Stakeholder Involvement in the Civil Security Systems: How (Dis)Similar are the CEE Countries Compared to the Rest of Europe?

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Abstract

Civil security is one of the crucial public goods provided by the state to protect its society from devastating disasters. The increasing complexity of disasters and the expanding scope of non-military challenges call for an increased heterogeneity of core actors and for more participatory governance. Yet little is known about the patterns of stakeholder involvement in civil security across countries. Based on a comprehensive dataset covering 22 European countries, the article presents systematic evidence on the official involvement of different types of stakeholders in the national civil security governance systems. The goal is to explore whether the European countries with similar characteristics fall into geographically and culturally similar categories and whether similar patterns can be observed across the Central and Eastern European (CEE) region. The research questions addressed are: Do the European countries with similar characteristics fall into geographically and culturally similar categories? Is the CEE region distinct from others? To answer the questions, a hierarchical cluster analysis is conducted using security governance as a framework for analysis. The association is further tested between the different clusters of countries and broader cultural variables. The results suggest that despite sharing cultural similarities and geographical proximity, the CEE countries form mixed clusters with other non-CEE European countries. While the involvement of civil society organizations is quite universal, especially the involvement of private for-profit actors and multilateral engagement seem to discriminate among different types of civil security governance setup.

Keywords:

Civil security; security governance; stakeholder involvement; cluster analysis; comparative analysis.

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1. Introduction

Official systematic collaboration with different stakeholders in terms of co-production and co-implementation of public goods is viewed as an effective strategy enhancing governance capacities (Huitema et al. 2009, Hefetz et al. 2014, Voorberg et al. 2015, Nemec et al. 2019). This holds also for the public good of civil security, where the increasing complexity of disasters and the expanding scope of non-military challenges call for increased heterogeneity of core actors and for more participatory governance (Ahrens and Rudolph 2006; Gable 2012; Hermansson 2016; Nowell et al. 2018; Okada et al. 2018).

Yet little is known about the patterns of stakeholder involvement across countries. Despite a growing number of case studies, comparative research is surprisingly scarce. Although several studies in the field concluded with a call for a comparative research across a larger number of countries (Roberts 2010; Zurita et al. 2015), such an approach remains under-explored. One exception here is an OECD (2017) study on risk governance in Austria, France and Switzerland, which devoted only a brief attention to the participation of other actors than the state institutions; a study by Aldrich (2019) concentrating on frictions in cooperation after disasters across the globe; and a comparative work by Driessen et al. (2016), which focuses on the narrower issue of floods. An analysis which would systematically present and assess the differences and similarities across a larger number of countries is lacking.

The article fills this gap by presenting systematic evidence on the official involvement of different types of stakeholders in the national civil security systems and exploring similarities and differences in the setup. The aim is thus to provide grounds for further theoretical and practical discussion on stakeholder involvement and co-implementation of civil security as a public good with potential implications also for regional collaboration and policy responses to future disasters (see Joyce and McCaffrey 2015). The article does so by providing a cross-country comparison of a broad range of 22 European countries, encompassing all its geographical regions to gain an increased and deeper understanding of civil security governance. The advantage of this approach is the coverage of a large geographic area while ensuring basic comparability, as all the countries in the study are either EU member states or states closely associated with the EU through a series of bilateral treaties, such as Switzerland.

Especially Central and Eastern Europe (CEE) is under-researched in this respect with the slight exception of Poland (see Driessen et al. 2016; Schimak et al. 2020). There were noted cultural differences in the defence sector between CEE and Western Europe (Grant and Milenski 2018, 191) and the CEE countries often face similar threats due to the regional dimension of disasters (Kešetović and Samardžija 2014, 217). While there is no unified approach in civil security governance (see Gable 2012), the goal of the paper is to assess whether the CEE countries have devel-

oped a distinct pattern of stakeholders involved in civil security based on common cultural and geographical factors or whether other patterns across Europe prevail. By doing so, the article shall contribute to the current debate on the pages of the *NISPCee Journal* on common European/CEE model(s) of governance (Koprić 2016) and stakeholder involvement in public services provision (Nemec et al. 2019) by presenting empirical evidence from the field of civil security.

