, stagnation and decline. Socio-economic processes and phenomena in problem areas reflect the provisions of theories of growth and location of productive forces, which explain the causes and consequences of economic dynamics. It should be noted that depressed areas are always considered in comparison with developed areas to establish the interaction and patterns of development.

In Ukrainian legislation, the criteria for classifying areas as depressed are defined in Article 9 of the Law of Ukraine "On Stimulating the Development of Regions". These include:

- the dynamics of the average volume of gross regional product per capita over the past five years;

*– for industrial regions*: increase in the registered unemployment rate and decrease in the number of employed in industry for the last three years, decrease in the volume of sold industrial products per capita, decrease in the average monthly wage compared to the average development indicators in this group;

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*– for rural areas* - a decrease in density and natural population growth rate over the past three years, a decrease in sales per capita, a decrease in the average monthly wage compared to the average development in this area;

*– for cities of regional and national importance* - an increase in the level of registered unemployment over the past three years, a decrease in the level of average monthly wages compared to the average development in this group.

In view of the above, we propose the following definition of depressed regions - regions with low rates and negative dynamics of socio-economic development, imperfect economic structure, low level of investment activity, low quality of life and inability to reproduce.

It is important that depressed regions differ from underdeveloped ones, because with lower indicators of socio-economic development compared to the national average, in the past these regions were developed, and in some economic activities they occupied leading positions.

Means of state regulation of the development of depressed regions have significantly expanded since the adoption of the Law of Ukraine "On Stimulating the Development of Regions", according to which a set of legal, financial, organizational, administrative, scientific and other measures is provided for both developed and underdeveloped regions.

It has led to the conclusion of regional development agreements between the Cabinet of Ministers of Ukraine and regional self-government bodies, the purpose of which is to achieve a balance of national and regional economies and social and environmental interests set out in state and regional development strategies. However, the socioeconomic underdevelopment of depressed areas deepens the differentiation of regions and inhibits the development of the national economy as a whole. For this reason, in addition to local mechanisms, the law also provides for those that should cover and stimulate all regions of Ukraine.

# International experience of differentiation of regions according to the level of socio-economic development

In the context of cross-border cooperation, it is important to take into account the experience of neighboring countries in classifying regions by level of socio-economic development, as different states may identify different criteria, which in turn may define the formation of further cooperation. The experience of Poland, Hungary and Slovenia is considered.

In the Republic of Poland, the concept of "support territory" where there are certain development problems is enshrined in law. In addition, underdeveloped areas and areas with the least favorable conditions for development have been identified.

In Hungary, the following is highlighted:

• Underdeveloped regions where the profitability of the economy, the level of infrastructure development and social indicators are much lower than the national average;

• Regions to be restructured, where unemployment is higher and the share of employment in industry and the level of industrial decline are higher than the national average;

• Agricultural regions in which the share of those employed in agriculture predominates in the structure of employment;

• Border regions in unfavorable conditions of proximity to the border with negative impact.

In Slovenia, the Law on Balanced Regional Development defines areas (municipalities) with special development problems, which are divided into three groups:

• Economically weak municipalities, where taxable gross income per capita is less than or equal to 80% of the national average;

• Municipalities with structural problems and high unemployment, where its rate and the share of rural population exceed the national average by 20%;

• Municipalities with limited capacity and limited development. This group includes areas where there is a decrease in population and those located in the border area.

As you can see, Ukrainian and foreign approaches are based on the indicators of population size, structure of employment, unemployment, and gross income per capita. Let's take a closer look at some of these indicators in Ukraine and its regions.

# The population of Ukraine in the context of antidepressant policy

In 1993, the population of Ukraine reached the highest level - 52.2 million. But in 2001, the number of citizens decreased by 7.2% compared to 1993. According to the State Statistics Service, the population of Ukraine as of January 1, 2020 is 41.9 million people. A further decrease in the indicator is expected due to negative natural population growth and a high level of external migration.

According to the State Statistics Service of Ukraine, 70% of the population lives in cities, of which 30% - in small and medium-sized cities with a population of less than 100,000 people. Such a declining population is becoming an objective precondition for the potential depression of small and medium-sized cities. Labor migration from small cities of Ukraine takes place mainly to large cities, but the visa-free regime has not changed the rate of departure of Ukrainians abroad for employment.

The population dynamics of small and medium-sized cities as of 01.01.2020 is characterized by unevenness in the regional dimension. The cities of Chernihiv (-2.36%) and Kirovohrad (-2.15%) oblasts showed the largest rates of reduction. The least reduction is recorded in Donetsk (-0.09%), Dnipropetrovsk (-0.19%) and Kharkiv (-0.27%) regions. The only region with a positive increase in the population of small towns is Kyiv (+ 1.55%), where the satellite cities of Kyiv – Irpin, Bucha, Vyshhorod, Vyshneve and Boryspil – were actively populated. At the same time, Kyiv region is the most disproportionate – here is the leading city in terms of growth in 2016-2018 – Irpin (population increase by 13.3%) and the outsider city – Tarashcha (population decrease by 4.1%).



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Source: based on the data of the State Statistics Service of Ukraine



**Figure 2.** Distribution of the population of Ukraine by cities, as of January 1, 2018 Source: based on the data of the State Statistics Service of Ukraine

There are several reasons for such dynamics of population-related processes in Ukraine: proximity to the war zone, the decline of the economy and infrastructure, lack of jobs. It should be noted that the reduction of labor resources deepens the unfavorable processes in the economy of the regions, which in turn leads to an increase in depression. This situation acquires the characteristics of a "vicious circle". As a result of objective and subjective direct threats, the number of depressed regions is growing.

At the present stage of development there are differences in the levels of depression in some regions of Ukraine. The largest concentration of depressed subregions and cities is in the western and northern regions of Ukraine, where, along with traditionally low rates of industrial development, negative trends in the industrial and agricultural sectors are noticeable.

The structure of crisis industries in a given area is the main cause of depression. The causes of depression can also include privatization processes, deteriorating product competitiveness, deteriorating raw material base, the emergence of new markets, consumers and others.



**Figure 3.** The population of Ukraine in terms of regions for the period 2018-2020 (excluding OTDLR, Crimea and the city of Sevastopol)

Source: based on the data of the State Statistics Service of Ukraine

# Changes in approaches to the development and implementation of state regional policy

The State Strategy for Regional Development for 2014-2020 proclaimed the provision of assistance to underdeveloped regions through financial support and declared the depressed areas as policy objects that did not receive de facto assistance.

In contrast to this document, the current State Strategy for Regional Development for 2021-2027 declares that determining the type of territories that require the use of differentiated mechanisms and instruments of state support is among the elements of regional policy. The following types are allocated among such territories:

- Agglomerations – territorial clusters of settlements (primarily cities), forming integral socio-territorial formations with a population of over 500,000 people.

- Large cities – cities with a population of 100 thousand people and more.

- Medium-sized cities – cities with a population of 50,000 to 100,000 people.

- Small towns – cities with a population of up to 50,000 people.

- Monofunctional cities – cities whose development is associated with the implementation of one production function and which are referred to the centers of coal mining, ore and non-ore raw materials, chemical and oil refining industries. Due to the decline of specialized industries in these cities, there are active depopulation processes, deteriorating environmental conditions, rising unemployment.

- Rural areas in unfavorable conditions – territorial communities that simultaneously have such characteristics as rural population density below 15 people per square kilometer, distance to nearby cities with a population of more than 50,000 people more than 30 minutes by car (approximately 40 kilometers by road with hard surface), the population decreased in the period 2008-2018 by more than 30 percent.

- Mountain territories of the Ukrainian Carpathians – territorial communities located in mountainous areas, which include at least one settlement with the status of mountain in accordance with the Law of Ukraine "On the status of mountain settlements in Ukraine".

- Macroregion "Azov-Black Sea" – part of the territory of Ukraine adjacent to the sea coast or the coast of sea bays and estuaries within 30 kilometers of accessibility.

- Areas of influence of international transport corridors – part of the territory of Ukraine within 15 kilometers of access to international public roads of national importance.

- Border regions – regions that are directly adjacent to the state border.

- Border areas in unfavorable conditions – territorial communities located near the border with states, relations with which provide an additional level of security of the state border and restrictions of the movement of goods and people, hindering the development of local economy and investment (Russia, Transnistria, Moldova) within 30 kilometers of accessibility, or the line of demarcation in accordance with the Law of Ukraine "On temporary measures for the period of the anti-terrorist operation".

- Temporarily occupied territories of Ukraine - parts of the territory of Ukraine

temporarily occupied as a result of armed aggression of the Russian Federation, within which in accordance with the Laws of Ukraine "On Features of State Policy to Ensure State Sovereignty of Ukraine in Temporarily Occupied Territories in Donetsk and Luhansk Regions" and "On Securing the Rights and Freedoms of Citizens and the Legal Regime in the Temporarily Occupied Territory of Ukraine", the armed forces of the Russian Federation and the occupation administration of the Russian Federation have established and exercise general control.



**Figure 4**. Border regions as a type of functional territories

Source: Regional Development Strategy for 2021-2027

- Protected areas and objects - territories and objects of the nature reserve fund, their functional and protection zones, territories and objects of the ecological network, territories of the Emerald Network, wetlands of international importance, biosphere reserves of the UNESCO program "Man and the Biosphere", UNESCO World Heritage Sites in accordance with the Law of Ukraine "On National Infrastructure of Geospatial Data".

In the context of cross-border cooperation and overcoming depression in the regions of Ukraine, this approach is of paramount importance because it takes into account the specifics of certain types of territories in the allocation of resources and the organization of state regional policy in general. Border regions and areas of influence of international transport corridors will play a key role in the issue of international cooperation.

State Program for the Development of Cross-Border Cooperation for 2021-2027							
	State Strategy of Regional Development for 2021-2027	State Program for the Development of Cross-Border Cooperation for 2021-2027					
Objectives defined by the document	Accelerating economic growth of regions, increasing their competitiveness through efficient use of domestic potential, creating new jobs, improving employment, creating conditions for repatriation of migrant workers, which will ensure rapid and sustainable growth of quality of life regardless of where one was born, where he lives now, and where he will live in the future	Increasing the level of competitiveness of the regions of Ukraine by intensifying and developing cross- border cooperation, promoting the establishment and deepening the economic, social, scientific, technological, environmental, cultural, tourist and other relations between the entities and participants of such relations between Ukraine and other states in terms of cooperation					
Sources of funding	Financial support is provided from the State Fund for Regional Development, state budget funds within budget programs aimed at the development of the relevant area in the regions, subventions, other transfers from the state budget to local budgets, local budgets, technical assistance and sectoral support of the EU, other international donors, international financial organizations, investors' funds, enterprises' own funds	Financial support for the program is provided within the funds allocated for the state and local budgets for the year, as well as from the State Fund for Regional Development, international technical assistance and other sources not prohibited by law					

# **Table 1.** Comparison of the State Strategy of Regional Development for 2021-2027 andState Program for the Development of Cross-Border Cooperation for 2021-2027

Source: State strategy of regional development for 2021-2027, State program for the development of cross-border cooperation for 2021-2027

# Eastern Partnership and Ukraine

A special place in the issue of cross-border cooperation is occupied by the Eastern Partnership program launched by the European Union in 2009. The initiative extends to 28 EU member states and the EU's six Eastern European neighbors - Azerbaijan, Belarus, Armenia, Georgia, Moldova and Ukraine.

The Eastern Partnership is based on the European Union's bilateral cooperation with partner countries and multilateral cooperation. The introduction of a multilateral dimension of political and expert dialogue is one of the main differences between the Eastern Partnership and the European Neighborhood Policy.

The multilateral dimension operates on four levels:

1. Summits with the participation of the Heads of State and Government of the EU Member States and Partner countries are held every two years.

2. Meeting of the Ministers of Foreign Affairs of the EU and partner countries held, as a rule, once a year in Brussels

3. Meetings devoted to assessing the progress made and discussing the prospects for further development of relations. Political approval of the main goals and work programs of the multilateral thematic platforms of the Eastern Partnership is underway.

4. Thematic platforms of the Eastern Partnership:

- Democracy, good governance and stability;

- Economic integration and convergence with EU policies. This thematic platform discusses trade and regulatory convergence, socio-economic development, the environment and climate change. In the context of overcoming the depression of the regions of Ukraine, this platform is one of the key values.

- Energy security;

- Interpersonal contacts.

# Solving Depression

I. Prokopa and L. Shepotko consider the main means of solving the problem of depression - rehabilitation of territories.

The set, sequence and target orientation of remediation in each case are individual, which requires a specially designed program. The choice of options for rehabilitation of depressed areas is the following:

- temporary preservation of a depressed state (external support funds mitigate the destruction without eliminating its causes);

- restructuring (transformation of economic potential, social unloading of the territory, elimination of the causes of ecological catastrophes, etc.);

- total rehabilitation or complete removal from the zone of depression of industrial facilities, resettlement of residents.

The system of mechanisms for rehabilitation of depressed areas in modern crisis, unstable conditions will become effective only in case of compliance with the following principles:

1) target orientation, i.e. mechanisms should not be indifferent to the object of regulation; it is necessary to take into account the current state and steadily ensure the achievement of certain goals of rehabilitation of depressed areas;

2) systemic impact – remediation mechanisms are designed so that they appear simultaneously with the exclusion of opposing components;

3) multilevel support – rehabilitation mechanisms must be built into the policy of state and local authorities, the areas of joint action and areas of exclusive competence must be separated;

4) concentration of resources – the rehabilitation mechanisms should provide for the accumulation and possible redistribution of resources through different channels;

5) precautionary actions, which provide that the rehabilitation mechanisms are designed to prevent new depressive situations;

6) efficiency, or implementation of the proposed measures in the current system of management procedures and decisions;

7) the reality that provides for the inevitable implementation of remedial measures, abandoning the effective urgent goals, the failure to achieve which worsens the situation;

8) controllability, i.e. carrying out the actions with possible monitoring of conformity of the received results with the certain purposes;

9) publicity, which provides for objective coverage of goals and procedures, a high level of discussion of controversial issues, disclosure of each step of rehabilitation, especially in the use of budget funds.

The final results of the monitoring of socio-economic indicators of the regions show that no territory falls under the current Law of Ukraine "On Stimulating the Development **of Regions**", i.e. there are no depressed regions in the country.

According to expert estimates of regions, in Ukraine there are regions with indicators worse than the national average. This is due to the fact that the criteria for determining the depression of the region are clearly defined by law, so no region has officially received such a status.

The authors suggest the following ways to solve the problem of depression:

- decentralization of the budget following the example of EU countries, where the regions are more financially independent and regional budgets are formed "from below" taking into account local needs. In France, the Czech Republic and other countries, the relationship between the center and the regions is based on contracts - regional development plans for several decades, which are developed within the national development strategy. A similar norm is enshrined in the Ukrainian Law "On Stimulating the Development of Regions", however, according to experts; it does not solve the problem of financial decentralization of the regions of Ukraine;

- application of the practice of creating free economic zones and territories of priority development in problem regions;

- development of small and medium business;

- increase of social responsibility of large business, due to strengthening the penalties to large enterprises for lack of development of social infrastructure. Note that large business is not interested in solving problems of development of depressed areas.

In our opinion, the main attention should be paid not so much to passive methods of maintaining depressed areas, as to stimulating business activity, building an effective economic model through:

- introduction of a mechanism to stimulate the social and economic development of depressed areas;

- expansion of the rights of the regions in solving the problems of market

transformations, social policy, increase of subventions from the state budget to local budgets;

- introduction of uniform social standards and effective mechanisms of social protection of the population regardless of economic opportunities and places of residence.

Overcoming significant differences in the level of socio-economic development of the regions requires:

- decentralization of executive functions, delegation of a significant part of them to the regions;

- balancing the powers between central and local executive bodies and local governments, developing an effective mechanism for monitoring the implementation of their delegated powers;

- strengthening local finances, completing the process of forming the ownership of united territorial communities, stimulating interregional international cooperation;

- creation of mechanisms for providing state support to depressed regions and stimulating socio-economic development.

# Conclusions

The harmonization of regional development and the promotion of maximum convergence of the economies of the regions as a prerequisite for the integrity, competitiveness and economic security of the state are important tasks of the state regional policy. It is difficult to create favorable preconditions for this in all regions, however, it is possible to level such preconditions on the basis of compliance with the following principles:

First, problem regions need to achieve the level of development of the most developed regions;

Second, there is a need for compensatory mechanisms for interregional differences or compensation for the negative effects of depression;

Third, it is important to focus on the socio-economic development of regions to improve the quality of life of citizens.

State regional policy of Ukraine should be based on the following basic principles: priority of national interests taking into account the peculiarities of regions, ensuring equal conditions for development of all regions, ensuring legality and stability in the distribution of powers between the center and regions which corresponds to the state regional policy.

Summing up, we note that the implementation of antidepressant policy will overcome the phenomenon of depression and increase the level of social, environmental and economic development of depressed areas by increasing the business activity of depressed areas, improving the quality of life in such regions, creating additional jobs, increasing employment.

As Ukraine is a full participant in international relations, in particular a country associated with the European Union and is planning to become a member of the EU in the

future, solving the problem of underdevelopment and overcoming economic divergence in Ukraine are the factors slowing down European integration processes.

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The development of transport services domain in the economy of Ukrainian regions: current challenges and European integration priorities

The development of transport services domain in the economy of Ukrainian regions: current challenges and European integration priorities

#### Abstract

Transport plays an important role in modern economy and society and substantially impacts economic growth and employment. The high road and rail network density, geographic location at the crossroads of main European and global transport routes are among the preconditions for enhanced development of freight transport in Ukraine. In 2019 the transport, warehousing, postal and courier activity domain accounted for 7.74% in the structure of Ukrainian GVA. Over two-thirds of provided services accounted for 6 regions (Kyiv city, Odeska, Dnipropetrovska, Kyivska, Lvivska and Harkivska oblasts). Over half of employed in transport, warehousing, postal and courier activity in Ukraine as of 2020 accounted for the 6 regions mentioned above. The authors analyze major trends in the development of transport services both on international and domestic Ukrainian markets and outline their role in boosting the regional economic development. The analysis of dynamics and structure of freight transportation and freight transportation.

Special attention is paid to the issues of domestic and EU transport legislation harmonization. A specific chapter of the EU-Ukraine Association Agreement (hereinafter - Agreement) addresses the development of sustainable transport systems, efficient and safe transportation, as well as intermodality and operational compatibility of transport systems (Title V. Economic and Sector Co-operation. Chapter 7. Transport).

Gradual harmonization of domestic and EU transport legislation is fostered by extended cooperation in the framework of the Eastern Partnership (EaP) transport panel, which is also oriented at securing the development of EaP regional transport panel compatible with the TEN-T network. Signing the Agreement on Common Aviation Area at the 23rd EU-Ukraine Summit (12 October 2021) and adoption of the Law of Ukraine "On Multimodal Transportation" (17 November 2021, Nº1887-IX) in terms of implementation of the Council Directive 92/106/EEC were essential incentives for the development of passenger and freight transportation. It will boost the volumes of freight transportation through the territory of Ukraine by national transport companies, the country's competitiveness in the global transport services market, and the development of transport corridors network.

**Key words**: regional economy, freight transportation market, Ukraine, EU integration.

#### Introduction

Transport represents one of the fundamental economic sectors in Ukraine. The high road and rail network density and favorable geographic location at the crossroads of main European and global transport routes are the preconditions for the accelerated development of freight transportation in the country. The use of the mentioned advantages, along with the development of logistics and transport infrastructure, will foster regional development and improve regional competitiveness on national and global markets. There is a clear connection between the higher logistics efficiency and the extent of participation in global value chains. The countries oriented on deeper integration within the global value chains should reduce technical and organizational barriers and promote trade in the first place, as well as develop the respective infrastructure.

Chapter 7 of the EU-Ukraine Association Agreement (hereinafter - Agreement) addresses the cooperation in the transport domain. It emphasizes cooperation with the purpose to develop transport connections to make them unconstrained, safer, and more reliable.

The 2021-2027 State Regional Development Strategy approved by the Order № 695 of the Cabinet of Ministers of Ukraine as of 5 August 2020 argues that "the powerful transit capacity" is among the competitive advantages of Ukraine and its regions because "... Ukraine is located at the crossroads of major transport routes and international transport corridors cross almost every region of the country; the areas under their impact gain an additional stimulus for economic growth. Ukrainian infrastructure includes 170,000 km of roads, 22,000 km of railways, 13 marine and 16 river ports capable to secure quick transportation of all types of cargo both in Ukraine and abroad".

Therefore, the promotion of the development and modernization of transport infrastructure, especially in the areas of international transport corridors' impact, will have a substantial effect on the economic and sustainable development of regions.

