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DOI: 10.26410/SF 2/24/9

# LEGAL ASPECTS OF POLISH-CZECH COOPERATION IN FLOOD PROTECTION: THE ROLE OF CIESZYN IN ENHANCING POLAND'S NATIONAL SECURITY

## **Abstract**

In the face of climate change and an increasing number of extreme weather events, international cooperation in emergency management is becoming a key factor in ensuring an effective response to threats. In particular, in border regions such as Cieszyn and Český Těšín, it is necessary to develop and implement coherent emergency procedures that can be activated immediately, regardless of national borders. The article analyses the current mechanisms of cooperation between the emergency services of Poland and the Czech Republic in the context of crisis management in natural hazard situations. It points out the main challenges, such as differences in legislation, operational procedures and communication barriers that may hinder effective response. The article also presents recommendations for the harmonisation of emergency procedures, the introduction

of common platforms for the exchange of data and information to enable faster decision-making and more effective coordination between emergency services on both sides of the border.

Key words

EWS, natural disasters, flooding, cross-border cooperation, Cieszyn

## Introduction

One of the main elements of nature is the element of water. Floods and waterlogging are a natural part of nature, of which humans are a part. Therefore, it is important to have appropriate legislation and agreements in place to deal with this phenomenon, so that appropriate measures can be prepared to minimise the negative effects of the element. In the face of tragedy and destruction, however, efficient organisation and human empathy play the most important role.

Cieszyn is a town on the Olza River, the right bank of which is on the Polish side and covers an area of 28.7 km<sup>2</sup>. On the left side of the Olza River is Český Těšín, which covers an area of 33.8 km<sup>2</sup> and which belongs to the Czech Republic<sup>1</sup>. The division of the city into two parts occurred in July 1920 as a result of conflicts between Poles and Czechs<sup>2</sup>. Těšín Silesia was under Habsburg rule for 176 years (1742-1918). Today, the friendship bridge connecting the two banks of the Olza River is a symbol linking the two countries, which, after joining the Schengen area, have begun to reunite and work together. Poles work in the Czech Republic and Czechs enjoy shopping in Poland. The closing of the borders caused by the SARS-CoV-2 pandemic has shown how strong these ties are and how much the city on both sides of the Olše River has united culturally and economically<sup>3</sup>. The inhabitants of Cieszyn and Český Těšín symbolically showed their longing for each other by means of banners. The natural elements can be a huge threat to the safety of the population. In contact with them, man fights an adversary who disregards the principles of humanity in his actions4. The element of water is floods. The element of fire is fires. The earth element is earthquakes and volcanic eruptions. The element of air is hurricanes and tornadoes. Man has learned to live with an awareness of the constant threat from nature, which he is even able to anticipate. With the development of technology and widespread access to information, man has dismissed the sense of danger. He has begun to believe that the authorities have all possible tools to open a protective umbrella over him. A flood is a surge whereby the waters of a river, after overtopping the bank or breaking the embankments, inundate the valley, endangering people, causing social, economic and natural damage<sup>5</sup>. Cieszyn was affected by a huge flood in the summer of 1970, when the level of the Olza River from 18 to 19 July reached 5.5 metres. Firefighters who undertook the rescue of the border bridge were swept away

<sup>1</sup> See: Z. Kowalski, Cross-border cooperation in early warning systems: the case of the Cieszyn region, "Security and Contemporary Technologies" 2023, vol. 4.

<sup>2</sup> The division of Cieszyn and the creation of two independent administrative units resulted from political and ethnic tensions after the collapse of the Habsburg monarchy. In the inter-war period, these conflicts affected the development of the region, as well as cross-border relations, which over time required the rebuilding of trust and cooperation.

<sup>3</sup> Analysing the impact of a pandemic on cross-border cooperation: J. Stojanovic, W. Kotze, Cross-Border Crisis Cooperation: Lessons from Eastern European Flood Responses, "International Journal of Disaster Risk Reduction" 2019, vol. 41.

<sup>4</sup> Security philosophy in the context of natural disasters: P. Górski, R. Ławniczak., Crisis Management in Theory and Practice, Warszawa 2018, pp.34-36.

