

УДК 334.7+17.024.4:339.9

DOI: 10.30857/2413-0117.2021.1.5

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**INSIGHTS INTO INTERNATIONAL BEST PRACTICES
IN INTEGRATED CLUSTER MANAGEMENT**

The article seeks to explore best practices of integrated cluster management in the EU countries. It is noted that modern business realia and business process internationalization have significantly raised the importance of cluster partnerships across the European Union member states. Given the factor of global competitiveness, the European Commission has begun to pay greater attention to the development of innovation capacity, primarily through closer interaction between industry clusters within the European Union. In this context, a number of projects and initiatives for the European intercluster partnerships development have been launched, along with implementing the European cluster programs that will promote the development of sectoral clusters and facilitate their entry into European markets by increasing the degree of their interaction. The purpose of this article is to provide insights into the European experience as to managing programs, initiatives and development trends in the area of integrated clusters. The study employs general scientific research methods, in particular, the method of logical generalization, methods of statistical analysis of EU initiatives and programs that foster cluster partnership building processes. The research findings on cluster partnership development programs in the EU have revealed the following key characteristics of successful cluster initiatives: harmonization of interests and specific needs of partnership participants, providing information support and lobbying; significance at both the regional and the national level; awareness of national executive authorities about cluster initiatives in the region or identification of promising areas for building cluster partnerships; participation in government targeted projects; active positioning at the regional, national and international levels; building a management team within a cluster framework, launching cluster development centres, etc. Based on the study results, it is observed that the modern settings of national industrial economy development have spurred the interest to cluster partnerships which are established to implement a common strategy. It is argued that the application of an international model of cluster partnership management, however successful it is, in the domestic realia will not necessarily lead to the desired outcomes, whereas the implementation of particular elements of best international practices in the context of shaping national cluster development patterns will allow using them as effective national economy drivers.

Keywords: cluster partnerships; intercluster partnerships; consortium; cluster alliances; cluster initiative development programs.

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**АНАЛІЗ ІНОЗЕМНОГО ДОСВІДУ УПРАВЛІННЯ ІНТЕГРОВАНИМИ
КЛАСТЕРНИМИ СТРУКТУРАМИ**

Статтю присвячено дослідженню кращих практик інтегрованого кластерного менеджменту в країнах ЄС. Наголошується, що сучасні умови протікання бізнес-процесів та їх інтернаціоналізація значно актуалізували питання партнерства між кластерами в країнах, що входять до Євросоюзу. Зважаючи на фактор конкурентоспроможності на глобальному рівні, Європейська комісія стала приділяти велику увагу розвитку інноваційного потенціалу, насамперед, за допомогою взаємодії між галузевими кластерами європейських країн. З цією метою започатковуються проекти та ініціативи щодо розвитку європейського міжкластерного партнерства, розробляються європейські кластерні

програми, що сприятимуть розвитку галузевих кластерів та полегшують їх вихід на європейські ринки через підвищення рівня їх взаємодії. Метою цієї статті є аналіз досвіду європейських країн щодо програм, ініціатив та принципів розвитку інтегрованих кластерних структур. У роботі використано загальнонаукові методи дослідження, зокрема, метод логічного узагальнення, методи статистичного аналізу ініціатив та програм ЄС, які допомагають організувати потенційні кластерні партнерські відносини. Дослідження програм розвитку кластерного партнерства в ЄС дозволяє сформулювати такі основні ознаки успішної кластерної ініціативи: врахування інтересів і конкретних потреб учасників партнерства, надання інформаційної підтримки та забезпечення лобіювання інтересів; значущість як на рівні регіону, так і на національному рівні; обізнаність національних органів виконавчої влади про кластерні ініціативи в регіоні або визначення ними перспективних напрямів формування кластерних партнерств; прийняття участі в ініційованих державою профільних заходах; активне позиціонування як на регіональному, так і на національному та міжнаціональному рівнях; формування в рамках кластерної ініціативи управлінської команди, центрів кластерного розвитку тощо. Спираючись на проведені дослідження, можна констатувати, що в сучасних умовах розвитку національних промислових економік особливу роль відіграють кластерні партнерства, які утворюються з метою впровадження та реалізації єдиної стратегії. Обґрунтовано, що застосування навіть успішної іноземної моделі управління кластерним партнерством у вітчизняних умовах не обов'язково матиме позитивний результат, проте імплементація окремих елементів кращих закордонних практик у процесі формування власного шляху кластерного розвитку дозволить використовувати їх як інструменти, що стимулюють розвиток національної економіки.

