


DOI: 10.24193/OJMNE.2026.50.02

Filip TERESZKIEWICZ, PhD 
University of Opole, Poland
f.tereszkiewicz@gmail.com

Karolina CZABANOWSKA, PhD candidate 
University of Opole, Poland
karolina.czabanowska@uni.opole.pl

SECURITY AND CROSS-BORDER COOPERATION IN THE EUROPEAN UNION: A STUDY OF POLISH B-SOLUTION CASES

ABSTRACT: *The article analyses Polish cases reported under the EU b-solutions initiative, focusing on barriers to cross-border cooperation affecting local security. Although the programme was not originally designed as a security policy tool, the conducted study of seven cases from the Polish border regions demonstrates its potential in this area. Problems identified included inconsistent regulations, lack of coordination of emergency services and limitations in access to health services and infrastructure. The article is a contribution to the debate on decentralisation, resilience and multi-level governance, highlighting the role of local governments in addressing systemic barriers. B-solutions appear as an effective tool for identifying problems in the EU periphery and promoting territorial integration in the context of social, health and environmental security.*

KEYWORDS: cross-border security; cross-border cooperation; b-solutions initiative; local government; institutional resilience; European Union.

1. Introduction

Cross-border cooperation constitutes one of the key pillars of the European integration process and plays an important role in pursuing the European Union's objectives in terms of territorial, economic and social cohesion. Despite the growing importance of this area, practice shows that the functioning of cross-border structures still faces numerous administrative, legal, institutional and operational barriers that hinder effective coordination of activities, especially at the local and regional levels.

One instrument aimed at identifying and reducing these obstacles is the b-solutions initiative, which is being implemented by the Association of European Border Regions (AEBR) on behalf of the European Commission. This programme allows for the reporting of specific problems arising in the day-to-day practice of cross-border cooperation and the presentation of expert recommendations to overcome them. Although the literature on the subject highlights the significant contribution of b-solutions to the development of knowledge on barriers to cross-border cooperation (Medeiros et al.,

2022; Mullan & Scott, 2024), there is still a lack of in-depth analysis of the collected cases from a security perspective, especially in the context of its local and cross-border dimensions.

The submissions documented under the b-solutions initiative reflect the real challenges faced by local governments, public services and other actors involved in cross-border cooperation. However, the relationship between the barriers identified and the issue of security – in its both classical and extended forms – remains poorly recognised. This also applies to the cases reported from Poland's border areas, which – despite their relatively small number – show a broad spectrum of barriers of significant practical and systemic importance.

This article analyses the Polish submissions to the b-solutions initiative in terms of how they relate to security issues arising in the border areas of the European Union. Referring to the literature on the subject, including Balogh (2024), Mullan & Scott (2024) and Makkonen (2024), the authors attempt to answer the question to what extent the Polish cases relate to security issues and what types of barriers are identified in them. The starting point for the analysis is the hypothesis that safety issues are present in Polish submissions indirectly rather than directly and that the dominant barriers are due to the diverging legal and administrative framework, insufficient coordination of emergency services, problems in the health sector and restrictions on the mobility of cross-border workers.

The innovative character of this study is reflected in two aspects. Firstly, a security analysis of trans-regional cooperation units, i.e. institutions operating at the interface of diverse legal systems, which makes them particularly susceptible to the emergence of institutional barriers. Secondly, the identification of specific security challenges emerging in the practice of cross-border cooperation, which allows the operational and institutional dimensions to complement the existing literature coverage. The analysis carried out confirms that many of the problems identified are universal and find their equivalents in a wider, pan-European context (Medeiros et al., 2024; Mullan & Scott, 2024).

This study is based on a qualitative analysis of cases reported under the b-solutions initiative, with a particular focus on reports from Polish border areas. The authors reviewed seven cases reported between 2018 and 2024, using available European Commission compendia. The analysis had the form of desk research and involved a critical interpretation of the content of the submissions and the accompanying expert recommendations. In addition, the study was based on a broader theoretical context, drawing on literature on security policies, cross-border cooperation and territorial governance.

The first part of the article reviews the literature on the b-solutions initiative, pointing out the inadequate connection between this instrument and security theory. This is followed by a discussion of the concept of security and its local and cross-border dimensions, with a particular focus on the concept of resilience. The next section looks at the evolution of cross-border cooperation in the

European Union, taking into account the impact of the COVID-19 pandemic and the diversity of integration models. This is followed by a description of the structure of the b-solutions programme, highlighting its practical and specialist nature. A study of seven cases from the Polish border region allowed for the identification of four main types of risks: health, public, social and environmental. The article concludes by pointing out the key role of local governments in the implementation of existing legislation and the potential of b-solutions as a tool to support local security policy in a complex and diverse institutional environment.