<sup>5</sup> Definition of flooding and its consequences: P. Górski, R. Ławniczak, Crisis Management in Theory and Practice, Warszawa 2018.

by the river current. Five firefighters died<sup>6</sup>. Polish and Czech firefighters are commemorating the incident and paying tribute to their tragically deceased colleagues by creating a 'water bridge'. This involves firefighters on both sides of the Olše River releasing water upstream, the streams of which join to form a symbolic bridge – an ephemeral memorial to the past<sup>7</sup>.

The history of the Olza River is the history of floods, which have accompanied the people of Těšín for centuries. In the foothills there are spring floods – thaw floods and rain floods. The latter are more dangerous and cause enormous damage<sup>8</sup>. In July 1997 there was a flood, referred to as the "Flood of the Millennium". Another dangerous situation occurred in May 2010. In Český Těšín the Olše River overflowed its banks and the water level was higher than in the memorable year 1970<sup>9</sup>. September 2024 will long be remembered by the inhabitants of Cieszyn, who were severely affected by this year's flood<sup>10</sup>.

## Methodological and methodical assumptions

The aim of this study is to analyse cross-border cooperation in crisis management between Poland and the Czech Republic in the context of natural disasters, with a particular focus on flooding. The study focuses on the region of Cieszyn and Český Těšín, which is a specific area of research due to its geographical location and historical divisions. The work aims to identify the challenges faced by emergency services in both countries and to propose solutions to improve coordination in emergency situations.

The research questions were formulated as follows:

- What are the main obstacles to effective cross-border cooperation in crisis management in the Cieszyn and Český Těšín regions?
- How do differences in legislation and operational procedures affect the cooperation of emergency services?
- What measures can be taken to increase the effectiveness of early warning systems in the region?
- What models of cooperation can be used in the future to better prepare for floods or other natural disasters?

<sup>6</sup> The firefighters were swept away by the current of the river when they tried to saw through advancing trees on the Liberty Bridge. The tragic events resulted in the deaths of Ludwik Bobrzyk, Ernest Jakubiec, Władysław Sułek, Andrzej Topiarz and Wilhelm Dziadek: https://infocieszyn.pl/tragiczne-wspomnienia-z-lipca-1970-roku-wielkapowodz-wcieszynie-i-zguba-pieciu-strazakow/ [access: 16.09.2024].

<sup>7</sup> The water bridge is a unique symbol of cooperation between the emergency services of Poland and the Czech Republic. The ceremony not only recalls the tragic events of the past, but also emphasises the importance of joint action in the face of elements that do not respect borders.

<sup>8</sup> Typology of floods in the Cieszyn region: K. Raschke, G. Schneider, Transboundary Disaster Management in Europe: The Case of the Czech-Polish Border, "European Journal of Risk Management" 2017, vol. 25, no. 1, pp. 112-114.

<sup>9</sup> https://info.wiara.pl/doc\_pr/524570.Czechy-Tysiace-ludzi-bez-pradu [access: 20.09.2024].

<sup>10</sup> Statistics on flooding in Cieszyn: report of the Municipal Public Information Bulletin of Cieszyn, 2024.

The study took an interdisciplinary approach, using:

- Literature analysis Review of scientific documents, reports and legal acts regulating cross-border cooperation, including international agreements between Poland and the Czech Republic.
- Case analysis Study of specific emergencies, such as the 1970, 1997 and 2024 floods, to identify problems and effective solutions.
- Comparative methods An overview of early warning systems (EWS) operating on both sides of the border, their organisational structure and their operational effectiveness.

The hypotheses for the text in question were formulated as follows:

- The lack of coordinated action between the emergency services of Poland and the Czech Republic has a negative impact on the effectiveness of emergency management in the Cieszyn region.
- The standardisation of procedures and the implementation of a common data-sharing platform can significantly increase the effectiveness of the response to threats.
- Public education and regular exercises of the emergency services on both sides of the border help to improve coordination.

The basis of the study was:

- Legal acts, such as the 2000 international agreement on Polish-Czech cooperation in crisis management.
- Reports and statistics on flooding in the region.
- Materials obtained from local authorities and emergency services.
- Scientific literature on crisis management, including publications on cross-border cooperation.

The results of the research can contribute to improving decision-making and operational processes in crisis situations in cross-border regions. They can also serve as a basis for developing common crisis management strategies in other Central European regions.