Yet, it is worth remembering that international transport corridors crossing the territories of consolidated territorial communities can have both positive and negative impacts. Administrative-territorial (the threat of breaching the integrity of territory as an administrative-territorial unit, historical-cultural areas, social links in the community), urban planning (the risk of chaotic development of areas located close to highways), and environmental (the risk of declining biodiversity, degradation, and environmental pollution) are the major directions of *international transport corridors' negative impact*. Infrastructural (the development of local transport network; the construction of junctions), economic (the development of nodal areas; the stimulation of cross-border cooperation in border areas), demographic (the development of new or the change of development directions for existing urban centers), and touristic-recreational (the development of nodal areas along the roads of local significance to improve the accessibility of resources) are among the major directions of **positive impact** on the development of territories. Therefore, it is important to create necessary conditions to strengthen the positive effect for the development of a certain area and minimize the negative impact (Prytula, Kalat, Kyryk, 2021).

#### Strategic priorities for the EU transport policy

It is not surprising that transport plays a significant role in today's economy and

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society and has an influence on growth and employment. According to the data of Joint Research Centre, the transport industry directly employs around 10 million people and accounts for about 5% of Gross Domestic Product (GDP). Effective transport systems are fundamental for the European companies' ability to compete in the world economy. Logistics, such as transport and storage, account for 10-15% of the cost of a finished product for European companies. The quality of transport services has a major impact on people's quality of life. On average, 13.2% of every household's budget is spent on transport goods and services. Nevertheless, transport also represents an important source of CO2 emissions (EU SCIENCE HUB, 2021)

In order to transform the transport sector, the White Paper "Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system" was approved.

In line with Transport Roadmap that introduces the structural changes to transport sector, the EU transport policy research focuses on:

- analysis of efficiency of the whole transport system, especially, influence on transport demand, costs, emissions, congestion, accessibility as well as economic impacts;
- analysis of the contribution of transport to economic competitiveness;
- investigating the transport long term perspective, especially, innovation in transport;
- introduction of new technologies that can reduce transport emissions as well as the estimation of external costs (EU SCIENCE HUB, 2021).

According to its the strategic goals, the White Paper aims to:

- halve the use of 'conventionally-fuelled' cars in urban transport by 2030; phase them out in cities by 2050; achieve essentially CO2-free city logistics in major urban centres by 2030;

– low-carbon sustainable fuels in aviation to reach 40% by 2050, also by 2050 reduce EU CO2 emissions from maritime bunker fuels by 40%;

- shift 30% of road freight over 300 km to other modes such as rail or waterborne transport by 2030, and more than 50% by 2050, facilitated by efficient and green freight corridors;

– triple the length of the existing high-speed rail network by 2030 and maintain a dense railway network in all Member States. By 2050 the majority of medium-distance passenger transport should go by rail;

– establish a fully functional and EU-wide multimodal TEN-**T** "core network" by 2030, with a high quality and capacity network by 2050;

– by 2050, connect all core network airports to the rail network, preferably highspeed; ensure that all core seaports are sufficiently connected to the rail freight and, where possible, inland waterway system;

- by 2050, move close to zero fatalities in road transport;

- move towards full application of "user pays" and "polluter pays" principles and private sector engagement to eliminate distortions, including harmful subsidies, generate revenues and ensure financing for future transport investments (White Paper,

#### COM/2011/0144).

Challenges that have been addressed in White Paper 2011 are not the only ones that have to be solved whereas new ones occur as hauler drivers are among the least prestigious occupations and they are lacking in the market.

It is said that mainland Europe is experiencing 400,000 lorry driver shortage. Research by Transport Intelligence logistics analysts found that Germany was missing between 45,000 and 60,000 HGV drivers last year. France has also faced a similar crisis, with the country facing a shortage of around 43,000 drivers since 2019 and the shortfall in Italy in 2019 was estimated to be around 15,000 (Wright, 2021).

"Mobility package" that has been adopted by the European Parliament on 9 July 2020 is one of the tangible factors that influence the development of the European road freight market. It will be entering into force in stages over the next six years. The mobility package consists of three legislative texts that are intended to improve the working conditions of lorry drivers and reduce the risk of unfair competition in the road transport sector (EurWORK, 2020). Such legislative initiative introduces significant changes to the rules of EU road transport and covers many aspects of the industry. The mobility package includes:

- taking a *regular weekly rest* for driver more than 45 hours outside the vehicle;
- the driver will have to take *within two weeks*: two regular *weekly rest periods* or one regular rest period and one reduced weekly rest period of at least 24 hours;
- obligatory rest period within each period of three or four consecutive weeks (depending whether the driver had two consecutive reduced weekly rests). The employer is obliged to offer to the driver a possibility of return to either his or her place of residence or to the employer's operational centre where the driver is normally based, through an appropriate organisation of the work. Such organisation has to be actively undertaken, without particular request by the driver. Drivers should ultimately have the freedom to choose where they will spend their rest period – at home or at company headquarters;
- the *introduction of digital tachographs*. Mandatory replacement of analogue and digital tachographs (2024 year) and 1st generation smart tachographs (2025 year) with 2nd generation smart tachographs. Mandatory use of tachographs and recording of working time and rest periods for drivers of vehicles up to 3.5 t in international transport (July 2026);
- the carrier will be able to carry out a maximum of three cabotage operations within seven consecutive calendar days, but the driver will not be able to carry out another cabotage on the territory of the same country unless at least four days have passed since the last trip of this type. This means that the vehicle will be 'cooled off' for a period of at least 4 days after the cabotage (2022) (European Commission, Directorate-General for Mobility and Transport (2021), IRU -European Union (Brussels) office (2021)).

Transport ministers of Bulgaria, Cyprus, Hungary, Lithuania, Malta, Poland and Romania have complaints against the Mobility Package I: "The Mobility Package I deviates

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from goals of the Commission's initial proposal. Furthermore, significant provisions were not subject to an Impact Assessment in terms of their effect on the road transport industry, its workers and the EU economy. In this context, it should be noted that the Commission also admitted that some measures were not analysed properly and expressed its doubts as regards their compliance with the EU climate policy. In particular, the obligatory return of vehicles to the member state of establishment of the hauler is an example of a provision that is not only discriminatory among the different member states but also incoherent as it undermines ambitious EU goals in the field of environmental policy and is contrary to the European Green Deal. This provision is expected to increase up to additional 3 million tons of CO2 emissions in the whole EU **per year**" (EURACTIV Media, 2020).

In general, the adoption and implementation of the mobility package will:

- impact the redistribution and reorganization of the road haulage market;

increase the cost of road transport services (especially, administrative and social costs);

- pose the high risk of increase in CO2 emissions;

- *increase the number of trips*. In the most likely base case scenario, this mileage could increase by 2.5 billion vehicle-kilometres. This could mean an increase of 4.8% over the normal market scenario in 2023. This increase is due to the need for trucks to return to their bases in Central and Eastern European countries every eight weeks. *Increase the waiting times at the border*. In the basic scenario, which does not involve the establishment of branches of transport companies in Western and most favourably located Central European countries, waiting times at some border crossings could double or even triple, especially in the case of Romania. Interestingly, none of the three scenarios should have a significant impact on waiting times at the German-Polish border (Pakulniewicz, 2021);

- improve the working conditions of truck drivers involved in international transport;

– stimulate the use of other modes of transport for freight and passenger movements.

In the context of Ukraine's integration into the European economic space, the establishment and implementation of national transport policy must take into account the main priorities of EU transport policy including environmental issues, sustainability, security; development of high-speed railways, expansion of the market of rail freight and passenger transport, development of the multimodal transportation, etc.

# The Ukraine's transport sector under the European integration process

The cooperation between Ukraine and the EU in the field of transport is implemented in order to promote the development of sustainable transport systems, ensure the connectivity and interoperability of transport systems (removing the administrative, technical, border and other barriers), meet the efficiency and safety criteria for freight transport and passenger mobility. The consequence of such cooperation should result in an increase in the transport flows between Ukraine and the EU and third countries in the region, as well as the modernization of their infrastructure.

The EU within its Eastern Partnership cooperation launched and financed several projects in order to support the Ukrainian authorities in developing the transport sector:

1. "Strengthening the Regulatory Capacity of the National Communications Regulatory and Informatization Commission in the Areas of Market Access and Quality of Service Monitoring System". The overall objective of the project was to improve performance in the area of electronic communications in Ukraine and ensure high-quality services for all end-users (project time frame: 08.09.2019 - 07.11.2021).

2. The goal of the project "Assistance for Dnipro Transport Development" was to implement the inland waterway reform in Ukraine (project time frame: 28.12.2018 - 27.12.2021).

3. The project "Assistance to the Ukrainian authorities for the establishment of national transport model and master plan" includes building a comprehensive transport model, developing transport master plan for Ukraine, covering all modes of transport and travel to, from, within, and through Ukraine (project time frame: 02.07.2018 - 31.12.2021).

4. "Strengthening the Aviation Framework and European Regulations for Ukraine (SAFER-U)". This project will harmonise Ukraine's aviation regulatory framework with EU standards and lay the foundation for a safe, efficient and secure air transport system (project time frame: 04.02.2019 - 03.02.2022).

5. **"Further support to the implementation of EU**-Ukraine Association Agreement in **the transport sector and of the National Transport Strategy in Ukraine" is aimed to** contribute to the further development and reform of the transport sector in Ukraine (project time frame: 29.11.2019 - 28.11.2022) (EU NEIGHBOURS EAST, 2021).

According to the Report on the EU-Ukraine Association Agreement Implementation over the 2015-2020 years, the overall progress in the implementation of the Association Agreement accounted for 54%. The great steps in the implementation of the Association Agreement have been made in many areas, in particular, "political dialogue, national security and defense" – 89%, "justice, freedom, security and human rights" – 82%, "public procurement" – 80%, "technical barriers to trade" – 79%, "entrepreneurship" – 76%. Nevertheless, there are several areas in which Ukraine is significantly behind the schedule in fulfilling its obligations. For instance, the following sectors: "financial cooperation and combating fraud" – 24%; "transport, transport infrastructure, postal and courier services" – 35% and "financial services" – 36% (Report on Implementation of the Association Agreement between Ukraine and the European Union 2015-2020).

The major progress has been made in the adoption of the legislation: "On railway transport" (No. 1196-1 dated 06.09.2019), "On the courier and postal services" (No. 4353 dated 10.11.2020), Law of Ukraine "On inland water transport" (No. 1054 dated 03.12.2020), Law of Ukraine "On multimodal transportation" (No. 1887-IX dated 17.11.2021). The Common Aviation Area Agreement between the European Union and its

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Member States and Ukraine was signed on 12 October 2021.

The development of the national transport network of Ukraine directly depends on the level of its integration into the network of international and trans-European transport corridors, modernization and improvement of technical base, usage of the modern information technologies for managing such networks, etc. Ukraine's transport system borders the trans-European Transport Network (TEN-T) and Ukraine is included in the indicative TEN-T maps (except inland waterways), but still there is a low level of interoperability of the national transport network and overall technological lagging behind TEN-T.

Within the framework of the Eastern Partnership of the European Union, the Indicative Plan for the Development of the trans-European Transport Network has been developed, according to which about 30 priority infrastructure projects will be implemented, the following of which have already been implemented or have been ongoing:

– project on the introduction of the passenger rail service Mukachevo-Chop (Záhony) (Hungary) / Čierne nad Tisse (Slovakia). As a result, the train No. 33/34 Mukachevo-Budapest and the train No. 960/961– №962/963 Mukachevo – Chop – Čierna and Tisa – Košice are already in operation;

 electrification of railway tracks within section Berdychiv – Korosten – Berezhye (new construction of railway transport infrastructure facilities with electrification of the State Border – Ovruch – Korosten – Zhytomyr – Berdychiv section);

- Odesa airport terminal (completion of reconstruction);

– Implementation of dredging works in the water area of the Southern branch of the State Enterprise "The Ukrainian Sea Ports Authority".

The transport sector remains a high priority area in the Eastern Partnership and in the post-2020 programming period.

During the Eastern Partnership Summit held on 15 December 2021 in Brussels, the leaders of state or governments of the Republic of Armenia, the Republic of Azerbaijan, Georgia, the Republic of Moldova, and Ukraine *agreed a joint declaration*, in which they reconfirmed commitments from previous Summits and bilateral agreements, as well as their determination to carry them forward. The declaration statements mentions that countries focus on strengthening economic resilience through fostering trade and economic integration, investment and access to finance, enhanced transport connectivity, and investing in people and knowledge societies. In this regard, sustainable, rules-based and secure transport interconnectivity will be enhanced through the completion of extended indicative core TEN-T network covering all modes of transport (road, rail, air, maritime and waterborne, including inland waterways), and investments to upgrade 3,000 km of priority roads and railways along the extended TEN-T network. Cross-border ecommerce with the EU will be substantially increased and four digital transport corridors will be operational, complementing the TEN-T network (Joint Declaration of the Eastern Partnership Summit, 2021).

#### The place of transport services domain in the economy of Ukrainian regions

Nowadays, the transport, warehousing, postal and courier activity domain accounts for 7.74% in the structure of Ukrainian GVA (as of 2019). Over two-third of provided services accounts for Kyiv (31.3%), Odeska (12.6%), Dnipropetrovska (6.7%), Kyivska (5.9%), Lvivska (5.2%), and Harkivska (5.1%) oblasts. The volumes of provided services directly correlate with the level of socio-economic development of the region, volumes of export-import operations, and development level of logistics-transport infrastructure of the area. In 2015-2019, Zhytomyrska oblast (307.6%), Kyiv (301.2%), Chernihivska (300.1%), Ternopilska (252.5%), Zakarpatska (239.8%), Hmelnytska (233.7%), Cherkaska (218.3%), Sumska (209.3%), Vinnytska (207.9%), and Chernivetska (205.6%) oblasts were characterized by the highest growth dynamics of services provided in transport, warehousing, postal and courier activity.

Over half of employed in transport, warehousing, postal and courier activity in Ukraine as of 2020 account for Odeska (10.8%), Dnipropetrovska (8.1%) oblasts, Kyiv city (7.5%), Harkivska (7.3%), Kyivska (6.8%), Lvivska (6.3%), and Donetska (5.7%) oblasts. In 2020, to replace the positive dynamics of a growing number of employed in 2018-2019 both in the country's economy and in transport, warehousing, postal and courier activity, the number of employed declined by 4% and 2.4%, respectively. It is caused in the first place by the slowdown in economic activity in Ukraine and an overall decline in global demand due to the COVID-19 pandemic.

The share of transport, warehousing, postal and courier activity in the structure of economies of six regions is higher than the average country rate: in Odeska (19.39%), Zakarpatska (10.76%) oblasts, Kyiv city (9.9%), Ternopilska (9.21%), Mykolayivska (9.03%), and Kyivska (8.39%) oblasts.

In 2020, the share of employed in transport, warehousing, postal and courier activity in the total number of employed in the region was the highest in Odeska – 10.6%, Kyivska – 8.8%, Donetska – 7.72%, Zhytomyrska – 7.32%, and Kirovohradska oblasts – 6.38%. Odeska and Kyivska oblasts are the leaders among the rest of the regions by these two parameters of transport, warehousing, postal and courier activity development (see Table 1).

	The share of transport, warehousing, postal and courier activity in regional GVA, %				The share of employed in transport, warehousing, postal and courier activity in the total number of employed in the region, %				
	2016	2017	2018	2019	2016	2017	2018	2019	2020
Ukraine	7•75	7.59	7 <b>•53</b>	7•74	6.13	6.14	6.08	6.03	6.13
Vinnytska	5.13	6.06	6.45	5.42	6.30	6.49	6.33	6.10	6.05
Volynska	7.72	6.50	7.48	6.54	5.23	5.46	5.50	5.45	5.71
Dnipropetrovska	6.43	5.44	5.72	5.42	6.46	6.33	6.23	5.99	5.80

**Table 1.** Transport services in the economy of Ukrainian regions, 2016-2019
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	The share of transport, warehousing, postal and courier activity in regional GVA, %				The share of employed in transport, warehousing, postal and courier activity in the total number of employed in the region, %				
	2016	2017	2018	2019	2016	2017	2018	2019	2020
Donetska	11.95	9.65	5.27	4.84	6.76	7.91	7.80	7.62	7.72
Zhytomyrska	5.10	6.28	6.88	6.90	7.35	7.50	7.59	7.60	7.32
Zakarpatska	9.29	10.92	11.02	10.76	5.06	4.98	4.74	4.66	4.73
Zaporizka	3.97	3.58	3.28	3.11	5.08	5.03	4.89	4.81	4.76
Ivano-Frankivska	6.35	6.40	5.56	5.14	4.17	4.15	4.14	4.12	4.35
Kyivska	10.27	9.07	8.65	8.39	8.95	8.65	9.02	8.83	8.80
Kirovohradska	8.93	8.08	7.07	6.87	6.57	6.50	6.39	6.11	6.38
Luhanska	4.79	3.47	3.02	3.23	5.56	5.75	5.73	6.16	6.30
Lvivska	9.99	8.36	7.55	7.39	6.07	6.03	5.88	5.63	5.87
Mykolayivska	9.86	9.62	9.19	9.03	5.94	6.06	5.95	6.08	6.13
Odeska	20.08	19.88	18.44	19.39	10.70	10.61	10.71	10.57	10.60
Poltavska	5.09	5.27	5.55	5.16	6.75	6.43	6.17	5.87	6.04
Rivnenska	5.13	5.85	5.93	5.60	5.59	5.61	5.47	5.62	5.75
Sumska	4.26	5.44	5.45	5.42	5.71	5.59	5.50	5.44	5.70
Ternopilska	7.58	7.28	9.44	9.21	4.81	4.99	4.82	4.88	5.05
Harkivska	6.78	6.52	6.68	6.39	5.83	5.77	5.66	5.59	5.91
Hersonska	5.86	4.92	5.97	5.41	5.22	5.13	5.06	4.96	4.76
Hmelnytska	5.00	5.34	5.86	5.78	4.70	4.75	4.85	4.77	4.87
Cherkaska	5.30	6.21	6.84	6.26	5.41	5.34	5.43	5.36	5.51
Chernivetska	5.39	5.97	5.82	5.81	4.25	4.24	4.18	4.16	4.14
Chernihivska	4.12	5.76	6.58	6.02	4.83	4.60	4.49	4.57	5.08
Kyiv city	7.05	7.62	8.39	9.90	4.88	4.87	4.84	5.24	5.42

Source: based on the data of the State Statistics Service of Ukraine

Odeska and Kyivska oblasts are the leaders by the volume of provided services in the sector and its weight in the economy of the respective region. The largest transport hubs in Ukraine securing transit, domestic, and international passenger and freight transportation have emerged at the territory of these regions (see Figure 1).

The analysis of the volume of products (goods, services) sold by economic entities and the number of employed by them by the types of economic activities across the regions have contributed to evaluating the development of the road freight transport market.



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The share of Dnipropetrovska (from 5.9% to 10.9%) and Odeska (3.47% to 6.52%) oblasts in the total volume of products sold in the country by the type of economic activity 49.4 Road freight transport and provision of transportation services increased almost twice in 2010-2019. These oblasts, including Hersonska, demonstrate the highest parameters of growth dynamics: in 2010-2019, the volume of products sold by the type of economic activity 49.4 Road freight transport and provision of transportation services increased over 10 times. Meanwhile, the volume of services sold in road freight transportation increased 5.5 times on average in Ukraine.

The shares of Kyiv (15.16%), Dnipropetrovska (10.87%), Lvivska (8.31%), Kyivska (6.87%), and Harkivska (5.82%) oblasts in the provision of the road freight transport services are quite high. Therefore, these regions' shares of employment in the sector are above the country's average (see Figure 2).

16 **15.16** 400.00 341.28 14 350.00 319.70 319.55 305.43 11 .81 286.41 282.16 300.00 12 10.87 250.00 10 8.31 8 75 7.84 8 200.00 6.87 6.52 6.4 98 5.825.89 6 150.00 100.00 4 50.00 2 Ο 0.00 Wator Fattingto Kirovohradska Driptopettovska MNKO BYINSKO chernivetska Intonvista Ternopilska ... Therkaska chernitivska Luhanska Poltavska Rivnenska Harkinska Hmelnytska Donetska Lakarpatska Sumska Hersonska thin cited Vinnytska Odeska

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Share of the region in the total volume of sold products by type of economic activity 49.4 Freight road transport, provision of transportation services in the country,% of the total

Share of the region in the total number of employees in the country by type of economic activity 49.4 Freight road transport, provision of transportation services,% of the total

Index of sold products by type of economic activity 49.4 Freight road transport, provision of transportation services in 2019, compared to 2015,%

# **Figure 2.** The parameters of the volumes of products sold in the country and number of employed by the type of economic activity 49.4 Road freight transport and provision of transportation services across regions, %

Source: based on the data of the State Statistics Service of Ukraine

In 2015-2019, the growth dynamics of the volumes of products sold by the 49.4 type of economic activity was the highest in the maritime regions of the country: Hersonska (341.3%), Mykolayivska (319.7%), and Odeska (319.6%) oblasts. Considering the closure of ports in China due to the COVID-19 pandemic, the traditional supply chains were disrupted. Therefore, in 2020, the share of freight transportation reoriented on road and railway transportation, causing the redistribution of the volumes of services provided in freight transportation among Ukrainian regions.