2. Potential and limitations of b-solutions in the light of cross-border cooperation studies

In the literature on cross-border cooperation, the b-solutions initiative is seen as a tool for practical barrier removal, although the number of studies focusing exclusively on it remains limited. Available studies indicate that cross-border action in the European Union is heavily burdened by institutional and legislative barriers, which is particularly evident in sectors such as health care or labour mobility (Medeiros et al., 2023). Particularly in the former area, researchers highlight the existence of serious limitations due to inconsistent patient data regulations, the lack of automatic recognition of medical staff qualifications, different criteria for reimbursement of treatment costs and discrepancies in technical standards. As Mullan (2024) and Balogh (2024) show, these problems lead to fragmentation of health systems in border regions, and their effects were additionally compounded during the COVID-19 pandemic. On the other hand, cases such as the cooperation of emergency services on the Belgian-French border show that differences in interpretation of the same rules can effectively paralyse emergency operations (Mullan, 2024). Cross-border health services are thus recognised as a key component of regional development and strengthening the resilience of cross-border communities (Balogh, 2024).

In parallel, the literature emphasises the importance of b-solutions in identifying barriers to cross-border labour mobility and labour market integration. The Makkonen review (2024) shows that legal and administrative constraints continue to impede the free movement of workers and effective solutions require both practical action and a solid theoretical background. Similar conclusions are drawn by Medeiros et al. (2023), who point to the initiative's potential to create operational knowledge that can serve to alleviate the day-to-day barriers associated with commuting and cross-border professional activity.

The initiative is also analysed in the context of territorial governance. Medeiros (2024) highlights its impact on the development of both "hard" tools such as legal regulations or spatial strategies

and “soft” tools, namely participation, potential building and decision-making capacity of local actors. Zillmer (2024) points to strengthening the system of multi-level governance and subsidiarity, while Ulrich (2024) focuses on the role of European Groupings of Territorial Cooperation (EGTCs), which gain new coordination tools and innovative models for dealing with border obstacles through the initiative. In this vein, Chirodea et al. (2024) place b-solutions in the strand of so-called new regionalism, emphasising the need for cooperation among authorities at different levels, the research and education sector and the private sector.

A broader theoretical perspective is offered by the work of Medeiros et al. (2024), who demonstrate that the initiative played an important role in rebuilding institutional trust in border regions after the pandemic. Their analysis of 41 cases shows the strengthening of local actors’ capacities, the promotion of territorial integration and institutional learning processes, especially in the context of the phenomenon of “covidfencing”, i.e. the closing of internal borders within the EU. However, the key conclusion remains that the effectiveness of the initiative depends largely on the willingness of central authorities to implement the proposed solutions. Mullan and Scott (2024) adopt a similar tone, describing border regions as “integration laboratories” where practical mechanisms for overcoming barriers arising from diverging administrative, legal and social systems are tested.

3. Cross-border dimension of security

The consensus in the literature is that security should not be understood solely as a static state of the absence of threats, but rather as a dynamic process of ensuring the persistence, survival and development of a given entity. This approach is based on the assumption that security comprises three interdependent components: (1) persistence – physical existence under conditions of relative calm, (2) survival – the ability to function despite the occurrence of disturbances, and (3) development – understood as the ability of an entity to freely realise its potential in the long term (Chojnowski, 2017).

In this context, security acquires a universal dimension, but its concrete content varies according to the category of an entity under analysis. The concept is therefore referred to not only a state, but also social organisations, local groups and even individuals. Moreover, the more the analysis shifts towards the local level, the more pronounced the heterogeneity of security needs becomes, which results from local conditions, social structure and the specific functioning of territorial communities (Babiński, 2020).

In recent years, there has been an increasing emphasis on the need for a cross-border per-

spective in security studies. While regional security is sometimes analysed in the context of geopolitical macro-regional structures (e.g. Central and Eastern Europe), cross-border cooperation among local government units is still relatively poorly described. Meanwhile, structures such as Euroregions – although often overlooked in systems analyses – play an important role in creating a security space based on cooperation, coordination and the exchange of resources (Bouckaert & Kuhlmann, 2016).

In the case of Europe, local and regional authorities are becoming increasingly active actors in security policy, as not only executors of central decisions, but also initiators of preventive and adaptive measures. The Italian example of so-called “security pacts” (*Patti per la sicurezza*) shows how effective horizontal and vertical institutional coordination can be, combining the efforts of central and local administrations aimed at preventing crime and increasing social resilience (Calaresu & Tebaldi, 2015).

From a security analysis perspective, cross-border cooperation becomes a space for testing the effectiveness of institutional arrangements, especially in locations characterised by the occurrence of legal, cultural or procedural barriers. The documents prepared as part of the b-solutions initiative clearly indicate that the biggest challenges for local governments participating in such forms of cooperation arise from the inconsistency of regulations, the limited interoperability of systems and the lack of uniform standards for emergency management, which is also confirmed by other studies (Arrieta & Davies, 2025; Balogh, 2024).