Ключові слова: кластерні партнерства; міжкластерні партнерства; консорціуми; кластерні альянси; програми розвитку кластерних ініціатив.

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АНАЛИЗ ЗАРУБЕЖНОГО ОПЫТА УПРАВЛЕНИЯ ИНТЕГРИРОВАННЫМИ
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Статья посвящена исследованию лучших практик интегрированного кластерного менеджмента в странах ЕС. Отмечается, что современные условия протекания бизнес-процессов и их интернационализация значительно актуализировали вопросы партнерства между кластерами в странах Евросоюза. Учитывая фактор конкурентоспособности на глобальном уровне, Европейская комиссия стала уделять большое внимание развитию инновационного потенциала, прежде всего, за счёт взаимодействия между отраслевыми кластерами европейских стран. С этой целью запускаются проекты и инициативы по развитию европейского межкластерного партнерства, разрабатываются европейские кластерные программы, способствующие развитию отраслевых кластеров и облегчающие их выход на европейские рынки благодаря повышению уровня их взаимодействия. Целью этой статьи является анализ опыта европейских стран по реализации программ, инициатив и принципов развития интегрированных кластерных структур. В работе использованы общенаучные методы исследования, в частности, метод логического обобщения, методы статистического анализа инициатив и программ ЕС, которые помогают организовать потенциальные кластерные партнёрские отношения. Исследование программ развития кластерного партнерства в ЕС позволяет сформулировать следующие основные признаки успешной кластерной инициативы: учёт интересов и конкретных потребностей участников партнерства, оказание

информационной поддержки и обеспечение лоббирования интересов; значимость как на уровне региона, так и на национальном уровне; осведомлённость национальных органов исполнительной власти о кластерных инициативах в регионе или определение ими перспективных направлений формирования кластерных партнёрств; принятие участия в инициированных государством профильных мероприятиях; активное позиционирование как на региональном, так и на национальном и межнациональном уровнях; формирование в рамках кластерной инициативы управленческой команды, центров кластерного развития и тому подобное. Опираясь на проведённое исследование, можно констатировать, что в современных условиях развития национальных промышленных экономик особую роль играют кластерные партнёрства, которые создаются с целью внедрения и реализации единой стратегии. Обосновано, что использование даже успешной иностранной модели управления кластерным партнёрством в отечественных условиях не обязательно приведёт к положительному результату, однако имплементация отдельных элементов лучших зарубежных практик в процессе формирования собственного пути кластерного развития позволит использовать их как инструменты, стимулирующие развитие национальной экономики.

***Ключевые слова:** кластерные партнёрства; межкластерные партнёрства; консорциумы; кластерные альянсы; программы кластерных инициатив.*

Formulation of the problem. The experience of developed countries indicates that the increase in competitiveness and the provision of the leading position of the national economy occurs through the intensive growth of innovative activities, leading to the emergence of new technologies, and their entry into the international markets of high-tech products.

Since a cluster is a center that unites science, education, production and is a focus of innovation within its triad, cluster organizations and inter-cluster partnerships are increasingly playing a key role in the implementation of national industrial policy.

Analyzing the experience of the European Union in the field of cluster policy, it should be noted that the European Commission pays special attention to this issue, considering clusters as a tool to help eliminate economic imbalances, ensure sustainable structural growth of industry, increasing the competitiveness of the European economy.

