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Kyiv National University of Technologies and Design, Ukraine INCENTIVE PROGRAMMES TO ENHANCE CLUSTER PARTNERSHIP DEVELOPMENT IN THE EU COUNTRIES

The lack of normative regulation for the procedures of creating cluster partnerships in Ukraine, their organizational and legal forms as well as the government support instruments triggers a critical need to explore successful international experience, of the EU countries in particular. The purpose of this article is to provide insights into the best European practices in developing initiatives, programmes and platforms to support cluster partnership schemes. The study employs general scientific research methods, in particular, the method of logical generalization and statistical analysis to investigate the neighbouring countries of Ukraine that were awarded with the ECEI Label by the European Secretariat for Cluster Analysis (ESCA). It is emphasized that most European countries have developed and continue to develop and improve their cluster policies and programmes to support their national economy competitiveness and create new jobs. At the level of the European Union, methodology and tools for national innovation development were introduced in the early 1980s. Cluster policy support programmes have been launched since the late 1990s. Currently, to ensure the core principles of the cluster partnership development, the EU policy is focused on improving the environment for the effective cluster operation in all member states, as well as on supporting their internationalization. Although country-specific programmes to enhance cluster partnerships have different priorities and implement a vast range of diverse tools, they all pursue the same goals: they seek to provide appropriate support and meet the needs of all cluster partnership actors along with improving the environment for sustainable national development. Among the analysed programmes and platforms, this paper is focused on the European Secretariat for Cluster Analysis (ESCA) which contributes to the improvement of skills, competencies and practices in cluster management within the cluster partnership framework. The information presented on the ESCA platform demonstrates that currently more than 1100 cluster partnerships from 45 countries have been tested for and / or awarded with the BRONZE quality mark, about 130 gained SILVER and over 100 were awarded with GOLD quality mark. The study also provides cluster analysis of Ukraine's neighbouring countries that quality marks for effective cluster partnership management. Among such countries the leader is Romania – 81 clusters have received quality marks. To date, the European Initiative has recognized three ECEI quality marks as a reliable International Standard for Cluster Partnership Management. The findings reveal that the EU experience in supporting cluster partnerships is relevant for other countries seeking to boost their innovative development, this also refers to Ukraine in particular, where, to a great disappointment, there are yet no legal regulations to support and develop cluster partnerships.

Keywords: cluster partnerships; cluster partnership systems; cluster partnership development platforms; European Strategic Cluster Partnerships; European Secretariat for Cluster Analysis (ESCA); European Cluster Collaboration Platform (ECCP); European Cluster Observatory (ECO).

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Київський національний університет технологій та дизайну, Україна ЗАХОДИ СТИМУЛЮВАННЯ РОЗВИТКУ СИСТЕМ КЛАСТЕРНОГО ПАРТНЕРСТВА В КРАЇНАХ ЄС

