

Dzmitry Chyzh, PhD

Belarussian State University,

Tatsiana Tsetsiarynets, PhD

Belarussian State Technical University

**THE ISSUES OF CROSS-BORDER INDUSTRIAL
SAFETY IN LAND-USE PLANNING DOCUMENTS**

Paper peer-reviewed by Natalia Kablak, PhD,
Uzhhorod National University

In accordance with the CBC Financing Agreement, ratified by the Law of the Republic of Belarus dated October 17, 2017 "On Ratification of the Financing Agreement for the Cross-border Cooperation (CBC)"¹, one of the strategic objectives of the European Neighbourhood Instrument, Cross-border Cooperation Programme – Belarus - Ukraine 2014-2020, is addressing the common problems related to the environment, public health, civil protection, and security. The thematic objective 8 ("Common challenges in the protection and security") sets the addressing of common security problems as one of the priorities:

1. Joint initiatives related to preparatory actions for natural disasters, environmental disasters and emergencies.
2. Joint initiatives for the prevention of natural and man-made disasters,
3. Development of joint prevention, monitoring, response, and disaster recovery systems.

The issues of the security of Cross-border territories are quite diverse and include environmental, economic, social and other security aspects. However, currently, the problem of ensuring the Cross-border industrial safety of production facilities is a priority in the field of protecting the environment, public life, and health from harmful effects of economic and other activities, as well as man-made emergencies. The introduction of new technological solutions in the industry leads to the growth of capital investment and an increase in potential damages from accidents at production facilities.

Threats arising in the Cross-border territory as a result of the operations of the enterprises, which use hazardous substances, which may pose a threat to the public life and the environment of neighbouring countries, indicate the need to develop a common policy for placement of such facilities.

In the Republic of Belarus, the legal regulations in the field of industrial safety is provided by the laws applicable to all organizations, regardless of their legal entity and ownership throughout the country, namely the Laws "On Industrial Safety"² and "On the Main Pipeline Transport"; Rules of Guarding the Trunk Pi-

1 <http://pravo.by/document/?guid=12551&p0=H11700054&p1=1> (19.03.2019);

2 https://kodeksy-by.com/zakon_rb_o_promyshlennoj_bezopasnosti/28.htm (19.08.2019);

pelines; and Regulations on the Procedure for Commissioning of Construction Projects, the Procedure for Development of the Industrial Safety Declaration and on the Registration of Hazardous Industrial Facilities.

The common problems and risk factors in the field of industrial safety in the Republic of Belarus are³:

- a high degree of wear and tear of fixed production assets;
- a low level of production and process discipline;
- shortage of qualified experts;
- insufficient knowledge of industrial safety requirements;
- instable financial status of enterprises.

Given the Cross-border effects of industrial development, the United Nations Convention on the Cross-border Effects of Industrial Accidents⁴ was adopted in 1992. It is aimed at prevention and reduction of industrial accidents, mitigation of their consequences, as well as promoting active international cooperation between the countries before, during and after industrial accidents. UNECE Convention on the Cross-border Effects of Industrial Accidents is designed to protect people and the environment from the destructive effects of industrial accidents by preventing their occurrence, reducing the severity and frequency of their occurrence and mitigating their consequences. The Convention shall also apply to industrial accidents triggered by natural disasters such as floods, landslides, and earthquakes⁵.

The Convention recommends identifying all kinds of hazardous activities within the country's national borders, which could have a Cross-border impact in the case of accidents. Emphasis is placed on preventive measures, such as inspections and testing of security documentation, provision, and compliance with relevant regulatory requirements.

3 <http://ucp.by/university/news/novosti-partnerov/viktor-biryuk-problemy-obespecheniya-promyshlennoy-bezopasnosti-na-sovremennom-etape/>

4 https://www.unece.org/fileadmin/DAM/env/documents/2017/TEIA/Publication/RUS_ECE_CP_TEIA_33_final_Convention_publication_March_2017.pdf (19.08.2019);

5 http://www.unece.org/fileadmin/DAM/env/teia/doc/IA_Publications/Cross-border_concerns_-_shared_strategies_Rus_WEB.pdf (19.08.2019);

The Convention also points to the importance of land-use planning, location of hazardous activities and integration of safety aspects into policies, plans, programmes and projects (Article 7).

Besides the Convention on the Cross-border Effects of Industrial Accidents, the issues of land-use planning and industrial safety are considered in the Convention on Environmental Impact Assessment in a Cross-border Context and the Protocol on Strategic Environmental Assessment. They form the basis for assessment of the potentially harmful effects on the environment and human health due to the land-use planning and placement of objects on which the hazardous activity is conducted. The use of these instruments and tools is disclosed in the Guidance on Land-Use Planning, the Siting of Hazardous Activities and related Safety Aspects⁶.