Utilizing security governance as a framework for analysis, the first part of the paper identifies key dimensions of civil security governance based on a literature review. In the next sections, the research methodology is outlined and the cluster analysis is conducted. The association is tested between the different clusters of countries and broader cultural characteristics identified in the research of Inglehart and Welzel (2010) and Hofstede et al. (2010). The paper further discusses the results of the cluster analysis and patterns of actors' involvement. Finally, results are summarized in the concluding part reflecting on the lessons that can be drawn for further research.

2. Literature review

2.1 Security governance as a framework for analysis

Civil security is thought of as a public good ensured by the state (COM 2012), distinct from the military security on the one hand; and from the field of law and order on the other hand (Shalamanov 2006). As a specific policy domain (Miller and Douglass 2016), civil security is coupled with the issue of governance (see Kuipers et al. 2015; Hoijsink 2014) and its use as an analytical framework (Kirchner et al. 2015). Civil security governance then refers especially to the “public governance structures for crisis, risk and disaster management” (Bossong and Hegemann 2015, 7) which are in place to protect the country and its people against new and urgent threats to their security and to the functioning of the critical infrastructure (Boin et al. 2014, 5).

Governance in this field is characterized as patchy or fragmented (Lane and Hesselman 2017), yet consensus seems to exist in the literature about the need to go beyond governmental settings and to engage a broad array of stakeholders, both public and private, and to consider the national, local and international levels (ibid.; Prizzia 2008; Tierney 2012; Gall et al. 2014; Zurita et al. 2015). For conceptualization purposes, the comprehensive and integrated character of governance is stressed (Gall et al. 2014) and thus the need to consider especially those actors and organizations which are formally involved in the implementation of the laws, regulations and programmes concerning civil security (Garmestani and Benson 2013).

Although no universal list of stakeholders exists, the literature dealing with civil security governance typically addresses the state at the national but also low-

er levels of administration (Wolensky and Wolensky 1990; Krahmann 2003; Field 2012; Zurita et al. 2015; Bae et al. 2016; Lane and Hesselman 2017); civil society organizations (CSOs) (Coppola 2006; Roberts 2010; Joachim and Dembinski 2011; Zurita et al. 2015); and the private (for-profit) sector (Lethbridge 2009; Roberts 2010; Tierney 2012; Zurita et al. 2015). A large body of the literature also stresses the active engagement of the military forces as a distinct actor (Wentz 2006; Coppola 2006; Roberts 2010; Tierney 2012; Zurita et al. 2015; Bae et al. 2016) and the role of individual citizens as active participants in disaster preparedness and mitigation (Zhang and Kumaraswamy 2012; Wehn et al. 2015; Zurita et al. 2015; Aldrich 2019; OECD 2017; Lane and Hesselman 2017). Finally, at the international level, the role of transboundary assistance and coordinated international effort is stressed as an important element of the governance framework (Coppola 2006; Gopalakrishnan and Okada 2007; Roberts 2010; Ha 2015; Driessen et al. 2016; OECD 2017; Lane and Hesselman 2017).

2.2 Stakeholder involvement in civil security systems

The majority of risks associated with civil security is coordinated and managed centrally at the national level (Field 2012, 360; Bae et al. 2016). Yet, the state-centric approach is no longer sufficient to address the provision of civil security (Kirchner et al. 2015, 287), and a wider range of modes of governance is encouraged to be applied than the currently dominant ones primarily focusing on public actors (Driessen et al. 2016, 53). From a normative perspective, especially a broad whole-community approach is often stressed as necessary for successful civil security policies (Kapucu and Sadiq 2016).

Over the last few years, shifts in civil security governance structures have started to be debated especially within the disaster management sector (Zurita et al. 2015; Nowell et al. 2018). Zurita et al. (ibid.) observed a trend towards partnership between the state and public and private actors in Australia: While the national and local governments remained legally the central governing actor, through strategic outsourcing other actors started sharing the responsibility. In their analysis in the US, Nowell et al. (ibid.) examined patterns of (de)centralized coordination of different responders. The authors observed neither highly integrated nor centralized structure, yet expected the heterogeneity of actors to increase with the increasing complexity of disasters (ibid., 711).