Such difficulties lead to the question: Do local actors involved in cross-border cooperation perceive threats in the same way or does the specificity of this cooperation lead to a redefinition of security priorities? The regional examples show that the predominant categories of threats are those related to social, environmental and economic security. However, in the Euroregional context, there may be a shift in emphasis, for example towards procedural barriers, risks associated with the lack of communication or inadequate infrastructure on both sides of the border (Opiola & Böhm, 2022).

At this point, it is worth mentioning the category of resilience, which in recent years has been gaining status of a central concept in local security policy. According to a study by Park et al. (2022), the effectiveness of local government operations depends not only on formal competences, but also on the availability of internal personnel, organisational and decision-making resources. At the same time, as Arrieta & Davies (2025) show, excessive emphasis put on resilience can lead to a paradoxical effect: the normalisation of a crisis state in which further constraints (e.g. budgetary ones) become permanent rather than temporary.

Similar risks are noted by the authors of studies on UK local governments in the context of budget cuts and devolution: resilience can become a rhetorical substitute for real systemic support, leading to the widening of regional disparities and the worsening of public service delivery (Arnold

& McKenna, 2024). At the same time, the literature emphasises that local security is closest to the citizen's everyday experience, it is what shapes the subjective sense of threat or calm. Research by Stefański (2024) shows that factors influencing the perception of safety include both objective elements (e.g. the number of criminal incidents) and subjective ones (e.g. confidence in institutions, the quality of public space).

Local and regional security policies must therefore take into account psychological, social, infrastructural and cultural factors, and create the conditions for intersectoral, including cross-border, cooperation. In this context, common risk management mechanisms, the compatibility of emergency response systems and mutual recognition of protection standards are of primary importance.

4. Evolution and determinants of cross-border cooperation in Europe

Cross-border cooperation (CBC) in Europe was initiated in 1958 with the creation of a Euroregion on the German-Dutch border, involving more than 100 municipalities from both countries. Its main objective, according to Alfred Mozer – the initiator of this model – was to overcome borders as “scars of history” and to build reconciliation between local communities on a bottom-up basis (Wassenberg, 2020, p. 502). In order to classify an initiative as cross-border cooperation, it is not necessary to set up a Euroregion, but, according to the Madrid Convention, what is necessary is a formal sphere, including the conclusion of agreements and adoption of arrangements necessary for the realisation of such intentions (Council of Europe, 1980). According to the aforementioned Convention, if the formal conditions are fulfilled, cross-border cooperation is defined as any joint action undertaken by a minimum of two contracting parties with a view to intensifying and developing contacts between neighbouring communities and territorial authorities. As partners belong to two separate states and are also authorities at the regional level, the role of multi-level governance (MLG) is highlighted in the activities discussed. The current activities of the European Union, Member States as well as regional and local authorities are, in principle, coordinated in accordance with the principles of MLG (Committee of the Regions, 2009). However, there are exceptions when decisions are taken unilaterally by higher-level bodies without consulting regional structures. This practice was particularly evident in the area of broadly understood security, as exemplified by the COVID-19 pandemic (Böhm, 2021), which undermined the effectiveness of previous coordination mechanisms triggered in crisis situations (Medeiros & Guillermo-Ramírez, 2021). The pandemic crisis highlighted the role of national governments and affected both the functioning of the MLG mechanism and the quality of cross-border cooperation. Accordingly, researchers undertook an analysis of the role of Euroregions as political actors in the management of border policy during the pandemic in

Poland, pointing to their marginal importance during the crisis (Opiola & Böhm, 2022). The impact of the pandemic was felt not only in the healthcare and economic spheres, but also in the functioning of the Schengen area, where there was a phenomenon of border closures referred to as “covidfencing” (Medeiros et al., 2020).

Besides crisis situations, cross-border cooperation also faces factors that constantly exert influence on it. Among these, the literature mentions primarily historical, political, legal, social and economic factors (Krasucka, 2010). However, the factors and their impact are not the same for all countries and their border areas. Despite the creation of documents and strategies common to all EU Member States, researchers recognise differences among different areas of Europe (also within the EU) in the context of cross-border cooperation. The literature points to six patterns of integration, varying in the level of trust, intensity of interaction and institutional commitment (Durand & Devocille, 2019). There are clear differences between the areas, which does not mean that the problems occurring there are not the same or similar, but it may affect the previously raised issue of the replicability of solutions (cf. Table 1).

Model 1	Characteristics	Regions
Eastern European	Low level of public trust, limited contacts, high participation in INTERREG A	Baltic states borders, Romania, northern and southern borders of Poland, eastern borders of Hungary and Slovakia, and Greece
Northern European	High level of social trust, moderate flows (low population density) – apart from Norway, relatively weak cross-border cooperation	Scandinavia, Finland
Marine	Low level of integration in all dimensions; physical barrier of the sea	Interreg A programme areas located on the North, Baltic and Adriatic Seas.
Western European	High intensity of cross-border flows, relatively high level of trust, low number of actors involved	Rhineland, Belgium, Luxembourg, France – northern and eastern borders, German-Austrian border.
Central European	High institutional activity; significant discrepancies in public trust on both sides of borders: low especially in the eastern borderlands rather than the German or Austrian borderlands	Former Soviet Bloc countries and eastern German-speaking regions.

