FOSTERING A COMPREHENSIVE SECURITY APPROACH: AN EXPLORATORY CASE STUDY OF CBRN CRISIS MANAGEMENT FRAMEWORKS IN ELEVEN EUROPEAN COUNTRIES

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Abstract: Response to CBRN threats and events has gained momentum at the national, regional and also international level. Within the European Union, since the adoption of the EU Action Plan in 2009 Member States have been called to focus on this issue and develop appropriate response strategies. The increasing risk of CBRN events, including terrorist attacks, triggers the need to adopt an integrated approach, at the regional as well as at the national level. Tackling terrorist access to CBRN agents is currently considered a top priority for the European Union, but what is the framework and which are the instruments developed to prevent and respond to this kind of emergency? Is the EU sufficiently equipped to deal with the devastating effects of a CBRN event? Are the Member States up to this task? The present paper investigates the strengths and weaknesses of the existing tools. It does so relying on the results of a two-year research project funded by the EU, which, inter alia, analysed in a comparative way the normative framework of Italy and ten other EU Member States. The goal of this contribution is twofold. In the first place it will provide the reader with an overview of the key issues surfaced in the course of the comparative analysis against the backdrop of the EU legal and institutional frameworks and, secondly, it will point at the possible ways forward to harmonise and better regulate the response to the kind of events at stake and enhance the concept of security in Europe. The comparative analysis has shed light on several crucial issues that stress the urge to foster and implement an integrated response to CBRN events or threats. As emerged from the information collected and elaborated in this contribution, some important aspects (i.e. the coherence and soundness of the normative framework dealing with CBRN crises and emergency management; the effectiveness of the communication strategies and the need to improve and promote multi-agency training) still need to be duly addressed in order to fill the gaps identified.

Keywords: CBRN, crisis management, European Union, terrorism, preparedness, response, law enforcement, first responders, comparative legal analysis.

Introduction

The EU is currently facing a large number of security threats. Many would argue that terrorism, the economic crisis and the conflict between Russia and Ukraine rank pretty high in this list. In such a context strengthening chemical, biological,
logical or nuclear (CBRN) security is certainly one of the key goals that the EU and its Member States must pursue. As stressed by the European Commission, even though most terrorist attacks have been conducted using conventional weapons, there is a growing possibility that terrorist organisations might eventually turn to unconventional weapons, such as CBRN materials, potentially leading to a high number of casualties and causing huge socio-economic damage. In particular, it shall be noted that terrorism that makes use of CBRN agents poses a clear threat to public health and safety, security, and economic and political stability on a national, regional and global level. A recent Eurobarometer showed that European citizens are increasingly worried about their security. In fact, the proportion of people who see terrorism as the main security challenge in the EU has jumped from 33% on average in 2013 to 49% in 2015. Tackling terrorist access to CBRN materials is currently considered a top priority for the European Union, but what is the framework and which are the instruments developed to prevent and respond to this kind of emergency? Is the EU sufficiently equipped to deal with the devastating effects of a CBRN event? Are the Member States up to this task? The European Union is fully aware of the increasing risk of being the target of terrorist offences and already in 2005 it has developed a comprehensive counter-terrorism strategy which builds on four pillars, namely “prevent, protect, disrupt and respond.” The second pillar of the EU Counter-Terrorism Strategy, i.e. protect, deals with the issue of CBRN and highlights the importance of strengthening the cooperation with international organisations and partners, as well as offering technical assistance to third countries and stopping the proliferation of CBRN materials.

The present contribution relies on a previous project, “Chemical, Biological, Radiological and Nuclear Integrated Response in Italy: Enhancing On-site Cooperation between Safety and Security Organisations,” which has been triggered by the need to provide an answer to this sort of questions. This paper, authored by the same researchers who drafted a comprehensive Mapping Report on the legal, institutional and operative framework concerning the preparedness and response to CBRN events, aims at presenting the outcomes of the research to an academic audience, underlining the findings that emerged in the course of the legal/comparative analysis and disseminating them through a scientific publication. It is worth to stress that the EU countries surveyed and analysed in the course of the study have been selected on the basis of relevant criteria, e.g. presence of nuclear power plants on their territory, occurrence of CBRN events in the past, increasing risk of terrorism, and so on. Furthermore, it shall be noted that the data have been collected combining the results of a desk-based research with the answers provided by national experts and practitioners to a questionnaire prepared by the authors.
The present paper in the first place is going to provide the reader with an overview of the international and European legal frameworks regulating the preparedness and response to CBRN crises, as well as the established international cooperation mechanisms. Indeed, one should not overlook the fact that the relevant frameworks and mechanisms in the surveyed States, as well as the specific norms and procedures they consist of, have been established according to international obligations. Secondly the present contribution will summarise and discuss the findings of the legal analysis, starting from the Italian approach and then comparing it with the framework of ten other Member States. Finally, the conclusive part of the paper will point at some possible ways forward to enhance security in Europe through the promotion of a preparedness and readiness to respond to CBRN events.