Відсутність в Україні на рівні закону регламентації створення, організаційноправових форм і важелів державної підтримки кластерного партнерства зумовлює актуальність аналізу відповідного закордонного досвіду, зокрема, країн ЄС. Метою цієї статті ϵ дослідження кращих практик країн ϵ С щодо розвитку ініціатив, програм та платформ підтримки систем кластерного партнерства. У роботі використано загальнонаукові методи дослідження, зокрема, метод логічного узагальнення, методи статистичного аналізу – при здійсненні аналізу країн-сусідів України, які отримали ЕСЕІ Label Європейського секретаріату з кластерного аналізу (ESCA). В цій статті зазначається, що більшість країн Європи розробили та продовжують розробляти й вдосконалювати кластерну політику та програми розвитку систем кластерного партнерства для підтримки конкурентоспроможності економіки, а також створення нових робочих місць. На рівні Європейського Союзу політичні інструменти для національного інноваційного розвитку були введені ще на початку 1980-х років. Програми підтримки кластерної політики існують ще з кінця 1990-х. Сьогодні, для забезпечення загальних принципів щодо розвитку систем кластерного партнерства політика ϵC сконцентрована на вдосконаленні умов для функціонування кластерів у всіх державахчленах, а також щодо підтримки їх інтернаціоналізації. Хоча спеціальні програми підтримки розвитку систем кластерного партнерства для окремих країн зосереджені на різних пріоритетах та використовують різні інструменти, всі переслідують однакові цілі: вони прагнуть забезпечити належну підтримку та потреби учасників кластерного партнерства та сприяти поліпшенню умов для сталого національного розвитку. Серед проаналізованих програм та платформ сконцентровано увагу на Європейському секретаріаті з кластерного аналізу (ESCA), що сприяє вдосконаленню навичок, досвіду та практики управління кластерами в системі кластерного партнерства. Інформація, представлена на платформі ESCA, засвідчує, що на теперішній час понад 1100 кластерних партнерств із 45 країн світу пройшли тестування та / або отримали знак якості «БРОНЗА», близько 130 – «СРІБНИЙ» знак якості і більше 100 – «ЗОЛОТИЙ» знак якості. Проаналізовано кластери країн-сусідів України, що отримали знак якості за ефективне управління в системі кластерного партнерства. Серед країн-сусідів лідером ϵ Румунія — 81кластер отримав відповідний знак якості. На сьогодні, Європейською ініціативою визнано три знаки якості ЕСЕІ як надійний "Міжнародний стандарт управління кластерним партнерством". Проведений аналіз показав, що досвід ЄС щодо підтримки систем кластерного партнерства є актуальним і для інших держав, які прагнуть стимулювати свій інноваційний розвиток, зокрема і для України, де дотепер, на жаль, немає законодавчо врегульованих нормативних документів для підтримки та розвитку систем кластерного партнерства.

Ключові слова: кластерне партнерство; системи кластерного партнерства; платформи розвитку кластерного партнерства; Європейське стратегічне кластерне партнерство; Європейський секретаріат з кластерного аналізу (ESCA); Європейська платформа для кластерної співпраці (ECCP); Європейська кластерна обсерваторія (ECO).

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Киевский национальный университет технологий и дизайна, Украина МЕРЫ СТИМУЛИРОВАНИЯ РАЗВИТИЯ СИСТЕМ КЛАСТЕРНОГО ПАРТНЕРСТВА В СТРАНАХ ЕС

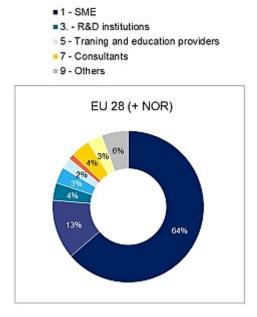
Отсутствие в Украине на уровне закона регламентации создания, организационноправовых форм и рычагов государственной поддержки кластерного партнерства обуславливает актуальность анализа соответствующего зарубежного опыта, в частности, стран ЕС. Целью данной статьи является исследовать опыт стран ЕС по развитию инициатив, программ и платформ поддержки систем кластерного партнерства. В работе использованы общенаучные методы исследования, в частности, метод логического обобщения, методы статистического анализа – при осуществлении анализа стран-соседей Украины, которые получили ECEI Label Европейского секретариата кластерного анализа (ESCA). В данной статье отмечается, что большинство стран Европы разработали и продолжают разрабатывать и совершенствовать кластерную политику и программы развития систем кластерного партнерства для поддержки конкурентоспособности экономики и создание новых рабочих мест. На уровне Европейского Союза политические инструменты для национального инновационного развития были введены ешё в начале 1980-х годов. Программы поддержки кластерной политики существуют ещё с конца 1990-х. Сегодня, для обеспечения общих принципов развития систем кластерного партнерства политика ЕС сконцентрирована на совершенствовании условий для функционирования кластеров во всех государствах-членах, а также по поддержке их интернационализации. Хотя специальные программы поддержки развития систем кластерного партнерства для отдельных стран сосредоточены на разных приоритетах и используют различные инструменты, все преследуют одинаковые цели: они стремятся обеспечить надлежащую поддержку и потребности участников кластерного партнерства и способствовать улучшению условий для устойчивого национального развития. Среди проанализированных программ и платформ внимание сосредоточено на Европейском секретариате кластерного анализа (ESCA), который способствует совершенствованию навыков, опыта и практики управлению кластерами в системе Информация, представленная кластерного партнерства. на платформе свидетельствует, что в настоящее время более 1100 кластерных партнёрств из 45 стран мира прошли тестирование и / или получили знак качества «БРОНЗА», около 130 – знак качества и более 100 – «ЗОЛОТОЙ» «СЕРЕБРЯНЫЙ» Проанализированы кластеры стран-соседей Украины, получивших данный знак качества за эффективное управление в системе кластерного партнерства. Среди стран-соседей лидером является Румыния — 81 кластер получил соответствующий знак качества. На современном этапе Европейской инициативой признано три знака качества ЕСЕІ как "Международный стандарт управления кластерным партнёрством". Проведённый анализ показал, что опыт ЕС в части поддержки систем кластерного партнерства является актуальным и для других государств, которые стремятся стимулировать свой инновационное развитие, в том числе и для Украины, где на сегодняшний момент, к сожалению, нет законодательно урегулированных нормативных документов для поддержки и развития систем кластерного партнерства.