South-western	Low level cross-border activity, significant discrepancies in public trust on both sides of the border	Portugal, Spain, southern France, western Italy and Croatia.
---------------	--	--

Table 1 - Integration patterns

Source: Durand & Decoville, 2019.

It is worth noting that although cross-border cooperation faces obstacles, they are outweighed by the potential benefits of achieving its objectives. The roles assigned to it include a form of multi-level governance, a tool for regional development, a form of paradiplomacy, a tool for post-conflict reconciliation and an instrument for building Europe (Böhm, 2021). However, researchers also recognise the non-universal assumptions concerning the borders of Europe. For example, Sohn (2014) points out that CBC also plays an important role in shaping transnational territorial identities by means of fostering the process of building a shared vision for the development of border spaces regardless of national borders. In order for cross-border cooperation to successfully fulfil the roles assigned to it, it needs to be systematically supported through dedicated programmes. An example is the b-solutions initiative analysed in this article, which supports the removal of barriers to cooperation.

5. The b-solutions initiative in the context of cross-border cooperation

Cross-border cooperation is a multi-faceted and context-dependent process (Sohn, 2014), which means that programmes supporting it should also be flexible, adapted to local circumstances and take into account the diverse needs of border communities. The effectiveness of these programmes requires not only institutional coordination, but also the ability to respond to specific administrative, legal and infrastructural barriers. This is what characterises the b-solutions initiative, which was initially a two-year pilot initiative of the European Commission's Directorate-General for Regional and Urban Policy (DG REGIO) launched in 2018. It was intended to serve as a tool to overcome administrative and legislative obstacles in cross-border areas within the European Union (AEBR & EC, 2020). The initiative continued after the pilot phase, with four compendia published by July 2025, describing 165 reported and analysed cases (in 2018-19, 43 cases; in 2020-21, 47 cases; in 2022-23, 41 cases, in 2023-2024, 34 cases) of obstacles to cross-border cooperation in 166 borderlands (during the first round, one of the reports included 2 borderlands) (AEBR & EC, 2020, 2021, 2024a, 2024b). The cases in the first compendium (2020) are divided into the following categories: employment, public transport of passengers, health and emergency services, institutional cooperation, multilingualism and eGovernment. Three subsequent publications (2021, 2024a, 2024b)

had a revised breakdown of submissions. The currently applicable breakdown includes institutional cooperation, cross-border public services, employment and education, as well as green issues. As our study concerns the analysis of the b-solutions initiative in terms of security, it is important to highlight the fact that the category of health and emergency services, which is included in the scope of broadly understood security, appeared only in the first edition of the programme. Of course, submissions related to health and emergency services are still accepted, but they are included in other categories.

The initiative is managed by the AEBR, so actors interested in reporting a problem apply through its website. B-solutions are a combination of theory and practice, as qualified applications receive answers with advice provided by an expert who has extensive knowledge of the border area in question and participates in study visits to the area of concern. Currently, problems are categorised as follows: institutional cooperation, cross-border public services, employment and education, environment (AEBR & EC, 2024b), so there is no separate category relating to security. Through the publication of expert advice, actors in the border areas of the European Union gain the opportunity to benefit from proven “know-how” (AEBR & EC, 2020). However, it is worth bearing in mind the studies indicating the diversity of cross-border cooperation models in individual European regions (Table 1), which may make it difficult to adapt solutions developed in other parts of the continent. This does not mean that actions based on the idea of “know-how” are impracticable, especially where areas belong to the same model, but they may face difficulties whose scale is not fully foreseeable.

From the point of view of analysing security issues, the b-solution initiative is an interesting layer of analysis. In a sense, it is consistent with the division, well-established in the literature on the subject, between objectively and subjectively existing security challenges, constituting a specific combination of the two (Chojnowski, 2017). The challenges for cooperation identified under this initiative are objective in nature, as they have been reported and analysed by designated experts. Therefore, neither their existence nor the fact that they create certain problems in mutual cooperation can be denied. On the other hand, however, they represent some subjective perception of the reality of those mentioning these challenges. Thus, they do not have to be objectively the most important problem in cross-border cooperation. However, for some reason they have been indicated by project participants. It can therefore be assumed that the b-solutions from the Polish border region analysed below reflect both subjective (they have been reported) and objective (they have been verified) problems in cross-border cooperation in the area of broadly understood security.