Each of the countries of the CBC Programme Poland-Belarus-Ukraine has its developed land-use planning and industrial safety systems.

For example, in the Republic of Belarus, the legal basis of the land-use planning is formed by⁷:

- Land Code of the Republic of Belarus of July 23, 2008, No. 425-3,
- Law of the Republic of Belarus "On the Objects Wholly Owned by the State, and the Types of Activity Subject to the Exclusive Right of the State",
- Law of the Republic of Belarus "On the Administrative and Territorial Division and the Procedure of Addressing the Issues of the Administrative-Territorial Structure of the Republic of Belarus",
- "On the seizure and allocation of land plots" Decree of the President of the Republic of Belarus dated December 27, 2007" No. 667,
- Regulation on the procedure of developing the district land management patterns, etc.

6 https://www.unece.org/fileadmin/DAM/env/documents/2018/TEIA/1735405R_inside_PRINT_2.pdf (19.08.2019);

7 https://www.unece.org/fileadmin/DAM/env/documents/2019/TEIA/LuP_Moldova_May_2019/presentations/Russian/2B_-_2_The_experience_of_Belarus_-_Belarus.pdf (19.08.2019);

Besides the land management planning, the patterns of comprehensive territorial organization of administrative districts, regions and the country as a whole have their own regulatory framework:

- “On Architectural, Urban Planning and Construction Activities in the Republic of Belarus: the Law of the Republic of Belarus dated July 5, 2004”, No. 300-3;
- “On the main directions of the state urban development policy of the Republic of Belarus for 2016-2020”: Decree of the President of Belarus dated September 5, 2016 No. 334⁸;
- Regulation on the procedure for public discussion in the field of architectural, urban planning and construction activities (as amended by the Decree of the Council of Ministers of the Republic of Belarus dated April 22, 2019 No. 256)⁹;
- Town planning. The pattern of a comprehensive territorial organization of the area (region, district, group of districts). Design rules. Technical Code of Good Practice TCGP 45-3.01-118-2008¹⁰, etc.

The territorial planning documents are closely related to the strategies and forecasts of socio-economic planning. According to the Law of the Republic of Belarus dated May 5, 1998, No. 157-3 “On the State Forecasting and Programs of Social and Economic Development of the Republic of Belarus”, these are:

- National Strategy for Sustainable Social and Economic Development of the Republic of Belarus (for 15 years) and the main directions of social and economic development of the Republic of Belarus (for 10 years),
- Program of Social and Economic Development of the Republic of Belarus (for 5 years),
- Annual Forecast of Social and Economic Development of the Republic of Belarus (for 1 year), etc.

8 <http://www.pravo.by/document/?guid=3871&p0=P31600334> (19.08.2019);

9 <https://aversa.by/blog/docs/item/114-postanovlenie-256-ot-22-04-2019-go-poryadke-provedeniya-obshchestvennykh-obsuzhdenij-v-oblasti-arkhitekturnoj-gradostroitelnoj-i-stroitelnoj-deyatelnosti> (19.08.2019);

10 <https://rovar.info/archives/1434> (19.08.2019);

The main public governance bodies in the area of land-use planning and industrial safety in Belarus include the Council of Ministers of the Republic of Belarus; the Ministry of Architecture and Construction; the Ministry of Natural Resources and Environmental Protection; the Ministry of Industry; the Ministry of Transport and Communications; the Ministry of Emergencies; the Ministry of Economy; the Ministry of Energy; and the State Property Committee. Also, a number of state concerns participate in project activities, such as Belneftekhim, "Belenergo", etc.

Article 1 of the Land Code of the Republic of Belarus contains a direct reference to the fact that the land management pattern is a document on land-use planning determining the prospects of allocation, use, and protection of the administrative-territorial or territorial unit lands.

Over the past years, a certain structure of the administrative area land management policies has evolved:

1. General information about the district;
2. Natural conditions and resources;
3. Distribution and status of the land reserves;
4. Reclamation and environmental condition of the territory;
5. The overall strategy of the land-use organization;
6. Status and forecast of the land-use by land user categories;
7. Restrictions on the economic use of the land;
8. District land management pattern efficiency;
9. Arrangements for implementation of the land management pattern.