Ключевые слова: кластерное партнёрство; системы кластерного партнерства; платформы развития кластерного партнерства; Европейское стратегическое кластерное партнёрство; Европейский секретариат кластерного анализа (ESCA); Европейская платформа для кластерного сотрудничества (ECCP); Европейская кластерная обсерватория (ECO).

Formulation of the problem. The absence in Ukraine at the level of the law regulating the establishment, organizational forms, leverage government support cluster partnership relevance analysis leads to relevant international experience, including the EU. European politicians have started to use cluster initiatives since the late 1990s. Today in Europe you can find about 3500 cluster initiatives and similar approaches (Fig. 1).

Other regions of the world have also fully applied and continue to adopt a cluster approach to enhance the competitiveness of national economies. In recent years, clusters have played a new and increasingly important role in sustainable development and sustainability in the economies of

EU. Cluster Partnership is a perfect "tool" to be used in the development and implementation of national innovation strategy and therefore undoubtedly contributes to the development of the economy. In this context, cluster partnership is the vehicle, that transfers innovative processes, regional strategies to the level of business contributes to the creation of jobs in new innovative areas. The composition of the cluster partners is key for successful cooperation within the framework of the cluster partnerships. Different competencies are required to facilitate the work and competitiveness of the entire cluster partnerships. If certain key actors (partners) and key competencies are not available, this may harm the innovative capabilities of cluster partnerships in general.



Source: author constructed on the basis [9].

Figure 1. Membership of cluster partnerships and initiatives in the European Union

Therefore, today is vital to form a single pan-European approach to the development of cluster partnership policy. It can be done by individual support institutions or information and analytical platforms in the EU. The information on existing clusters, cluster initiatives, and partnerships from 36 European countries (including Ukraine) are collected and classified.

Analysis of recent research and publications. It is believed that the ancestor of the clusters is Michael Porter, when he introduced the concept of cluster education to the world through his book "Competitiveness of Nations" in 1990, since then more than 1,500 scientific articles by the author are focused on the study of clusters and cluster partnerships. Porter, sees the cluster as a geographically close group of interconnected companies and related institutions in a certain area that are connected by common and external factors [10, 11]. According to other sources [12], the term "cluster" was used back in the seventies, 20th Century, L. Ablas and S. Chamansky. In their work, researchers study industrial complexes and clusters. The concept of "industrial complex" is broader and with not such close ties, in clusters. The general is a set of industries, territorial proximity [5]. The ideas in the cluster definition are not new. In the first half of the XIX century cluster theory originates in works on the economics of agglomeration I. von Tunen, in the articles V. Launhardta, M. Weber and others [16]. Tunen notes the impact of transport costs on the prices of goods, the distance to the city on the intensity of management. Launhardta's contribution is to simulate the optimal location of the plant relative to raw materials and describe it as a method for solving practical problems. Weber has established new factors for placing production in the form of labor and raw materials costs, economic benefits, agglomeration. Research by a Swedish scientist

Christian Ketels (he is considered a follower M. Porter) aimed at solving the problems of clustering the economy. In the community of European scientists, C. Ketels is considered a leading specialist in the development of cluster partnerships. In his works, he notes that in the development of state assistance programs for the development of clusters, the greatest risk is the duration of the cluster project and the high cost of state cluster initiatives. He considers the most effective measure to support cluster partnerships "cluster activation" and explains that the role of the state should be to remove barriers to cluster evolution, primarily by improving the economic environment of the business by creating an infrastructure where the cluster can develop on its own [9].