6. Polish submissions as an illustration of cross-border problems

In their study, Mullan and Scott (2024) identified several types of problems illustrating how cross-border cooperation fails to function as expected, including a lack of coordination of emergency services, discrepancies in health insurance schemes, administrative barriers limiting entrepreneurship and labour mobility, as well as shortcomings in environmental cooperation. The analysis of the Polish submissions fully confirms these observations: all the categories of problems mentioned by the authors are reflected in the Polish cases. Although the number of submissions from the Polish borderlands was relatively small, their content ranges from economic and social to infrastructural, environmental and institutional issues, demonstrating the universal nature of the barriers identified. For this reason, we focus in this article on an analysis of Polish cases that are representative of the submissions collected under the b-solutions programme. The reported problems in the Polish borderlands concern the following issues (AEBR & EC, 2020, 2021):

- the creation of a cross-border business incubator to combat high unemployment (PL-LT);
- regulations concerning social insurance for cross-border workers (PL-LT);
- official permits for the construction of a pedestrian and cycle bridge in the tri-state (CZ-DE-PL) area;
- access to an effective water supply network (PL-LT);
- coordination and cooperation of emergency services (PL-LT);
- delegation of public employees to another EU country (PL-CZ);
- regulations enabling cooperation on the financing and organisation of services for patients from a neighbouring country by healthcare facilities (PL-LT).

Most notably, five of the seven Polish cases of b-solutions appeared in the first compendium in 2020. The dominance of the Polish-Lithuanian border should also be noted, which covers five of the seven submissions (the other two are related to the Czech-German-Polish and Polish-Czech borderlands). The barriers occurring in Poland's areas are described in detail below, which allows for a better understanding of their nature and the proposed ways to overcome them. These descriptions reflect the factual state of affairs as at the time of the publication of the compendia.

The first case concerned legal difficulties in setting up a cross-border business incubator in the Polish-Lithuanian border area. The initiative was intended to counter youth unemployment and emigration, but the lack of clear regulations prevented the joint funding of the project by local governments. Lithuanian legislation did not resolve the issue of spending public funds abroad, and Polish law excluded the possibility of transferring funds abroad. The reinterpretation of existing regulations, the use of bilateral agreements and the creation of a common legal entity based on an agreement or

tools of EU law (EGTC, European Economic Interest Grouping – EEIG, European Cross-Border Mechanism – ECBM) were identified as feasible solutions.

The second case involved residents working on both sides of the border who face difficulties due to the two countries' divergent social security systems. The lack of uniform rules means that there is a lack of clarity when combining paid work and self-employment or coordination with other areas such as taxation and healthcare. In order to overcome the above barriers, a Polish-Lithuanian bilateral agreement was proposed under Article 16 of Regulation (EC) No 883/2004, and consideration was given to creating a separate social security system or developing enquiry points for employees and entrepreneurs.

The third case concerned plans for a pedestrian and cycle bridge linking the Czech Republic, Poland and Germany in the Nysa Euroregion. The project did not go ahead because it required approvals in three countries and the lack of mutual recognition of professional qualifications further hampered the process. Possible solutions were to expand the project team to include engineers from the Czech Republic and Germany, to conclude a tripartite intergovernmental agreement or to use the ECBM to simplify procedures.

The fourth case was related to deficits in access to water supply in border communities. On the Lithuanian side, only a part of the population had access to the network and on the Polish side, the infrastructure was technically degraded. The joint project was prevented by regulations prohibiting the provision of water services by foreign entities. The expert advice proposed bilateral agreements between communes, a physical interconnection of the two water supply networks, as well as the support of Euroregions and cross-border institutions in organising and coordinating the project.

The fifth case involved the cooperation of emergency services in the Vilkaviškis-Vižajny-Rutka-Tartak region. The lack of standardised procedures increased response times, putting residents at a greater risk of serious incidents. The existing agreements were outdated and did not regulate issues such as insurance, equipment liability or accounting for the costs of emergency actions. Experts recommended updating the agreements, introducing transparent command mechanisms, joint exercises and training, as well as applying for funds from cross-border programmes to upgrade equipment.

The sixth case concerned the delegation of the employees of the Dolnośląskie Province Marshal Office to the Joint Secretariat in Olomouc as part of the Interreg Poland-Czech Republic programme. There was a lack of clear regulations regarding the legal status of such employees and the application of labour and social security regulations. At the time, it was proposed to base employment contracts on the principles of Regulation (EC) No 593/2008 (Rome I), which would allow for the determination of the applicable labour and tax law. The need for developing a common standard

between the institutions of both countries was also pointed out.

The seventh case involved healthcare in border regions, where facilities were struggling with staff shortages and limited funding. Despite Directive 2011/24/EU, cooperation was hampered by the lack of clear cost reimbursement and documentation sharing rules. In response, experts proposed that the interested parties follow the example of the 2019 Lithuanian-Latvian agreement, have individual establishments sign letters of intent, conclude a governmental agreement and prepare operational annexes that would allow them to implement in practice the principles of cooperation.