The analysis of transport services export and import in Ukraine in 2016-2020 showed the changing dynamics across regions. By 2020, most regions had increased the volumes of transport services export and import: **the country's transport services export index was** 171.9%, the import index – 157.6%. The oblasts that have increased the services export volumes the most include Volynska oblast – 2.3 times, Zhytomyrska – 2.6 times, Sumska – 3 times, Chernihivska – 2.6 times. The leaders by the transport services import growth

were Odeska – 2.4 times, Sumska – 5.7 times, Hersonska – 2.2 times, Hmelnytska – 13.3 times, and Chernihivska oblasts – 4.5 times.

A substantial share of transport services in the structure of the region's services export and import (~80%) is a feature of Odeska oblast economy. It is the highest rate among Ukrainian regions. Transport services account for almost a half of the import services structure in Zakarpatska (44.7%), Ivano-Frankivska (40.8%) and Ternopilska (48.7%) oblasts.

In 2020, the volumes of transport services export and import fell in Ukraine compared to 2019 at the background of the global economic recession and restricting measures regarding border crossings imposed due to the COVID-19 pandemic, by 45% and 32%, respectively. Meanwhile, albeit the general economic decline, some oblasts managed to increase the transport services export compared to 2019, namely Vinnytska, Dnipropetrovska, Donetska, Zakarpatska, Luhanska, Mykolayivska, Odeska, and Cherkaska oblasts. The transport services import increased 1.6 times in Dnipropetrovska, 1.1 times in Kyivska, 1.1 times in Lvivska, 3.2 times in Mykolayivska, 1.2 times in Odeska, 1.01 times in Rivnenska, 1.3 times in Ternopilska, 1.6 times in Harkivska, 1.01 times in Chernivetska, and 1.4 times in Chernihivska oblasts. The conditions the global and national economies were functioning in 2020 caused the change of transport services export and import structure: the share of maritime transport increased twice, and the shares of railway and road transport increased by 3% (see Figure 3).



### **Figure 3**. The structure of the transport services export in 2019 and 2020, % Source: based on the data of the State Statistics Service of Ukraine

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The volumes of transport services export declined, in the first place, due to the decline in the air transport services export 1.8 times (from \$ 1,420 million to \$ 802 million) and pipeline transport – 2.4 times (from \$ 5,904 million to \$ 2,443 million). The volumes of maritime and road transport services export increased slightly by 1.6 % and 0.3%, respectively. It impacted the growth of the share of some regions in the total volume of transport services export, namely Dnipropetrovska, Zakarpatska, Lvivska, Mykolayivska, and Odeska oblasts (see Figure 4).



**Figure 4.** The share of Ukrainian regions in the total export and import of transport services (distributed) in 2020, %

 \*inside circle – distribution of the transport services export volumes across regions, %; outside circle – distribution of the transport services import volumes across regions,
Source: based on the data of the State Statistics Service of Ukraine

In 2016-2020, the export of transport services in Ukraine and its regions exceeded the import of these services 4-6 times. The largest share of both export and import of transport services accounts for Kyiv ( $\approx$ 40%) and Odeska oblast ( $\approx$ 30%). Most of the oblasts have about the same share of these services provision in the total structure of services provided in the country. Meanwhile, the volumes of the transport services import in Mykolayivska oblast are insignificant compared to the services export volumes: the oblast is the third by the share of the transport services export (6.29%). In 2020, the export of transit services exceeded their import 18 times. In the previous years, the gap amounted to 30-50 times. The transport services import exceeded their export in the total volume of transport services export was 2.46%, and in import – 8.8%. The transport services average annual export growth paces in Vinnytska, Volynska, Dnipropetrovska, Zhytomyrska, and Chernihivska oblasts were about 20% in 2016-2020. Insignificant

transport services average annual export growth paces at the level of  $\approx$ 3% were peculiar to Lvivska and Zakarpatska oblasts. The transport services average annual export decline paces ranged within -14.5% – -1.5% for Ivano-Frankivska, Kirovohradska, Kyivska, Mykolayivska, and Donetska oblasts. It is worth mentioning that for some oblasts the crisis 2020 affected the export of transport services. In particular, transport services export in Ivano-Frankisvka oblast declined 1.6 times compared to 2019, while that of Sumska oblast – 2.3 times. Meanwhile, Sumska oblast demonstrates positive transport services average annual export growth paces against 2016.

The analysis of transport services imports dynamics in 2016-2020 shows the growth in Chernihivska and Hmelnytska oblasts. Odeska oblast increased the transport services import volumes 2.8 times in 2020 against 2016, or the transport service average annual import volume growth was 29.9%.

In 2020, Kyiv – 28.79%, Lvivska – 14.17%, Kyivska – 7.23%, Zakarpatska – 6.57%, and Dnipropetrovska oblasts – 5.38% were among the Top 5 Ukrainian regions by the road transport services export. The same oblasts are the leaders by the road transport services import: Kyiv – 39.1%, Lvivska – 12.1%, Kyivska – 8.9%, Dnipropetrovska – 8.2%, Odeska – 4.5%, and Zakarpatska oblasts – 4%.

The share of the road transport services export in the total volume of transport services export exceeds 90% in some regions: Volynska, Ivano-Frankivska, Luhanska, Poltavska, Sumska, Ternopilska, Hmelnytska, Chernivetska, and Chernihivska oblasts. Volynska (86%), Luhanska (86.8%), Lvivska (89%), and Ternopilska oblasts (84.5%) are the leaders by the share of the road transport services import in the total transport services import.

As of 2020, 70.7% of the transport services export in Ukraine accounted for 6 countries: Russian Federation, Switzerland, UAE, Germany, USA, and the United Kingdom of Great Britain and Northern Ireland. These countries were the main transport services exporters in 2019. They accounted for 78.9% of the total transport services export or \$ 7.2 billion. It is worth mentioning that the half of total transport services export accounts for Russian Federation.

The structure of the transport services imports across importing countries is more diversified. A relatively larger transport services import accounts for Germany ( $\approx$ 14%) and Turkey (8-12%). As of 2020, the Top-5 transport services importing countries included primarily the neighboring countries – Turkey, Poland, Russian Federation, Belarus, as well as Germany and China. They accounted for 49.7% of the transport services import. In 2019, the Top-5 importers included Great Britain with the 8.8% share. Yet, the volumes of transport services import from the country declined 3 times in 2020. In 2019, the 3-4% shares in the structure of transport services import accounted for Slovakia, Belgium, and Egypt. As of 2020, the absolute volumes of the transport services import from these countries declined about three times, while from Slovakia – from \$ 74 million to \$ 12.8 million or 5.8 times.

The lack of permits is among the obstacles to the transport services export growth

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and carrying out the road freight transportation.

Commercial freight transportation across the territory of foreign states is carried out by transport companies subject to the availability of permits to carry out international road transportations. The exchange of such permits between the states takes place in compliance with the provisions of bilateral intergovernmental agreements in international road transport. Currently, the existing permitting practice is a serious barrier for transit liberalization between Ukraine and the EU in the framework of the EU-Ukraine Association Agreement implementation. About a third part of all permits accounts for travel through Poland, which in addition to being an important strategic foreign economic partner of Ukraine serves as the gate to the markets of another 12 European countries (see Figure 5).



### **Figure 5.** Allocation of quotas for travel through foreign countries to carry out international road freight transportation in 2021

Source: the data of the State Transport Safety Service of Ukraine, letter №6738/2.3/15-21 as of 12 December 2021

According to the State Transport Safety Service of Ukraine, as of 31 December 2021, the permits were issued for travel in 2022 through 18 EU-member states and Azerbaijan, Bosnia and Herzegovina, Armenia, Georgia, Kirgizstan, Moldova, Russian Federation, Slovenia, Turkey, Turkmenistan, and Uzbekistan. The measures are being taken to receive permits from Tadzhikistan and Iran. Yet, the situation with the exchange of permits with Kazakhstan and Lithuania is quite complicated due to the complex negotiation process regarding the number of permits for Ukrainian transport companies. It is worth mentioning that all types of transportations with the Republic of Belarus have been carried out without permits since 1 January 2022 (State Transport Safety Service of Ukraine, Ukrtransbezpeka, 2021).

#### Conclusions

Transport plays a role of a kind of barometer of the country's and its regions' economic development by securing territorial integrity, accessibility, and quickness of passenger and freight transportation and improving investment attractiveness and competitiveness of a respective area.

Strategic priorities of the EU transport policy are declared in White Paper 2011. The EU transport sector is at the crossroads of finding a balance between minimizing the transport impact on the environment and securing the transport industry growth, increasing the road freight transportations, and ensuring human mobility.

The EU declared 2021 the European Year of Rail as an initiative under the European Green Deal. The workforce deficit is among the current challenges to the development of the European market of road freight transportation. The EU is trying to address the issue by adopting the Mobility Package oriented on improving the working conditions of truck drivers and reducing the risks of unfair competition in commercial road transport. These initiatives will impact the Ukrainian market of freight transportations because Ukraine remains among the largest workforce donors in Europe, including truck drivers. Moreover, some Ukrainian transport companies have been operating at the territories of adjoining countries for a long time, primarily in Poland. So, adopting the Mobility Package will substantially impact the redistribution of road freight transportations on the European market.

The Report on the EU-Ukraine Association Agreement implementation in 2015-2020 provides that the overall progress in transport, transport infrastructure, postal and courier services amounts to 35%. The lag behind the schedule of meeting their obligations in transport can be explained by the multi-vector nature of changes. In the first place, it is about the legislative changes for five transport modes (road, railway, domestic water, maritime, air transport) and postal services. The changes vary by direction – establishment of technical and operational procedures, security, social conditions, access to the profession, etc. In the meantime, adopting legal acts on the functioning of railway transport, postal service, and multimodal transportation, etc. is a positive change.

The share of the transport industry in the structure of Ukrainian GVA amounts to 8% as the country has a well-developed network of road and railway routes and is located on the crossroads of main trade routes North-South and East-West. The third part of total transport services accounts for Kyiv. The input of the industry is the most significant in the economy of six regions, where the share of the transport industry in the region's GVA is higher compared to its average rate in the country: Kyiv, Odeska, Zakarpatska, Ternopilska, Mykolayivska, and Kyivska oblasts.

Odeska and Kyivska oblasts are the leaders by the volume of services provided in the industry and its weight in the economy of respective regions. The largest transport hubs in Ukraine that secure transit, domestic, and international passenger and freight transportations are located in these regions.

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Kyiv, Dnipropetrovska, Odeska, Hersonka, Lvivska, Kyivska, and Harkivska oblasts dominate in the road freight transport among Ukrainian regions. The highest dynamics of the road freight services provided in 2015-2019 was observed in the maritime regions: Hersonska (341.3%), Mykolayivska (319.7%), and Odeska (319.6%) oblasts.

In 2016-2020, the development of foreign economic activity in transport services was characterized by changing trends across regions. By 2020, most regions had increased the transport services export and import, but in 2020 they declined considerably (export – by 45%, import – by 32%). The transport services export and import are concentrated in Kyiv and Odeska oblast. Meanwhile, the top-5 leaders by the road transport services export include Kyiv, Lvivska, Kyivska, Zakarpatska, and Dnipropetrovska oblasts. In some regions, the share of the road transport services export in the total transport services export exceeds 90%.

As of 2020, two-third of the transport services export of Ukraine accounted for only 6 countries. Meanwhile, the transport services importing countries geography is diversified. A relatively larger volume of the transport services imports accounts for Germany (≈14%) and Turkey (8-12%).

The lack of permits is among the non-tariff trade barriers that slow down the increase of road transport export growth. Polish permits are in the most deficit that has been observed for the last four years.

Therefore, the problems of unbalanced demand and supply of permits for international freight transportation and disproportional growth of the number of issued permits to the growth of trade volumes due to signing the Agreement require an immediate solution.

The development of transport and the increase of freight transportation in the national transport network will be boosted by the further development of the logistics-transport infrastructure: multimodal terminals, logistics centers, transport-warehousing facilities, logistic clusters, logistic hubs, etc. The improved quality and increased volumes of provided transport services will not only foster the economic development of regions but also determine the emergence of new transit routes in Ukraine in the future.

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Development of transit capacity in the Ukrainian economy: dynamics and prospects for the future

Development of transit capacity in the Ukrainian economy: dynamics and prospects for the future

#### Abstract

The development of *transit capacity* in Ukraine's economy is natural due to the country's favorable geopolitical position as it is located at the crossroads of trade routes between Europe and Asia and has considerable capacity in its Black Sea ports, high railway capacity, and developed transport network in latitudinal and meridional directions. Also, *transit capacity* should become an object of close attention of Ukraine's *government* for its successful and competitive development in order to promote the country's development as a transit hub and create necessary conditions for the transportation of transit freight through its territory.

Transport development is becoming even more urgent in the present economic environment, when transnational freight flows and flows of capital are increasing, and so are the physical speed of movement and the speed of information dissemination. Transit is one of the guidelines of Ukraine's integration into the European transport system, and an important source of replenishment of the State budget. However, at the present stage of Ukraine's development the sharp decline in the **country's volume of transit traffic of goods** and passengers due to the influence of many factors is an important problem.

The authors present a retrospective dynamic of the volume of transit freight traffic by transport type in Ukraine. Modern factors of declining volumes of transit freight flows are characterized, namely: military actions in the East of Ukraine, annexation of Crimea and coronavirus pandemic. Measures have been formulated to expand the volume of transit traffic: reforming Ukraine's customs system in accordance with EU standards by joining the computerized transit system (NCTS) and the Authorized Economic Operator (AEO) program, acceding to the Convention on a Common Transit Procedure; introduction of innovative technologies, namely: use of unmanned trucks, taxis and buses, magnetic levitation, Hyperloop technology, SkyWay, identification systems, innovative mobile platforms, and hubs. Innovative vision of urban mobility more accessible, create a new mobility ecosystem, an innovative vision of urban mobility, which will help revitalize the cities of the future focusing on human needs.

**Key words:** transit capacity, **Ukraine's** economy, transit dynamics, factors of decline, reforming the customs system, innovative technologies.

#### Introduction

In the globalized world, transport remains to be among the main factors of the economic development and is the most important tool of integration. Modernization of transport system and realization of the country's powerful transit capcity to support European trade and economic ties are among the key links in the development of Ukraine's economy. Ukraine's geopolitical interests and competitive conditions for the development of transport infrastructure determine the high efficiency of realization the national foreign

trade capacity in the global transport arena.

Ukraine has identified an innovative way of developing its national economy; today, the innovative orientation of the economy not only solves the problem of attaining the modern level of socio-economic and scientific-technological process, but also determines the strategy of further technological growth. Development of scientific, technological and innovative activities is a key factor that should ensure Ukraine's entry into the circle of **economically developed countries. The country's technological** capacity is determined by the development of basic sectors of its economy, among which a prominent place belongs to transport.

The favorable geopolitical position of Ukraine located at the crossroads of trade routes between Europe and Asia, its significant capacity in Black Sea ports, high railway capacity, and developed transport network in latitudinal and meridional directions **contribute to this country's development as a transit country a**nd create the necessary conditions for freight transport transit. According to international experts, Ukraine has one of the highest transit rates in the world.

The relevance of the problem of transit traffic is emphasized in the National Transport Strategy of Ukraine until 2030: "In order to maximally use the transport capacity of Ukraine as a transit country, it is necessary to create a customer-oriented transport service system and take measures to ensure efficient organization of the work of this country's transport and road complex and obtain a synergic effect from efficient combination of the potential and capabilities of all modes of transport based on partnership and competition principles during transportation" (Pro shvalennya natsionalnoyi transportnoyi stratehiyi Ukrayiny na period do 2030 roku, 2018).

Problems of the development of transit transportations are in the center of attention of many Ukrainian and foreign scientists.

The article by M. Makarenko and V. Myronenko (Makarenko et al., 2012) outlines the problems of Ukraine's transit capacity and increasing competitiveness of Ukrainian transport on the international market of transport services. The authors provide the dynamics of cargo turnover of the ports of the Russian Federation, Hungary and Romania. However, this article was written before the start of hostilities in Eastern Ukraine and other political events that altered the predictions about the development prospects of the transport system and transit in Ukraine.

An analytical note by the Institute for Strategic Studies (National Institute for Strategic Studies, 2012) analyzes the transit freight traffic on Ukraine's territory, and identifies the causes of the reduction of transit on certain modes of transport. The authors propose various measures, whose implementation would promote the development and more efficient use of Ukraine's transit capacity.

The dissertation of Novikova A.M. (Novikova, 2004) elaborates methodological **foundations for the development of Ukraine's transit** capacity. The author proposes various theoretical and practical measures to realize Ukraine's transit advantages, and deals with the problems of the development of international transport corridors in the Eurasian space and Ukraine's place in them. A logical scheme is developed for determining potentially

possible transit freight flows along Ukraine's international transport corridors.

The dissertation of Pashchenko Yu.Ye. (Pashchenko, 2006) develops a theoretical and methodological toolset for determining potential transit freight flows of Ukraine, and **carries out practical calculations for the forecast of freight flows in terms of Ukraine's** international transport corridors.

The article (Luchnikova, 2019) investigates the formation of Ukrainian transit potential. It shows that the unsatisfactory condition of the fixed assets, and consequently reduced speed and quality of rail transport, is one of the reasons for the decline in demand for transit.

The study (Platonov, 2017) presents the characteristics of current trends in the development of international freight transportation and reveals the importance of international transport corridors in the global transport system. A chain of obstacles to international freight transport is identified, which includes various non-tariff instruments of foreign trade policy (non-tariff regulation of customs procedures and foreign trade operations, restructuring of the central management bodies of the transport sector, and a series of infrastructural and institutional factors).

The purpose of research work (Petrenko et al., 2017) is a comprehensive study of the **processes of formation of Ukraine's transit market. The article covers the theoretical and** methodological aspects of the emergence and development of the potential of freight transport transit in Ukraine. The article considers various theoretical aspects of the formation of the global market of transit traffic, and identifies factors influencing the market of freight transit.

The emergence of new trends, in particular the spread of digital technologies, is causing global changes in the European and global transport system. Recently, a number of negative factors have appeared, which contributed to the slowdown in transit growth, such as trade tensions and protectionism; the decision of the United Kingdom of Great Britain and Northern Ireland to leave the European Union (Brexit); economic transformations in China; geopolitical troubles; and coronavirus pandemic.

Ukraine's transport system has considerable reserves for the development of transit capacity, but its availability does not guarantee its use. During the global economic crisis of 2008-2009 and after it, there was a sharp decrease in freight transit through Ukraine. The current state of transit traffic and its prospects require in-depth analysis and search for ways out of this situation.

Figures 1 and 2 show the dynamics of transit of goods by the main modes of Ukraine's transport for the 1996–2014 period, which clearly demonstrates their dramatic decline.

In 2014, transit accounted for a significant share (30.3%) in the structure of foreign economic flows across Ukraine's borders. This is due to this country's favorable geopolitical location, the development of international transport corridors on its territory, as well as available capacities for processing freight transit in the sea trade ports, provision of hydrocarbon transportation to European countries and Turkey with Ukraine's pipeline facilities, gradual improvement of the road network and revival of the airline industry (National Institute for Strategic Studies, 2012).



### **Figures 1 and 2.** Dynamics of transit of goods by the main modes of transport of Ukraine for the 1996-2014 period, thousand tons

Source: based on the data of the State Statistics Service of Ukraine

Unfortunately, attempts to build the dynamics of transit traffic so far have proved to be impossible due to the absence of publicly available statistics. The statistical collection *"Exports, imports and transit of goods in Ukraine"* on the website of the State Statistics Service of Ukraine only has issues until 2014. The statistical collection *"Transport and Communications of Ukraine"* also lacks transit statistics from 2015 on. Thus, it is not possible to get official statistics on the volume of transit traffic for the 2015-2021 period.

In general, the level of transit capacity of Ukraine's economy and the transit volumes, in particular, are considerably influenced by the level of logistics efficiency (which is not so much a transportation process, but a set of business processes for high-quality and timely delivery of goods to a particular consumer). In order to measure the efficiency of countries' logistics, the World Bank calculates the Logistics Performance Index (LPI), which became the first comprehensive indicator to estimate the level of logistic development in a country since 2007.