In 2003, a group of authors, including A. Solwell, G. Lindqvist (Stockholm School of Economics), as well as C. Ketels, published the book "Green Book of Cluster Initiatives," which conducted a comprehensive analysis – about 250 programs around the world and proposed a model for evaluating their work (Cluster Initiative Performance Model) [9]. After that, a group of authors from Lund University created the "White Book of Cluster Policy" with a focus on what kind of cluster partnership should have [1].

Much of the green and white papers focus on the positive aspects of cluster development. Similar views are held by groups of scientists who conducted a more detailed analysis [2]. As a result, the cluster approach was supported at higher national level, such organizations (institutions providing a coordination function within the cluster) gained access to the support of specialized institutions.

At the same time, works should be noted that contains a more critical approach to the active development of cluster initiatives. Some materials note the paradoxical nature of the cluster partnerships or questioning the very need for state participation in cluster formation [7]. Instead, it is more prudent to stimulate the growth of strong, more pro-active private investment organizations, since it is impossible to predict in advance which technologies and regions will be beneficial in the future [3]. Some researchers believe that the state should concentrate on the implementation of its traditional tasks, for example, the creation of infrastructure, the provision of social services, environmental planning, and not engage in innovative systems [8].

However, in the policy documents of the European Commission and the EU Council, clusters were identified as an effective means to strengthen regional innovations and reduce the gap between business, research and resources, and were also included in the EU regional policy programs for the period 2007–2013. Therefore, it is important to study the implementation of the experience of these platforms in the European Union and their impact on the development of cluster partnerships.

The purpose of the article to explore the experience of the EU on development initiatives, programs and platforms cluster partnerships.

Statement of the main material. Most European countries have developed and continue to develop cluster policies and programs to support economic competitiveness and create new jobs. At the European Union level, policy tools for the development of national innovative development were chosen and introduced in the early 1980s. There have been clear cluster policy programs since the late 1990s. To ensure common principles in these approaches, EU policy focused on improving cluster conditions in all member States, as well as on supporting internationalization. In addition to the European Commission, in recent years EU member countries have been developing further policies for the development of cluster partnerships. Although ad hoc cluster partnerships support programs for individual countries focus on different priorities and use different tools, all have the same goals: they seek to provide support needs for cluster partnership participants and help improve conditions for sustainable national development. Therefore, the EU has established relevant departments to support and develop cluster partnerships, among them should be highlighted:

• European Cluster Observatory (ECO) — was created in 2007, headed by A. Solwell and R. Tigland. In 2012, the Cluster Observatory was separated from the European Cluster Observatory and managed by the Stockholm School of Economics — Centre for Strategy and Competitiveness.

- European strategic cluster partnership and a mission of B2B (ESCP) are directed to internationalization of cluster partnerships,
- The European Secretariat for Cluster Analysis (ESCA) promotes cluster management excellence in cluster partnerships,
- The European Cluster Cooperation Platform (ECCP) facilitates knowledge sharing among cluster partners. More than 1,000 cluster organizations and partnerships registered on the platform from Europe and elsewhere in the world have the opportunity to compare the results of their activities with others, participate in special events that make it possible to establish mutually beneficial business relations with the necessary partners and find important intersection points. According to the Executive Decision of the European Commission, among the total funds of Euro 397 600 000 allocated to COSME (Competitiveness, Entrepreneurship and SME Program) in 2018, 5900,000 euros were allocated to "create an updated ECCP, which will become the main online hub for cluster participants in Europe through the merger of the European Observatory for Clusters and the European Knowledge Center for Resource Efficiency" [13]. A more detailed description of key EU cluster partnership institutions is presented in Table 1.