7. The b-solutions initiative in the context of local and regional security policies

As indicated earlier, the themes of the Polish submissions under the b-solutions initiative are representative of a broader spectrum of problems faced by border regions across the European Union. The submissions from Poland, however, are of particular analytical importance as they not only show the typical institutional and legal difficulties, but also highlight how closely they are linked to security in the broad sense, understood as a dynamic process of ensuring the existence, survival and development of local and regional communities (Babiński, 2020; Chojnowski, 2017).

The cases identified fall into the four dominant categories of security: social, healthcare, public and environmental. The convergence of problems reported by actors from different EU regions – regardless of their geographical location – confirms the universal nature of cross-border barriers. At the same time, as Durand and Decoville (2019) emphasise, patterns of regional integration and levels of trust in institutions vary from region to region. This has important implications for the replicability of solutions and points to the need for instruments tailored to local conditions.

The study results clearly indicate that the most frequently reported issues represent the categories of social and healthcare problems. These are, for example, difficulties in access to healthcare and coordination of social security systems in the PL-LT border area. According to the literature (Balogh, 2024; Mullan, 2024), cross-border healthcare in the EU remains burdened by a number of obstacles from incompatible patient data regulations, through the lack of automatic recognition of medical staff qualifications, to differences in cost reimbursement and medical transport rules. The case of the delegation of public employees in the PL-CZ region finds its analogues in the Denmark-Sweden border region (AEBR & EC, 2024a), which appears to confirm Makkonen's (2024) thesis of systemic constraints on cross-border labour mobility.

Public security, understood as the ability to manage emergencies and respond to them rapidly, also proved problematic. The case from the PL-LT borderland relating to the cooperation of emergency services confirms the findings of Mullan (2024), who showed that the lack of consistent

procedures and common protocols limits the effectiveness of emergency response. As noted by Arieta and Davies (2025), the inconsistency of crisis management systems and lack of interoperability is a significant barrier to cross-border institutional security.

Similarly, administrative and infrastructural problems – such as the construction of a bridge at the CZ-DE-PL border – should be classified under the infrastructural dimension of security, especially in the context of regional resilience. As emphasised by Park et al. (2022), the effectiveness of local emergency operations depends on the availability of resources and coordination of activities among the different administrative levels, which is also confirmed by an analysis of Italian “security pacts” (Calaresu & Tebaldi, 2015).

The category of environmental security also deserves special attention. The case of access to a water supply network in the PL-LT border area indicates the threat of an inadequate legal framework for natural resource management. As examples from Belgium and Germany (waste transport) as well as Austria and Bavaria (energy) show, similar barriers affect many EU regions (AEBR & EC, 2024a, 2024b). In this context, cross-border cooperation becomes not only an environmental management tool, but also a form of security policy, responding to threats related to access to water and energy.

According to the concept of local security (Stefański, 2024), such threats have a direct impact on residents’ subjective sense of security, both physically (access to services) and socially (trust in institutions). Research shows that Euroregions and EGTCs can play a key role in building a space of resilience, but their effectiveness largely depends on the political will of central authorities (Medeiros et al., 2024).

It is worth noting that, in the light of the analysis of the aforementioned submissions and the literature on the subject, the b-solutions initiative can be seen as a tool of security policy at the local and regional levels, even though it was not originally classified as such in the literature. Practical cases show that this initiative supports not only territorial development, but also the building of institutional resilience in the conditions of multi-level governance (Zillmer, 2024; Ulrich, 2024).

8. Conclusions

An analysis of the Polish submissions to the b-solutions initiative shows that the main challenges to broadly understood security resulted mainly from the lack of adequate legal regulations enabling effective cross-border cooperation. This gap caused real risks in terms of healthcare security by reducing the effectiveness of emergency services and the healthcare system as well as environmental security, especially with regard to access to drinking water.

In accordance with the adopted hypothesis, the problem was not always due to a lack of

legislation at the EU or national level. On the contrary, in two out of seven cases analysed, necessary regulations did exist, but were not taken advantage of by local and regional authorities. This concerned, among other things, access to healthcare services or water supply infrastructure, where the legal framework enabled cooperation, but its practical implementation failed. This suggests that an important part of the barriers to cooperation are due to not so much a lack of regulations as insufficient awareness among local authorities of the existing instruments and possibilities to act within the framework of the regulations already in place.

A different situation is represented by the case of cross-border cooperation of emergency services in the Polish-Lithuanian border area. In this case, the source of the problem was the real lack of regulations adapted to the presence of the two countries in the Schengen area, which created a legal gap at the EU or international level. Resolving this issue requires intervention of central authorities. It is significant that they may not be aware of the existence of such problems functioning on the periphery of the state.

According to prevailing definitions of security policy, it is the state – and in particular the executive and the legislative branches – that is responsible for shaping a coherent legal framework and creating the conditions for international cooperation in this area. However, an analysis of the submissions from the Polish borderlands shows that also the lack of activity and competences on the part of local authorities can constitute a significant barrier. Therefore, increasing local decision-makers' awareness of existing legal possibilities appears to be a prerequisite for the effective elimination of obstacles to cross-border security.

