

DEVELOPMENT OF LEGAL REGULATION OF ELECTRONIC ACCESS SYSTEM TO EMISSIONS INTO THE ATMOSPHERE AIR

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Abstract.

Purpose: the article reveals the issue of developing an electronic access system for information on emissions into the air. The international and national legislation on access to information on emissions into the air is analyzed. **Methods of research:** the list of normative legal acts and international dossiers in this field is determined. The methodological basis of the research comprise general scientific methods of scientific knowledge, such as integrated and interdisciplinary. **Results:** the main directions of further development of the updated system of accounting and control of emissions are determined, in particular, on the Internet resources. It is concluded that the formation and further implementation of a comprehensive state policy in the field of climate change, harmonized with international law, is a complex and urgent task. It is necessary to establish a clear accounting of emissions for all forms of pollutants. **Discussion:** problems of national and international legislation and implementation of norms of foreign legislation to the norms of domestic legislation in the field of development of the electronic system for access to information on emissions into the air.

Key words: environmental information, emissions, environmental protection, sources of pollutants, e-government.

Problem definition. The issue of free access to ecological information in Ukraine has been one of the most crucial issues and it is still among the most significant ones. For many years it has been the ruling issue in scientific studies of top scholars.

The right to free access to the information about the state of the environment, about the quality of food stuffs and household goods and the right to spread it, too, are guaranteed to everybody. It is impossible to make this kind of information secret.

Analysis of recent researches and publications. Legal aspects of access to ecological information have been studied by these Ukrainian scientists: V.I. Andreytsev, G.I. Balyuk, V.V. Kostytskyi, S.M. Kravchenko, V.I. Kutuzov, M.V. Krasnova, N.R. Malysheva, A.A. Popov, E.V. Poznyak, I.V. Sukhan, Y.S. Shemshuchenko and the other scientists.

The works of Ukrainian scholars V.I. Andreytsev, G.I. Balyuk, Y.S. Shemshuchenko, M.V. Shulga, V.Z. Yanchuk, D.V. Voloshyn, A.L. Derkach and

the other ones have become a scientific background for studying the legal base in the sphere of climate changes.

Formulating the goals of the article. Preservation of the environment and maintenance of stable development have been defined as a leading task by the Constitution of Ukraine. Providing effective access to ecological information is a connecting link, a sophistic category that, at first, has to be defined on the levels of philosophical approaches. Emissions into the atmosphere affect the increase of climate change. Global climate change is one of key ecological problems that has emerged ahead of the mankind [1].

A presentation of the main research material. Fossilized fuel utilization and ineffective power consumption are the main reasons for climate changes. Greenhouse gases produced in the result of human agency lead to the increasing of greenhouse effect [1].

Emergencies such as severe droughts, floods, storms, hurricanes, extremely hot weather which will happen more and more frequently, but not gradual warming will be the landmark consequence of climate changes [1, 2].

The table showing emission of pollutants and carbon dioxide into the atmosphere (1996-2016) in Ukraine is accessible on the Statistics HQ's website (<http://kiev.ukrstat.gov.ua>). Environmental problems in Ukraine require effective solution. The present time has caused the necessity to implement effective integrated electronic system of ecological management. This system has to provide free access to the information on the state of environment and the public participation in decision making concerning significant ecological issues [3].

Article 3 of the Law of Ukraine "About Information" defines the main directions of state information policy, which are: providing everyone with access to the information; arrangement of conditions for creating in Ukraine informative society etc.

The law of Ukraine "About Environment Protection" (part 2, article 25-1) defines that information assurance on ecology is performed by state administration bodies and local government bodies in the frames of their power.