The land management pattern shall be agreed with the land management service of the district executive committee, the territorial body of the Ministry of Natural Resources and Environmental Protection of the Republic of Belarus, the territorial bodies of Architecture and Construction (Urban Development), a body of the Ministry of Agriculture and Food of the Republic of Belarus, as well as other state bodies and organizations specified by the customer in the terms of reference for the development of a land management pattern.

The Law of the Republic of Belarus Act dated July 18, 2016, No. 399-3 “On State Ecological Expertise, Strategic Environmental Assessment and Environmental Impact Assessment” defines the *land management pattern of an administrative district and urban planning projects as objects of state ecological expertise, and purely urban planning projects are defined as the objects of strategic environmental assessment. An example is an environmental report on strategic assessment of a Pattern for Comprehensive Territorial Organization of Maladzyechna District*¹¹.

The territorial planning documents are developed by specialized enterprises, such as Republican Design Institute for Land Management Belgiprozem¹² and UE “BELNIIPGRADOSTROITELSTVA”¹³.

The system of land-use planning in Ukraine is quite similar but has its own peculiarities. Relations in the field of land planning are governed by the Constitution of Ukraine and laws of Ukraine¹⁴ “On the Regulation of Urban Development”; “On the Urban Development Fundamentals”; “On Architectural Activity”; “On Land Management”; “On the Construction Standards”; “On Environmental Protection”; “On Environmental Impact Assessment”, etc.

The Law of Ukraine “On the Regulation of Urban Development” provides for the interaction between land-use and industrial safety structures.

Relations in the field of industrial safety are governed by the Law of Ukraine “On Extremely Dangerous Objects” tailored to the requirements of the Seveso II Directive (96/82/EU dated January 9, 1996).

Within the framework of the European integration process, the Law of Ukraine No. 2059-VIII “On Environmental Impact Assessment” was adopted on May 23,

11 <http://www.mas.gov.by/uploads/files/Ekologicheskij-doklad-SEO-SKTO-Molodechenskogo-rajona.pdf> (19.08.2019);

12 <http://belgiprozem.by> (19.08.2019);

13 www.irup.by (19.08.2019);

14 https://www.unece.org/fileadmin/DAM/env/documents/2019/TEIA/LuP_Moldova_May_2019/presentations/Russian/2B_-_3_The_experience_of_Ukraine_-_Ukraine.pdf (19.08.2019);

2017. It complies with the EU requirements. According to the European standards on environmental impact assessment, EIA procedures are influenced by other decision-making processes and broader EIA public access to information.

Certainly, such an important safety aspect of Cross-border areas as the industry is implemented in a number of projects of the **Cross-border Cooperation Programme Poland - Belarus - Ukraine 2014-2020**.

For example, the project entitled "*Shared initiatives for increasing security of the Cross-border area in the event of ecological and chemical disasters*" (PBU1/0077/16)¹⁵ tackles the issues of improving the quality of life of the residents through joint initiatives aimed at improving safety of people, property and the environment in the border areas of Belarus and Poland. Upgrading of fire rescue units, as well as chemical and environmental rescue units, would increase the preparedness for the risk of environmental disaster resulting from the development of the chemical industry in this district. The project beneficiaries are the rescue units from the areas of Siemiatycze county (powiat) and Grodno region (oblast).

The project entitled "*The new approach to the Cross-border emergency management system*" (PBU1/0497/16)¹⁶ is aimed at achieving the goal of emergency management in the Cross-border area and improves the Cross-border capacity and cooperation to save lives, preserve the environment, protect the property and economy. The project is raising awareness of the risks and contributes to a safer, more disaster-resilient society in the Cross-border area. Ultimately, it improves the management of emergency situations and civil protection in the border area between Belarus and Poland.

The implemented projects of the **Cross-border Cooperation Programme Poland - Belarus - Ukraine 2007-2013** related to industrial safety include the following:

15 <https://www.pbu2020.eu/pl/projects2020/57> (20.08.2019);

16 <https://www.pbu2020.eu/pl/projects2020/65> (20.08.2019);