Table 1

EU Cluster Partnership Platforms

Name		CITGANIZATION	Participants			
The European G	Specialization	Organization 2007, Directorate General				
			annual reports on the			
1		industry, entrepreneurship	-			
1 1 -	-	and small and European				
	,		36 countries.			
1	onvenient platform					
1	nat provides a single					
1	oint of access to data	Competitiveness.				
1	nd cluster analysis. It					
	lso offers a cluster					
	brary and classroom					
	or cluster education.					
		2008, Eurocommission.	First generation (2016–			
	luster partnerships.		2017): 15 jointly funded			
	Organization provides		partnerships and 10			
1 \	upport international		voluntary partnerships.			
gı	rowth companies.		Second generation (2018-			
			2019): 25 jointly funded			
			partnerships, including 2			
			partnerships for the			
			application of Earth			
			observation data and 2			
			partnerships in the defense			
			and security sector.			
			Third generation (2020–			
			2022): 24 jointly funded			
			partnerships, including 2			
			partnerships for the			
			application of Earth			
			observation data.			

End of Table 1

	End of Table 1			
Name	Specialization	Organization	Participants	
The European	Facilitates knowledge	2016 founded.	Provides cluster	
Cluster	sharing among	COSME launched by the	information, cluster	
Collaboration	European cluster	Directorate General for	partnerships European	
Platform (ECCP)	managers. Conducts	Internal Market, Industry,	cluster partnerships and	
	information	Entrepreneurship and the	initiatives, National	
	collection,	European Commission	cluster associations,	
	organization of	ICPs.	cluster networks, national	
	specialized events,		policies, cluster	
	promoting		partnership development	
	international		worldwide.	
	communication			
	between partners			
	Clusters ECCP's Anti-			
	COVID-19 Response			
	Portal allows			
	organizations to find			
	each other and share			
	knowledge.			
The European	Benchmarking and	2009, one of the	Approximately 200	
	_	participants European	experts from more than	
Cluster Analysis	clusters and	Cluster Excellence	30 countries.	
(ESCA)	cluster management	Initiative – VDI/VDE		
,		Innovation + Technik		
	addition, ESCA	GmbH.		
	provides practical			
	advice to cluster			
	managers on cluster			
	development and			
	supports cluster			
	policy makers and			
	program owners with			
	advice on cluster			
	program development			
	and partnerships.			
The European	ENSR covers all types	Since 2004 the Network	The network consists of	
Network for Social		has an office in Brussels.		
and Economic	business sector:	Co-financed by EU SME	member countries, as	
Research (ENSR)	entrepreneurship,	Competitiveness Programs	well as members of	
	labor, production,	– COSME.	Norway, Iceland,	
	innovation,		Switzerland (also	
	internationalization,		covering Liechtenstein),	
	CSR, impact		Turkey and the UK. As a	
	assessment, social		result, ENSR covers 33	
	affairs.		countries.	

Source: classified by data [6, 13–15].

These platforms help in cluster management and are critical to maximizing the benefits that can be achieved through a cluster partnerships of their systemic support for industry, research and education in regions of countries. In parallel, these strategic cluster activities are supported by state authorities to stimulate regional development, focused on improving the competitiveness of regions of countries.

Among the analyzed cluster partnerships development platforms in Europe, the European Secretariat for Cluster Analysis (ESCA) is a universal center for promoting the excellence of cluster management through benchmarking and marking the quality of cluster partnerships around the world. The Berlin-based organization coordinates a network of about 200 experts from clusters with more than 30 countries that offer comparative analysis and labeling services on behalf of ESCA. In addition, ESCA provides practical advice to cluster managers on cluster development and supports cluster policy makers and program owners with cluster partnerships development tips.

The European Secretariat for Cluster Analysis awards three different quality marks to qualified cluster management organizations. We investigated the awarding of this kind of quality mark on the effective management of cluster partnerships in the neighboring countries of Ukraine (Table 2).