An Overview of the International and European Cooperation Frameworks Concerning Response to CBRN Crises

International Obligations and Cooperation Mechanisms at Universal Level

Over the last decade, C, B, R, N issues have increasingly gained momentum, ranking high within the priorities identified by the international community. Several legal and policy instruments dealing with the subject matter have been adopted at universal, regional and national level.

As far as the United Nations (‘UN’) is concerned, the Security Council adopted Resolution 1540 (2004), which discusses and imposes binding restrictions, concerning nuclear, chemical or biological weapons and related materials. Resolution 1540 (2004)—re iterated and extended by Resolution 1673 (2006), Resolution 1810 (2008), and Resolution 1977 (2011)—not only requires UN Member States to adopt legislation preventing the proliferation of nuclear, chemical and biological weapons, their means of delivery, and to implement measures to ensure that related materials are not illicitly trafficked, but also proposes enhanced international cooperation in such measures. International obligations concerning prevention, preparedness and response to CBRN events can also be found in a significant number of international legal instruments. These are for instance the Treaty on the Non-Proliferation of Nuclear Weapons (1968), the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction (1972) and the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction (1992). In addition to the core Conventions, further obligations, in particular those concerning RN agents, are enshrined in the International Convention for the Suppression of Acts of Nuclear Terrorism (2005).
The above mentioned conventions address the issue of CBRN threats with respect to the development, deployment and usage of weapons of mass destruction or to criminal and terrorist activities. In other words, they deal with CBRN security-related issues. However, there are other international instruments that cover the topic, discussed here, from a safety perspective. These are conventions dealing with trans-boundary cooperation and assistance in case of nuclear and radiological emergencies originating from civilian use of related material.\textsuperscript{12}

It is worth recalling that CBRN threats emanating from both State and non-state actors are also one of the main concerns of NATO.\textsuperscript{13} As stated in the Organisation’s New Strategic Concept adopted at the 2010 Lisbon Summit, NATO should develop the capacity to defend Member States’ populations, territory and forces against the threat of military or terrorist attacks involving CBRN agents.\textsuperscript{14} On a very operative level, the above commitment has been fulfilled through the establishment of a Combined Joint CBRN Defence Task Force consisting of a CBRN Joint Assessment Team (‘JAT’) and CBRN Defence Battalion.\textsuperscript{15} With regard to the latter, it is trained not only for armed conflicts. It may also provide military assistance to civilian authorities in situations of crisis such as natural disasters and industrial accidents, including those involving hazardous material. Its deployment should be authorised by the North Atlantic Council.\textsuperscript{16} It is also worth mentioning that NATO has promoted further Civil Emergency Planning activities, focused on enhancing national capabilities and civil preparedness in the event of possible attacks using CBRN agents.\textsuperscript{17}

\textbf{The EU CBRN Preparedness and Response Framework}

Narrowing down the focus of the overview to the European Union framework, what emerges in the first place is that crisis management in general, and preparedness for, resilience and response to, and recovery from CBRN incidents in particular, are primarily a responsibility of the Member States. With respect to disasters or crises at large, the EU approach strongly emphasises that a central capability to respond should be developed in accordance with two principles, namely national responsibility and EU solidarity.\textsuperscript{18} In effect this means that EU actions concern the promotion of coordination among individual Member States. This can be through initiatives to share resources or best practices, or through promoting interoperability. With respect to cross-border emergencies, including CBRN events, the European Union supports Member States through different tools. In particular, the most relevant tools to respond to both natural and man-made disasters and crises are the ‘solidarity clause mechanism,’ the European Union Civil Protection Mechanism and the EU Integrated Political Crisis Response arrangements.\textsuperscript{19} Moreover, the Health Security Committee and the European Centre for Disease Prevention and Control are in charge of responding to public health risks and crises, whilst in cases of critical situations stem-
ming from suspected criminal or terrorist activities Europol can provide investigative support to Member States’ law enforcement and intelligence authorities.