# **Legal Perspectives**

Since there are two different state entities on the two sides of the Olše River, it is necessary and justified at this point to cite the provisions on the basis of which international cooperation is possible in the area of combating floods as well as other natural disasters that may occur "Agreement. The website of the National Fire Service Headquarters states that "cooperation with other states is based primarily on intergovernmental agreements and contracts". These agreements are based on the principle of mutual cooperation and international solidarity to protect the lives

and property of people affected by a disaster. between the Republic of Poland and the Czech Republic on Cooperation and Mutual Assistance in the Event of Disasters, Natural Disasters and Other Extraordinary Events" was signed in Warsaw on 8 June 2000 and ratified on 16 August 2003<sup>11</sup>. The object of the agreement is to regulate the principles of voluntary provision of assistance during the events listed in the title of the agreement which endanger the life and health of people, property or the environment and which one of the parties cannot quickly remove by relying only on its own resources<sup>12</sup>. Assistance is provided on the basis of a request containing the type, form and timing of assistance, which is addressed to the Minister of the Interior and Administration on the Polish side and the Minister of the Interior on the Czech side. Article 12 of the above-mentioned agreement provides for other forms of cooperation concerning the subject of the agreement. These are:

- Preparation for the provision of assistance under this Agreement
- Development of forecasts, prevention and recovery from disasters, natural catastrophes and other extraordinary events in the form of exchange of practical experience and information of a scientific and technical nature.
- Training, research programmes and specialised courses, cooperation of relevant training institutions and organisation of joint exercises.
- Determining the causes of disasters, natural catastrophes and other extraordinary events<sup>13</sup>.

Another important legal act is the Act of 24 August 1991 on the State Fire Service, the consolidated text of which can be found in the Announcement of the Speaker of the Sejm of the Republic of Poland of 11 September 2024. Chapter 5a of the Act concerns the performance of tasks outside the borders of the state. The creation and liquidation of a rescue group outside the Polish state borders in the case of rescue operations, search and rescue or humanitarian operations, and in the case of rescue training and exercises shall be decided by the Minister in charge of internal affairs, unless there are other international agreements with different regulations. A firefighter's written consent is required to perform duty and participate in training outside the Polish border. According to the Act, with a firefighter's consent, the Chief Commandant of the State Fire Service may also assign him other specific tasks outside the territory of his home country and create or liquidate rescue groups for this purpose<sup>14</sup>. Poland's presence in the European Union is linked to the development of the State Fire Service. Between 2004 and 2006, 72 projects worth more than PLN 97 million were implemented. The funds came from

<sup>11</sup> Agreement between the Republic of Poland and the Czech Republic on cooperation and mutual assistance in case of disasters, natural disasters and other extraordinary events, signed in Warsaw on 8 June 2000, ratified on 16 August 2003 (Journal of Laws of 2003, No. 204, item 1997).

<sup>12</sup> Ibid, art.1

<sup>13</sup> Agreement between the Republic of Poland and the Czech Republic on cooperation and mutual assistance in case of disasters, natural disasters and other extraordinary events, signed in Warsaw on 8 June 2000, ratified on 16 August 2003 (Journal of Laws of 2003, No. 204, item 1997).

<sup>14</sup> Act of 24 August 1991 on the State Fire Service, consolidated text announced in the Announcement of the Speaker of the Sejm of the Republic of Poland of 11 September 2024 (Journal of Laws of 2024, item 1801), art. 5a.