The problems analysed within the scope of b-solutions undoubtedly arise from the diversified legal and administrative frameworks of European Union Member States (Medeiros et al., 2022), the difficulties in coordinating healthcare and emergency services (Balogh, 2024; Mullan, 2024), as well as the barriers limiting employee mobility (Makkonen, 2024). Nevertheless – and crucially for this study – they also concern the aspects of security that have less often been explicitly identified in the literature to date.

The cases collected since 2018 show that the b-solutions initiative responds to problems related to emergency coordination, employee mobility, access to healthcare services and environmental protection. This was very well reflected in the Polish cases, which are representative examples of the entire initiative. The authors emphasise that b-solutions fulfil advisory and consultative functions, identify obstacles, propose possible paths to overcome them as well as raise institutional and public awareness of the importance of cross-border cooperation (Mullan & Scott, 2024). More broadly, b-solutions are assessed as a tool to support the process of progressive dismantling of legal and administrative barriers in Europe and as a pilot project for the ECBM, which would allow the application

of the law of a neighbouring country in the implementation of cross-border projects (Medeiros et al., 2022). Thus, the b-solutions initiative, despite its limited scope, is compatible with the idea of “One Europe, One System”, in which borders are no longer a barrier to public service delivery, mobility or institutional cooperation (Medeiros et al., 2022).

At the same time, the literature indicates that although b-solutions build institutional trust and strengthen the commitment of regional authorities (Medeiros & Guillermo-Ramírez, 2021), their impact is limited. Although pertinent and valuable, solutions proposed by experts are not fully scalable due to the wide variety of legal and administrative systems, as well as cooperation models in Europe (Durand & Decoville, 2019; Medeiros et al., 2022). This makes the effectiveness of such initiatives dependent on not only their merits, but also the political will of Member States and the capacity of local institutions to implement proposed solutions.

References

1. AEBR & EC. (2020). ANNEX b-solutions: Solving Border Obstacles A Compendium of 43 Cases, Association of European Border Regions, European Commission, Brussels.
2. AEBR & EC. (2021). b-solutions: Solving Border Obstacles. A Compendium 2020-2021, European Commission, Brussels.
3. AEBR & EC. (2024a). b-solutions: Solving Border Obstacles. A Compendium 2022-2023, European Commission, Brussels.
4. AEBR & EC. (2024b). b-solutions: Solving Border Obstacles. A Compendium 2023-2024, European Commission, Brussels.
5. Arnold, T. & McKenna, M.G. (2024). The ‘Great Survivor’ lives on? Resilience, austerity and devolution in English local government. *Local Government Studies*, 50(6), 1105–1117. 10.1080/03003930.2024.2407917
6. Arrieta, T., & Davies, J. S. (2025). Crisis management in English local government: the limits of resilience. *Policy & Politics*, 53(3), 594–612. <https://doi.org/10.1332/03055736Y2024D000000029>.
7. Babiński, A. (2020). Dimension of Local Security – Selected Issues. *Zeszyty Naukowe SGSP*, 75(3), 153–171.
8. Balogh, P. (2024). Cross-border health and emergency services (based on the results of b-solutions and beyond). *Journal of Advanced Studies on Borders, Cooperation and Development*, 0, 55–67.
9. Bouckaert, G. & Kuhlmann, S. (2016). Conclusion: Tensions, Challenges, and Future “Flags” of Local Public Sector Reforms and Comparative Research. In: *Local Public Sector Reforms in Times of Crisis. National Trajectories and International Comparisons*. Bouckaert, G. & Kuhlmann, S. (eds.), London: Palgrave Macmillan, 347–354.
10. Böhm, H. (2021): Five Roles of Cross-border Cooperation Against Rebordering, *Journal of Borderlands Studies*, DOI: 10.1080/08865655.2021.1948900.
11. Calaresu, M. & Tebaldi, M. (2015). Local security policies and the protection of territory: an analysis of the Italian experience (2007-2009). *City, Territory and Architecture*, 2(1), 1–18.
12. Chirodea, F., Soproni, L., & Marian, M. (2024). European Union Tools for the Sustainable