The EU Solidarity Clause

The solidarity clause entails the possibility for both the Union and its Member States to provide assistance to another Member State, which is the object of a terrorist attack or the victim of natural or man-made disaster. Although it is not provided explicitly, it goes without saying that the above identified threats may involve the release or fusion of CBRN agents. With regard to the EU, it is important to stress that it has a legal obligation to mobilise all the instruments at its disposal in order to assist a Member State in its territory, at the request of its political authorities. This means that the EU is not entitled to act *motu proprio* and the State affected can refrain from requesting any assistance. As far as the Member States are concerned, they are under a legal obligation to assist the affected State, however they have the right to choose, in good faith, the specific modalities of assistance. The implementation of the solidarity clause is outlined in Decision 2014/415/EU adopted by the Council. The Decision aims at defining the scope of the solidarity clause, the geographical applicability, its activation mechanisms, as well as the response arrangements adopted at Union level.

The EU Civil Protection Mechanism

The EU Civil Protection Mechanism is designed to facilitate the co-operation between the 28 EU Member States, plus four other participating third countries, in civil protection assistance for major emergencies or threatened emergencies. The Mechanism was established as a “Community Mechanism” by the *Council Decision 2007/779/EC*. Recently, it has been established as “Union Mechanism” by Decision 1313/2013/EU of the European Parliament and of the Council of 17 December 2013. As originally conceived and implemented, the Mechanisms had the goal to provide assistance to Member States that were in the event of a natural disaster or man-made accident. From 2007 the mechanism may be also triggered to counter acts of terrorism. Moreover, Member States participating in the EU’s Civil Protection Mechanism are encouraged to apply the *EU Host Nation Support Guidelines* adopted on 18 January 2012 (‘HNS Guidelines’). The HNS Guidelines are intended to support and assist affected States in receiving international assistance, whether in the preparedness or disaster response phases. They merely recommend, as they are non-binding, key actions to be taken in relation to emergency planning, emergency management and coordination, logistics, transport and legal and financial issues.
The EU Integrated Political Crisis Response Arrangements

The EU Integrated Political Crisis Response arrangements (IPCR) allow the European Council to carry out political coordination in response to the invocation of the solidarity clause.\(^{31}\) The arrangements help strengthening the cooperation between the European stakeholders in a major crisis situation thanks to an increased participation by Member States, the Council Secretariat General, the Commission, the European External Action Service and other actors involved in the response process.\(^{32}\)

The Health Security Committee

In Europe, CBRN falls partly within the organisational framework of the European Union’s Health Security Committee (HSC). The HSC was set up in 2001 by the Council of Ministers to “address health security issues such as the prevention and management of pandemic flu, the deliberate release of CBRN substances and other non-specific threats to health.”\(^ {33}\) It has primary responsibility for coordinating Union-wide health security efforts.\(^ {34}\) It focuses on health-related threats from, for example, cross-border pandemics, but also releases of CBRN agents.

The European Centre for Disease Prevention and Control

In the EU, there are systems in place for epidemiological surveillance. The European Centre for Disease Prevention and Control (ECDC) takes responsibility for the surveillance of infectious diseases in Europe and for maintaining databases concerning epidemiological surveillance. This is an important aspect of the detection and prevention of, and response—as well as the coordination of responses—to, possible CBRN events, such as bioterrorism attacks. Member States undertake to share information pertaining to possible public health issues that may be felt at the European level.\(^ {35}\) As per its remit, the focus of the ECDC is more on the B aspects of CBRN than C or RN, dealing mainly (in these respects) with biosecurity, biorisk, biosafety, etc.