LPI summarizes the efficiency of logistics by the following main components: 1. Customs: efficiency of customs and border management; 2. Infrastructure: quality of trade and transport infrastructure; 3. International shipments: Ease of delivery at competitive prices; 4. Logistics quality and competence; 5. Tracking and tracing: the possibility to track a consignment of goods; 6. Timeliness: correspondence of actual delivery to its planned time.

Table 1 shows the top ten best countries in terms of the LPI efficiency index in 2018 (The World Bank, 2018). Ukraine occupied 66th place in this ranking in 2018 with an LPI score of 2.83. It should be noted that the indicators have significantly improved after Ukraine's preparations for the Euro 2012 World Cup and the hosting of the final of this championship together with Poland on its territory.

Country	LPI ranking	LPI estimate	Customs	Infra- structure	Inter- national shipments	Logistics quality and competence	Tracking and tracing	Timeliness
Germany	1	4.20	4.09	4.37	3.86	4.31	4.24	4.39
Sweden	2	4.05	4.05	4.24	3.92	3.98	3.88	4.28
Belgium	3	4.04	3.66	3.98	3.99	4.13	4.05	4.41
Austria	4	4.03	3.71	4.18	3.88	4.08	4.09	4.25
Japan	5	4.03	3.99	4.25	3.59	4.09	4.05	4.25
Netherlands	6	4.02	3.92	4.21	3.68	4.09	4.02	4.25
Singapore	7	4.00	3.89	4.06	3.58	4.10	4.08	4.32
Denmark	8	3.99	3.92	3.96	3.53	4.01	4.18	4.41
UK	9	3.99	3.77	4.03	3.67	4.05	4.11	4.33
Finland	10	3.97	3.82	4.00	3.56	3.89	4.32	4.28

Table 1. Ranking of selected countries by logistics efficiency index LPI in 2018

Source: based on The World Bank data - International LPI 2018

Starting from 2015, the dynamics of transit can only be traced by analyzing the *statistics of vehicles passing* through Ukraine's state border of (State Statistical Service of Ukraine, 2021) (see Figure 3). In 2020, compared to 2015, the decline in vehicle traffic was: by railway – 46.8%, by automobiles – 62.1%, by maritime ships – 13.1%, and by aircraft – 23.9%.





In 2020, the most border crossings by railway took place through Ukrainian-Russian (24.4% of total), Ukrainian-Belarusian (21.3%) and Ukrainian-Slovak (15.5%) checkpoints.

As for the crossing of Ukraine's borders by cars in 2020, 38.7% of their total number occurred through Ukrainian-Polish, 13.7% Ukrainian-Hungarian, 12.6% Ukrainian-Moldovan checkpoints.

The decline in transit traffic by all modes of transport in Ukraine was influenced primarily by political and economic events within this country, which were the triggers of serious changes, in particular, in the map of foreign economic and transit traffic. The hostilities in eastern Ukraine, which began in 2014 and continue to this day, and the **Russian Federation's annexation of the Crimean Peninsula have** hampered ties and logistics chains. It is well known that at least 70% of freight transit by Ukrainian railways used to come from the Russian Federation, from where they were exported through Ukrainian seaports or railway crossings to **Ukraine's western border. Thus, the dynamics** of Ukrainian transit directly depended on Russian exports of goods, which generated a **considerable share in the actual traffic for Ukraine's railways and could** have been a potential factor in loading Ukrainian rail transport in consequent years, and *indirectly* benefit from the Russian exports through its own seaports and land transport in the Eastern direction (Makarenko et al., 2012).

Thus, according to preliminary estimates of the Information and Analytical Center of the National Security and Defense Council of Ukraine, the direct economic damage to Ukraine due to the aggravation of the socio-political situation and the hostilities in Donbass can be estimated as exceeding 30 billion UAH. Of this amount, about 4.8 billion UAH was needed for the reconstruction of industrial and trade facilities, 2.15 billion UAH for road facilities, 1.75 billion UAH for housing facilities, 1.2 billion UAH for power plants and gas supply facilities, and almost 0.9 billion UAH for the restoration and repair of railway transport facilities (Kulitsky, 2021).

As a result of the annexation of Crimea, Ukraine effectively lost 5 seaports: Kerch, Feodosia, Yalta, Sevastopol, and Yevpatoria. In addition, since 2014, the operation of Ukrainian sea trade ports located on the coast of the Sea of Azov (Mariupol and Berdyansk) has been complicated due to tensions in the region related to hostilities, uncertainty in the status of Kerch strait and the fee for its passage increased by the Russian side. All these events affected the volume of transit traffic.

The COVID-19 pandemic, which caused enormous damage to the global economy as a whole and virtually to all economic sectors, can be considered as another factor in the significant transit decline since 2020. The transport and logistics sector was one of the first to face the challenges of the pandemic and to feel its consequences.

According to the State Statistics Service of Ukraine (State Statistics Service of Ukraine, 2021), in 2020 the volume of freight transportation by all modes of transport in Ukraine amounted to 1641.1 million tons, which is by 3.9% more than in 2019. However, a most significant decline in freight traffic in 2020 took place in railway (-2.3%) and pipeline (-14.2%) transport.



In 2020, the freight turnover of companies in all modes of transport in Ukraine amounted to 290.3 billion tkm, or 85.7% of the amount of 2019 (see Figure 4).

Source: based on the data of the State Statistics Service of Ukraine

The greatest impact was caused by the coronavirus in the form of decreased traffic volumes and restrictions on movement within the country, which reduced passenger traffic. In 2020, the passenger turnover of transport companies was 49.4 billion passenger-km, or 46.1% of the amount of 2019 (see Figure 5). Only 2570.2 million passengers, or 60.3% of the number in 2019, used passenger transport services.



**Figure 5.** Passenger turnover of Ukrainian transport companies (% of corresponding period of previous year, cumulative total) Source: based on the data of the State Statistics Service of Ukraine

The largest decline in the quarantine period was registered in railway passenger transport (33.4% to corresponding period of 2019) and air transport (35.1%). Passenger turnover of road transport in Ukraine in the first half of 2020 constituted 54.8% of corresponding period in 2019 (see Figure 6).

It should be noted that in order to rectify the situation, that is to facilitate the movement of goods and expand trade, Ukraine needs to accede to the Convention on a Common Transit Procedure. In this case, Ukrainian businesses operating in the Convention countries will enjoy the benefits of common transit. The Convention countries include EU and EFTA countries, Turkey, North Macedonia and Serbia.

Customs transit is one of the cornerstones of economic reforms, which are important for the political association and economic integration between the EU and Ukraine. Ukraine has committed itself to acceding to the Convention on the Common Transit Procedure, and already in 2022 has good prospects of meeting all the necessary requirements.



## **Figure 6.** Passenger turnover of Ukrainian transport (% of corresponding period of 2019, cumulative total)

Source: based on the data of the State Statistics Service of Ukraine

In accordance with Art. 84 of the EU-Ukraine Association Agreement, Ukraine has committed itself to gradually adapt its national customs legislation to that of the EU. This involves, in particular, introducing the program of Authorized Economic Operator (AEO) in Ukraine to establish a relationship of trust between business and customs (Prohrama avtoryzovanyh ekonomichnyh operatoriv v Ukrayini: rishennya Rady, 2019).

Draft Law 481048 "On Amendments to the Customs Code of Ukraine on Certain Issues of Functioning of Authorized Economic Operators" introduces an effective mechanism of the AEO institution in Ukraine similar to that operating in the EU, with the prospect of further mutual recognition as provided by Art. 80 of the Association Agreement between Ukraine and the EU. The future recognition of the AEO status by customs authorities of the EU countries will ensure the participation of Ukrainian AEOs in the creation of so-called "safe" supply chains; will provide significant simplifications in customs formalities for responsible businesses; and will increase their competitiveness in foreign and domestic markets.

Cooperation with international partners will increase the efficiency of customs authorities through access to modern tools of information exchange and reduce the time spent on control procedures within the AEO.

AEO status is:

- speed:

- reduced risk;
- simplified declaration procedure;

- service:

- the possibility of shipping goods directly to the company's warehouse;
- warning about the physical inspection of the freight;

- saving:

- reduced delays at the border;
- reduced cost of customs terminal services;

- predictability:

• transparent and pre-understood procedures of customs clearance;

• increased security and improved communication between partners in the supply chain.

It should be noted that it is not just the Convention on the Common Transit Procedure itself that is important, but also the underlying technology – the NewComputerizedTransitSystem (NCTS), which is only available to the Contracting Parties to the Convention (Alishkauskass, 2021).

The NCTS connects customs services in the countries of the Convention, allowing the exchange of customs data. After acceding to **the Convention, EU's and Ukraine's customs** will have a single transit document in the system. This allows the customs authorities to control goods at every stage of transportation, which means tracking goods in different jurisdictions. This is projected to improve the fight against fraud with supporting documents and increase customs revenues (State Customs Service of Ukraine, 2021).

Ukrainian business already has the opportunity to start working in accordance with the rules of transit of goods in force in the countries of the Convention. These are not **individual measures or** "surgical" improvements, but a systematic approach to the reform based on digitalization, transparency and trust between business and customs authorities; it takes into account the successful experience of other countries that are currently EU members. New opportunities of joint transit based on the one vehicle - one declaration - one financial guarantee principle open up for Ukrainian businesses.

The system significantly simplifies transit formalities; through the use of paperless customs clearance methods, it eases administrative burden and reduces the number of trucks queuing at the border. This ensures faster movement of goods.

Ukraine has already come a long way in preparing to accede to the Convention, actively working to harmonize its customs legislation with the EU's, developing software and training customs officers, and has already begun to apply the NCTS at the national level.

Recent decades have recognized scientific and technological progress as the most important factor of economic development, the basis of the competitiveness of companies, industries and national economies. Moreover, there is an understanding that the future **prosperity and even a country's survival in the global economy is determined by the central** role of innovations that increase productivity and capital.

Despite the fact that the condition of the **country's road and customs infrastructure**, organization of transportation within the country, and security measures are the factors hampering transit in Ukraine, the introduction of innovative technologies in transport that will increase speed, ensure a high level of traffic safety and help avoiding traffic jams is an

important factor of increasing the transit volumes.

Innovations in developed countries already allow a very rapid, comfortable and economical movement. A systematic review of global trends, challenges and development prospects for the fifth-generation transport was carried out by experts from the National Academy of Sciences (Heets, 2020), including the Institute for Economics and Forecasting of the National Academy of Sciences of Ukraine, which is engaged in economic forecasting. This monograph defines what the transport will be like in the next 5, 10, 25 years and provides a definition of the fifth generation of transport, which will determine the innovative basis of society in the future.

Experts and representatives of the automotive industry believe that people will start using unmanned trucks, taxis and buses by the end of 2021-2022. Tesla, Toyota, Ford, Volvo, Renault and other manufacturers are already testing prototypes of such vehicles, and robotaxis have appeared in Dubai, Tokyo, Sydney and Las Vegas.

Today, the share of unmanned vehicles on the roads is minimal, and the credit of trust in them is not very high. However, experts say that such vehicles are the future. They react to obstacles on the road faster than ordinary vehicles, which helps avoiding accidents, they do not violate traffic rules and minimize traffic jams. In addition, the widespread use of identification systems can make it completely unnecessary to access the cabin and to have keys to start the engine. Cars will learn **to simply recognize the driver** "by face" and by voice, and the engine will start automatically after fingerprint recognition by a sensor built into the Start button.

The world's first full-fledged magnetic levitation line, ChuoShinkansen, has been opened in Japan. It connects Tokyo, Nagai and Osaka. High speed is the advantage of such trains as they can accelerate to 603 km/h. The technology of magnetic levitation or maglev is that the train travels due to the strength of the electromagnetic field and, unlike traditional trains, does not touch the **rails' surface**.

Elon Musk has introduced an even faster mode of transport – Hyperloop. This is a ground pipeline, inside which transport capsules will travel at a speed of 480 to 1220 km/h. Maglev and Hyperloop can become an alternative mode of transport by the end of 2022. Another new transport technology is called SkyWay. It is an innovative transport system capable of quickly transporting people both within a town and to other settlements. The system represents passenger and freight modules that move on steel wheels on special rails attached between the supports.

UrbanAirMobility (UAM), an innovative mobile platform that combines personal air transport and urban airmobile services, is one of the solutions that Hyundai proposes for the cities of the future. UAM provides unobstructed flight within the city using personal air transport capable of vertical takeoff and landing with the help of electric traction. UAM is considered a key innovative business of the future, which will contribute to solving urgent transport problems of the metropolises such as road jams and transform the paradigm of mobility. A completely innovative space is a hub combining air and ground vehicles. It has a take-off and landing module for the roof and ground docking stations. In the future, Hyundai plans to make intellectual mobility more accessible by placing similar hubs in the cities of the future and creating a new mobility ecosystem, and an innovative vision of urban mobility, which would help revitalize the cities of the future focusing on human needs.

#### Conclusions and prospects for further development within the study

Summarizing the above, it can be noted that in order to increase the volume of transit **traffic of goods and passengers through Ukraine's territory in modern** conditions, which are characterized by many risks and challenges, the following provisions must be met:

• to comply with international standards and conventions on transit transportation;

• to accede to the Convention on a Common Transit Procedure;

• to adapt Ukraine's national customs legislation to EU's by acceding to the New Computerized Transit System (NCTS) and implementing the Authorized Economic Operator (AEO) program;

• to introduce the most modern progressive innovative technologies in transport;

• to increase the number of checkpoints at Ukraine's customs border through which excisable goods are transported (Novikova, 2004);

• transit taxation should be at a zero rate;

• to introduce the responsibility of customs and other controlling services for the time of crossing of the state border by vehicles, giving priority to transit. To introduce standards for the time of crossing of the state border for TIR vehicles, and for transit by other modes of transport, and to entrust the customs service to control their delay at the checkpoint;

• to prohibit the state control authorities at the border from transferring their functions to commercial organizations. All control operations must be carried out at the expense of state services, as is the case in the international practice;

• to streamline and greatly increase the role of transport forwarding in the organization of transit transportation and attraction of transit flows;

• to continue improving the tariff system for transit of goods and passengers.

The analysis of the dynamics of transit freight flows in Ukraine and the development of forecast models of transit in the near future, with due regard of the current trends in economic development, are the promising areas for further development within this study.

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Justification of the method for choosing a territorial customs body as a foreign economic activity entity

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#### Abstract

The study presents the results of the development and practical testing of a **methodological approach to the choice of a territorial customs body by a foreign economic** activity entity.

The authors identify problems in the functioning of the customs system of Ukraine and propose a system of urgent tools to eliminate them, as ways of urgent actions aimed at solving priority and urgent problems of a customs nature, eliminating or minimizing their negative impact.

The study presents a method for selecting a territorial customs body for customs clearance of export and import products of enterprises in the context of anti-crisis management, which is based on the implementation of a number of consecutive stages.

The proposed method of selecting a territorial customs body for customs clearance of export and import products of enterprises in the conditions of anti-crisis management was tested on the example of such territorial customs offices of the State Customs Service of Ukraine as Bukovyna, Volyn, Halytska, Dnipro, Transcarpathia, Kyiv, Odesa, North, Podilska, Polissya, Slobozhansk and Black-Sea.

**Key words**: crisis management, Euro-Atlantic integration, investment, investment attractiveness, innovation, tool, customs, organizational change, urgent tool.

#### Introduction

Today, more and more enterprises focus on problems in customs clearance of products crossing the country's border in the implementation of export-import activities. It is worth noting that in the context of European and Euro-Atlantic integration, which promote the involvement of Ukrainian business structures in the common European market, the list of priority tasks includes urgent solutions to existing problems in the customs sphere. After all, the successful accession of customs authorities to the EU customs union by harmonizing customs procedures with European rules, introducing unified customs principles of operation and permanent improvement of customs activities one are the integral steps on the path of Ukraine's economic integration into the EU. The processes of Euro-Atlantic and European integration focus on the effective implementation by customs authorities of security and service functions related to the protection of the state and its society from dangerous and low-quality products, as well as maximum assistance to the implementation of legal export-import operations.

The obvious irreversibility of the Euro-Atlantic vector of Ukraine's development makes it necessary to implement targeted internal transformations at all levels. We are talking about not only systematic reform and harmonization of the principles of work of state and local authorities with the standards and practices of the North Atlantic alliance, but also the introduction of progressive anti-crisis management tools in the activities of domestic business structures.

The customs system of the state is a complex multifunctional structure, the results of which, on the one hand, are influenced by a wide range of stakeholders at different levels, and on the other hand, determine the effectiveness of the development of the national economy at different levels.

#### Analysis of scientific sources and regulations

Confirmation of the urgency of solving existing problems in the customs sphere and harmonizing the work of customs authorities with European standards are the state's obligations in accordance with the provisions of the Association Agreement between Ukraine, on the one hand, and the European Union, the European Atomic Energy Community and their member states, on the other hand (2014).

Article 76 of the document deals with the need to introduce various customs simplifications for law-abiding businesses, including granting the status of an authorized economic operator, improving the efficiency, non-discrimination and transparency of customs procedures, reducing costs and time for their implementation, using innovative customs tools in the field of customs risk management, customs post-audit, improving and unifying the processes of determining the code of goods and their origin, optimizing the documentation of customs clearance of goods, etc. Article 77 of the Association Agreement between Ukraine and the EU describes the principles of cooperation between customs authorities and business structures, which should be based on timely and systematic advice, ensuring access and transparency of customs legislation and information messages, promoting legitimate international trade, etc. Articles 80-83 of the Agreement reveal the specifics of internal and external customs cooperation in the context of ensuring progressive reform of customs authorities and improving their work in accordance with the best European practices.

Based on the results of the analysis, it can be argued that there are a considerable number of urgent problems in the field of customs clearance of products during both export and import operations, which indicate, first, non-fulfillment and partial fulfillment of Ukraine's obligations under the Association Agreement with the EU. In addition, the existing customs obstacles can lead to the emergence of a wide range of crisis phenomena in the functioning of foreign economic entities and thus discourage business structures from entering international markets. All of the mentioned above significantly hampers the processes of European and Euro-Atlantic integration, hinders the development of the national economy, and reduces the image of Ukraine in the international and European arenas.

The key tasks of reforming customs authorities for 2021 are set out in the plan of legislative work of the Verkhovna Rada of Ukraine (VRU, 2021), approved by the resolution of this authority No. 1165-IX of 02.02.2021:

- unification of duty rates on imported light industry goods;

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- improvement of procedures for personnel selection and evaluation of customs officials;

- harmonization of national customs legislation with the EU regulatory framework in terms of exemption from duties;

- introduction of the institute of customs mediation for consideration of tax complaints of business entities.

So, it should be noted that in the context of European and Euro-Atlantic integration of Ukraine, the elimination of existing customs obstacles in international trade is a priority and urgent task, which will ensure the timely implementation of the integration obligations assumed by Ukraine, the activation of international trade, the progressive development of the national economy, the exit of domestic business structures from the crisis, the improvement of their production and economic activities, etc.

In the practice of rating assessment of various economic objects, the taxonometric method is widely used. Thus, Yu. L. Logvynenko (2012) uses this tool for polycriterial rating of industrial enterprises. First, the scientist emphasizes the need for a diverse assessment of business structures by taking into account different areas of their activity. Such a multidimensional approach, according to the author, makes it possible to determine the final rating position of a business entity based on a comprehensive diagnosis of priority areas of its production and economic activities. According to Yu. L. Logvynenko, this makes it possible to monitor each area of the enterprise's functioning, identify strengths and weaknesses in a particular area, and thus make specific management decisions on choosing or changing functional development strategies.

At the present stage, foreign economic activity entities are increasingly noting the existence of a wide range of problems in customs clearance of products, which cause the emergence of various crises in the implementation of international trade operations. At the same time, according to the results of specialized surveys of domestic exporters and importers (Anhel et al., 2021), various territorial customs authorities have a rather uneven situation regarding the efficiency of their work. We are talking about the fact that, for example, a separate territorial customs office can lead in terms of efficiency of customs clearance of products, while, at the same time, it reflects problems in the field of customs control over the reliability of classification of goods of foreign economic activity. According to the results of studying the specialized materials and author's research, the use of only one diagnostic criterion is insufficiently justified in the context of determining the optimal customs clearance of export and import products. After all, there is a threat of obtaining an incomplete information picture, which will lead to false conclusions about the state of the diagnosed object.

In his work, Yu. L. Logvynenko (2012) notes the need to comply with certain requirements to ensure the effectiveness of rating the industrial enterprises, namely:

- ensuring the uniformity of rating assessment objects;

- scientific justification of the selection of indicators, taking into account the specifics of the activities of rating assessment objects;

- ensuring proportionality and comparability of indicators for rating selected objects.