Many case studies worldwide reflect the trend of an increasing involvement of different stakeholders in civil security over the last decade. This concerns both the state and its institutions in the form of a growing role of local governments (Field 2012; Bae et al. 2016); an upward trend in the use of military personnel and assets in disaster relief (Canyon et al. 2017); as well as an enhancement of international (Gabrielle 2018) and cross-border cooperation in disaster preparedness and response (Brie 2017). On the side of civil society, the role of CSOs has shifted in

some countries from supplemental to a more central one (Joachim and Dembinski 2011; Zurita et al. 2015) while the incentive to engage the private sector in security provision has increased as well due to the limited resources available to the state (Tierney 2012).

Comparative analyses dealing with stakeholders involved in the national civil security governance systems are still rare. Zurita et al. (2015) call for “studies across different geographical areas and with different disaster events” to appreciate the existing variations of the civil security governance setups (*ibid.*, 395). Focusing on effectiveness, a comparative study among European national security systems undertaken by Kuipers et al. (2015) touched upon different analytical dimensions, such as perceptions of the role of government, procedures, and quality in terms of absence of controversies; yet the stakeholder involvement was not the focus of the study. Another large comparative study by Aldrich (2019) compared the level of governance in disaster responses in eighteen countries in the Americas, Asia, and East Africa and showed that democratic societies find collaboration of different stakeholders easier and value civil society and its voluntary organizations as active participants.

In a narrower field of flood governance, a study by Driessen et al. (2016) focused on seven (mostly North-Western) European countries, where only one case (Poland) represented the CEE region. The authors point to the necessity of steering at different levels of government, i.e. the national, regional/local, transboundary and EU levels and recommend the consideration of other stakeholders, namely citizens, NGOs, and businesses (*ibid.*, 53). The same set of countries was also used in the study by Dieperink et al. (2018), which concludes that in flood resilience, the “governance systems tend to be multilevel” (*ibid.*, 30).

In the CEE region, collaborative relations between state and non-state actors were analyzed by Börzel and Buzogány (2010) for environmental policy. Their study showed a deficit in cooperative state-society relations (*ibid.*). According to a later study on new modes of governance (Börzel and Fagan 2015), NGOs in the CEE/Western Balkan countries lack capacities to function as partners of the state in public policy-making while private economic actors are more effective in this regard (*ibid.*).

3. Research methodology

The paper aims to provide a systematic comparison (see Azarian 2011), exploring and empirically assessing the existing patterns of stakeholder involvement in the national civil security governance systems across different European countries, covering all its geographical regions, including CEE. The research questions are: Do the European countries with similar characteristics fall into geographically and culturally similar categories? Is the CEE region distinct from others in terms of different types of stakeholders involved?

To answer the research questions, the article follows an exploratory design and employs an agglomerative hierarchical cluster analysis in order to group cases into categories with shared characteristics and thus to reduce the complexity of the studied phenomenon (Azarian 2011). Maximizing intra-cluster similarity and minimizing inter-cluster similarity, this method allows for grouping the countries with similar characteristics across a set of variables, leading to homogeneous empirical types (Fenger 2007). Such an empirical assessment is a helpful tool in identifying different patterns in the civil security governance in Europe, as the current knowledge does not allow for determining ex-ante typical representatives of different types, nor a given number of clusters, which renders unsuitable a non-hierarchical approach.

Hierarchical cluster analysis is suitable for a smaller number of cases; allows several variables to enter the analysis; and operates with all types of variables, including the nominal/binary ones (Mareš et al. 2015). There are also limitations which need to be taken into account. Ensuring the comparability of the cases and working with particular variables reduces the richness of the information while the limited number of cases does not allow for greater generalization beyond the analyzed sample. Finally, the clustering method needs to be considered carefully, as different methods yield potentially different results, and thus also caution in interpretation is needed (*ibid.*).

The choice of variables entering the analysis reflects six dimensions of civil security governance as identified in section 2.1 of this paper, reflecting different types of stakeholders besides the state at the national level. These are 1) the engagement of regional or local governments in policy formulation and/or executive responsibility; 2) the engagement of the CSOs and 3) formal engagement of individual citizens; 4) the engagement of for-profit organizations; 5) international ties; and 6) the engagement of the military. The overview of the dimensions and variables is provided in Table 1. The choice of the grouping method and measure is outlined below.

The paper utilizes data from the collaborative project ANVIL (“Analysis of Civil Security Systems in Europe”) within which data on civil protection and disaster management systems in 22 European countries were collected (20 EU Member States, Serbia and Switzerland). This ensures both comparability of the data collected under a unified methodology and comprehensive coverage of the field, including countries from all waves of post-2000 EU accessions. Within the project, coded datasheets were prepared and accompanied by detailed peer-reviewed country studies upon which the coded data were checked for accuracy.