- *“Together safer”* (IPBU.02.01.00-06-037/10)¹⁷. The project was aimed at creating a joint response system for crisis situations, natural and man-made disasters, failures and other circumstances threaten the health and life of the residents of Lublin and Volyn districts, as well as the subsequent increase in border security. The event resulted in upgrading of the logistics base of partner organizations, increased competence of employees, enhancement of the environment monitoring and environmental hazard prevention system.
- *“The improvement of the efficiency of the Cross-border reaction system to the environmental hazards: Tomaszów Lubelski – Zhovkva – Sokal”* (IPBU.02.01.00-06-048/10)¹⁸. The project was aimed at introducing a number of soft and investment measures, the exchange of experience between firefighters in Poland and Ukraine, the acquisition of special equipment for environmental safety, which is predetermined by the proximity of mines in Tomaszów Lubelski County to the border regions of Ukraine. The project activities eliminated deficiencies in crisis management operations and showed the effectiveness of response measures to natural hazards;
- *“Development of the rescue services Poland – Ukraine within the strengthening the infrastructure of Cross-border management system of natural hazard”* (IPBU.02.01.00-14-177/10)¹⁹. The overall objective of the project is to strengthen the protection of the natural environment and ecologically valuable territories in the eastern part of the Mazovian Voivodeship and Volyn region. Threats arising in the Cross-border area in the form of enterprises possessing hazardous substances, as well as urban and agricultural areas causing fires and toxic threats to forest complexes and waters, indicate the need for continuous monitoring of threats and preparation for the quick elimination of disasters in order to restrict the losses in the natural environment. The project aims at increasing the capacity of rescue services and improving threat monitoring and crisis management.

17 <http://www.pl-by-ua.eu/contract.php?id=6> (20.08.2019);

18 <http://www.pl-by-ua.eu/contract.php?id=5> (20.08.2019);

19 <http://www.pl-by-ua.eu/contract.php?id=25> (20.08.2019);

A significant contribution to the development of Cross-border industrial safety issues is made by international technical assistance projects. In the recently completed European Union project “*Prevention, Preparedness and Response to Natural and Man-made Disasters in the Eastern Partnership Countries*” (PPRD East 2), the Republic of Belarus and Ukraine were project territories. The main thing was to improve the effectiveness of risk management at the national level, as well as to strengthen the protection of the population from eventual adverse consequences of natural and man-made disasters. Each country received a roadmap with a list of specific measures in the areas such as disaster risk assessment and management; collection and processing of the disaster loss data; inclusion of costs to reduce such risks in the state budget; volunteer work to inform the public about disasters.

In spite of some progress in the field of industrial safety in Cross-border areas, the most recent subregional workshop on land-use planning and industrial safety for Eastern Europe and the Caucasus in Chisinau (May 22 – 24, 2019)²⁰ revealed that a number of countries, including Ukraine and Belarus, are facing problems with integration of the land-use planning and safety procedures to ensure coordination and cooperation between the relevant government agencies in connection with adoption of the land-use planning decisions and placement of hazardous industrial facilities²¹.

To consolidate the efforts to ensure further inter-institutional coordination, it was recommended to adopt or revise the laws integrating the land-use planning and industrial safety in line with the relevant multilateral environmental treaties (primarily the UNECE Industrial Accidents Convention, the Convention on Environmental Impact Assessment in a Cross-border Context, the Protocol on Strategic Environmental Assessment, and the Convention on Access to Information, Public Involvement in Decision-Making and Access to Justice in Environmental Matters).

20 <https://www.unece.org/index.php?id=50975> (20.08.2019);

21 https://www.unece.org/fileadmin/DAM/env/documents/2019/TEIA/LuP__Moldova_May_2019/Conclusions.pdf

Taking into account the existing experience of monitoring the hazard factors and crisis management, it is advisable, within the framework of the Cross-border Cooperation Programme Poland - Belarus - Ukraine 2014-2020, to develop a pilot land-use planning project (territorial planning project) of the border administrative-territorial units (administrative districts of Belarus, districts of Ukraine, and powiats of Poland). The land-use planning scheme of Włodawa County of Lublin Voivodeship of Poland, Brest district of Brest region of Belarus and Shatsk district of Volyn region of Ukraine would be the most relevant.

In this project, it is advisable to consider:

- strengthening cooperation between the countries through more effective agreements, action plans in emergency situations, capacity-building, training and practical exercises on industrial safety;
- the issues of harmonization (profound understanding) of territorial planning (land-use planning) of Ukraine, Poland, and Belarus;
- strengthening of Cross-border cooperation through the implementation of Article 7 and reporting on the existing and potential hazardous activities of the neighbouring countries in accordance with Article 4 of the Industrial Accidents Convention;
- coordinated Cross-border location of hazardous industrial facilities;
- development of the common Cross-border geographic information resources of the land-use planning and industrial safety;
- further study of good practices and support of higher standards and security measures;
- ensuring transparency and accountability in the implementation of hazardous activities by raising awareness and promoting free information flow;
- transferring the best practices stipulated by the Convention into the national laws and their integration into industrial activities by means of targeted training, capacity-building and knowledge dissemination.