Europol

Europol is the EU’s agency whose main goal is to support and enhance Member States’ competent authorities’ action and their mutual cooperation in preventing and combating organised crime, terrorism and other forms of serious crime affecting two or more Member States.\(^ {36}\) Given its role and tasks, Europol contributes to counter-terrorist or criminal activities involving CBRN agents as well as explosives. In case of a crises or emergency stemming from the criminal or terrorist employment of CBRN agents in one or more Member States, Europol may support national law enforcement, and intelligence, authorities to carry out investigations by sharing relevant information through existing information systems.\(^ {37}\) Furthermore, Europol staff may participate in joint investigation teams to be deployed on the territory of the Member
States affected by a criminal or terrorist act, or other form of serious crime.  
Within the limits provided for by the law of the Member States, in which a joint investigation team operates, and in accordance with an administrative arrangement between the Director of Europol and the competent national authorities, the EU’s agency can facilitate *in loco* investigation. During the operations of a joint investigation team, Europol staff shall, with respect to offences committed against or by them, be subject to the national law of the Member State of operation applicable to persons with comparable functions. They shall not, however, take part in the implementation of any coercive measures.

*The EU CBRN Action Plan*

With respect to CBRN, the *EU CBRN Action Plan*, i.e. the main EU adopted policy document dealing with this type of threats, reiterates that “it is primarily Member States’ responsibility to protect the population against CBRN incidents and that initiatives at the EU level should be taken in accordance with the principles of subsidiarity and proportionality, as well as be guided by the principle of solidarity.” It has to be noted that *The EU CBRN Action Plan* “constitutes a political commitment” and “may be seen as a roadmap of intentions for the coming years,” but it is not a legal instrument. By adopting an all-hazards approach to CBRN incidents and materials, it recommends actions concerning prevention, detection, preparedness and response, as well as horizontal measures in the context of high-risk CBRN materials. On May 2012, the European Commission issued the “Progress Report on the Implementation of the EU CBRN Action Plan.” The report points out that progress has been made in all C, B, R, N areas.

*Mapping National Frameworks in Europe: Main Findings from a Comparative Analysis*

The present section provides an overview of the key aspects that need to be further investigated and improved in order to increase the preparedness and response to CBRN events in Europe. Its content arises from an investigation concerning the Italian and, adopting a comparative approach, other 10 EU Member States’ institutional and legal frameworks governing CBRN crisis and emergency management. It will: (i) present similarities and differences between the national approaches to CBRN threats; (ii) recognise solutions or practices that may be adopted or implemented by Italy and the other surveyed States in order to foster CBRN resilience.
Discussing How the ‘Duality’ of the Italian CBRN Crisis and Emergency Management System Can Impact the Preparedness and Response Strategy: a Model to Export or to Dismiss?

The Italian CBRN crises and emergencies management system consists of two structures and mechanisms that are formally separated, although intrinsically entwined: the Civil Defence and the Civil Protection. While the latter deals with natural disasters and man-made incidents affecting Italy and determining a situation of ‘emergency’ at national/central, regional or local level, the former copes with the same kind of events but amounting to a situation of ‘crisis.’ Furthermore, the Civil Defence mechanism is triggered to manage crises stemming from man-made intentional activities like criminal, subversive and terrorists actions, or military attacks originating from State and non-State actors.

Overall, these mechanisms share the same goal, i.e. they both aim at safeguarding human life, goods, national heritage, human settlements and the environment from threats entailing a situation of emergency or crisis. Nevertheless, the main difference between the Italian Civil Defence and the Civil Protection mechanism lies in the fact that the former prioritises national security and law enforcement related concerns, namely safeguarding the continuity of the Government action, protecting critical infrastructures, maintenance and/or restoration of the public order, forensic investigation, crimes’ prosecution and so on; the latter, instead, focuses more on the safety of the persons and assets affected by dangerous events. It should be noted that a formal distinction between ‘Civil Protection’ and ‘Civil Defence’ was established also within legal frameworks of other EU Member States. Those were the cases of Spain and Sweden, which have nowadays abandoned such a distinction since the notion and mechanism of civil defence have been, more or less entirely, replaced by or incorporated in the concepts and apparatus of civil protection. Anyway, it is worth noting that the normative notion of civil defence, adopted by Spain and Sweden, referred to the readiness of non-military resources in the service of national defence, more specifically to the employment of civilian resources in response to the consequences of a situation of war.