- Development of Border Regions. *Sustainability*, 16(1), Article 1.
<https://doi.org/10.3390/su16010388>,
13. Chojnowski, L. (2017). Modern Understanding of Security: Basic Terminology. *Security Dimensions*, 24, 50–61.
 14. Committee of the Regions. (2009). White Paper on Multilevel Governance. (2009/C 211/01). <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2009:211:0001:0027:EN:PDF>
 15. Council of Europe. (1980). European Outline Convention on Transfrontier Co-operation between Territorial Communities or Authorities. *European Treaty Series - No. 106*. <https://rm.coe.int/1680078b0c>.
 16. Durand, F., & Decoville, A. (2019). A multidimensional measurement of the integration between European border regions. *Journal of European Integration*, 41(6), 765–780.
 17. Krasucka, M. (2010). Rola euroregionów we współpracy transgranicznej na przykładzie Euroregionu Pradziad. *Ekonomiczne Problemy Usług* 61, strony 199–210.
 18. Makkonen, T. (2024). Cross-Border Labour Mobility and Markets: Issues and Insights from b-solutions. *Journal of Advanced Studies on Borders, Cooperation and Development*, 0, 22–37.
 19. Medeiros, E. (2024). The contribution of EU b-solutions initiative to foster soft and hard territorial governance and how to assess its main cross-border impacts in the EU cross-border regions. *Journal of Advanced Studies on Borders, Cooperation and Development*, 0, 10–21.
 20. Medeiros, E., & Guillermo-Ramírez, M. (2021). Mitigating barriers to cross-border commuting and increasing institutional trust via EU b-solutions initiative. In *2021 Barcelona Workshop on Regional and Urban Economics: Internal Migrations and Cross-Border Commuting*.
 21. Medeiros, E., Guillermo Ramírez, M., Brustia, G., Dellagiacomma, A. C., & Mullan, C. A. (2023). Reducing border barriers for cross-border commuters in Europe via the EU b-solutions initiative. *European Planning Studies*, 31(4), 822–841.
<https://doi.org/10.1080/09654313.2022.2093606>.
 22. Medeiros, E., Guillermo Ramírez, M., Dellagiacomma, C., & Brustia, G. (2022). Will reducing border barriers via the EU's b-solutions lead towards greater European territorial integration? *Regional Studies*, 56(3), 504–517. <https://doi.org/10.1080/00343404.2021.1912724>.
 23. Medeiros, E., Guillermo Ramírez, M., Ocskay, G., & Peyrony, J. (2020). Covidfencing effects on cross-border deterritorialism: The case of Europe. *European Planning Studies*, 29. <https://doi.org/10.1080/09654313.2020.1818185>.
 24. Medeiros, E., Trillo-Santamaría, J.-M., & Guillermo-Ramírez, M. (2024). Cross-Border Institutional Trust in Post-Pandemic Times. The Role of EU b-solutions Initiative. *Journal of Borderlands Studies*, 1–24. <https://doi.org/10.1080/08865655.2024.2352431>.
 25. Mullan, C. (2024). B Solutions as a Diagnostic Tool for Improving Cross-border Health Systems, Access to Patient Services and Population Health: Insights from Published Cases 2018-2023. *Journal of Advanced Studies on Borders, Cooperation and Development*, 0, 38–54.
 26. Mullan, C., & Scott, J. W. (2024). B-solutions: Taking Down Border Barriers for a More Integrated Europe. *Introductory Notes*. *Journal of Advanced Studies on Borders, Cooperation and Development*, 0, 5–9.
 27. Mullan, C., Wilson, P., & Guillermo-Ramirez, M. (2021). Cross-border patient mobility in selected EU regions. Association of European Border Regions. Brussels : European Commission. https://health.ec.europa.eu/system/files/2022-02/crossborder_patient-mobility_frep_en.pdf.

28. Opiola, W., & Böhm, H. (2022). Euroregions as political actors: Managing border policies in the time of Covid-19 in Polish borderlands. *Territory, Politics, Governance*, 10(6), 896–916.
29. Park, S., Graham, M., & Foster, E.A. (2022). Improving Local Government Resilience: Highlighting the Role of Internal Resources in Crisis Management. *Sustainability*, 14(3214), 1–13. <https://doi.org/10.3390/su14063214>.
30. Regulation (EU) 2021/1059 of the European Parliament and of the Council of 24 June 2021 on specific provisions for the European territorial cooperation goal (Interreg) supported by the European Regional Development Fund and external financing instruments. OJ L 231, 30.6.2021, pp. 94–158.
31. Sohn, C. (2014). Modelling Cross-Border Integration: The Role of Borders as a Resource. *Geopolitics*, 19(3), 587–608. <https://doi.org/10.1080/14650045.2014.913029>
32. Stefański, M. (2024). Determinants of the Sense of Security in the Local Community. *Reality of Politics. Estimates - Comments – Forecasts*, 27(1), 120–135. <https://doi.org/10.15804/rop2024107>.
33. Ulrich, P. (2024). What does b-solutions indicate about the role of EGTCs in solving border obstacles and creating innovative models of collaboration. *Journal of Advanced Studies on Borders, Cooperation and Development*, 0, 84–95.
34. Wassenberg, B. (2020). Cross-Border Cooperation. W *Critical Dictionary on Borders, Cross Border Cooperation and European Integration*. Brussel: Peter Lang.
35. Zillmer, S. (2024). Legal Perspectives Supporting Multi-Level Governance for the Benefit of Citizens. *Journal of Advanced Studies on Borders, Cooperation and Development*, 0, 96–106.

Declaration of Interest: The author(s) declare no conflict of interest.

Funding declaration: This work was supported by the European Education and Culture Executive Agency (Brussels, BE) under Grant 101085071 — MC4EUEASP.