Next, it is proposed to consider in details the issue of creating electronic system of access to the information about emission into the atmosphere. According to the article 1 of the Law of Ukraine "About Air Protection", emission is pollutants' or mixture of pollutants' entry into the atmosphere. Protocol "About Registers of Emission and Pollutants' Transfer" explains the conception "emission" even fuller. Article 2 of the Protocol defines that "emission" means any entry of the pollutants into the environment in the result of any anthropogenic activity regardless of being deliberate or accidental, planned or unplanned, including spilling, ejection, injection, removal or burial of waste, or through sewerage system without final purification of sewage water. Legal regime of emission management is regulated by the Law of Ukraine "About Environment Protection", the Law of Ukraine "About Air Protection", the Law of Ukraine "About Administrative Services" etc.

The Law of Ukraine "About Air Protection" in the article 32 defines that monitoring in the sphere of air protection is aimed for getting, collecting, processing, storage and analyzing the information about emission of pollutants and air pollution level, estimation and forecasting its changes and degree of danger, and development of science-based recommendations for decision making in the sphere of air protection.

Monitoring in the sphere of air protection is one of the components of state monitoring system of the environment. Organization and monitoring routine in the sphere of air protection is enacted by the Cabinet of Ministers of Ukraine.

According to the Instruction about the content and the order of report preparation on performing inventory of pollutants' emission at an enterprise approved by the Order of the Ministry of Environment Protection and Nuclear Safety of Ukraine (10 February, 1995, № 7), normalization in the sphere of air protection is aimed to set the complex of rules, regulations, requirements of compulsion concerning air protection against pollution.

Point 1.4. of the Instruction about the content and the order of report preparation on performing inventory of pollutants' emission at an enterprise specifies that inventory includes technology characteristics, gas-treating system concerning pollutants formation and disposal, defining the parameters of pollutants stationary sources and characteristics of disorganized sources.

According to the Conception of Electronic Control Development in Ukraine approved by the Cabinet of Ministers of Ukraine on the 20-th of September, 2017, № 649-p, electronic control is the form of state management organization that favors higher efficiency, openness and transparency of state government and local self-government bodies activity with data-telecommunication technologies usage for the new type of country formation, the country oriented towards citizens' needs satisfaction.

Actuality of the electronic control development in the sphere of ecology was declared by the Convention "About Access to the Information, Public Participation in Decisionmaking Process and Access to Justice on Issues Concerning Environment", hereinafter referred to as Aarhus Convention, on the 25-th June, 1998 in the town of Aarhus.

We focus attention on the fact that every party that signed Aarhus Convention provides gradual increasing of ecological information volume in electronic database that is easily accessible for the public at large through public communication network.

In May, 2003 in Kyiv during the extraordinary Meeting of Aarhus Convention parties 34 states and European Union signed the Protocol “About Registers of Emissions and Pollutants Transfer” (then – REPT) added to Aarhus Convention [4, 25]. The Protocol requires from the parties to create nationwide systems to collect and provide information about pollution; it also defines a number of key elements for REPT. Correspondingly, the information REPT has to be directly accessible in electronic form, as an open website, on free of charge basis. The parties have to provide “the other effective means” for the public representatives that do not have electronic access. REPT have to provide information concerning separate enterprises, diffusive pollution and levels of joint pollution [4, 25].

The Protocol about REPT was ratified by the law of Ukraine “About Ratification of the Protocol about Registers of Emissions and Pollutants Transfer” on the 3-rd of February, 2016.

Article 4 of the Protocol “About Registers of Emissions and Pollutants Transfer” defines that every party creates and keeps accessible for the public national register of emissions and pollutants transfer that: a) is recorded independently for specific objects concerning reporting on point sources; b) covers different components of the environment distinguishing emission into the air, soil and water; c) contains the information about transfer; d) is based on obligatory reporting periodically presented; e) contains standardized and presented on time data, limited quantity of standardized ceiling values for presenting reporting and, if any, limited quantity of regulations on confidentiality; f) is logically consistent and suitable for usage and accessible for the public, including electronic form; g) provides public participating in its development and modification; h) is a structured, computerized data base or several consolidated data bases conducted by a competent authority.