Accepting a certain reduction in the richness of the information for the purpose of this paper, the original data categories were recoded where necessary into dichotomous variables to allow the hierarchical cluster analysis. For cardinal variables, the middle value (median) was computed and the dataset was divided accordingly. For the coding and its explanation where necessary, see Table 1. Table 2 then shows the scores for individual countries in the sample.

Table 1
Variables in the analysis

Dimension	Coding
Engagement of regional or local governments:	
1a) Decentralization in executive responsibility for civil security	Yes=1 (executive responsibility for civil security rests first and foremost at the regional or local levels); No=0 (executive responsibility rests first and foremost at the national level of government)
1b) Decentralization in policy formulation for civil security	Yes=1 (policy formulation first and foremost at the regional level); No=0 (policy formulation first and foremost at the national level)
Involvement of CSOs:	
2a) Do societal/non-profit actors play an official/legally mandated role in the REGULAR provision of civil security?	Yes=1 (almost all areas); No =0 (no or some specialized areas only)
2b) Do societal/non-profit actors play an official/legally mandated role in EXCEPTIONAL crises?	Yes=1; No =0
Citizens' engagement:	
3a) Do citizens have a formal/legal obligation or responsibility in civil security?	Yes=1 (regular responsibilities); No=0 (not specified or temporary)
3b) Is civil emergency training (not/except basic FIRST AID) part of the school curriculum?	Yes=1; No=0
Private sector involvement:	
4a) Do for-profit/private actors play an official/legally mandated role in the REGULAR provision of civil security?	Yes=1 (at least in some parts of civil security); No=0
4b) Do for-profit/private actors play an official/legally mandated role in EXCEPTIONAL crises?	Yes=1; No=0
International ties:	
5a) Higher than median number of signed bilateral agreements on civil security matters with other countries than neighbours.	Yes=1; No=0
5b) Higher than median number of signed regional/multilateral agreements on response-oriented disaster management.	Yes=1; No=0
Involvement of the military:	
6a) Is the crisis management approach primarily based on civilian operations (rather than military)?	Yes=1; No=0
6b) Is the military used for support for crisis management operation?	Yes=1 (regularly); No=0 (no or in exceptional situations only)

Source: author, based on ANVIL coded data-sheets.

Table 2
Country scores

Country	1a	1b	2a	2b	3a	3b	4a	4b	5a	5b	6a	6b
AT	1	1	1	1	0	0	1	0	0	0	1	0
CH	1	1	0	1	1	0	1	1	0	0	1	0
CZ	1	0	0	1	0	1	0	0	0	0	1	0
DE	1	1	1	1	0	0	1	1	0	0	1	0
EE	0	1	–	–	0	1	–	–	–	–	1	0
FI	1	0	0	1	1	0	1	1	1	1	1	0
FR	0	0	0	1	0	1	1	1	1	0	1	0
HR	1	0	1	1	0	0	1	1	1	1	1	0
HU	1	0	0	1	1	1	1	1	1	0	1	0
IE	1	0	0	1	0	0	0	0	1	0	1	0
IT	1	1	1	1	1	1	1	1	1	0	1	1
LT	–	–	–	–	0	1	–	–	1	0	1	0
LV	0	0	–	–	–	1	–	–	–	–	1	0
MT	0	0	1	1	0	0	0	1	0	0	1	0
NL	1	0	0	1	0	0	1	1	1	1	1	0
NO	0	0	1	1	1	0	0	0	0	1	1	1
PL	1	0	0	1	0	1	0	0	0	0	1	0
RO	1	0	1	1	1	1	1	1	1	1	1	0
RS	1	0	0	1	0	0	1	1	0	1	1	0
SE	1	0	1	1	0	0	0	0	0	1	1	1
SK	1	0	0	1	0	1	1	1	1	1	1	1
UK	1	0	0	1	0	0	0	0	0	0	1	0

Source: author based on the ANVIL coded datasheets and country reports.

Considering the nature of the data (binary variables), the common Between Groups measure was used (see Finch 2005) and coupled with the Simple Linkage method² (see Jardine and Sibson 1971). No variables were highly correlated (i.e. with correlation coefficients > 0.90) and thus sufficiently unique to be included in the analysis.