Modern conditions for the flow of business processes, their internationalization, have determined the relevance of issues of interaction between clusters in the countries of the European Union.

Analysis of recent research and publications. According to M. Porter and many other researchers [1–3, 5, 8, 9], an important distinguishing feature of cluster development is that competition and cooperation in clusters are not mutually exclusive concepts. Combining these activities into one "hybrid activity" in which firms compete and cooperate with each other at the same time has become known as "co-competition."

Subsequently, almost every author studying clusters offered his own definition of this phenomenon. In this regard, some scholars argue that the concept of a cluster has acquired such a variety of uses, connotations and meanings that it has become in many ways a "chaotic concept." However, when analyzing the definitions of "cluster" and "cluster structures", first, it is necessary to note their semantic similarity, which proves the objectivity of such a phenomenon as a cluster. At the same time, discrepancies arise both as a result of linguistic and cultural differences, when economic phenomena similar in meaning are described somewhat differently in different countries, depending on the dominant semantic and conceptual paradigm, translation features, and in different accents, emphasizing the most significant, distinctive, according to each author, the signs of the

phenomenon, for example, a pronounced innovative component of activity, the achievement of a synergy effect, etc.

The purpose of the article to study the EU experience on programs, initiatives and principles of cluster structures development.

Statement of the main material. Considering the factor of competitiveness at the global level, the European Commission began to pay great attention to the development of innovative potential, through interaction between sectoral clusters of European countries.

To this end, certain steps began to be taken in the development of European cluster partnership, European cluster programs were developed to promote the development of sectoral clusters, facilitating entry into the markets of European states by increasing the level of their interaction.

Several initiatives have been developed to develop cluster partnerships:

- organization of the European Cluster Collaboration Platform (ECCP), facilitating cluster cooperation within the EU and helping clusters to enter international markets;

- holding international events to establish contacts between clusters, in order to provide opportunities for cooperation for European cluster organizations with partners in Europe and beyond. Cooperation events can be organized both in third markets and in Europe in order to bring together cluster representatives from Europe and third countries to promote business opportunities and establish partnerships in strategic areas of mutual interest. In Europe, events can also be organized with the participation of representatives of European clusters working in different sectors, with the aim of developing intersectoral cooperation and promoting the emergence of new value chains;

- the formation in 2012 of the European Strategic Cluster Partnerships (ESCP), the task of which is to pool resources and knowledge for specific work on joint strategies. ESCP seeks to develop and test innovative approaches to facilitate collaboration between cluster organizations and cluster firms in and across Europe and beyond, with the aim of enhancing internationalization through clusters and developing the level of their competitiveness [7, 11, 12].

The rationale for creating strategic cluster partnerships under the auspices of the ESCP is the need to solve large problems that are beyond the power of individual clusters. The ESCP partnerships encourage European clusters to work together, leveraging synergies to develop a shared "European" strategic vision with a global perspective and shared goals to reach third markets.

The basis for the formation of the Partnership is an agreement between its participants, within the framework of which an algorithm is developed for the development and implementation of management mechanisms [1].

A candidate (cluster or network) for participation in the ESCP registers on the ESCP Platform by filling out the proposed questionnaire.

An important role in making a positive decision on the entry of a cluster into a partnership is the presence of a "label" assigned by independent experts of the European Cluster Supremacy Initiative based on the assessment of 31 indicators characterizing the activities of a potential participant (minimum level – bronze mark, maximum – gold).

Candidates should be ready to work in conditions of close cooperation ties and have a high potential for the development of the Partnership [3, p. 61].