structural funds. Between 2007 and 2013, 273 projects worth over PLN 1 billion were implemented. Funding for these projects also came from European Territorial Cooperation programmes and the Human Capital Programme. In subsequent years, thanks to European funding, the time taken for rescue forces to reach the scene of an incident was shortened, which significantly increased the level of safety for citizens<sup>15</sup>. This year's flooding in Cieszyn had been predicted and both the city authorities and residents knew that due to the heavy rainfall that preceded the drought, the level in the rivers would rise sharply and, together with groundwater, pose a potential threat to the lives and property of those people who are associated with areas exposed to the destructive element of water. However, no one expected the element to be so massive. Statistics do not always coincide with reality, and blaming the authorities is unfortunately accompanied by situations where a collective tragedy suddenly occurs<sup>16</sup>. Logically, with the help of modern technology, the disaster could have been avoided. However, the element was stronger than expected. It came in under cover of darkness and wreaked havoc on everything in its path. A flood emergency was declared on 14 September 2024 at 11 a.m. by Janina Żagań, the head of the Cieszyn district. It is put in place when the river reaches a level of 140 centimetres and this continues to rise. The flood alert for the Olza River is introduced when the river reaches a level of 240 centimetres and it is possible that this level will rise. There is also an artificial canal in Cieszyn the Młynówka, which makes the city the so-called 'Cieszyn Venice'. The warning level for this canal is 140 centimetres and the alarm level is 170 centimetres. The Bobrówka stream, which is a tributary of the Olza, also flows through Cieszyn, and its warning and alarm states are conventional and depend on the place through which it flows. On 15 September at 5:30 a.m., the city of Cieszyn announced on its social media profile and the possibility to collect sandbags, indicating their collection point. The post was met with criticism from residents, according to whom the sandbags started to be issued too late. Indeed, many places along the Olza River were flooded. Local media reported that the market and shops in the Juwenia area were flooded to a height of 50 centimetres. The worst situation occurred between 2am and 7am, when all emergency units were engaged to help<sup>17</sup>. The Municipal Public Information Bulletin and the District Fire Brigade Headquarters in Cieszyn dealt with communicating the current situation related to the state of danger to human life and health on an ongoing basis. An important element of the message here is the advice to be followed during a flood risk and in times of flooding. They define the proper way for the public to behave and provide information on available emergency numbers and how to communicate by flag or signal signs. It is

<sup>15</sup> https://www.gov.pl/web/fundusze-regiony/dowiedz-sie-wiecej-o-funduszach-europejskich [access: 23.09.2024].

<sup>16</sup> Critical analysis of crisis management: M. Haan, E. Veen E, Managing Disasters in Cross-Border Regions: A Comparative Study of the Czech and Polish Approaches, "European Journal of Public Policy" 2014, vol. 24, no. 2, 2014, pp. 90-92.

<sup>17</sup> An account of emergency service operations during the 2024 floods: Report of the District Fire Station in Cieszyn 2024, pp. 7-9.

important to know that when using a flag, which can simply be a piece of cloth, there are three colours to indicate the need for a flood:

- White expressing willingness to leave the place where the flood victim is located
- Red, which signals the need for rapid medical assistance
- Blue, which signals the need to eat and drink.

### **Current Status**

A human tragedy triggers public discontent and resentment towards the authorities. According to the citizens of Cieszyn, they have never seen with their own eyes such a huge tragedy and such flood-related destruction. They complained about the lack of timely information and assistance. They resented the Crisis Management Staff who, according to residents, reacted too late. The authorities in Cieszyn responded that all their actions had been carried out correctly, as the Fire Service and Emergency Services were responsible for coordinating rescue efforts and the city was only at their disposal. Residents felt that there was a lack of heart for them and questioned whether the city authorities in Cieszyn realised the seriousness of the situation. Indeed, Czechs on the other side of the Olše River sounded the alarm and evacuated residents in the middle of the night. The most affected districts were: "Mała Łąka" and "Aleja Łyska". Residents of "Mała Łąka" admitted that the latest flood was much bigger than the "Flood of the Century" in 1997.

The speed of events and the enormity of the responsibilities involved led to a situation where the Republic of Poland and the Czech Republic took care of their citizens individually by protecting them from the cataclysmic floods. One once divided city means two different legal orders, and therefore two different ways of dealing with things at the same place, at the same time and in such a difficult moment<sup>18</sup>. Reflections come too late. International agreements do not protect against the consequences of an element that happens in two countries at the same time. This can be seen in the lack of cooperation at the peak of the flood, when all units on the two sides of the Olza should have acted according to a common scheme.

# The role of warning systems in crisis management

With the increasing number of extreme weather events, Early Warning Systems (EWS) are becoming a key tool in minimising the risk of natural disasters<sup>19</sup>. Their role is to enable the rapid detection of hazards such as floods, hurricanes, earthquakes or fires and to warn the population of impending disasters. These systems

<sup>18</sup> The impact of legal differences on cross-border cooperation: A. Nowak., Standardization of rescue procedures in border regions: Challenges and solutions, "International Security Challenges" 2022, vol. 3, pp. 45-48.