² Alternatively, also the Centroid method was considered, yielding very similar results, but it was not further utilized due to its propensity to create more similar clusters at early stages and more dissimilar ones at later stages (see Jardine and Sibson 1971).

4. Cluster analysis and its results

The sample was reduced to 19 countries as the SPSS does not include cases with one or more variables missing. A dendrogram representing the outcomes is shown in Figure 1. The vertical proximity of the linked countries suggests their similarity in their civil security systems in terms of different actors' involvement. Table 3 then summarizes in its second column the cluster membership of the country cases.

Figure 1
Country clusters based on stakeholder involvement in civil security governance

Table 3
Cluster Membership and Cultural Scores

Case	Cluster*	WVS traditional vs. secular**	WVS survival vs. self-expression**	GH_ DPI ***	GH_ MAS ***
Austria	1	0.25	1.43	11	79
Germany	1	1.4	0.6	35	66
Switzerland	1	0.74	1.9	34	70
Croatia	2	0.08	0.31	73	40
Finland	2	0.82	1.12	33	26
France	2	0.63	1.13	68	43
Netherlands	2	0.71	1.39	38	14
Serbia	2	0.35	-0.62	86	43
Slovakia	2	0.67	-0.43	104	110
Czech Rep	3	1.23	0.38	57	57
Ireland	3	-0.91	1.18	28	68
Malta	3	-1.53	-0.03	56	47
Poland	3	-0.78	-0.14	68	64
United Kingdom	3	0.06	1.68	35	66
Hungary	4	0.4	-1.22	46	88
Italy	4	0.13	0.6	50	70
Romania	4	-0.39	-1.55	90	42
Norway	5	1.39	2.17	31	8
Sweden	5	1.86	2.35	31	5

*Source: author based on own cluster analysis; **Source: Inglehart and Welzel 2010; ***Source: Hofstede et al. (2010)

The first culturally and geographically homogeneous cluster (comprised of Austria, Germany and Switzerland) is characterized by the federal nature of governance, which also translates into the countries' civil security governance systems through decentralization in policy formulation (unlike the rest of the countries in the sample with the exception of Italy). While these countries can be internally characterized through the official involvement of both civic and private organizations in civil security, their international engagement in terms of both bilateral and multilateral agreements on disaster response is rather moderate.

The second cluster comprises both CEE and other European countries (Croatia, Finland, France, the Netherlands, Serbia and Slovakia). The main characteristics

consist in somewhat larger private sector involvement both during regular operations and during exceptional crisis situations in all the countries in the cluster together with relatively high international orientation in disaster management issues both bilaterally and multilaterally. The civic involvement is less pronounced here. Citizens have no formal obligations or responsibilities in disaster governance (except for Finland), and CSOs do not play a large role in regular disaster management and security provision (except for Croatia).

The third cluster is also geographically heterogeneous (Czech Republic, Poland, Ireland, United Kingdom and Malta as an outlier) and comes out as the most state-centric one. The official role of anything other than state actors is relatively small compared to other countries; CSOs are engaged during emergencies. A distinctive feature of this cluster is the low engagement of for-profit organizations in civil security, both in regular (in all cases) and in exceptional situations (except Malta). Civil security tasks are not outsourced³, nor does the international dimension play a large role in these countries.

While also geographically rather heterogeneous, cluster four (Hungary, Italy and Romania) can be regarded as opposite to the previous one in many aspects. There are formal obligations of the citizens stipulated, and the official role of the for-profit sector is rather important both in regular civil security provision and during exceptional crisis situations. Internationally, this cluster can be described in terms of a relatively high number of bilateral agreements in place covering civil security issues beyond their immediate neighbours.

The most outlying yet geographically homogeneous cluster five (Norway, Sweden) is characterized by common use of the military for support in disaster management operations⁴, which – coupled with policy formulation placed at the national level – might also suggest a relatively large state-centrism in the countries' civil security governance. For-profit organizations do not have any large official role here, while the official role of the CSOs is relatively important both in regular and in exceptional situations. The bilateral civil security cooperation is somewhat lower here (compared with clusters two and four), yet the countries largely engage in multilateral cooperation.