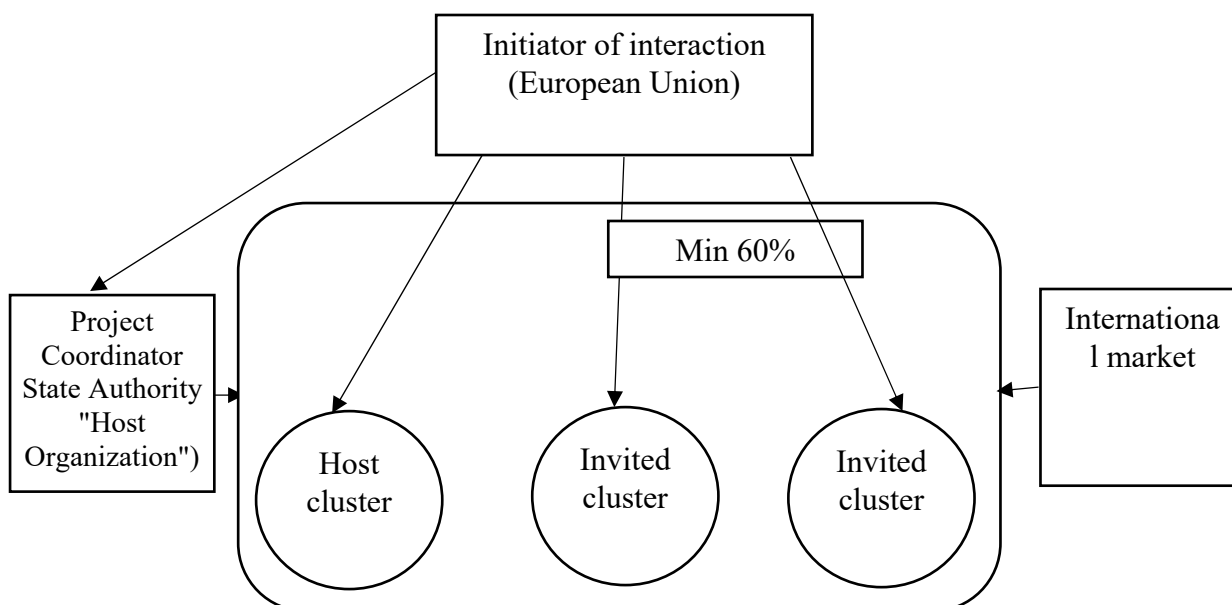
The cluster partnership organization scheme in the European Union is shown in Figure 1.

The Cluster Partnership Organization in the European Union consists of the following structural elements:

- when organizing a cluster partnership, the project coordinator consists of one regional or national government authority, or agency, which are defined as "host organization". The project

coordinator performs the administrative function of managing cluster and network programs designed to support international activities. Its functions are also project management planning, task coordination (checking deadlines, reminders, etc.), reporting and financial administration of the project. The project coordinator is the liaison between the European Commission and the project partners;

- the host cluster (represented by the manager) plays the role of a leader or "locomotive" of the project, especially in relation to the mission and activities;
- at least two cluster and network organizations from other participating countries ("invited cluster organizations") involve small and medium-sized businesses (hereinafter referred to as SME) to discuss cooperation.



Source: adapted from [7].

Figure 1. Organization model of cluster partnership in the European Union

The organization of cluster cooperation can take the form of a consortium and is short-term. As for the number of cluster participants in each consortium, practice has shown that the most effective cooperation between 3–5 clusters works very well. This size of the consortium facilitates concrete actions and cooperation, and it is easy to reach a common understanding to agree on a common international strategy [7, p. 12].

However, other organizational forms are also actively developing. An example is the increase in the number of cluster partnerships in various fields (food production; lighting; aerospace; communications and information technology; hydropower; personalized health; efficient use of natural resources, etc.), focused on developing a new approach to cooperation, in the form of a so-called "large metacluster" with a critical mass of partners, which allows to combine the interests of individual clusters with common project objectives, focus on a limited number of geographic markets and technology sectors and help SMEs gain access to new markets.