The Protocol “About Registers of Emissions and Pollutants Transfer” defines that every party develops their own register taking into account the pos-

sibility for its further widening and providing the public with access to the data of at least for the previous 10 years.

Internationally, it is important to remember the significant role of the results of the Intergovernmental forum on chemical safety, particularly Bali Declaration on Chemical Safety, Priorities of Activities after 2000 and Plan for Activities Concerning Register of Emission and Pollutants Transfer/Emission Surveys, International Program on Rational Regulation of Chemical Substances, Organization of Economical Cooperation and Development activity, particularly its Council recommendations on implementing registers of emission and pollutants transfer, etc.

Henceforth, the issue of access and data validity about emission and pollutants sources has become really actual and turns to be one of the key moments of electronic control in the sphere of ecology.

Since 2013 active work has been performed on realization of Basic plan of adaptation of ecological legislation of Ukraine to the European Union’s legislation, that foresees activities concerning 31 directive of the EU adaptation [5]. National report about environment state is prepared annually on the grounds of information materials from central executive bodies, scientific establishments and organizations. Reports about the state of environment in the regions of the country are prepared in Ukraine yearly [2].

Ecological indicators and methodologies used in the report about evaluation of the European Environment Agency (EEA) are used in the report in Ukraine [2].

In November 2016 the 22-nd Conference of the Parties of Framework Convention of the OUN about Climate Changes took place [6]. According to the data of Emission Gap Report proclaimed before the Conference, world emissions of greenhouse gases continue to increase and reached 52.7 billion tons of CO₂ equivalent (ГТ) in 2014. To avoid the raise of the temperature on the planet to the level 2 degrees Celsius less in 2030, total world emissions have to be reduced [6, 7].

On the 15-th of March, 1999 Ukraine signed the Kyoto Protocol that provides certain obligations from the country. The terms of the Protocol are very mild for Ukraine as far as they do not require

decrease of greenhouse gases emission, moreover they allow the increase of the gases to the level of the year 1990 [1]. On the 10-th of September, 2009 in Kyiv the representatives of state and private sectors from 20 countries gathered in Ukraine for the first time to find the ways of accelerating and widening the sizes for realization of the projects of "joint adaptation" concerning greenhouse gases emission decrease [8].

The Conception of Realization of State Policy in the sphere of climate changes for the period till 2030, approved by the Directive of the Cabinet of Ministers of Ukraine on the 7-th of December, 2016, № 932-p defines the problem that needs solution. Low ability of the countries to adapt to such occurrences of climate changes as floods, droughts, river banks breakdown and lasting periods of abnormal heat can result in social and economic instability. In accordance with the Concept for the implementation of the state policy in the field of climate change for the period up to 2030, the implementation of the new tasks appeared after Ukraine's ratification of the Paris Agreement and the further implementation of its provisions requires the formation of a coherent and consistent state policy on climate change in accordance with the policy of international organizations taking into account the world leading technologies and practices, as well as features of national conditions, capabilities, needs and priorities.

Therefore, it is important to determine that the systematic and integrated approach that matters in the area of sustainable development and preservation of the environment plays (a)very important role in Ukraine.

The United Nations Framework Convention on Climate Change was adopted on 9 May 1992 in the United States. The Convention was signed by more than 180 countries of the world. Ukraine ratified the Convention by the Law of Ukraine "On Ratification of the United Nations Framework Convention on Climate Change" on October 29, 1996, No. 435/96-BP, the United Nations Framework Convention on Climate Change "[9]. The Paris Agreement to the United Nations Framework Convention on Climate Change was ratified by the Law of Ukraine No. 1469-VIII on July 14, 2016. The key achievement of the Paris Agreement was the unification of all

countries of the world in the fight against climate change. Art. 4 The Paris Agreement stipulates that each country must prepare and report nationally determined contributions that it intends to achieve. Such nationally defined contributions should demonstrate the target countries for reducing greenhouse gas emissions and should be updated every five years [10]. Ukraine also has the potential to increase its national contribution in the course of further international negotiations [10].