4.1 Internal cluster validity

To evaluate the results of the clustering algorithm, cluster validity deserves to be briefly discussed (see Theodoridis and Koutroubas 1999; Halkidi et al. 2000). The

3 Poland stands somewhat out with the ambulance services being privatized. Overall, however, the reliance of the state on the for-profit sector is very small in Poland (Matczak and Abgarowicz 2013).

4 In the sample of the countries observed in this paper, this generally seems to be a relatively less common feature, with only Norway, Sweden and also Slovakia and Italy reporting regular use of the military in disaster management operations.

results are further evaluated based on internal criteria, checking for the clustering potential of the selected dimensions and their variables with respect to the identified clusters.

Based on the data qualities (nominal for cluster membership and binary for the clustering variables), a chi-square test was conducted with the following results: Seven variables covering five dimensions were able to differentiate among the clusters on a statistically significant level. These were: Decentralization in policy formulation (Pearson Chi-Square, P-value: 0.005); Formal/legal obligation or responsibility of citizens in civil security (Pearson Chi-Square, P-value: 0.045); For-profit/private actors' engagement in both regular security provision and during exceptional crises (Pearson Chi-Square, P-value: 0.001/0.013, respectively); Higher number of both bilateral and multilateral agreements (Pearson Chi-Square, P-value: 0.014/0.012, respectively); Regular use of the military for support in crisis management operations (Pearson Chi-Square, P-value: 0.041).⁵

At the same time, the CSOs' engagement during exceptional situations and the civilian basis of crisis management were features present in all the cases and can thus be described as more universal features common to the European countries. Out of all the above-considered variables, only the Decentralization in executive responsibility; Societal/non-profit actors' official engagement in regular disaster management and security provision; and Emergency training being part of the school curricula did not discriminate sufficiently among the clusters.

Given these results, all dimensions considered in section 3 of this paper, except for the involvement of CSOs, seem to be able to discriminate among the clusters and thus bear some interpretative value. The involvement of CSOs is relatively large in all countries under study (both in regular operations and especially during exceptional crisis situations) and thus differs only in its scope.

4.2 External validity

Research suggests that cultural variables might impact upon national security and risk related issues, such as safety performance (Park 2011; Tsai and Chi 2012; Dückers et al. 2015; Kasdan 2016). Based on the cultural variables as provided by the research of Inglehart and Hofstede, the results of the cluster analysis are further examined to see whether national culture can be associated with different civil security governance setups. The World Value Survey (WVS) wave 6 (2010–2014) was taken here as a basis, providing country scores for the traditional vs. secular and survival vs. self-expression dimensions.

In the WVS, the traditional/secular dimension is related to the deference to authority (Inglehart 2000). Societies with traditional values emphasize deference

⁵ The magnitude of the P-values performed for each variable is an indication of how well the respective variable discriminates between clusters.

to authority, whereas those with secular-rational values place less emphasis on authority. Survival values then put emphasis on security. Societies with high survival values emphasize economic and physical security, while societies with high self-expression values put more emphasis on participation (ibid., 83–84).

The country scores for these dimensions are provided in Table 3. The one-way analysis of variance (ANOVA)⁶ was statistically significant for both the WVS Traditional vs. Secular (P-value 0.021⁷) and the WVS Survival vs. Self-expression variables (P-value 0.016⁸). This suggests that the clusters differ on these dimensions. By a post-hoc multiple comparison⁹, where a Bonferroni test¹⁰ was utilized, clusters 1 and 5 differed significantly on the traditional vs. secular dimension and clusters 3 and 5 on the survival vs. self-expression dimension.

Also worth considering are cultural dimensions from the Hofstede (2010) research. Especially Power Distance (DPI) and Masculinity (MAS) have been associated with security and safety issues in disaster management (den Ouden and Russell 1997; Park 2011). Masculinity represents a preference in society for achievement and competitiveness. The opposite (femininity) stands for a preference for cooperation (Hofstede 2011, 12–13). Power Distance is then about power distribution. People in societies exhibiting a small degree of Power Distance expect more to be consulted and have a preference for pluralism (ibid., 9–10).