Below are some of the EU initiatives and programs that help organize potential cluster partnerships:

- The European Cluster Alliance is an open platform created in September 2006 to promote political dialogue at the EU level between national and regional public authorities responsible for developing cluster policies and managing or funding cluster programs. The main goal is to pool resources and develop more effective cluster policies, avoiding redundancy and duplication of functions at the national level. From January 2008, any cluster policy maker or cluster financial

institution wishing to share experience and interested in joint activities with other partners of the alliance can join the European Cluster Alliance.

- Europe INNOVA is an initiative launched in 2007 as part of the European Commission's Competitiveness and Innovation Framework Program. Its main goal is to create an innovation laboratory for the development, testing and promotion of new innovation support tools to simplify the process of innovation creation by innovative enterprises. As conceived by the creators, Europe INNOVA should become the main pan-European platform for managers of individual companies, cluster managers, investors, politicians, within which they will have the opportunity to discuss, develop, test and exchange "best innovative practices." The sectoral approach of this initiative is to develop a better understanding of innovation models across different sectors of the economy. To this end, Europe INNOVA engages innovation agencies, other public or private innovation support agents interested in jointly searching for new forms of innovation support at the European level. The initiative identified three priority areas: cluster cooperation, knowledge intense services (KIS) and green innovation.

- Cluster partnership "EcoCluP" – an innovative partnership of European eco-innovation clusters in Austria, Denmark, Great Britain, Germany, Hungary, France, Spain, Finland, the Netherlands, operating in such eco-innovative industries as waste recycling, water purification, reclamation of disturbed land, pollution control, environmentally friendly sources of energy. EcoCluP includes over 3,500 cluster companies (mainly SMEs) and 430 research institutes 46. Within the framework of the partnership, the development of strategies for the internationalization of clusters, the promotion of eco-solutions to the European market, the encouragement of the exchange of skills and experience between cluster partnerships and cooperation in the field of R&D, the creation of training programs for cluster managers, the organization of trainings and coaching programs.

- The main goal of the cluster partnership "ABCEurope" (Advanced Biotech Cluster platforms for Europe) is to expand partnerships between European biotechnology clusters and their partnerships to create world-class biotechnology clusters in the EU.

There are 5 main areas of cluster partnerships:

1. Development of tools to support the internationalization of small and medium-sized biotechnology enterprises.

2. Developing and testing new, more effective measures and tools to support innovation of SMEs and providing better tools to cluster managers.

3. Provision of legal protection of intellectual property – development of model agreements in the field of intellectual property rights, training on the protection of intellectual property rights.

4. Strengthening partnerships by organizing transnational events for cluster organizations and their individual participants.

5. Facilitating access to the objects of the pan-European research infrastructure for selected clusters and organizations.

The formation of such associations makes it possible to identify the needs of enterprises and organizations participating in the cluster in personnel, the amount of funding for cluster projects, thematic events, consulting services, information about potential partners, to promote the development of a modern legal and regulatory framework in the field of regulating the activities of clusters, to promptly inform about possible financial, organizational and information support, organize joint projects with the participation of the maximum number of clusters and cluster organizations, ensure greater transparency of government procedures and decisions for cluster partnerships, provide equal access to information and support for cluster partnerships, ensure collective interests when entering various markets, including international.

Conclusions. A study of the above initiatives and programs allows us to formulate the following main features of a successful cluster initiative:

- taking into account the interests and specific needs of the members of the association, providing information support and ensuring lobbying of interests;
- significance both at the regional and national levels; awareness of national executive authorities about cluster initiatives in the region or their determination of the right directions for the formation of clusters;
- taking part in specialized events initiated by the state;
- active positioning both at the regional and national and international levels (participation in competitive procedures, profile events, surveys, etc.);
- the presence of a fairly clearly expressed innovative component;
- formation within the framework of the cluster initiative of a management team, cluster development centers, etc.

The initiatives listed above are also distinguished by a high proportion of international cluster cooperation activities, since the growing pace of globalization of the world economic system entails a change in global competition and, accordingly, the formation of a new view of the key characteristics and prospects of cluster development.

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