The development and transfer of technologies is one of the important mechanisms for reducing greenhouse gas emissions and adapting to the effects of climate change. In view of this, in 2010, the so-called Technology Mechanism was created; it consists of the Technology Executive Committee (TEC) and the Climate Technology Center and the Network (CTCN) [6]. It is also worth noting that the introduction of e-governance in the field of monitoring and accounting of emissions also corresponds to Ukraine's international commitments, in particular, as set out in the Association Agreement with the EU [3].

At present, the work to adapt Ukrainian legislation to EU requirements is underway. The Decree of the Cabinet of Ministers of Ukraine dated April 15, 2015, No. 371-p, approved Implementation Plan for the implementation of EU legislation worked out by the Ministry of Ecology and Natural Resources.

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, defines in Art. 361 that the cooperation aims at preserving, protecting, improving and recreating the quality of the environment.

The Concept of the development of the electronic services system in Ukraine approved by the Order of the Cabinet of Ministers of Ukraine on November 16, 2016, № 918-p determines: with the development of the information society and public relations, there is a need to provide administrative and other public services in electronic form. In the Annex to the Concept of the development of the electronic services system in Ukraine among the lists of priority services, the introduction of which provision in electronic form provides primarily

(third, fourth stage of development of electronic services) are: issuance of permits for emissions of pollutants into the air.

In accordance with the amendments made by the Law of Ukraine dated December 20, 2016, No. 1791-VIII to the Tax Code, since January 1, 2017, emissions of certain pollutants by stationary sources of pollution have been increased in the air. In this regard, the Minister of Ecology and Natural Resources declares that in Ukraine it is necessary to substantially raise the rates of environmental tax. O. Semerak believes that the tax on CO₂ emissions per tonne in the amount of 37 cents in Ukraine should be increased [11]. In July 2017, the most enterprises included in the ranking are concentrated in the Donetsk, Dnipropetrovsk and Zaporizhzhya regions [12].

According to the Association Agreement, Ukraine has to implement such acts of EU environmental law. Applying the best state-of-the-art environmental management practices will also help bring Ukraine closer to the EU standards: IPPC, PRTR, OGP, SAICM [3].

Within the framework of the European Union, a Shared Environmental Information System (SEIS) was established based on principles: Information should be electronically transmitted as close as possible to the source of this information, The information should be fully available to the general public, both after adequate level of aggregation, taking into account the relevant requirements of confidentiality, and nationally in the relevant national languages., The dissemination and processing of information should be based on common, free and open standards etc [13, 3].

On March 30, 2016, the Ministry of Ecology and Natural Resources of Ukraine signed a Memorandum of Understanding on the establishment of an integrated electronic system for environmental protection and management of natural resources, concluded between the Ministry of Ecology and Natural Resources of Ukraine, the Department of Ecology and Natural Resources of Lviv Oblast State Administration and the International charitable organization "Ecology-Law-Man" [14]. MBO "Ecology-Law-Man" (EPL) advocates the creation of an electronic system called "PRTR +" [14].

Consequently, the formation of an effective system of e-governance envisages new forms of organization of activity and interaction of public authorities with citizens and organizations. One of the most pressing problems remains the division of functional state management in the field of environmental protection in Ukraine, which is divided between various executive authorities [13]. At present, the authorities do not have systematic data exchange in electronic form, which leads to low efficiency of public administration, excessive permitting and controlling burden on business entities, and the impossibility of providing the public and other interested parties with qualitative information on the state of the environment [13].

This situation is mainly due to the lack of procedures and mechanisms for integrating government data, due to the lack of unified national reference books (classifiers), procedures and standards for the systematic exchange of information electronically [13].

The problem of the lack of a single national infosphere in the field of environmental protection appeared in the past in different countries of the world [13]. Therefore, it is also important to take into account the experience of leading countries in this area.