A ‘dual’ or ‘bi-dimensional’ emergency and crisis management system is nowadays in place also in Germany where there is a distinction between ‘civil protection in the broader sense’ (‘Katastrophenschutz’) and ‘civil protection in the narrow sense’ (‘Zivilschutz’). The former encompasses all the concrete actions to achieve preparedness with respect to disasters in peace time and all the measures taken in order to limit the number of victims and the extent of damages. On the contrary, in the functional area of civil protection in the narrow sense fall the disasters caused by an on-going armed conflict on the German territory. The described configuration is reflected in a dual regime of responsibility: on the one hand stand the States (the ‘Länder’) which are
responsible for the civil protection in the broader sense, and on the other hand the German Federation, which is in charge of the civil protection in the narrow sense.\footnote{49}

The described dichotomy of the German crisis management system does not fully match the ‘duality’ of the Italian system. In fact, the German dichotomy is based on the distinction between threats occurring in peace or in war time. As already mentioned, the Italian dichotomy disregards such a distinction, exacerbating the uniqueness of the Italian system in Europe. Consistently, Italy is the only country where the CBRN crises and emergency management system relies on two formally separated mechanisms. This situation triggers several considerations, but in particular a crucial question: can the Italian system be regarded as an effective one despite the peculiar dichotomy in place? Observing the Italian system, and taking into account both the Italian response to recent real life emergencies and the results of exercises and field trials, it is possible to conclude that the system works. In other words, the system can be regarded as sound, reliable and effective, although it presents—as in many other countries—some critical aspects of concern.\footnote{50} From this perspective, the duality of the Italian system may not be deemed as a potential limitation to the provision of an effective response. Nonetheless, it could not be recommended as a model to be followed by other countries.

This conclusion stems from the fact that when the nature and the potential impact of a threat cannot be immediately classified—for instance, as a terrorist attack—it is not possible to establish whether it qualifies as an ‘emergency’ or a ‘crisis’ and therefore it is difficult to determine which mechanism can be triggered and which authority should be activated in order to react to a threat or an event in a timely manner. This would require a better definition of the circumstances, under which each mechanism should be activated, or at least the establishment of more specific guidelines and criteria to distinguish a potential emergency from a crisis. Such criteria could be for example based on the criticality of the threatened target: e.g. a CBRN event affecting specific and pre-identified infrastructures or services should ipso facto amount to a situation of crisis, thus triggering the Civil Defence mechanism. Of course, if an event involves instead a target (service or infrastructure) that is not deemed critical this will raise a situation of emergency that activates the Civil Protection mechanism.

Interestingly, the Dutch legislation distinguishes between ‘emergency’ and ‘crisis’ too, but on the basis of the number of threats that are at stake. According to the Dutch legislation,\footnote{51} an ‘emergency’ is normally caused by a single event,\footnote{52} while a ‘crisis’\footnote{53} is triggered by a combination of factors. Leaving aside any considerations about the validity of this approach per se, its adoption by the Italian normative framework will not be useful to clarify which mechanism should be triggered in response to CBRN events. In fact, the Dutch legislation considers both emergencies and crises as disas-
ter’s subtypes which trigger the same response structure, whereas in Italy, it would be still a matter of choice between two different mechanisms. In conclusion, the interplay between the Italian Civil Protection and Civil Defence mechanisms should be better determined and its extent further clarified from the outset. This would help to prevent potential procedural uncertainties that cause loss of time, as well as to avoid conflicts of competence between the authorities that are responsible for responding to CBRN threats.

Towards a More Coherent and Comprehensive Normative Framework

A second crucial aspect, which emerged from the analysis of the Italian response to CBRN events and its comparison with the framework in place in other countries, is the fact that the Italian legislation appears to be ‘fragmented,’ i.e. this specific topic is regulated by a large number of laws and regulations adopted at different level (national and regional mostly). Whilst a few countries, such as Belgium, France, Spain and Sweden have also registered a proliferation of legislation concerned with emergency response over the past 20 years, in other settings, instead, the response to CBRN events is governed by a more organic and less complicated set of laws. Valid examples of less articulated normative frameworks can be found in several settings. For instance, in the Czech Republic only two legal instruments cover all levels of institutional action, from national to local, and represent the key provisions regulating the legal framework of crisis management and response. In The Netherlands the legislation concerning emergency management and crisis control was previously laid down in a number of separate laws and acts, eventually replaced with a more comprehensive legal instrument in January 2010. Moreover, in the Dutch system CBRN-e incidents are considered as crises that have to be counteracted with generic crisis management, taking into account specific knowledge and expertise in CBRN-e. Similarly in the United Kingdom CBRN events are dealt with according to the general legal framework, which disciplines the response to emergencies. Thus, the whole subject is regulated by the provisions enshrined in one legal instrument.