In addition, in the monograph (Yurinets et al., 2013), the authors justify the expediency of using the taxonometric method for rating assessment against the background of other existing tools in this area. Scientists claim that the taxonometric approach makes it possible to compare the actual values of performance indicators of various rating objects with the best values of similar indicators that certain objects under study have in a certain period. Based on such a comparison, final integral assessments are formed to rank the objects by the level of operational efficiency and thus create prerequisites for fighting for the highest places in the rating, thereby encouraging improvement in performance indicators.

As noted in the work (Yurynets et al., 2013), the use of statistical methods for rating purposes requires providing a sufficient volume and representative sample. It is worth noting that the use of static tools for rating all territorial customs authorities is difficult due to the need to form a wide geographical sample of respondents. In addition, a significant part of information about the specifics of the work of customs authorities, as a rule, is confidential and difficult to access.

#### **Problem statement**

Taking into account the existing unevenness in the efficiency of functioning of territorial customs bodies and a wide range of problems, there is a need to develop a method for choosing a territorial customs body to ensure optimal customs clearance of goods of export-import entities in the conditions of anti-crisis management. We are talking about the fact that based on the use of this method, business structures will be able to quickly assess several territorial customs authorities to determine the most efficient ones in the context of ensuring the most favourable customs clearance of export and import products in various parameters. This is how business entities will be able to protect themselves from possible crises in foreign economic activity of a financial, temporary, reputational and other nature caused by various problems in customs clearance of goods.

#### Tasks and stages of the method

The key tasks for developing a method for selecting a territorial customs body in order to ensure optimal customs clearance of export-import products of enterprises in the context of anti-crisis management are the following three, shown in Figure 1.

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Source: developed by the authors

The implementation of the method of selecting a territorial customs body for customs clearance of export-import products of enterprises in the conditions of anti-crisis management provides for the implementation of a certain sequence of stages (see Figure 2).

Thus, the first stage is related to the collection of comprehensive information on the current state, characteristics and priority problems of customs clearance of products during export and import operations. It should be noted that it is necessary to ensure that such a database is up-to-date, since in the context of customs reform, changes in various areas of the state's customs system often occur under the influence of European integration processes. The official website of customs authorities, international ratings that reflect the customs component, research materials and surveys of specialized institutions, official statistics, etc. are the key sources of obtaining relevant information on the state and problems of customs clearance of export and import products of enterprises.

Stage 1. Information support of the rating assessment of territorial customs authorities on the favourable customs clearance of export and import goods of enterprises.

Stage 2. Preparation of indicator and criterion support for the rating assessment of territorial customs authorities on the favourable customs clearance of export and import goods of enterprises.

Stage 3. Selection of territorial customs authorities as objects of rating assessment.



**Figure 2.** The sequence of implementation of the method of selection of the territorial customs authority for customs clearance of export and import products of enterprises in terms of crisis management

Source: developed by the authors

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Stage 4. Collection of data for quantitative and qualitative content of the indicatorcriterion base of rating assessment of territorial customs authorities on the favourable customs clearance of export and import goods of enterprises.

Stage 5. Balanced rating assessment of territorial customs authorities on favourable customs clearance of export and import goods of enterprises based on the taxonometric method.

5.1. Compilation of the input matrix of key indicators of customs rating

5.2. Development of a standardized matrix based on the normalization of values of multidimensional indicators of customs rating

5.3. Formation of a reference matrix by selecting the best values of customs rating indicators

5.4. Establishment of Euclidean distances between actual and reference values of customs rating indicators

5.5. Justification of the weights of customs rating indicators based on the use of a pair comparison matrix

5.6. Drawing up a rating of territorial customs offices by the level of favourability of customs clearance

Stage 6. Analyzing the rating of territorial customs authorities and making a decision on the choice of customs for optimal customs clearance of export and/or import goods of the enterprise in the context of anti-crisis management.

Based on this information, it is necessary to identify priority and most problematic aspects in the customs clearance of export and import products of enterprises at the current stage of development of the state's customs system, which will further determine the selection of representative indicators. At the same time, it should be noted that the nature and significance of the problems of customs clearance of products in the context of export or import activities may differ to a certain extent.

The next stage of the method shown in Figure 2 reflects the purposeful selection of indicators and their corresponding optimality criteria for further rating assessment of territorial customs authorities regarding the favourability of customs clearance of export and import products of enterprises. The indicator base is formed based on data collected at the first stage, reflecting the current state, features and problems of customs clearance of products of exporters and importers. In addition, it should be remembered that a significant part of information on the work of customs authorities is usually difficult to access and is closed from external users. Information on the official website of the customs service is not always updated. This, accordingly, will complicate the search for information data necessary for calculating certain indicators. Therefore, it is recommended to choose such indicators, the information for determining of which is available to business structures. In addition, you should keep in mind the basic diagnostic rules for ensuring the limitation and representativeness of the indicator base, excluding indicators similar in content, and so on.

As noted above, the Institute for Economic Research and Political Consultations has

been conducting a survey of domestic foreign economic activity entities on problems in passing various customs procedures, including in the context of territorial customs for several years in a row. Based on the results obtained, the specialists of this institution map average point assessments of the state of various customs operations, procedures, objects, entities, etc. Such information is freely available on the official website of the Institute, is properly justified, updated and reflects the real problems of business cooperation with customs authorities during customs clearance of goods, and therefore can help prepare an appropriate indicator base.

Thus, basing on the study of a wide range of various specialized materials (Anhel et al., 2021; Berezhniuk (Ed.), 2015; Budz, 2020; State Customs Service of Ukraine, 2021a; Zhihalo, 2020; Komarnytska, 2019b; Serebrianskyi et al., 2015) and taking into account the existing features and problems of customs clearance of export and import products, the key indicators of the rating assessment of territorial customs authorities include:

- average expert assessment of the time of customs clearance of export and import products of enterprises (Y1 measured in points on a scale from 1 to 5, where 1 is the worst score, 5 is the best score);

- average expert assessment of the time of customs inspection of export and import products of enterprises (Y2 measured in points on a scale from 1 to 5, where 1 is the worst score, 5 is the best score);

- the level of efficiency of control by the territorial customs authority of the reliability of calculating the customs value of export and import products (Y3 measured in %, an increase is the optimal criterion);

- the level of efficiency of control by the territorial customs authority of the reliability of identification of the code of export and import products according to the UKTVED (Y4 measured in %, an increase is the optimal criterion);

- average expert assessment of the quality level of technical support of territorial customs authorities (Y5 measured in points on a scale from 1 to 5, where 1 is the worst rating, 5 is the best rating);

– average expert assessment of the qualification level of officials of territorial customs authorities in the customs clearance of export and import products of the enterprise (Y6 measured in points on a scale from 1 to 5, where 1 is the worst rating, 5 is the best rating);

- average expert assessment of the level of corruption of territorial customs authorities during customs clearance of export and import products;

- businesses (Y7 measured in points on a scale from 1 to 5, where 1 is the worst score, 5 is the best score).

In the future, it is necessary to determine the optimal criteria for the listed indicators of rating assessment of territorial customs authorities regarding the favourability of customs clearance of export and import products of enterprises in the conditions of anticrisis management. Above, next to each indicator, are its units of measurement and regulatory criteria. It is worth noting that the indicator base was formed taking into account a number of factors, namely taking into account the features and priority problems
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in customs clearance of export and import products of enterprises, the availability of customs information data in the context of territorial customs authorities, as well as ensuring the complexity and representativeness of the rating assessment.

The third stage is related to the selection of territorial customs authorities as objects of rating assessment. According to the resolution of the Cabinet of Ministers of Ukraine (2019) No. 858 of 02.10.2019, the territorial customs bodies of the state customs service of Ukraine include: Azov, Bukovyna, Volyn, Halytska, Dnipro, Transcarpathian, Kyiv, Odesa, Northern, Podilska, Polissya, Slobozhansk, Black-Sea customs of the State Customs Service. It should be noted that today, foreign economic activity entities can choose any territorial customs office for customs clearance of products, regardless of the place of registration. As a rule, business structures tend to choose the customs that is geographically closest to it, but taking into account only this factor is not a sufficiently reasonable basis for making an optimal decision in favour of a particular customs body.

Given the current stage of the military-political conflict between Ukraine and Russia, which is localized mainly on the eastern border of the state, it is advisable to exclude the Azov customs (Donetsk region) and the Eastern customs (Luhansk region) of the state customs service from the list of examined customs offices. This is primarily due to the inability to provide complete, adequate and reliable data today, to form a representative sample of respondents, and so on. Since the energy customs of the State Customs Service of Ukraine deals with customs clearance of only energy carriers, it is illogical to carry out its rating along with other territorial customs authorities.

Consequently, the list of territorial customs authorities as objects of rating assessment will include: Bukovyna, Volyn, Halytska, Dnipro, Transcarpathian, Kyiv, Odesa, Northern, Podilska, Polissya, Slobozhansk and Black-Sea customs of the State Customs Service. It is worth noting that foreign economic activity entities can reduce the list of customs offices under study in accordance with its interests. For example, if a business structure is located in the Western region of Ukraine, then it is possible to evaluate the customs authorities located in this territory.

The fourth stage concerns the collection of data for establishing indicators of rating assessment of territorial customs authorities regarding the favourability of customs clearance of export and import products of enterprises. For the most part, such information should derive from national sources, since international ratings can provide data of a more general nature. Taking into account the essence of the indicators in the list proposed for rating, statistical materials of the State Customs Service of Ukraine and the results of surveys of the Institute for Economic Research and political consultations (Anhel et al., 2021) became information sources for their determination.

The next fifth stage shown in Figure 2 represents a comprehensive balanced rating assessment of territorial customs authorities regarding the favourability of customs clearance of export and import products of enterprises based on the taxonometric method. Within this stage, first, it is necessary to draw up an input matrix of selected representative indicators that collectively characterize the level of favourability of customs clearance of

export and import products of enterprises for each territorial customs office for further rating of the relevant customs offices. The matrix *YY* should take the following form (Balabynets, 2014; Yurynets et al., 2013; Samorodov, 2011; 2012):

$$Y = \begin{bmatrix} y_{11} & y_{1j} & y_{1n} \\ y_{i1} & y_{ij} & y_{in} \\ y_{m1} & y_{mj} & y_{mn} \end{bmatrix}$$
(1)

where  $y_{ij}$  – the actual values of the *i* indicator are the *j* territorial difference;

i = [1, m] - indicator sequence number;

j = [1, n] -serial number of the territorial customs body.

Since 12 territorial customs offices are selected for rating, which are proposed to be evaluated according to 7 indicators, the matrix Y will take on  $m \times n$  dimensions (m - number of indicators taken into account (m = 7), n - number of territorial customs offices (n = 12).

It should be noted that the indicators proposed for evaluating territorial customs offices are characterized by different dimensions. This is primarily due to the need to ensure the complexity and representativeness of the rating of customs authorities based on the principles of considered diverse indicators. Therefore, there is a need to standardize the values of all considered indicators in order to build the transformed matrix S on the basis of the input matrix Y, which will ensure the uniformity of their measurement and mutual comparability (Balabinets, 2014; Yurynets et al., 2013; Samorodov, 2011):

$$S = \begin{bmatrix} s_{11} & s_{1j} & s_{1n} \\ s_{i1} & s_{ij} & s_{in} \\ s_{m1} & s_{mj} & s_{mn} \end{bmatrix}$$
(2)

where  $s_{ij}$  – standardized value of the i indicator of the j territorial customs;

i = [1, m] - indicator sequence number;

j = [1, n] – serial number of the territorial customs.

At the same time, the calculation of Matrix indicators  $S(s_{ij})$  will be conducted according to the formula (Balabynets, 2014; Yurynets et al., 2013; Samorodov, 2011)

$$s_{ij} = \frac{y_{ij} - \overline{y_i}}{\sigma_i} \tag{3}$$

where  $\overline{y_i}$  – average value of the *i* indicator for the entire set of territorial customs offices,  $\sigma_i$  – standard deviation of the *i* indicator.

In turn, the average value of the i indicator for the entire set of territorial customs offices should be calculated using the following formula (Balabynets, 2014; Samorodov, 2011; Feshchur et al., 2010):

$$\overline{y}_i = \frac{1}{m} \sum_{i=1}^n y_i \tag{4}$$

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The standard deviation will be calculated using the formula (Balabynets, 2014; Samorodov, 2011; Feshchur et al., 2010)

$$\sigma_i = \sqrt{\frac{1}{m} \sum_{j=1}^n (y_{iy} - \overline{y}_i)^2} \tag{5}$$

In the future, it is necessary to create a matrix of reference territorial customs ( $S^E$ ) by selecting the most optimal values for all rating indicators taken into account based on comparison with certain regulatory criteria. Such a matrix will take the following form (Balabynets, 2014; Yurynets et al., 2013; Samorodov, 2011):

$$S^{E} = (S_{1}^{E}; S_{2}^{E}; \dots S_{i}^{E}; \dots S_{m}^{E})$$
(6)

where  $S_i^E \rightarrow \text{optimal criterion}$ .

The next step is to establish distances between the actual and reference values of indicators of favourable customs clearance of export and import products of enterprises for all territorial customs authorities. The total calculation of such deviations will determine the integral rating assessment of the territorial customs and will be carried out according to the formula (Balabynets, 2014; Samorodov, 2011):

$$K_{cj} = \sqrt{\sum_{i=1}^{n} (s_{ij} - s_i^E)^2}$$
(7)

where Kcj – integral rating assessment of the j territorial customs authority; Kcj  $\rightarrow$  min.

It should be noted that the establishment of places of territorial customs authorities in the rating will take place using the least squares method. This means that the territorial customs office with the lowest value of the calculated integral rating will occupy the highest position in the rating (Balabynets, 2014; Yurynets et al., 2013; Samorodov, 2011).

Since the indicators calculated for rating territorial customs offices are characterized by different weights of influence on the favourability of customs clearance of export and import products of enterprises, there is a need to establish their significance. To perform this task, it is advisable to conduct an expert survey of customs clearance specialists for domestic exporters and importers. Generalization of the obtained research results should be carried out by using a matrix of pairwise comparisons, which will allow determining the weighting coefficients for each of the rating indicators and thus provide a weighted assessment. Table 1 presents a prepared matrix of the weight of indicators of favourability of customs clearance of export and import products of enterprises.

After assigning appropriate weight to all the considered indicators that characterize the level of favourability of customs clearance of export and import products of enterprises, a balanced final rating of territorial customs authorities should be carried out using the formula (Balabynets, 2014; Samorodov, 2011)

		e	export	and	mpoi	rt pro	oduct	ts of enterp	orises		
Indicator	Y1	Y <sub>2</sub>	Y <sub>3</sub>	Y4	Y <sub>5</sub>	Y <sub>6</sub>	Y7	The total frequency of benefits by rows	The total frequency of preferences by columns	The total frequency of benefits	Weight of indicators
$Y_1$	-	Y <sub>1</sub>	6	-	6	0.29					
Y <sub>2</sub>	-	-	Y <sub>3</sub>	Y <sub>2</sub>	Y <sub>2</sub>	Y <sub>6</sub>	Y <sub>7</sub>	2	-	2	0.09
Y <sub>3</sub>	-	-	_	Y <sub>3</sub>	Y <sub>3</sub>	Y <sub>6</sub>	Y <sub>3</sub>	3	1	4	0.19
Y <sub>4</sub>	-	-	-	-	Y <sub>5</sub>	Y <sub>6</sub>	Y <sub>4</sub>	1	-	1	0.05
Y <sub>5</sub>	-	-	-	-	-	Y <sub>6</sub>	$Y_5$	1	1	2	0.09
Y <sub>6</sub>	-	-	-	-	-	-	Y <sub>6</sub>	1	4	5	0.24
Y <sub>7</sub>	-	-	-	-	-	-	-	-	1	1	0.05
Total	-	-	-	-	-	-	-	14	7	21	1

**Table 1**. Matrix of weights of indicators characterizing the favourable customs clearance ofexport and import products of enterprises

Source: developed by the authors

$$K_{cj}^{z} = \sqrt{\sum_{i=1}^{n} v_{i} (s_{ij} - s_{i}^{E})^{2}}$$
(8)

where  $K_{cj}^z$  – weighted integral rating assessment of the *j* territorial customs authority;  $v_i$  – weighting factor of the *i* indicator;

 $V_i - \text{weightin}$  $K_{ci}^z \rightarrow \text{min.}$ 

Similarly, as for a simple integral rating assessment, the determination of positions of territorial customs authorities based on a weighted assessment in the rating will also take place using the least squares method.

After drawing up a rating of territorial customs authorities on the level of favourable customs clearance of export and import products of enterprises, the last stage of the proposed method will be implemented. We are talking about a thorough element-by-element analysis of the rating of territorial customs authorities for all the indicators studied in order to make a decision on the choice of customs body to ensure optimal customs clearance of export and/or import products of the enterprise in the conditions of anti-crisis management.

Justification of the method for choosing a territorial customs body as a foreign economic activity entity

### Testing the developed method on the example of performance indicators of the customs authorities of Ukraine

To substantiate the practical significance of the developed method of selecting a territorial customs body for customs clearance of export and import products of enterprises in the context of anti-crisis management, its applied implementation was carried out. In particular, the rating of territorial customs authorities on the favourability of customs clearance of goods of foreign economic activity entities according to the data of 2020 was carried out. As was justified above, the objects of the rating assessment were such territorial customs authorities as Bukovyna, Volyn, Halytska, Dnipro, Transcarpathian, Kyiv, Odesa, Northern, Podilska, Polissya, Slobozhansk and Black-Sea customs of the State Customs Service.

The establishment of actual values of indicators for diagnosing the favourability of customs clearance of export and import products of enterprises in the context of territorial customs was based on statistical materials of the State Customs Service of Ukraine and the results of a survey of domestic exporters and importers of the Institute for Economic Research and political consultations (Anhel, Butin, Kuziakiv and Fedets, 2021). As previously noted, the indicators taken into account are multi-dimensional, and therefore there is a need to normalize their actual values using formulas 3-5. The results of standardization of the values of the studied indicators in the context of each territorial customs are presented in Table 2.

It should be noted that the normalized values of indicators from Table 2 at the same time are elements of the standardized matrix S. Based on the selection of the most optimal value of each indicator, we will form a matrix of the reference territorial customs  $S^{E}$ , which will take the following form:

 $S^{E} = (2.46; 2.66; 1.92; 2.09; 1.66; 1.64; 1.62)$ 

In the future, we will calculate the Euclidean distances between the actual and reference values of indicators of favourability of customs clearance of export and import products of enterprises for each territorial customs office.

Since different indicators are characterized by different weights of influence on the favourability of customs clearance of goods (see Table 1), as was justified above, it is advisable to perform a balanced integral rating assessment of territorial customs authorities (see Table 3) using formula 8.

Based on the data in Table 3 for visual perception, we will reflect the final weighted rating assessments of territorial customs authorities by the level of favourability of customs clearance of export and import products of enterprises in the conditions of anti-crisis management in the form of a barometer according to the data of 2020 (see Figure 3). As noted above, the positions of territorial customs authorities in the rating were determined using the least squares method.

	Customs Service of Ukraine in 2020											
Indicators/ Teritorial customs	Bukovyna customs	Volyn customs	Halytska customs	Dnipro customs	Transcarpathian customs	Kyiv customs	Odesa customs	Northern customs	Podilska customs	Polissya customs	Slobozhansk customs	Black Sea Customs
Y1	-0.73	0.07	0.07	-0.73	0.86	0.07	-1.53	2.46	-0.73	0.07	-0.73	0.86
Y <sub>2</sub>	-1.19	-0.09	-0.09	-0.64	-1.19	-0.09	-0.64	2.66	0.46	-0.09	-0.09	1.01
Y <sub>3</sub>	1.17	-1.03	-0.48	-0.14	0.21	-1.78	1.23	-0.48	-0.75	-0.14	1.92	0.27
Y <sub>4</sub>	-0.53	-0.64	-0.43	-0.20	-1.06	-0.53	-0.85	0.20	0.31	-0.74	1.98	2.09
Y5	1.66	0.09	-0.96	-1.49	-1.49	0.09	-0.44	0.61	0.09	-0.44	0.61	1.66
Y <sub>6</sub>	1.64	-1.64	0.00	-0.55	-0.55	-0.55	-1.10	1.64	-0.55	1.10	0.00	0.55
Y <sub>7</sub>	1.19	-0.97	-0.11	-0.54	0.76	-0.54	-0.97	1.62	-0.54	1.62	-0.11	-1.40

**Table 2.** Indicators of rating assessment of the favourable customs clearance of export and import products of enterprises in terms of territorial customs authorities of the State Customs Service of Ukraine in 2020

Source: compiled on the basis of data from the State Customs Service of Ukraine and the Institute for Economic Research and Policy Consulting

Thus, in Figure 3 territorial customs offices are placed in a clockwise rating order.