For example, in Poland, activated carbon filters are installed to clean the atmosphere. An online monitoring of emissions into the atmosphere is carried out, data are automatically transmitted to the Inspectorate for the protection of the environment. After fermentation, the precipitate is sent to drying. Approximately 20% of the dried precipitate with a calorific value of 14,500 kJ / kg is produced, which is sent to cement plants for incineration or to compost enterprises [5].

Conclusion. Consequently, we can conclude that the formation and further implementation of a comprehensive state policy in the field of climate change, harmonized with international law, is a complex and urgent task. It is important to point out the multidisciplinary nature of the task, the lack of a clear, consistent policy and lack of consistency. In general, international obligations, in our opinion, become the driving force behind the development of legislation in this area. Politically, economically and scientifically grounded decisions on climate

change should be taken for all sectors of the economy, including energy, land use, as well as health, conservation and restoration of ecosystems. Therefore, we believe that the first step is the systematization and co-ordination of legislation in this area. The second order is to determine the criteria for the effectiveness of its implementation. To do this, it is necessary to harbor a clear account of emissions in all forms of pollutants.

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РОЗВИТОК ЕЛЕКТРОННОЇ СИСТЕМИ ДОСТУПУ ДО ІНФОРМАЦІЇ ПРО ВИКИДИ В АТМОСФЕРНЕ ПОВІТРЯ

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Мета: у статті розкривається питання розвитку електронної системи доступу до інформації про викиди в атмосферне повітря. Аналізуються міжнародне та національне законодавство у сфері доступу до інформації про викиди в атмосферне повітря. **Методи дослідження:** визначається перелік нормативно-правових актів та міжнародних дооворів в даній сфері. Методологічну основу дослідження складають загальнонаукові методи наукового пізнання, такі як комплексний та міждисциплінарний. **Результати:** визначаються основні напрями подальшого розвитку оновлюваною системою обліку та контролю викидів, зокрема, в Інтернет ресурсах. Робиться висновок, що формування і подальша реалізація цілісної державної політики у сфері зміни клімату, гармонізованої з міжнародним законодавством, є складним та актуальним завданням. Необхідно запровадити чіткий облік викидів на всіх формах забруднювачів. **Обговорення:** проблеми національного та міжнародного законодавства та імплементації норм зарубіжного законодавства до норм вітчизняного законодавства у сфері розвитку електронної системи доступу до інформації про викиди в атмосферне повітря.

Ключові слова: екологічна інформація, викиди, охорона навколишнього середовища, джерела забруднюючих речовин, електронний уряд.

РАЗВИТИЕ ЭЛЕКТРОННОЙ СИСТЕМЫ ДОСТУПА К ИНФОРМАЦИИ О ВЫБРОСАХ В АТМОСФЕРНЫЙ ВОЗДУХ

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Цель: в статье раскрывается вопрос развития электронной системы доступа к информации о выбросах в атмосферный воздух. Анализируются международное и национальное законодательство в сфере доступа к информации о выбросах в атмосферный воздух. **Методы исследования:** определяется перечень нормативно-правовых актов и международных договоров в данной сфере. Методологическую основу исследования составляют общенаучные методы научного познания, такие как комплексный и междисциплинарный. **Результаты:** определяются основные направления дальнейшего развития обновляемой системы учета и контроля выбросов, в частности, Интернет ресурсах. Делается вывод, что формирование и дальнейшая реализация целостной государственной политики в сфере изменения климата, гармонизированной с международным законодательством, является сложной и актуальной задачей. Необходимо ввести четкий учет выбросов на всех формах загрязнителей. **Обсуждение:** проблемы национального и международного законодательства и имплементации норм зарубежного законодательства к нормам отечественного законодательства в сфере развития электронной системы доступа к информации о выбросах в атмосферный воздух.

Ключевые слова: экологическая информация, выбросы, охрана окружающей среды, источники загрязняющих веществ, электронное правительство.