Interestingly, in some countries, e.g. Ireland, preparedness and response to CBRN emergencies are not established by statutory regulations, but are outlined in ‘Plans’ adopted at the national, regional and local level according to common planning and management standards. Consequently, one of the main criticisms against the current approach to emergency management in Ireland is the lack of legally binding instruments. Both the lack and the proliferation of legal tools hinder the chances to regulate in a sound and efficient way the response to CBRN events. As emerged from the Mapping Report analysis the better option—for Italy and for the countries that face the same hurdles—would be to collect all the key provisions in a consolidated text, which will help overcoming the flaws of the current normative frameworks.
The ‘e’ Factor in CBRN Crises and Emergency Management

The Italian normative framework does not directly link the explosive (‘e’) element to CBRN threats. The risks posed by explosives are dealt with laws that refrain from putting them in correlation with the risks deriving from CBRN agents. Notably, the Italian civil authorities dealing with threats posed by explosives, i.e. the Police and its artificers, are slowly building a stronger expertise in CBRN-e, which can be particularly valuable to cope with specific threats, for instance the so-called ‘dirty bomb’.

The response to CBRN-e events is disciplined in an organic way only by two of the countries investigated, namely France and The Netherlands. All the other countries included in the study do not consider ‘e’ events as automatically associated with CBRN, and some of them, for instance Sweden, deal with ‘e’ events through a specific, separate legislation.

It is impossible to foresee whether the inclusion of the -e factor into the normative framework regulating CBRN would significantly improve the effectiveness of the response to these kinds of threats or not. However, it is evident that the inclusion of the -e factor might improve the comprehensiveness of the framework and limit the risks of uncertainty and normative overlaps.

Sound Leadership and Efficient Multi-Agency Coordination as Paramount Factors for the Delivery of Effective Response

In Italy, both the Civil Defence and the Civil Protection mechanisms are structured with a command and control chain, where the Prime Minister takes national decisions supported by different decision-makers and coordination committees. On-site decision-making and assistance coordination are provided by different kinds of local authorities, each of them contributing to the response with their own resources. On the operative level, first response relies on several stakeholders, interacting on the basis of some pre-established criteria. Broadly speaking, this model reflects the organisation of the crisis and emergency management systems in all the countries surveyed. Of course each of the countries considered has different characteristics and priorities; accordingly, they have set up ad hoc crisis and emergency management systems tailored on their specific needs. Achieving efficient coordination between several authorities and agencies involved in the response activity at different levels clearly constitutes a difficult goal. The same consideration applies to determining the authorities that lead the response activities. With regard to Italy, coordination is pursued through the establishment of ad hoc collective bodies. Depending on the level considered (central, regional or local) and the mechanism triggered—Civil Defence or Civil Protection—the leadership is assigned to particular authorities as provided for by law.
Noteworthy is the approach adopted by Ireland to deal with the leadership issue. The Irish emergency management system is built around the crucial concept of ‘lead role/agency.’ This concept applies at the national, regional and local level of emergency management (and planning) and when multi-agency action is required. It ensures the possibility to quickly identify the authority, Government department or agency, which takes the lead of the response operations and coordinates all the actors involved in the response. The lead is, hence, ‘automatically’ claimed by a concerned authority depending on the specific type of emergency at stake and on the interests/sectors mostly affected by the event. The ratio of pre-determining the department/agency that will be taking the lead in emergency management is to assign, as quickly as possible, the responsibility for the co-ordination. It is worth stressing that the lead department/agency role may change over time to reflect the changing circumstances of the major emergency. Ownership of the leadership may be reviewed at appropriate stages of the emergency. Different departments or agencies may take the lead in case of an emergency involving the accidental or voluntary release/fusion of C, B and RN substances. Developing and proposing a ‘one size fits all approach’ is not the goal pursued by the present contribution and therefore the Irish approach has not been described to provide other countries, and Italy in particular, with an alternative option to handle the issues of leadership and coordination. However, it is in line with the scope of this work to highlight the shortcomings and the advantages of the different national frameworks to offer food for thought to a wide audience which encompasses academics, policy makers and the relevant stakeholders involved in the preparedness and response to CBRN events.