Based on the results of the study, it can be concluded that the leading position of the Northern customs was obtained due to the best indicators regarding the time for customs clearance and customs inspection of export and import products of the enterprise, as well as the level of qualification of customs officials and the level of corruption. Unfortunately, the Odesa customs of the State Customs Service of Ukraine in 2020 showed rather low values of all the studied indicators, which led to the last place in the rating list.

It is worth noting that depending on the frequency and severity of problems in customs clearance of products faced by a particular enterprise, it is also recommended to carry out a partial analysis of the ratings of territorial customs for each of the indicators and on this basis make a decision in favour of the relevant customs. As practice shows and experts and specialists in the customs sphere note, significant changes in the functioning of customs authorities mostly do not occur quickly, yet, as a rule, no more than one year. Consequently, the obtained rating results for the previous period (year) can reasonably serve as a guide for the company's choice of a territorial customs body in the current period (year) for the purpose of passing customs clearance of export and import products.

Justification of the method for choosing a territorial customs body as a foreign economic activity entity

# **Table 3.**Weighted integrated rating assessments of territorial customs bodies of the State Customs Service of Ukraine on the favourable customs clearance of export and import products of enterprises in 2020

			mpe		iucis oi	ornorp	11505 11	2020				
Indicators/ Teritorial customs	Bukovyna customs	Volyn customs	Halytska customs	Dnipro customs	Trans- carpathian customs	Kyiv customs	Odesa customs	Northern customs	Podilska customs	Polissya customs	Slobozhansk customs	Black Sea Customs
Y1	2.94	1.66	1.66	2.94	0.74	1.66	4.60	0.00	2.94	1.66	2.94	0.74
Y <sub>2</sub>	1.33	0.68	0.68	0.98	1.33	0.68	0.98	0.00	0.44	0.68	0.68	0.25
Y <sub>3</sub>	0.11	1.65	1.10	0.80	0.56	2.61	0.09	1.10	1.36	0.80	0.00	0.52
Y4	0.34	0.37	0.32	0.18	0.49	0.34	0.43	0.18	0.16	0.40	0.00	0.00
¥5	0.00	0.22	0.62	0.89	0.89	0.22	0.40	0.10	0.22	0.40	0.10	0.00
Y <sub>6</sub>	0.00	2.59	0.65	1.15	1.15	1.15	1.80	0.00	1.15	0.07	0.65	0.29
Y <sub>7</sub>	0.01	0.34	0.15	0.23	0.04	0.23	0.34	0.00	0.23	0.00	0.15	0.46
Σ	2.18	2.74	2.27	2.68	2.28	2.63	2.94	1.17	2.55	2.00	2.13	1.50
Rating	5	11	6	10	7	9	12	1	8	3	4	2

Source: compiled on the basis of data from the State Customs Service of Ukraine, the Institute for Economic Research and Policy Consulting, an expert survey



**Figure 3.** Barometer of rating assessments of territorial customs bodies of the State Customs Service of Ukraine on the favourable customs clearance of export and import products of enterprises in 2020

Source: authors' elaboration

#### Conclusions

The method of selecting a territorial customs body for customs clearance of export and import products of enterprises in the conditions of anti-crisis management is improved. It is recommended to be used by specialists in customs and foreign economic activity, as well as the management of customs authorities for a balanced rating assessment of territorial customs on a number of representative indicators that reflect the defining parameters of customs clearance of products of exporters and importers, in order to optimize management decisions in the customs sphere.

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Analysis of the condition of transport-customs infrastructure and efficiency of the transit potential of Ukraine

#### Abstract

The article proposes a method for studying the current condition and presents the results of the analysis of the infrastructure of the Ukrainian network of international transport corridors and the parameters of the arrangement of the customs border of Ukraine with checkpoints for automobiles. It shows that to increase the efficiency of the country's transit potential, the infrastructure and capacity of highways and checkpoints on the customs border require a further increase in capacities for the transportation and processing of export-import flows by updating and modernizing the existing elements of the transport system and arranging new checkpoints on the customs border in accordance with European standards. The expediency of introduction of modern intensive transport technologies based on reduction of time of transportation and service of the basic types of cargoes, development of uniform rules and indicators for all elements of transport infrastructure and types of transport is noted.

The development of logistics infrastructure and harmonization of transport corridors with the countries of Europe and the world will enable Ukraine to realize its advantageous position and become a transport hub of world scale. Thus, the provision of modern infrastructure and technological parameters of checkpoints of the customs border of Ukraine for processing possible volumes of cargo and passenger traffic will significantly increase the efficiency of the Ukrainian transport system and double its share in GDP from 7% to 15%.

The renewal and technological modernization of the transport and infrastructure spheres of the state are determined by the strategy "Drive Ukraine 2030" as the main drivers of Ukraine's integration into the world economy. The transport and infrastructure spheres must unite Ukraine and ensure its effective integration into the European and world transport systems.

**Key words:** transport and customs infrastructure, transit potential, Ukrainian roads.

#### Introduction

In modern conditions, the success of economic development of the state directly depends on the full use of transit potential and the state of transport and customs infrastructure of the country. Expert assessment of the current state of transport infrastructure in Ukraine conducted by the European Business Association determines the infrastructure index equal to 2.58 points out of 5 possible and only 54% of respondents assess the level of development of the infrastructure industry as satisfactory (European Business Association, 2020). Therefore, improving the efficiency of the transport system is one of the main tasks of the National Transport Strategy of Ukraine until 2030 (Ministry of Infrastructure of Ukraine, 2020). In general, the state of infrastructure of the Ukrainian

network of international transport corridors and checkpoints across the customs border of Ukraine, despite the measures taken, does not fully meet modern requirements for its crossing by vehicles and movement of goods, which hinders the growth of transit traffic. Moreover, having all the opportunities to become a transport bridge between the countries of the European Union and the countries of the Middle East and Asia, Ukraine is constantly losing the volume of international transit of goods through its territory, and consequently significant financial revenues to the state budget. In this regard, the problem of developing measures and determining the conditions for improving the efficiency of transport and transit potential of the country and increasing the capacity of the transport network taking into account the modernization of the infrastructure of border checkpoints of Ukraine is extremely relevant (Hoblyk, 2016, Iskarova, 2010).

Improving the efficiency of the transit potential of the state is important for the development of both the transport system and the economy of our country The relevance of research in this area is confirmed by a number of published scientific papers on various aspects of this issue.

Thus, in (Veprytsky et al., 2018), based on the analysis of the volume of freight traffic by different modes of transport, the trends of their development are established and the indicators of competitiveness of the transport infrastructure of Ukraine are determined. The results of the study of the problems of using the transit potential of the border regions of Ukraine with the European Union and the prospects of their infrastructure are given in the article (Hoblyk, 2016). The relationship between transport infrastructure and factors of economic security of the state are considered in (Iskarova, 2010).

Directions for further development of methodological approaches to the formation of transport and customs infrastructure in Ukraine are set out in the monograph (Pasichnyk (Ed), 2016). The analysis of modern tendencies of development of transport and logistic infrastructure is carried out and possibilities of their application for development and modernization of logistic transport and customs infrastructure of the Ukrainian transport system are considered. Problems of improving the management of cargo transportation and movement of vehicles in real time based on the use of satellite and geographic information technologies are considered in (Moroz et al., 2013). In (Mykhaylychenko et al., 2015), the basic conditions are defined and measures to increase the efficiency of transit transportations are offered, including due to the development of transport infrastructure and improvement of the operational reliability and technical characteristics of roads in the directions of the ITC.

The article (Platonov, 2017) presents the characteristics of current trends in the development of international freight transport and reveals the importance of international transport corridors in the world transport system. A study outlines the state and trends in reducing the volume of freight traffic in the transport system of Ukraine. The factors determining the development of international freight transportation and non-compliance of the Ukrainian transport system with EU standards and requirements have been identified.

The methodology for calculating the parameters of interaction of different elements of transport systems is presented in (Pravdyn et al., 1989). Issues of analysis of the functional parameters of international road checkpoints and improvement of the infrastructure of the Ukrainian customs border from the standpoint of economic security of the state are considered in publications (Pasichnyk et al., 2012, Pasichnyk et al., 2009).

The publication (Khalipova, 2013) is devoted to the study of logistics systems of international transportation on the basis of the application of mathematical modelling methods. Prospects for the application of the principles of the European common transport policy for the development of the transport system of Ukraine are considered in (Khoma et al., 2013). The main features of the use of the transit potential of Ukraine and the factors hindering its development are given in the article (Khomenko et al., 2020). It is established that Ukraine uses its transit potential by less than 50%.

The main purpose of this work is to develop methods and study the state of the Ukrainian network of international road transport corridors and infrastructure of road checkpoints across the customs border of Ukraine, as well as to identify ways to improve the efficiency of transit potential of the state.

To achieve this goal, it is necessary to solve the following tasks:

• conduct a study of the capacity of the transport system and checkpoints across the customs border of Ukraine;

• identify areas for improvement of transport and customs infrastructure;

• analyze the state of transit traffic of goods through the territory of Ukraine by different modes of transport;

• establish the level of competitiveness of the transport infrastructure of Ukraine;

• determine the degree of influence of the components of the transit potential on the value of the transit rating.

## Functional parameters and directions of modernization of the Ukrainian network of international transport corridors

The main goal of the National Transport Strategy of Ukraine for the period up to 2030 is defined as follows:

- priority renewal and modernization of the transport system in accordance with European standards;

- entry of the Transport System of Ukraine into the Trans-European Transport Network;

- improvement of transport networks and modernization of transport infrastructure;

- increasing the mobility of transport flows between Ukraine and other countries;

- simplification of technological procedures for resolving administrative and technical formalities related to border crossing;

- improvement of transport conditions for transportation of passengers and goods.

At present, seven automobile international transport corridors (ITC) passes through

the territory of Ukraine: Nº3, 5, 9, Europe-Asia, Baltic-Black Sea, Black Sea Economic Cooperation (BSEC), Europe-Caucasus-Asia (TRACEKA) (see Figure 1). It should also be noted that an international water transport corridor along the Danube Nº7 crosses the territory of Ukraine.

The length of roads in the directions of transport corridors is 5,240 km. At the same time, **ITC Nº3**, **Nº5** and BSEC are the most intense in terms of passenger traffic. It should be noted that the highest intensity of freight traffic is observed in the directions of ITC **Nº5**, **Nº9** and Europe - Asia. The route to the BSEC countries in international freight traffic is less busy. In general, according to expert estimates, Ukraine's transit potential is currently being used for a third of its capacity. Therefore, it is necessary to search for solutions and measures aimed at increasing the volume of goods flows that can move the transport system of Ukraine between countries of different continents today and will be formed in the future.



**Figure 1.** Map of international highways and transport corridors of Ukraine Source: https://dlca.logcluster.org/display/public/DLCA/2.3+Ukraine+Road+Network

It should be noted that the network of Ukrainian roads in length, density and configuration meets the technological needs of regional and local transport, but according to international requirements is underdeveloped compared to similar indicators in Europe

(see Table 1). These data indicate that the leading position in this rating is occupied by the most economically developed countries of Europe. Therefore, in order to stabilize the economic situation in the country, it is necessary to increase the efficiency of the Ukrainian transport network, conduct a systematic analysis of its functional parameters and determine the directions of its modernization.

of highways in Okrame and European countries									
Country	Road length, thous. km	Country area, thous. km²	Road density, km/ thous. km²						
Netherlands	139.7	41.5	3366.3						
Germany	644.5	357.4	1803.3						
France	1090.2	632.7	1723.1						
Italy	487.7	301.3	1618.7						
Spain	683.2	506.0	1350.2						
Polish	424	312.7	1355.9						
Ukraine	169.5	603.5	280.9						

### **Table 1.** Comparison of characteristics of the transport network of highways in Ukraine and European countries

Source: https://en.wikipedia.org/wiki/List\_of\_countries\_by\_road\_network\_size

The total length of public paved roads in Ukraine is 169.5 thous. km. Roads are divided into 5 categories, depending on the capacity, the number of lanes, the width of the lanes, the width of the carriageway, the width of the road surface, the width of the right-of-way, the longitudinal slope of the road and the radius of the road. Category I roads must have a mandatory distribution lane and 2-4 lanes for traffic in one direction. And twice as much in two directions, accordingly. And the roads of II - IV categories have one lane in one direction, only 2 lanes in both directions. Category V roads generally have only one lane. Estimated long-term traffic intensity (for a car) on the roads of the I category is more than 14,000 cars, II category – from 5,000 to 14,000 cars, III category – from 2,500 to 5,000, IV category – from 300 to 2,500, V category – less than 300 cars.

In the structure of highways of Ukraine, the share of international highways is 4.85%, the highways of state importance – 12.45%, and local roads – 87.6% of the total length (see Table 2) (State Statistical Service of Ukraine, 2018, Ministry of Infrastructure of Ukraine, 2021). Of the total length of public paved roads in Ukraine only 1.55% accounted for category I roads, category II roads accounted for 7.64% of the total length of such roads, category III roads – 17.17%, category IV roads – 62.51% and category V roads – 8.96% of the total length of public paved roads in Ukraine. Most category I roads are in Kyiv, **Dnipropetrovs'k, Donetsk, Zhytomyr and Kharkiv regions. And** few category I roads are in Sumy, Zakarpattya and Chernivtsi regions.

Table 2.   Structure of highways of Ukraine									
Road condition	Total		International	National	Regional	Of local			
Koud condition	km	%	mernanonai	National	кеуюни	importance			
Length	169495	100	8221	4843	8034	148397			
Paved	165820	97.83	8221	4843	8034	144722			
Unpaved	3675	2.17	0	0	0	3675			
By categories:									
Ι	2616	1.55	1789	515	231	81			
II	12945	7.64	4697	2840	2693	2715			
III	29112	17.17	1640	1373	4078	22021			
IV	105958	62.51	88	115	1031	104724			
V	15189	8.96	7	0	1	15181			
Network share, %	100		4.85	2.86	4.74	87.55			
Average categorical indicator	3.71		2.01	2.22	2.74	3.91			

Source: based on data from State Statistics Service of Ukraine, 2018

Data analysis in Table 2 shows that the average categorization of the entire network of roads is below the III category, and roads of international importance are at the level of the II category. The total length of highways in the directions of transport corridors is 5,240 km (Ministry of Infrastructure of Ukraine, 2021). Such quantitative and qualitative characteristics of the road transport network directly proportionally reduce its capacity. And since the highways of Ukraine are an integral part of international transport corridors passing through the territory of our country, we can talk about the direct impact of these indicators on the low efficiency of the transit potential of the state.

Note that the transit potential of the country is determined by the capacity of the transport network, as well as qualitative and quantitative characteristics of the resources of the transport and customs system and its infrastructure, to ensure the appropriate level of transport and customs services for transit of goods and passengers in Ukraine.

In this regard, increasing the capacity and quality of highways is one of the main tasks of the National Transport Strategy of Ukraine until 2030 (Ministry of Infrastructure of Ukraine, 2020). It is necessary to approach the implementation of the program tasks comprehensively taking into account the volumes of trade flows that are formed between the countries today and will be formed in the future. Thus, it is necessary to determine the value of the capacity of the Ukrainian network of international road transport corridors at present and to determine the directions of its development.

The level of capacity of the highway depends on the number of lanes, the speed of vehicles and the condition of the road surface, as well as the type of cars moving on a particular section. In accordance with the method (Pravdyn et al., 1989), taking into account these criteria under the condition of systematic movement of cars in normal

conditions, the capacity is determined as follows:

$$C_{cd} = 24 \cdot \frac{v \cdot nl \cdot \beta}{(lr + St + lc + ld)} \cdot 10^3, \quad (car/day)$$
(1)

where  $n_l$  – coefficient of the number of lanes;

#### v – vehicle speed, (km/h);

 $\beta$  – coefficient of the technological parameters of the road for the throughput capacity ( $\beta$  = 0.563);

lr – distance traveled by the car before the driver's reaction, (m);

 $S_t$  – braking distance, (m);

 $l_c$  – car length, (m);

*la* – safety distance to the car moving in front (m).

The results of the calculations of throughput for different sections of individual highways of international importance, taking into account the number of lanes (1/2/3) for traffic in one direction, according to formula (1) are presented in Table 3.

#### **Table 3**. Weighted average ITC bandwidth of Ukraine in automobile communication

ITC	Bandwidth, car/day
Cretan № 5	69056
Baltic - Black Sea (Gdansk - Odesa)	65056
Cretan № 9 (branches)	69056 (23019)
Europe - Asia	55245
Cretan № 3	55245
Black Sea Economic Cooperation (BSEC)	55245
Eurasian (Europe - Caucasus - Asia)	27622

Source: authors' elaboration

The analysis of the above data shows that the international transport corridor Gdansk - Ode**sa and ITC № 5 and №**9 (on the main route) have the highest capacity, while other ITCs are somewhat inferior. ITC Eurasian has the lowest capacity. Among the transport corridors, Europe - Asia is of great strategic importance and it is sufficiently loaded with transit and export-import flows. Thus, providing conditions for further development of foreign economic goods and passenger flows in the priority areas is the task of today's transport and customs system of Ukraine.

## Infrastructural and functional parameters of checkpoints across the customs border of Ukraine

It should be noted that the capacity of the Ukrainian network of international transport corridors is determined by both the capacity of highways and the capacity of the respective checkpoints that provide processing of traffic flows across the customs border of the state.

Ukraine borders seven countries (Belarus, Russia, Moldova, Romania, Hungary, Slovakia, Poland) and has the longest land external border among European countries. The total length of the state border today is 6993.63 km, of which the land area is 5638.63 km.

In accordance with the classical approach of the dynamic theory of traffic flows (Pravdyn et al., 1989), the estimated capacity of the customs border crossing point for the movement of cars is determined by the formula:

$$N_{ri} = \frac{1440}{t_{mki}} n_s \tag{2}$$

where  $t_{mki}$  – time needed for customs clearance of motor vehicles of the *i*-type taking into account conditions of safe movement of a transport flow, min.;

 $n_s$  – the number of lanes for customs formalities of motor vehicles of the i types.

The proposed method of calculation (2) allows solving the inverse problem: ensuring the required capacity of the checkpoints across the customs border in the car service and calculating the required number of lanes

$$n_s = \frac{t_{mki}}{1440} N_{ri} \quad \text{(lanes)} \tag{2'}$$

Comparative analysis of the results of calculation of infrastructural and functional parameters of checkpoints for goods' and passengers' road transportation by sections of the customs border of Ukraine is given in Table 4.

CBU Section	Length,	Average CB	Average bar car/d	-	International
	km	distance, km	Calculated	Actual	highways
Belarusian	1084.2	83.4	3888	83.4	<b>M-01, M</b> -19
Russian	1974.04	70.5	9050	70.5	<b>M-02, M-03, M</b> - 04, <b>M-14, M</b> -17, <b>M</b> -20
Moldavian	1222.0	42.14	8450	42.14	M-13, M-15, M-16, M-21, M-23
Romanian	580.8	193.6	3196	193.6	<b>M</b> -19
Hungarian	136.7	27.34	14820	27.34	<b>M</b> -06
Slovak	98.5	49.25	1800	49.25	<b>M</b> -08
Polish	542.39	90.4	17340	90.4	M-07, M-09, M-10, M-11

Table 4. Characteristics of sections of the customs border of Ukraine by car traffic

Source: based on data from (Pasichnyk (Ed), 2016)

The data in Table 3 shows that the average distance between checkpoints in almost all

areas exceeds similar indicators of the borders of European countries. In particular, Table 5 provides the characteristic features of the arrangement of the Polish border with road checkpoints after joining the European Union are given in Table 5.

At the time of Poland's accession to the Schengen area, the country's border guard has stopped guarding its internal European borders and continues to carry out its tasks only at the EU's external border. There are 16 border crossing points located on highways on the Polish border with Russia, Belarus and Ukraine, with a total length of 1,185.4 km, while 24 border crossing points on the Polish-German border with a length of 467 km. The table indicates that the average distance between non-EU countries is from 60 to 90 km, between EU member states - from 16 to 25 km.