Table 2

Quality system of cluster partnerships management in Ukraine's neighboring countries at the initiative of the European Cluster Excellence (ECEI)

	•	Number of CPs in Ukraine's		
Quality mark	Characteristic	neighbors, which have		
		awarded the ECEI Labe		
	The ECEI BRONZE Quality Label for Cluster	Poland	Total	53
ECEI Bronze	Excellence characterizes cluster partnerships as		Are	2
Label	those that seek to improve their management		active	
The list	capabilities and productivity levels.	Romania	Total	59
includes 1196	ECEI BRONZE quality mark "Striving for cluster		Are	3
clusters from	excellence" when at least two conditions are met:		active	
47 countries.	1) the applicant cluster partnership was identified	Slovakia	Total	32
	by one of the ESCA experts;		Are	22
	2) the cluster partnership that submitted the		active	
	application meets the set of "Eligibility Criteria for	Hungary	Total	33
	Cluster Management Excellence Signs".		Are	5
	Each cluster partnership is analyzed based on an		active	
	interview with the cluster manager conducted by an			
	independent ESCA evaluation expert. The interview			
	covers 36 indicators, including: cluster structure,			
	cluster management and cluster partnership			
	management, cluster financing system, analysis of			
	cluster services, contacts and interactions in the			
	cluster and achievements of the respective cluster.			
	The results are presented in the form of a report and			
	are transmitted directly to the cluster management			
	and also contain recommendations for further			
	improvement of the cluster.			
	When a cluster organization first receives the ECEI			
	BRONZE brand, it is valid for two years from the			
	month in which the analysis was performed. Within			
	one year after the expiration of valid BRONZE			

Continuation of Table 2

Continuation of Table 2				
		Number of CPs in Ukraine's		
Quality mark	Characteristic			ch have been
		awarde	ed the I	ECEI Label
	quality mark, it can be renewed by repeating the			
	same comparative testing process. Then the validity			
	of the quality mark is extended for three years from			
	the previous validity period.			
ECEI Silver	Silver Label benchmarking analysis includes four	Poland	Total	6
Label	stages:		Are	1
The list	1. Clusters and cluster partnerships can pass the		active	
includes 146	second stage of testing after receiving the bronze	Romania	Total	18
clusters from	quality mark in 1.5–2 years.		Are	4
23 countries.	2. During the second stage, the auditor arrives at the		active	
	site to verify these areas of improvement, using the	Slovakia	Total	0
	criteria of the Golden Quality Mark as a benchmark		Are	0
	for verification. This audit will verify that the cluster		active	
	and cluster partnership meet the minimum	Hungary	Total	6
	requirements of the GOLD Cluster Management		Are	3
	Excellence Label. These requirements are described		active	
	in the document "European cluster excellence –			
	minimum requirements for cluster organizations".			
	Therefore, if a cluster partnership does not meet one			
	of these criteria, the Silver Label cannot be awarded.			
	Subsequently, the auditor develops a report			
	detailing the results and including individual			
	recommendations for improving the management of			
	the relevant cluster partnership.			
	When a cluster partnership first receives the ECEI			
	SILVER quality mark, it is valid for two years from			
	the month in which the audit was conducted. One			
	year after the expiration of the valid SILVER			
	quality mark, it can be renewed by repeating the			
	verification process. Then the validity of the quality			
	mark is extended for three years from the previous			
ECEL Cald	validity period. In order to receive the ECEI GOLD label in a	Dolon J	Tata1	1
ECEI Gold Label "Excel	cluster partnership, the cluster management	Poland	Total	0
in Cluster	organization must meet certain criteria, such as the		Are	"
Excellence"	structure of the cluster partnership, cluster	Domania	active	4
The list	partnership management, funding system, strategy	Komama		
includes 119	and services provided. The audit is conducted by		Are	1 – Cluster
clusters from	two independent ESCA experts, over two days and		active	
18 countries.	evaluates 31 key quality indicators.			Transylvania 2 – PRO
16 Countiles.	When a cluster partnership first receives the ECEI			WOOD
	GOLD quality label, it is valid for two years from			
	the month in which the audit was conducted. One			Regional
				Wood
	year after the expiration of this GOLD quality			Cluster

End of Table 2

Quality mark	Characteristic	Number of CPs in Ukraine's neighbors, which have been awarded the ECEI Label		
	mark, it can be renewed after passing this	Slovakia	Total	1
	benchmarking analysis. Then the validity of this		Are	Kosice IT
	quality mark is extended for three years from the		active	Valley
	previous validity period.	Hungary	Total	0
			Are	0
			active	

Source: analyzed and systematized by the author based on [6].