**Crises and Emergency Communications Strategies and Policies as Essential to Achieve Effective Response**

Another key aspect emerged from our analysis is the importance of adopting a sound, reliable and efficient information and communication system to be activated in case of CBRN crises and emergencies. Together with ‘command’ and ‘control,’ ‘communication’ plays a central role with respect to the provision of an effective response to CBRN events. Command and control cannot be accomplished without the existence of a two-way communication. In particular, orders could not be passed from the commander to subordinates and control would be impossible to achieve since every control system would need a reliable communication network. Fast and efficient communication strategies and mechanisms are also paramount to the provision of information that decision makers and stakeholders use to detect or foresee potential CBRN threats. They are essential also for monitoring an on-going crisis or emergency, as well as assessing its evolution. Moreover, communication mechanisms are crucial to assess the effectiveness of the response measures that are adopted. In sum, they are pertinent for producing intelligence.
In Italy, the above aspects are regulated by the existing law and plans for crisis and emergency management, CBRN threats included.\textsuperscript{66} At the operative level, a sound information system established within the Civil Protection mechanism—that may be employed for Civil Defence purposes too—monitors potential and actual emergencies occurring in Italy and worldwide, provides updated information to all the stakeholders involved, alerts and activates the various components and operational structures contributing to the emergency management. However, the importance of communication is not limited to the above as it does not exclusively concern the way first responders and relevant authorities share and examine information supporting decision-making. According to a broader definition, ‘communication’ in crises and emergency management refers also to the way first responders and relevant authorities provide information to the population, directly or indirectly affected by the dangerous event. Prompt and efficient crisis communication solutions targeting the population are relevant to the success of the response to crises and emergencies, which spread fear and uncertainty, and may otherwise result in insecurity among the public. Whenever precise information does not reach the people affected by the crisis or emergency, the response is hindered and the authorities’ credibility is drastically reduced.\textsuperscript{67} It is noteworthy to observe that the Italian crisis and emergency management system lacks communication strategies or policies to be implemented when needed. In other countries, instead, much more attention has been placed on the importance to enhance and make efficient the communication between the authorities and the population in case of emergency, including CBRN events.

Positive examples of communication strategies could be found in three of the countries investigated. In Belgium for instance an Information Unit (‘CELINFO’) has been set up to: inform the general public about the protective measures to be taken; inform the media; monitor and evaluate the reactions of the population and the media in real time; send the necessary information to the neighbouring countries; and ensure that all the authorities concerned are promptly and sufficiently informed.\textsuperscript{68} Likewise, in Estonia a lot of emphasis has been placed on the importance of guaranteeing an efficient crisis or emergency communication. This duty is equally shared by local governments, regional rescue centres and government authorities.\textsuperscript{69} Moreover, in order to coordinate the interplay of different agencies and bodies, a permanent crisis communication team has been established and, in addition to that, the Ministry of the Interior has also published a Crisis Communication Handbook.\textsuperscript{70}

An \textit{ad hoc} body in charge of the communication with the population in cases of crisis or emergency has been established also in The Netherlands. The Communication Unit, one of the two bodies that compose the National Crisis Centre (NCC), is responsible for drafting and distributing risk and crisis-related information, both in its own capacity and on behalf of the central government.\textsuperscript{71} Finally, in Czech Republic
the operators of television or radio broadcasting are obliged, without any compensation and on request of the crisis management authorities, to disseminate (immediately and without any modification of the content and the meaning) information about the crisis, including the orders issued by the authorities.\textsuperscript{72}

\textbf{Constant Training for the Stakeholders, Including the Population}

The provision of constant training to stakeholders involved in the response to CBRN events is a fundamental aspect considered by all the above examined countries’ legal framework and also by the European Union.\textsuperscript{73} Good practices regarding this specific aspect have been found in several contexts. Exercises, which test and improve the interplay of the different actors cooperating in case of emergency have been organised in a number of countries, including Italy.\textsuperscript{74}