To assess the state of arrangement of checkpoints of the customs border of Ukraine, the integrated rating coefficient is suggested for calculation by the following formula based on indicators of functional parameters and relative weight indices of their impact:

$$\begin{split} K &= q_{fe} \cdot K_{fe} + q_{vs} \cdot K_{vs} + q_{te} \cdot K_{te} + q_{so} \cdot K_{so} + q_{r} \cdot K_{r} + q_{\phi} \cdot K_{\phi} + q_{z} \cdot K_{z} + q_{spk} \cdot K_{spk} + q_{ms} \cdot K_{ms} \\ &+ q_{stz} \cdot K_{stz} + q_{td} \cdot K_{td} + q_{ph} \cdot K_{ph}. \end{split}$$
 (3)

CB Section	Length, km	Number of checkpoints	Average distance, km	
Non-EU members	1185.4	16	74.09	
Russia	232.0	3	77.33	
Belarus	418.2	7	59.74	
Ukraine	535.2	6	89.20	
<i>EU</i> members	1899.0	99	19.18	
Lithuania	103.0	6	17.17	
Slovakia	539.0	21	25.67	
Czech Republic	790.0	48	16.46	
Germany	467.0	24	19.46	
Total	3084.4	115		

### Table 5. Characteristics of the arrangement of automobile checkpoints on the Polish border

Source: based on data from (Pasichnyk (Ed), 2016)

The value of the integrated rating coefficient takes into account the following indicators of functional parameters and relative weight indices of their influence:

1. Kfe – coefficient of efficiency of the use of a checkpoint capacity,

$$\mathbf{K_{fe}} = 1/3(Y_{f1}/Y_{n1} + Y_{f2}/Y_{n2} + Y_{f3}/Y_{n3}), \qquad (4)$$

where  $Y_{f1}$  – average daily traffic intensity of cargo vehicles,

 $Y_{f2}$  – average daily traffic intensity of passenger vehicles,

 $Y_{f3}$  – average daily intensity of bus traffic,

Yni – design capacity of the checkpoint,

Yn1 – cargo vehicles per day,

Yn2 – passenger vehicles per day,

Yn3 – buses per day;

 $q_{fe}$  – index of the impact of the efficiency of the checkpoint capacity on the integrated rating factor. According to expert estimates, it is proposed to be 0.6.

2.  $\mathbf{K}_{vs}$  – coefficient of correspondence of the checkpoint capacity in Ukraine and neighboring state,

$$\mathbf{K_{vs}} = 1/3(Y_{s1}/Y_{n1} + Y_{s2}/Y_{n2} + Y_{s3}/Y_{n3}),$$
(5)

where  $Y_{si}$  – the capacity of the checkpoint of a neighboring state,

Y<sub>s1</sub> – cargo vehicles per day,

Y<sub>s2</sub> – passenger vehicles per day,

Y<sub>s3</sub> – buses per day.

 $q_{vs}$  – index of the impact of the coefficient of correspondence of the checkpoint capacity in Ukraine and the neighboring country on the rating factor. According to expert estimates, it is proposed to be 0.4.

3.  $K_{te}$  – the service life of the checkpoint,

$$K_{te} = (T_t - T_m)/10,$$
 (6)

where  $T_t$  – year of the calculation period,  $T_m$  – year of the last reconstruction, construction.

 $q_{te}$  – index of the impact of the checkpoint service life factor on the rating factor. According to expert estimates, it is proposed to be 0.4.

4. Kso – coefficient of the functioning of the checkpoint:

 $K_{so} = 1 - \text{for permanent checkpoints},$  (7)

 $K_{so} = 2 - \text{for temporary checkpoints.}$  (8)

 $q_{so}$  – index of the impact of the checkpoint functioning coefficient on the rating factor. According to expert estimates, it is proposed to be 0.7.

5.  $K_r$  – coefficient of availability of the "filter" of the checkpoint:

$$K_r = 0 -$$
for checkpoints with a "filter", (9)

 $K_r = 1 -$ for checkpoints with no "filter", (10)

 $K_{\Gamma} = 2 -$ for checkpoints with no "filter" (11)

and project documentation.

 $q_r$  – index of influence of the checkpoint "filter" availability coefficient on the rating coefficient. According to expert estimates, it is proposed to be 0.3.

6.  $K_{\phi}$  – coefficient of economic functionality of the checkpoint,

$$K\phi = Enn / Emk,$$
 (12)

where  $E_{nn}$  – volumes of trade turnover through the checkpoint or the section of the customs border of Ukraine with a neighboring state,

E<sub>mk</sub> – volumes of trade turnover across the customs border of Ukraine.

 $q_{\phi}$  – index of the impact of the checkpoint economic functionality coefficient on the

coefficient of the rating. According to expert estimates, it is proposed to be 0.6.

7.  $K_{\!z}$  – coefficient of providing the checkpoint with technical means of customs control (TMCC):

 $K_z = 1 -$ the level of equipment with TMCC fully meets the requirements, (13)

 $K_z = 2 -$ the level of equipment with TMCC partially meets the requirements, (14)

 $K_z = 3$  – the level of equipment with TMCC does not meet the necessary requirements (15)  $q_z$  – index of the impact of the checkpoint TMCC security factor on the rating factor.

According to expert estimates, it is proposed to be 0.2.

8.  $\mathbf{K_{spk}}$  – coefficient of introduction of joint control:

 $K_{spk} = 0 - joint control at the checkpoint of a neighboring state,$  (16)

 $K_{spk} = 1 - joint control at the checkpoint is not carried out,$  (17)

 $K_{spk} = 2 - joint control at the checkpoint of Ukraine.$  (18)

 $q_{spk}$  – index of the impact of the joint control coefficient introduction on the coefficient of rating. According to expert estimates it is proposed to be 0.5.

9. Kms – coefficient of the main connection level:

 $K_{ms} = 1 - for highways of state importance,$  (19)

 $K_{ms} = 2 - \text{for highways of ITC.}$  (20)

 $q_{ms}$  – index of the impact of the main connection level coefficient on the coefficient of the rating. According to expert estimates, it is proposed to be 0.4.

10.  $K_{stz}$  – coefficient of strategic importance of the checkpoint for the economic security of the state:

$K_{stz} = 0.8 - under conditions of insignificant influence,$	(21)
--	------

$$K_{stz} = 1,0 - with a significant impact on economic security,$$
 (22)

$$K_{stz} = 1,2 - of crucial importance.$$
 (23)

 $q_{stz}$  – index of the impact of the coefficient of checkpoint strategic value for the economic security of the state on the rating coefficient. According to expert estimates, it is proposed to be 0.5.

11.  $K_{md}$  – coefficient of availability of design and estimate documentation for the modernization of the checkpoint:

 $K_{md} = 1 - \text{if there is the technical documentation},$  (24)

 $K_{md} = 0 - if technical documentation is absent.$  (25)

 $q_{md}$  – index of the impact of the coefficient of design and estimate documentation availability for the modernization of the checkpoint on the rating coefficient. According to expert estimates, it is proposed to be 0.3.

12. **K**<sub>**ph**</sub> – access coefficient:

 $K_{ph} = 1 -$ there are no roads or their condition is unsatisfactory, (26)

 $K_{ph} = 2 - access roads to the checkpoint are available.$  (27)

 $q_{ph}$  – index of the impact of the access roads coefficient on the rating coefficient. According to expert estimates, it is proposed to be 0.2.

For the practical application of formula (1), a database of functional characteristics

and infrastructure parameters of the checkpoints used in formulas (3) - (27) is formed.

The results of the calculation of the rating of the state of arrangement of Ukrainian road checkpoints across the western border are made on the basis of the approach proposed in formula (3) and given in Table 6.

The results of the analysis indicate that the infrastructure of arrangement of the customs border of Ukraine with road checkpoints requires further increase of capacity and processing of export-import flows due to modernization of existing and construction of new checkpoints.

CP Section	Automobile	Project	Actı	ıal 2012	Coeff. of	Datina	Charlengint
CB Section, Ukraine	CC, Ukraine	capacity (car/day)	trucks	passenger cars	bandwidth utilization	Rating coefficient	Checkpoint rating
Hungarian 2	Dzvinkove		0	114	0,0	2.35	1
Hungarian 5	Vylok		0	900	0,0	2.75	2
Hungarian 1	Chop (Tysa)	1000	491	1774	0.67	2.791	3
Hungarian 4	Luzhanka	4740	8	1278	0.16	2.845	4
Polish 1	Yahodyn	5000	933	2060	0.72	2.885	5
Polish 4	Krakovets'	2500	647	2505	1.27	3.134	6
Hungarian 3	Kosyno		0	365	0.0	3.15	7
Slovak 2	Uzhhorod	1000	0	734	0.07	3.157	8
Slovak 1	Malyy Bereznyy		324	952	0.0	3.493	9
Polish 5	Shehyni	2200	514	2016	1.39	3.703	10
Polish 6	Smil'nytsya		41	1176	0.00	3.930	11
Polish 3	Rava– Rus'ka	4250	553	2334	1.40	4.009	12
Polish 2	Ustyluh	2980	170	1500	0.58	4.020	13

### **Table 6.** Results of calculation of the ratingof checkpoints arrangement on the western border of Ukraine

Source: authors' elaboration based on data from (Pasichnyk (Ed), 2016)

#### Components of transit potential and the transit rating of Ukraine

The transport system, which provides opportunities for the integrated use of all modes of transport for the implementation of foreign economic activity in international transport and transit markets, is the basis of Ukraine's transit potential. The volumes of transit traffic by different modes of transport for 2010-2014 are given in Table 7 (State Statistics Service of Ukraine, 2021).

The analysis of the given data shows the decrease in volumes of cargoes transit through the territory of Ukraine by almost 32% for the specified period. While maintaining this rate of decline, according to expert estimates, transit volumes for 2010-2020

decreased three times.

The established dynamics of the decline in transit traffic in Ukraine is primarily due to late adoption and implementation of both technical and organizational and financial decisions to modernize the infrastructure of the Ukrainian transport system, as well as events related to the annexation of Crimea and hostilities in the east.

Types of transport	Volumes of transportation by years, thous. tons							
Types of transport	2010	2011	2012	2013	2014			
Railway	44511.8	48669.5	40940.1	32983.0	29398.0			
Automobile	4649.1	5011.2	4850.0	5685.0	5863.9			
Maritime	3660.4	3912.1	1637.7	1519.3	797.3			
River	0.0	0.0	7.6	2.2	0.0			
Air	1.6	2.8	3.0	0.8	1.2			
Other	90.6	527.8	477.1	787.1	136.6			
Total	52913.5	58123.4	47915.5	40977.3	36197.0			

Table '	7. Volumes of	cargo transi	it transportation	through the	e territory of Ukra	ine
Table	/• VOIUTTICS OF	cargo transi		unougnun	S torritory of Okra	

Source: based on data from State Statistics Service of Ukraine, 2021

Thus, according to the World Economic Forum (Economic Discussion Club, 2015), Ukraine ranks 81st in terms of the competitiveness of transport infrastructure, 130th in terms of road quality, and 88th in terms of infrastructure quality among 137 countries (Table 8). These results show that with the improvement of the overall assessment of transport infrastructure by 4 points, the indicator of the quality of railway infrastructure lost three positions and moved from 34 to 37 place. It should be noted that according to the results of the 2018 assessment, Ukraine ranked 83rd in the ranking of the global competitiveness index and 123rd in the ranking of countries in terms of road quality out of 140 countries.

To assess the transit potential of Ukraine, we will analyze the factors that ensure its formation and determine its level and importance.

At present, the methods of control of goods transit through the territory of Ukraine meet international conditions. Ukraine has ratified the norms of international legislation and international agreements on the transit of goods and the organization of international transport.

Specific conditions and economic factors that impact (directly or indirectly) the transit potential of the country are factors of the transit potential formation, i.e. its volume and level. By a place of occurrence of the factor action and its influence, the factors of formation of automobile transport transit potential can be divided to internal, which directly influence transit potential of the country, and external, which influence it indirectly.

Table 8. Indicators of transport infrastructure competitiveness in Ukraine							
Positions by the Index of Global Competitiveness	2015 (140 countries)	2016 (138 countries)	2017 (137 countries)	Dynamics			
	79	85	81	+ 4			
By transport infrastructure:	91	91	87	+ 4			
quality of all infrastructure	82	88	88				
quality of roads	132	134	130	+ 4			
quality of railway infrastructure	28	34	37	- 3			
quality of port infrastructure	108	96	93	+ 3			
quality of air transport infrastructure	97	103	92	+11			

Source: based on data from (Economic Discussion Club, 2015)

Internal factors can be divided into territorial, technical, economic and legal by the nature of the impact.

Territorial factors are determined by the geographical location of the country, which creates quite favorable conditions for the development of transport routes, the length of land borders of 5,637.982 km (total length of Ukraine's border is 6,992.982 km), the distance to the border: 80% of regions are border ones; Ukraine shares borders with seven countries. All this creates unique opportunities to ensure the transit of goods and raise funds for the development of transport infrastructure in this area. Countries with significant transit potential, i.e. with high potential for the movement of goods and passengers on their territory in national and international interests, have a significant transit ratio. The transit ratio is a complex characteristic that reflects the level of development of all transport connections in the country, taking into account the infrastructure that provides these connections. Thus, when calculating this indicator, the amount of transit capacity of all available modes of transport in the country is taken into account, as well as the technical condition and the resulting capacity of highways: road, rail, aviation, water, pipeline, etc. The calculation of the transit ratio was initiated by the British Transport Institute "Randall", which specializes in studying the problems of transport development. At the same time, there are different options for calculating indicators close in purpose to the transit coefficient. The selection of the base country with the average transit potential, which is equated to one, followed by the expression of the transit potential of other countries in the form of coefficients is one of such approaches. Another approach is to weigh the average transit rate, in which each mode of transport operating in the country is assigned its own score on a certain pre-established scale (the score depends on the relevance or demand, technical condition and infrastructure capacity

of each mode of transport), which is weighed (multiplied) by the share of this mode of transport in the total cargo turnover of the country. It should be noted that the lack of international statistical standards in this area is the main problem for the development and practical use of alternative transit indicators.

Depending on the task, the transit ratio can be considered not only as one of the territorial factors, but also as a result of the interaction of territorial and technical and economic factors, as it reflects the level of infrastructure development.

The technical and economic factors include:

– number of rolling stock units and condition of the vehicle fleet. Technically obsolete rolling stock in Ukraine reduces the level of competitiveness in terms of realizing the transit potential of the country;

- capacity of highways included in the system of international transport corridors (ITC) on the territory of Ukraine. Its assessment shows a lag in the pace of development of the Ukrainian part of the ITC system (there are areas that have a capacity several times lower than in general for the entire highway in almost every direction). The number of lanes can be considered the main indicator of capacity;

– quality of the internal transport network, in particular, the quality of the road surface. Low quality leads to limited speed of transit traffic;

- the level of development of the state border infrastructure. Insufficient capacity of border checkpoints and relatively high cost of services provided at the border crossing, complex and lengthy border crossing procedure, downtime at the border affect the country's transport potential;

- density of highways - 0.281 kilometers of roads per 1 square kilometer of the country.

Most of the internal conditions of the transport complex are systemic in nature and need to be addressed at the national level in a radical reform of the transport sector in general.

External factors are the factors whose influence cannot be directly regulated by the country and depends on foreign policy and many foreign economic circumstances.

Geopolitical factors are directly related to domestic political stability as a guarantee of security of transport corridors and partnerships with neighboring countries located within the corridors of transit flows.

In terms of geo-economics factors, the following should be taken into account:

 country's location relative to global economic centers, which can be determined by the distance to global economic centers;

- the importance of the country in the economic community, which characterizes its contribution to world or regional volumes of foreign trade, cargo turnover, passenger turnover, etc.;

- territorial and structural characteristics of international traffic, which is determined by the share of certain types of goods transported in the total volume of transit;

– infrastructural factors that ensure the joint functioning of transport corridors crossing the territory of several countries and coordination of requirements for technical parameters of vehicles and routes;

– technological level of ITC use, which is expressed in the growth of combined transportation, requirements for speed and quality of transport services, changes in the structure of cargo transit and the use of container transportation (Pasichnyk (Ed), 2016, Pasichnyk et al., 2011).

The efficiency of the use of transit potential is primarily determined by the development of infrastructure and the increase in the volume of cargo transportation by the Ukrainian network of international transport corridors. To determine the transit potential of ITC, it is necessary to translate their capacity defined in Table 3 to the number of trucks per day. Based on the method (Pravdyn et al., 1989) and taking into account the increase in the dimensions of modern cars, we choose the conversion factor equal to 6. We also assume that the share of tricks in the traffic flows is about 15%, each of which carries an average of 12 tons of cargo. The corresponding results of the calculation of the transit potential of the Ukrainian ITC network are given in Table 9.

Taking into account the level of development of all transport connections of the country and the infrastructure that provides these connections, the following formula is suggested to calculate the coefficient of the transit level, which reflects the complex relative characteristics:

$$K_{Tp} = \sum_{i=1}^{n} k_i E_i$$
 (28)

where  $K_{Tp}$  – coefficient of transit potential,  ${\rm k}i$  – weighting factor of the influence of the i factor,

Ei - component of the transit potential of the*i*factor.

When determining the coefficient of transit potential according to formula (28), the following weighting factors, which characterize transit potential, are taken into account:

**1.** Ukrainian network of ITC: Cretan Nº3; Cretan Nº5; Cretan Nº9; Cretan Nº7; Baltic - Black Sea (Gdansk – Odesa); Europe – Asia;

- 2. Relief of the territory;
- 3. Length of land borders;
- 4. Location in relation to the border;
- 5. Number of rolling stock units;
- 6. Condition of the vehicle fleet;
- 7. Capacity of highways;
- 8. Quality of Ukrainian transport network;
- 9. The level of transport infrastructure development;
- 10. The level of state border infrastructure development;
- 11. Density of highways.

Table 9. Transit potential of the Ukrainian ITC network							
ITC	Bandwidth, truck/day	Transit potent traffic volun		Use of transit potential by volumes of cargo			
	τι μεκ/ μμγ	thous. tons	%	transportation, %			
Cretan № 3	9200	4309,11	13.9	30.0			
Cretan № 5	11500	5386,37	17.4	50.0			
Cretan № 9	11500	5386,37	17.4	45.0			
Baltic - Black Sea (Gdansk - Odesa)	10800	5074,37	16.4	25.0			
Europe - Asia	9200	4309,11	13.9	35.0			
Black Sea Economic Cooperation (BSEC)	9200	4309,11	13.9	10.0			
Eurasian (Europe - Caucasus - Asia)	4600	2154,52	7.0	15.0			
Total	66088	30928,95	100	32.14			

Source: authors' elaboration based on data from State Statistics Service of Ukraine, 2021

Thus, taking into account the components of the transit potential and weights, from formula (28) we obtain:

$$K_{Tp} = k_3 E_3 + k_5 E_5 + k_9 E_9 + k_7 E_7 + k_1 E_1 + k_2 E_2 + k_4 E_4 + k_6 E_6 + k_8 E_8 + k_{10} E_{10} + k_{11} E_{11} + k_{12} E_{12} + k_{13} E_{13} + k_{14} E_{14} + k_{15} E_{15} + k_{16} E_{16},$$
(29)

where:  $K_{Tp}$  – coefficient of transit potential;

E<sub>3</sub> - transit potential of Cretan ITC Nº3; k<sub>3</sub> - weight coefficient of Cretan ITC Nº3;

**E**<sub>5</sub> − transit potential of **Cretan ITC №**5; k<sub>5</sub> − weight coefficient of **Cretan ITC №**5;

E<sub>9</sub> – transit potential of Cretan ITC Nº9; k<sub>9</sub> – weight coefficient of Cretan ITC Nº9;

E<sub>7</sub> − transit potential of Cretan ITC №7; k<sub>7</sub> − weight coefficient of Cretan ITC №7;

 $E_1$  – transit potential of Baltic - Black Sea ITC (Gdansk - Odesa);  $K_1$  – weight coefficient of Baltic - Black Sea ITC (Gdansk – Odesa);

 $E_2$  – transit potential of Europe - Asia ITC;  $k_2$  – weight coefficient of Europe - Asia ITC;

- $E_4$  transit potential of relief of the territory;
- k<sub>4</sub> weight coefficient of relief of the territory;
- $E_6$  transit potential of length of land borders;
- $K_6$  weight coefficient for length of land borders;
- $E_8$  transit potential of location in relation to the border;
- k<sub>8</sub> weight coefficient of location in relation to the border;
- $E_{10}$  transit potential of the number of rolling stock units;
- K<sub>10</sub> weight coefficient of number of rolling stock units;
- $E_{11}$  transit potential of the condition of the vehicle fleet;
- K<sub>11</sub> weight coefficient of the condition of the vehicle fleet;
- $E_{12}$  transit potential of the capacity of highways;
- k<sub>12</sub> weight coefficient of the capacity of highways;

- $\mathbf{E}_{13}$  transit potential of the quality of the Ukrainian transport network;
- $K_{13}$  weight coefficient of the quality of the Ukrainian transport network;
- $E_{14}$  transit potential of the level of transport infrastructure development;
- K<sub>14</sub> weight coefficient of the level of transport infrastructure development;
- $E_{15}$  transit potential of the level of the state border infrastructure development;
- K<sub>15</sub> weight coefficient of the level of the state border infrastructure development.
- $E_{16}$  transit potential density of highways;
- K<sub>16</sub> weight coefficient density of highways.