There are differences among the clusters in DPI (with clusters 3 and 4 scoring relatively high, especially in contrast with clusters 2 and 5), yet not on a statistically significant level. The one-way analysis of variance (ANOVA)¹¹ was statistically significant for MAS (P-value 0.045¹²). By a post-hoc multiple comparison, where a nonparametric Games-Howell test was utilized, clusters 1 and 2 differed significantly from cluster 5 with the first two clusters reaching relatively high scores on MAS and cluster 5 scoring low. The commonality of the first two clusters (in contrast to cluster 5) lies especially in the involvement of the for-profit sector in disaster management.

6 Test of Homogeneity of Variances (Levene statistic), conducted as a pre-condition for further analysis for both WVS indicators was not statistically significant, suggesting relative homogeneity of variances of the country clusters with respect to the WVS data.

7 When tested by a robust Brown-Forsyth test, the P-value was 0.023.

8 When tested by a robust Brown-Forsyth test, the P-value was 0.028.

9 Equal variances assumed – by Levene statistics.

10 Recommended with a relatively low number of comparisons (Field 2009).

11 Test of Homogeneity of Variances (Levene statistic) for DPI and MAS indicators was not statistically significant.

12 When tested by a robust Brown-Forsyth test, the P-value was 0.027.

4.3 Discussion

The findings show that in all the cases, civil security is not provided solely by the state and its institutions, but wider modes of governance are in place. Despite substantial heterogeneity, certain features apply in all the countries, such as a crisis management approach primarily based on civilian operations and an official role assigned to CSOs during exceptional crises. Although citizens in the CEE countries tend to participate less in voluntary organizations (Uslaner 2004; Petrova and Tarrow 2007), the CSOs are involved in civil security provision in all of them. Compared with other public services (see Nemec et al. 2019), it can be argued that a systematic collaboration with CSOs (typically the Red Cross or voluntary fire brigades) is in place across Europe, including the CEE countries. This is in line with Aldrich's (2019) observation that in democratic societies, voluntary organizations are valued as active participants in disaster response.

Although the involvement of different types of actors varies across the countries, interesting patterns emerge if we consider the balance between civic actors (i.e. the involvement of lower levels of administration, CSOs or the citizens; see variables 1a to 3b in Table 1) as opposed to other types of actors (i.e. for-profit organizations, other states or the military; variables 4a to 5b and 6b in Table 1). In fact, the identified clusters can be defined along two lines: 1) the ratio between the civic and other types of stakeholders; and 2) the number of different types of actors involved, denoting the width of civil security governance.

Following this logic, cluster 3 (Czech Republic, Poland, United Kingdom, Ireland, and Malta) stands out as the most concentrated with the lowest number of different types of actors involved and thus the largest role played by the state and its institutions. In all these countries, the civic domain prevails. Contrastingly, the broadest spectrum of stakeholders is characteristic of cluster 4 (Hungary, Italy, and Romania), with both civic and non-civic domains covered relatively evenly. The obligations and basic training of citizens can be found in all these countries, as well as the reliance on the for-profit sector.

While the CEE countries are located at both ends of this continuum, two culturally and geographically homogeneous clusters form part of the "middle ground" in terms of the number of different stakeholders involved. Cluster 5 (Norway and Sweden) is similar to cluster 4 in that there is no strong overall inclination towards the civic or other stakeholders. Unlike in cluster 4, the countries do not rely on for-profit organizations, but rather CSOs are involved combined with multilateral agreements and the use of the military. Cluster 1 (Austria, Germany, Switzerland) is characterized by a greater emphasis on civic resources (and an overall strong inclination towards the civic dimension), although the for-profit sector is involved in all three countries. The relatively large role played by the civic sector in this cluster corresponds with the overall tendency of these countries to deliberate policy and

delegate authority to interest associations both in decision-making and in policy implementation (Atkinson and Coleman 1992; Jochem and Vatter 2006).

The engagement of private companies in civil security is less common than the reliance on CSOs (see e.g. Coppola 2006). This seems to hold also more broadly for the civic dimension. The only cluster with a prevailing non-civic domain is cluster 2 (Croatia, Finland, France, Netherlands, Serbia, and Slovakia). This is the largest and most diverse cluster, yet in all its countries, the for-profit sector is involved in civil security, and a high number of bilateral and/or multilateral agreements on disaster response are in place; while the role of the CSOs and citizens is somewhat less pronounced.