Therefore, from this study we see that Romania is the leader among the countries of Ukraine's neighbors in obtaining ECEI Label, where 81 clusters received their recognition in the success of cluster management. Among the active clusters, Slovakia is the leader, where at the moment 23 cluster partnerships have received recognition of the highest level of professionalism in cluster management (Table 3).

Table 3

Quantitative characteristics of the received and operating
ECEI Label in the neighboring countries of Ukraine

Country	ECEI Bronze Label	ECEI Silver Label	ECEI Gold Label	Total / are
	Total / are active	Total / are active	Total / are active	active
Poland	53/2	6/1	1/1	60/4
Romania	59/3	18/4	4/2	81/9
Slovakia	32/22	0/0	1/1	33/23
Hungary	33/5	6/3	0/0	39/8

Source: analyzed and systematized by the author based on [6].

Having examined the information presented on the ESCA platform, to date, more than 1,100 cluster partnerships from 45 countries have been tested and/or labeled BRONZE, about 130 SILVER labels and more than 100 GOLD, respectively. Today, cluster managers and policymakers define three ECEI quality signs as a reliable "International Cluster Management Standard."

A review of the entire marking system within the framework of the European Cluster Excellence Initiative – Phase II (2017-2019), which was again supported by the European Commission, led to the further development of the management system and management of the marking scheme. The main features of the new marking system are increased transparency, efficiency and strengthening of the European measurement of cluster marking.

Another new feature is the introduction of a new set of so-called selection criteria: organizations that are interested in obtaining a quality mark must confirm their status as "Cluster Organizations," as defined by the European Commission, by fulfilling the set of "Selection Criteria for the Cluster Management Excellence Label".

iUnfortunately, today in Ukraine there are no cluster partnerships that would be tested or apply for participation in benchmarking analysis on this platform.

Together, these initiatives and platforms cover a range of tools needed to coordinate cluster partnerships, from gathering information to helping European enterprises enter world markets. Not all organizations have been preserved in their original form, which indicates the evolutionary nature of cluster development institutions in the EU and approaches to the implementation of cluster partnerships in general.

Thus, the European approach to the development of this sphere and the creation of institutions for its support is quite consistent. Conditionally, the implementation of a supranational cluster partnerships policy in the EU can be divided into four phases [13], to which a fifth should be added:

- 1. Phase 1 (2000–2006) The European Commission has launched various cluster support pilot initiatives through the PHARE program.
- 2. Phase 2 (2007–2009) signing of the European Cluster Memorandum, creation of cluster observatories, development of information and analytical materials.
- 3. Phase 3 (2010–2012) focus on improving the quality of cluster programs, creating assessment and ranking tools, training "cluster managers."
- 4. Phase 4 (2013–2017) integration of clusters into regional programs through the principles of "reasonable specialization" to promote structural changes in parallel with the development of regional strengths.
- 5. Phase 5 (2017-present) clusters as objects of the new EU industrial policy, the development and strengthening of cluster partnerships, the creation of a working group on clusters.

The last phase is characterized by the end of the seven-year cycle of the budget plan until 2020, which most of the programs are committed, and the need to create a new vision of economic development priorities and agree on a budget for 2021-2027.

Conclusions. The analysis showed that the cluster partnerships in EU is an integral part of the new industrial policy, which is aimed at supporting innovation and technological development.

In its policy documents, the European Commission has repeatedly noted the potential of clusters in the formation of favorable innovative regional ecosystems for the mutual strengthening of SME groups. The focus is not only on the industrial sector but also on cross-sectoral and crossborder cooperation and innovation. It should be noted that the cluster partnerships in EU is not considered as a unified document for all member countries, but it is a set of best/good practices, approaches, initiatives, and recommendations both for representatives of such organizations and for national and regional authorities. The EU experience in supporting clusters is also relevant for other countries that seek to stimulate their innovative development. While in Ukraine, there is no legal and regulatory legislation to support the development of cluster partnerships.

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