The values of the weights are determined on the basis of an expert assessment of the impact of each of the analyzed factors on the value of the transit rating in the 10-point calculation system. The values of the transit potential indicator are determined in the range from 0 to 1 on the basis of statistical data: the volume of transit traffic of goods in Table 7, assessment of the state of transport infrastructure in Table 2 and data on the level of use of the transit potential of the Ukrainian ITC network in Table 9. The values of each of the parameters taken to calculate the transit rating are given in Table 10.

Nº	Designation of weighting factor	The value of the weighting factor	Designation of the factor of transit potential	The value of the transit potential	The value of the transit potential component	
1	2	3	4	5	6	
1	k3	0.6	<b>E</b> 3	0.3	0.18	
2	k5	O.7	$\mathbf{E}_5$	O.5	0.35	
3	k9	0.6	E9	O.45	0.27	
4	k7	0.4	$\mathbf{E}_7$	O.15	0.06	
5	<b>k</b> 1	0.6	<b>E</b> 1	0.25	0.15	
6	<b>k</b> 1	0.7	<b>E</b> 2	O.35	0.25	
7	K4	0.5	$\mathbf{E}_4$	O.5	0.25	
8	K6	0.5	E <sub>6</sub>	0.6	0.30	
9	k <sub>8</sub>	0.4	E8	0.6	0.24	
10	<b>k</b> 10	O.4	<b>E</b> 10	0.25	0.1	
11	K11	0.5	<b>E</b> 11	0.2	0.1	
12	K12	0.6	<b>E</b> 12	0.35	0.21	
13	K13	0.8	<b>E</b> 13	O.5	0.40	
14	K14	0.6	<b>E</b> 14	O.5	0.30	
15	K15	0.7	<b>E</b> 15	0.25	0.8	
16	K16	0.7	<b>E</b> 16	O.35	0.25	
Scale	ò	9.5	Value K <sub>Tp</sub>		3.58	

Table 10. Source data for assessing the transit potential of the Ukrainian transport system

Source: authors' elaboration

The calculation according to formula (29) determines the transit coefficient of the Ukrainian transport system equal to 3.58. It should be noted that according to the British Institute for Transport "Randall", Ukraine has the transport transit rating – 3.75 (3.11 before 2002) (Kalinichenko, 2013, Malovychko, 2016).

Thus, the transition to multimodal transport technologies based on reducing the time of transportation and servicing of major goods, development of common rules and indicators for all modes of transport, ports, customers and cargo owners should be main directions of increasing the transit potential of Ukraine.

#### Conclusions

The results of a comprehensive study of the transport and customs infrastructure of the Ukrainian international transport corridors network and the main factors shaping the transit potential of the state allow us to conclude that the main factors stimulating the development of transit potential should be:

1. Increase of the capacity of transport and customs infrastructure;

2. Introduction of modern intensive technologies for processing cargo and transport flows, reducing vehicles downtime;

3. Improvement of the level of transport reliability and its safety;

4. Increase of the volume and attraction of additional revenues from the transportation of goods and other activities related to their provision;

5. Reduction of environmental pollution due to reorientation to ecological modes of transport.

The development of logistics infrastructure and harmonization of transport corridors with the countries of Europe and the world will enable Ukraine to realize its advantageous position and become a transport hub of world scale. Thus, modern infrastructure and technological parameters of checkpoints of the customs border of Ukraine for processing possible volumes of cargo and passenger traffic will significantly increase the efficiency of the Ukrainian transport system and double its share in GDP from 7% to 15%.

The renewal and technological modernization of the transport and infrastructure spheres of the state are determined by the strategy 2030 "Drive Ukraine 2030" as main drivers of Ukraine's integration into the world economy (Ministry of Infrastructure of Ukraine, 2021). Transport and infrastructure spheres should unite Ukraine and ensure its effective integration into European and world transport systems.

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#### CONCLUSIONS

A boost in European integration processes related to signing the EU-Ukraine Association Agreement and functioning of the Deep and Comprehensive Free Trade Area (DCFTA) since 1 January 2016 have accelerated the entry of Ukraine and its regions to European economic space due to the implementation of the EU legislation in different economic sectors. Meanwhile, the Report on the Implementation of the Association Agreement between Ukraine and the European Union for 2015-2020<sup>62</sup> specifies that the overall progress of the Association Agreement implementation amounts to 54%. The domains with the most essential progress in the Association Agreement implementation include political dialogue, national security and defense – 89%, justice, freedom, security, and human rights - 82%, public procurement - 80%, technical barriers to trade - 79%, entrepreneurship - 76%. However, Ukraine lags behind the schedule of meeting its obligations under the Association Agreement in some domains, namely in financial cooperation and combating fraud -24%, transport, transport infrastructure, postal and courier services - 35%, and financial services - 36%<sup>63</sup>. It is worth emphasizing the positive trends in finalizing the Draft Laws on Railway transport (Nº 1196-1 as of 6 September 2019), on Postal Services (Nº 4353 as of 10 November 2020), adoption of the Laws of Ukraine on Concession Nº 155-IX as of 3 October 2019, Domestic Water Transport № 1054 as of 3.12.2020, Multimodal Transportation № 1887-IX as of 17 November 2021, and signing the European Common Aviation Area agreement on 12 October 2021. The Annex provides the comparative analysis of the progress in the implementation of Association Agreements in Moldova, Georgia, and Ukraine (see Annex A).

Launching the Eastern Partnership initiative at the Prague Summit on 7 May 2009 on the Proposal of Poland and Sweden has become an essential step towards the expansion of cooperation between the countries of Eastern Europe, South Caucasus, and the EU and updating the legal framework of relations by replacing the partnership and cooperation agreements with association agreements, creating deep and comprehensive free trade areas, and liberalizing visa regimen between EU and partner countries<sup>64</sup>.

Eastern Partnership is based on bilateral cooperation between the European Union and partner countries and multilateral cooperation. The introduced multilateral dimension of political and expert dialogue is among the key issues that distinguish the Eastern Partnership from European Neighborhood Policy. The research results of the performance of the six Eastern Partnership countries and their progress towards sustainable democratic development and European integration research are summarized in Annex B.

<sup>&</sup>lt;sup>62</sup> Government portal (2021). *Report on the Implementation of the Association Agreement between Ukraine and the European Union for 2015-2020*. Retrieved from https://eu-ua.kmu.gov.ua/sites/default/files/inline/files/aa\_implementation\_report\_2015-2020\_ukr\_final\_0.pdf

 <sup>&</sup>lt;sup>63</sup> For comparison, in 2019, the overall progress of the implementation of the EU-Ukraine Association Agreement was
 43%, including only 19% in transport and postal services.

<sup>&</sup>lt;sup>64</sup> Ministry of Infrastructure of Ukraine (2021). Shidne partnerstvo [Eastern Partnership]. Retrieved from https://mtu.gov.ua/content/shidne-partnerstvo.html [in Ukrainian]

Access to EU programs and financial instruments plays an essential role in fostering European integration processes in the Eastern Partnership countries. They include Horizon Europe, Cross-Border Cooperation Programs of the European Neighborhood Instrument (ENI), COSME Programme for the Competitiveness of Enterprises and Small and Medium-sized Enterprises, The Creative Europe programme designated to support the culture and audiovisual sectors, EU Programme Erasmus +, etc. There are obvious positive changes that followed the implementation of numerous European projects for cooperation development, cross-border cooperation, and intergovernmental and transnational projects in these countries. They verify the irreversible nature of the pro-European path of Eastern Partnership countries. All projects funded by the European Commission have led to an increase in the number of citizens who know, respect, and promote European values and fundamental human rights. The impact of these programs cannot be always quantified because the change of mentality of the country's population plays an important role here.

Meanwhile, there is a range of challenges that do not allow using the opportunities provided by these programs and financial instruments to the fullest extent. They include the lack of funds for co-financing the projects implemented by local authorities, institutions and organizations, NGOs including; different approaches to the project activities of the participants of Euroregions and lack of asymmetry in the socio-economic development of border regions in neighboring countries; little experience of joint planning for the development of borderland, which, in general, slows down the progress of other economic initiatives, including the improvement of border infrastructure; low level of **business representatives' involvement in the development of cross**-border cooperation, namely at the level of Euroregions.

The EU holds the continuously changing and evolving cross-border cooperation policy to react timely to political and socio-economic changes in the Member States and neighboring countries and modify its approaches to create the best possible cooperation conditions. On the one hand, the policy is based on the improvement of a legal framework of the cross-border cooperation development, e.g. adoption of the Regulation 1302/2013 that has boosted the establishment of EGTCs with the third countries, and on the other hand, the change of policy tools to react to specific problems emerging in the process of cooperation more efficiently, e.g. establishment of the European Neighborhood Instrument, which has replaced the previous less efficient one. For that matter, favorable cross-border cooperation activity created in the EU, especially in the last 30 years, have boosted various initiatives from joint strategizing the development of cross-border regions to establishing cross-border institutions with legal personality.

The elaboration and implementation of the national transport industry development policy in conditions of integration with the European economic space should take into account the major European policy priorities, including ecological safety, sustainability, security; development of high-speed railways, expansion of railway freight and passenger transportation market, and reorientation of automobile freight transportation on other modes of transport, etc. EU announced 2021 as the European Year of Rail, which is the initiative in the European Green Deal framework. The workforce shortage is among the current challenges faced by the European automobile freight transportation market. EU tries to resolve it by adopting the Mobility Package that is designated to improve labor conditions for truck drivers and reduce unfair competition risks in commercial automobile transportation. These initiatives will impact the Ukrainian market of freight transportation because Ukraine remains to be among the largest workforce donors in Europe, including truck drivers. Moreover, some Ukrainian transport companies have been successfully operating at the territory of adjoining countries for a long time, Poland in the first place, so the adoption of the Mobility Package will significantly impact the redistribution on the automobile freight transportation market in the European space.

The use of geopolitical position advantages and branched network of all modes of transport can become a powerful catalyzer of the development of Ukraine and its regions. Ukraine is located on the crossroads of global trade routes between Europe and Asia (New Silk Road), India, Scandinavia, etc.

The full-scale use of transit capacities by Ukraine can be fostered by compliance with international standards and conventions on transit transportation; acceding to the **Convention on a Common Transit Procedure; adapting Ukraine's national customs legislation to EU's by acceding to the New Computerized Transit System (NCTS) and** implementing the Authorized Economic Operator (AEO) program; increasing the capacity of transport and customs infrastructure; introducing the most modern progressive innovative technologies in transport; introducing the responsibility of customs and other controlling services for the time of crossing of the state border by vehicles, giving priority to transit; prohibiting the state control authorities at the border from transferring their functions to commercial organizations; improving the level of transport reliability and its safety; reducing the environmental pollution due to reorientation to ecological modes of transport.

Therefore, the integration of the national network of international transport corridors with the European and international transport networks and the development of logistics and transport infrastructure will boost economic activity in the regions and efficient realization of their transit and trade capacities, and turn Ukraine into the global transit hub.

The platform of enhanced cooperation and dialogue between Ukraine, Georgia, **Moldova, and the European Union (the "Association Trio") opens new opportunities for** cooperation and development in the framework of Eastern Partnership. It contributes to enhancing their political association and economic integration with the EU. The initiative was officially recognized in the Joint Declaration of the Eastern Partnership Summit (Brussels, 15 December 2021), which emphasizes that the EU and all interested partners will explore options for enhanced sectoral cooperation, including, but not limited to, the areas of the twin green and digital transitions, connectivity, energy security, justice and home affairs, strategic communication and healthcare.

#### ANNEXES

#### Annex A

Table A.1. Ratings of implementation by the country of the main provisions

#### of the Association Agreements and DCFTAs<sup>65,66</sup>

	Georgia		Moldova		Ukraine	
Political principles	5, ru	ıle of law				
<ul> <li>Electoral democracy</li> </ul>	1	Dysfunctional democracy, one- party parliament	2	Improving, after years of instability and oligarchical power	2.5	Recent elections correct: President, Parliament, local
> Human rights	2	Respectable, however, detention of opposition leaders	2	Some discrimination of minorities; problems in Transnistria	2	Very bad in Donbas and Crimea; otherwise improving
Rule of law	2	Efficient ordinary justice, marred by political interference	1.5	Politically corrupt judiciary, needed reform	1.5	Judicial reform badly needed, not advancing consistently
> Anti-corruption	2.5	Effectively de-corrupted, except for concern over top-level	1	Poor record so far, but priority for new president	1	Marginal improvement, inconsistent stance of leadership
DCFTA						
> Market access	3	Completely open for goods and services	2	Industrial products tariff free; agrifood tariff quotas remain	2	Shift in trade structure from Russia to EU and China

<sup>&</sup>lt;sup>65</sup> Implementation of Association Agreements in Georgia, Moldova and Ukraine. URL: http://neweurope.org.ua/wp-content/uploads/2021/10/Print\_RGB\_IMPLEMENTATION\_layout\_2021\_ua.pdf

<sup>&</sup>lt;sup>66</sup> Note: ratings follow the methodology that the European Commission uses in its annual evaluation of the Balkan states, where 3 is a good rating in preparedness in relation to EU standards, 2 indicates moderate preparation, and 1 some preparation. Source for the ratings: M. Emerson et al, op. cit.

		Georgia		Moldova		Ukraine
<ul> <li>Customs services</li> </ul>	3	Fast, efficient and de-corrupted	2	Progressing, but still outdated infrastructure and corruption	2	Long resistance to reform; advances now being made
<ul> <li>Technical product standards</li> </ul>	2	Progress on standards and institutional infrastructure	2	Comprehensive adoption of EU standards	2	Good progress in implementing strategy
Food safety (SPS)	2	Strategy adopted for completion in 2027	1.5	Comprehensive SPS strategy, but institutional weaknesses	2	Strategy adopted; progress in implementation
> Services	3	Extremely liberal regime	2	Liberal regime for imports and rights of establishment	2.5	Ukraine more liberal than the EU for establishment
<ul> <li>Public procurement</li> </ul>	3	Efficient, highly rated system	2	Significant progress in modernising system on EU lines	2.5	E-procurement system acclaimed; risks of backtracking
<ul> <li>Intellectual property rights (IPR)</li> </ul>	2.5	Largely in line with best international practice	1.5	Legal framework mostly in place, but enforcement still weak	1.5	Limited progress in IPR protection and enforcement
<ul> <li>Competition policy</li> </ul>	2	Largely consistent with EU policies	1.5	Competition Council needs enhanced enforcement capacity	2	Laws okay, but authority of government agency at risk
> Statistics	2	Steady progress toward EU standards	2	Progressive implementation of EU practice	2	Significant progress in adopting EU methodologies
Economic coopera	tior	1				
Macroeconomic policy	2	Overall sound policies, still vulnerable to external shocks	1.5	Vulnerable to shocks, dependence on IMF/ EU loans	1.5	Improved but still vulnerable; IMF/EU aid-dependent
<ul> <li>Financial services</li> </ul>	2.5	Sound banking sector, approx. of EU laws progresses	2	Still shadow of 2014 banking fraud, no funds recovered	2	Proceeding with comprehensive alignment on EU laws
> Transport	2.5	Important regional role, approx. of EU laws progresses	1.5	Civil aviation advances; road haulage problem with the EU	1	Road transport needs action by Ukraine (and EU)
> Energy	1	Some important unbundling	2	Gas and electricity connections	2	Major challenges being

	Georgia		Moldova			Ukraine	
		commitments outstanding		with Romania advance		addressed; joining Green Deal	
> Environment	2	Gradual approx. of EU laws, with long transition periods	1.5	Heavy commitments, adverse climate change impacts	2	Comprehensive, costly, long- term action engaged	
Digital & cyber	3	Advanced digital regulatory and cyber security regimes	2	Fast growing sector, e- government progressing; weak cyber	2.5	Dynamic digital and cybersecurity sectors	
<ul> <li>Consumer protection</li> </ul>	1.5	Gradual advance, previously neglected sector	1	Consumer rights frequently neglected	1.5	Progress in product safety, but much more outstanding	
Company law	2	Approx. of EU directives ongoing	1.5	Reforms in progress, with delays	1.5	Legislative action, but uncertain enforcement	
Employment & social policy	2	Progress in safety standards, but problems still (mining)	2	Approximation mostly done, COVID impacts very severe	2	ILO conventions okay, but new Labour Code outstanding	
<ul> <li>Visa regime, movement of people</li> </ul>	1.5	Positive visa-free with EU, but excessive fake asylum	1.5	Visa-free regime widely used; spikes in fake asylum requests	2.5	Massive visa-free travel; temporary Covid stoppage	
Education & culture	2	Ongoing reform processes, but weak high school standards	2.5	Schooling standards favourable, but education reset needed	2.5	High educational standards, comparable to EU neighbours	
➢ Gender equality	2	Some progress in gender mainstreaming, pay gaps problem	2.5	Positive rating, boosted by new female prime minister	2.5	Comparable to EU neighbours	
➤ Civil society	2.5	NGOs effective in holding government to account	2.5	Active in holding government to account	3	Competent, forceful advocates of reform	

#### Table A.2. Economic relations with the EU and 3rd countries<sup>67</sup>

Georgia	Moldova	Ukraine			
2014 > 2020	2014 > 2020	2014 > 2020			
Export to EU	Export to EU	Export to EU			
<b>21.8% 21.5%</b>	• <b>53.3%</b> • <b>66.</b> 7%	• <b>31.5%</b> • <b>37.8%</b>			
Import from EU	Import from EU	Import from EU			
<b>27.6% 24%</b>	• <b>48.3</b> % • <b>45.6</b> %	• <b>38.</b> 7% • <b>43.</b> 4%			
Top 3 EU trading partners in goo	ds (by turnover, 2020)				
Germany	Romania	Poland			
USD 466 million (4.1%)	USD 1 338.6 million (16.98%)	USD 7 414 million (7.2%)			
Bulgaria	Germany	Germany			
USD 422 million (3.7%)	USD 677.8 million (8.59%)	USD 7 411 million (7.2%)			
Italy	Italy	Italy			
USD 216 million (1.9%)	USD 560.5 million (7.11%)	USD 4 058 million (3.9%)			
Trade in goods between 3 AAs in	2020 (% of total exports/imports)				
Exports to Ukraine: 6.5%	Exports to Ukraine: 2.81%	Exports to Moldova: 1.4%			
Exports to Moldova: 0.08%	Exports to Georgia: 0.90%	Exports to Georgia: 0.7%			
Imports from Ukraine: 4.9%	Imports from Ukraine: 9.73%	Imports from Moldova: 0.1%			
Imports from Moldova: 0.14%	Imports from Georgia: 0.08%	Imports from Georgia: 0.2%			

<sup>&</sup>lt;sup>67</sup> Implementation of Association Agreements in Georgia, Moldova and Ukraine. URL: http://neweurope.org.ua/wp-content/uploads/2021/10/Print\_RGB\_IMPLEMENTATION\_layout\_2021\_ua.pdf

#### Annex B

#### The Eastern Partnership Index 2020-202168

**The Eastern Partnership Index 2021** charts the performance of the six Eastern Partnership countries and their progress towards sustainable democratic development and European integration. The Index measures developments in the areas of:

- > Democracy and Good Governance;
- > Policy Convergence with the European Union;
- Sustainable Development.

The 2021 Index found Ukraine and Moldova to be the joint frontrunners, with Georgia in third position (see Figure B.1).



Figure B.1. Aggregate approximation scores

The results mean that the Associated Trio hold the top three places based on aggregate scoring. Armenia scored well on indicators to do with democracy and good governance, but was less impressive with regards to policy convergence, thus it takes fourth place (see Figures B.2-B.3). Fifth and sixth places are taken by Belarus and Azerbaijan. In both of these cases, their scores were lower than those in the 2017 Index, thus the gap between the two worst performers and the leading four became palpably wider.

Approximation in relation to "Democracy and Good Governance" captures the extent to which EaP states have incorporated core European and international standards. The Index measures this by establishing whether EaP states have adopted, legislated for and

<sup>&</sup>lt;sup>68</sup> Charting Performance in the Eastern Partnership: Democracy and Good Governance, Policy Convergence and Sustainable Development. URL: https://eap-csf.eu/wp-content/uploads/EaP-Index-2020-2021.pdf

also put into practice key international and European conventions and norms relating to democracy and human rights.



The aspects contributing to the scores on policy convergence are: Market Economy and DCFTA; Freedom Security and Justice; Energy: Legislation Convergence and Energy Policy; Environment and Climate Policy; Transport: Regulatory Policy.

The leading EaP state is Moldova, which is closely followed by Ukraine and then Georgia. The Associated Trio saw their scores appreciate since 2017. In fourth place sits Armenia, followed by Azerbaijan and Belarus. The overall scores for these three countries dropped, nevertheless, Armenia still found its way into the top three in energy and environment and climate policy.

Scientific edition

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