Although the CEE countries often underwent a massive deregulation, outsourcing and privatization in their public policies at some point of their democratic transition (Kouzmin et al. 2011), the for-profit sector does not seem to be equally important in their civil security. Many of the CEE and all the South-Eastern European countries in the sample count on for-profit actors, yet only Croatia, Serbia and Slovakia fall into a cluster where the non-civic dimension prevails. On the other hand, Romania and Hungary, while also involving private actors, developed a broader civil security system encompassing a larger array of actors and also putting emphasis on the responsibilities of individual citizens.

Some of the differences can be associated with geographical proximity and thus similar geographic conditions and historical factors. Within the clusters, geographical proximity is more pronounced with the non-CEE countries, as reflected by clusters 1 and 5. Some geographical and cultural factors seem to play a role in CEE (similar patterns in the Czech Republic and Poland; or Hungary and Romania), yet overall this role is rather limited (e.g. similar patterns in Serbia and the Netherlands). This indicates that even neighbouring countries can develop different civil security structures due to separate political and cultural developments, as Joyce and McCaffrey (2015) showed on Northern Ireland and the Republic of Ireland. This seems to hold especially for the CEE region and suggests an influence of other factors, such as selective experience transfers and learning, which is worth exploration in further research.

Cultural variables shed some additional light on understanding the differences, as they appear to have some (albeit limited) impact upon the civil security governance setup. Using the WVS data, both the traditional/secular and the survival/self-expression dimensions differentiate between some of the clusters. The difference along the former dimension could be explained by the geographical and cultural proximity of countries in clusters 1 and 5. The difference between clusters 3 and 5 along the latter dimension could be coupled with the larger participation of CSOs in regular civil security provision and broader multilateral engagement of the cluster 5 countries.

Caution is needed, however, in interpretation, as the countries with heterogeneous scores on the survival/self-expression dimension of WVS also form clusters together (such as in cluster 2). Thus while security systems in some countries may include more different types of stakeholders due to the values placed on participation; others might reach the same solution primarily due to insufficient resources (see Tierney 2012) and driven by the survival values instead. This has been witnessed, e.g., in Italy, where volunteering was a reaction to state insufficiency after the l'Aquila earthquake (Di Camillo et al. 2014).

According to Hofstede's country scores, clusters 1 and 2 differ significantly from cluster 5, with the first two reaching relatively high scores on the Masculinity scale and cluster 5 scoring low. This difference could be coupled with the countries' readiness to rely on the for-profit sector in the civil security provision. Although other factors might be intervening here, a hypothesis could be formulated that a higher reliance on the for-profit sector in the form of privatization or outsourcing is seen as desirable in more masculine cultures emphasizing competitiveness and performance. Testing this hypothesis is suggested for further research.

There are also differences among the clusters in Power Distance (with clusters 3 and 4 scoring relatively high, especially in contrast with clusters 2 and 5), yet not on a statistically significant level. This corresponds with other research (see Hermansson 2016) and suggests that in the current European context, the power distribution does not strongly impact upon the composition of the civil security systems.

5. Conclusions

Based on a comprehensive dataset covering 22 countries and all European regions, the article presents systematic evidence on the official involvement of different types of stakeholders in the national civil security systems. Although the state plays a crucial role in civil security provision in all European countries, in all cases civil security governance also comprises other actors than just the state and its institutions. The data show that the CSOs are counted on in all countries under study, especially in exceptional crisis situations. Also the official systematic involvement of CSOs in regular civil security provision appeared frequently and did not discriminate among the clusters. Contrastingly, the official role ascribed to private for-profit actors was important for differentiating among different clusters. A link with Hofstede's MAS dimension was suggested.

The goal of this paper was to explore whether the European countries with similar characteristics fall into geographically and culturally similar categories and whether the same patterns can be observed across the CEE region. Despite sharing cultural similarities and geographical proximity, the CEE countries formed mixed clusters with other non-CEE European countries. Three out of five clusters involved both CEE and non-CEE countries. The WVS values did not seem to explain this

heterogeneity. The two remaining clusters which did not involve any of the CEE countries were similar to observations in other policy domains (see e.g. Esping-Andersen 1990) and marked by geographical and cultural homogeneity.

The analysis provided a systematic overview as a common ground for future work and showed important similarities as well as discriminating dimensions worth further examination. Further research is suggested to concentrate on experience transfers and learning to shed light on the evolution of the official involvement of different types of actors in the provision of civil security as a public good.

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