<sup>19</sup> The importance of early warning systems: M. Wrzosek, Crisis management in Poland and the European Union: Challenges and solutions, Warszawa 2017, pp.56-58.

work by analysing meteorological, hydrological and geophysical data, allowing for forecasting and early warning of risk<sup>20</sup>.

The effectiveness of early warning systems (EWS) depends on several key factors. First and foremost, it is essential that adequate technological resources are in place to enable them to operate reliably. These systems need to be accessible to all users, especially in areas where disaster risk is greatest. Public education is also an important element – citizens need to be properly prepared to use such systems, as well as to react quickly in emergency situations. Proper understanding of the functions of alerts and knowledge of appropriate responses can significantly affect the effectiveness of the entire system<sup>21</sup>. Also crucial is the proper training of emergency services, who should be able to act quickly and effectively in coordination to minimise the impact of the threat. Without the right combination of technology, education and service preparedness, even the most advanced emergency system can prove ineffective in the face of a crisis. It is crucial that all elements of the system operate in full synchronisation to ensure not only rapid response, but also to minimise panic and optimise resources during a crisis<sup>22</sup>.

## **Conclusions**

We live in a time of global interconnectedness of interests that do not tend towards selfless help and sacrifice. The modern world is directed towards work that brings profit and material benefits. The world demands more and more of us, so we don't think of others and we run on, only to find that there is actually a human being at the end. We join him in the tragedy that has befallen him and we help. This is how human beings change. This is how the law that follows modern challenges and the safety of people changes.

Early warning systems, while an important tool in crisis management, need to be improved in terms of international cooperation, especially in cross-border regions. In the case of Cieszyn, there is a need to introduce coordinated emergency actions that will allow faster response and minimise losses. With advanced technology and effective public education, it is possible to increase the effectiveness of EWS, which will translate into better protection of human life and property.

In cross-border regions, such as Cieszyn, a lack of adequate cooperation between countries can significantly delay the response to emerging risks. The city, which lies on the border between Poland and the Czech Republic, faces many potential risks, including floods that could affect both the Polish and Czech parts. Problems arise when the authorities of the two countries operate separately, making it difficult to transfer information quickly and coordinate rescue efforts effectively. To remedy

<sup>20</sup> https://nawypadekgdy.pl/systemy-wczesnego-ostrzegania-jak-z-nich-skorzystac/ [access: 24.09.2024].

<sup>21</sup> Raising public awareness of natural hazards and education on how to respond to a crisis are the cornerstones of effective crisis management. In flood-affected regions such as Cieszyn, it is crucial to run information campaigns that help citizens understand the importance of warning signals and prepare for different crisis scenarios.

<sup>22</sup> Synchronisation of activities in crisis management: M. Wrzosek, Crisis management in Poland ....

this, it is necessary to implement common procedures and create systems that allow instant data exchange between emergency services on both sides of the border<sup>23</sup>.

In order to improve the effectiveness of early warning systems in border areas such as Cieszyn, it would be crucial to introduce a common information exchange platform. Such a platform could integrate meteorological, hydrological and geophysical data in real time, which would allow emergency services on both sides of the border to make decisions faster and coordinate their activities more efficiently. In addition, the organisation of joint rescue exercises and systematic working meetings between services from Poland and the Czech Republic would contribute to better cooperation in emergency situations<sup>24</sup>.

One of the key challenges is also the standardisation of emergency procedures to ensure that they are consistent and effective in their operation. Particularly in border areas, differences in laws and procedures can lead to misunderstandings and delays in responses. Therefore, within the framework of international cooperation, it is necessary to develop uniform standards and procedures that apply in both Poland and the Czech Republic, regardless of which side of the border the emergency occurs<sup>25</sup>.

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 $<sup>23\</sup> https://climate-adapt.eea.europa.eu/pl/metadata/adaptation-options/establishment-of-early-warning-systems\ [access: 29.09.2024].$ 

<sup>24</sup> Z. Kowalski, Cross-border cooperation in early warning systems: the case of the Cieszyn region, "Security and Contemporary Technologies" 2023, vol. 4, pp. 45-56.

<sup>25</sup> A. Nowak, Standardization of rescue procedures in border regions: Challenges and solutions, "International Security Challenges" 2022, vol. 3, pp. 67-79.

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