Significant examples of successful training can be found in Germany, where the LÜKEX exercise has been established since 2004.\textsuperscript{75} LÜKEX is a cross-Länder and cross-departmental exercise at political-administrative level in the area of national crisis management. The groups targeted by the exercise are also political decision-makers from the Federation and the Länder and operators of critical infrastructures. In Belgium, crisis management plans are also regularly practiced, especially the Nuclear Emergency Plan, which is exercised at least four times a year and can include the participation of foreign countries.\textsuperscript{76} With regard to Estonia, in 2011 it held an exercise particularly relevant for CBRN events: the EU CREMEX, Chemical and Radiological Emergency Management Exercise. CREMEX fulfilled several objectives, but foremost it pursued the goal of “testing the understanding, knowledge and response in the framework of the Union Civil Protection Mechanism.”\textsuperscript{77} Other countries perform their training on a smaller scale, organising exercises for the local stakeholders, in particular for the actors which play the most prominent roles. In the Czech Republic, for example, where an ‘Integrated Rescue System’ is in place, the Fire Rescue Service has a specific training which takes place on a monthly basis. Each municipal fire station and each regional Fire and Rescue Brigade have their own exercise plans, which are coordinated at the national level to ensure that other actors—the Medical Rescue Services, the police, the military, Ministries and other bodies of the Integrated Rescue System—are incorporated into these plans.\textsuperscript{78} In the UK, where the Police Force acts as the main stakeholder,\textsuperscript{79} every major city, airport and seaport is provided with a multi-agency CBRN response plan. All the plans must go through a three stages validation, which culminates in a large ‘live play’ exercise to make sure they are efficient and that the local commanders can activate them to deal with the ‘real life’ challenges of a CBRN event.

Even though training is widely recognised as crucial to improve the capacity to effectively respond to a CBRN crises or emergency situation, the exercises do not in-
volve the population. The establishment of specific training for the population, especially for those who live close to nuclear power stations, factories dealing with hazardous substances or next to facilities that are at risks of terrorist attacks, is therefore strongly recommended.

The International Dimension of CBRN Response: Promoting Incoming and Outgoing Assistance

The Italian CBRN crises and emergency management system, as well as the ones in force in the other countries analysed, is closely linked to the mechanisms and procedures established within the EU and other international cooperation mechanisms. In case of CBRN emergencies or crises and according to specific conditions, these States may require international assistance from other States that participate in the above mechanisms and also provide them with the support needed. Concerning the reception or hosting of international assistance by a State, whose territory and population are affected by a CBRN event, there are a wide range of issues that may prevent or hinder the reception of incoming help. These issues encompass the hosting State’s national legislation, for instance on entry, customs, taxation, and transport, that may pose some barriers to the deployment and action of foreign first responders.

At the international level, depending of course on the form of cooperation at stake, different initiatives have been promoted in order to cope with the above issues. As already described with regard to the EU, the Host Nation Support Guidelines propose specific (though non-binding) solutions to be adopted by States in order to receive international assistance during a major emergency in the most effective and efficient manner. The Guidelines highlight the key actions to be taken in relation to emergency planning, emergency management and coordination, logistics, transport, legal and financial issues. With regard to the legal issues, the Guidelines stress the need for the State receiving assistance (or ‘Hosting Nation’) to make legal arrangements to allow for the delivery of emergency support within its territory. According to the Guidelines “It is crucial for a smooth delivery of international assistance that the Participating States [to civil protection cooperation mechanism] have solid and systematic solutions ready to identify relevant legal issues that may constitute obstacles to the overall objective of facilitating the provision of international assistance and, if appropriate, modify their legislation.” In addition, the Guidelines recommend the Hosting Nation to “… ensure that assisting countries and relevant international organisations are provided with temporary authorisation to legally operate on their territory so as to enjoy the rights … for the purpose of providing assistance.”

In order for the incoming assistance to be delivered smoothly and promptly, the hosting State needs a proper normative or procedural framework consisting of rules
or, at the very least, principles aimed at regulating the support provided by foreign first responders. These rules or principles should cope with different issues ranging from the identification of the national authorities responsible for liaising at different level, i.e. political, tactical or operative, with foreign first responders, to the definition of duties and rights the latter have. Italy currently lacks a sound and comprehensive framework dealing with the management of international incoming assistance. Whereas it is not disputed which national authorities are entitled to ask for international assistance at the strategic/political level, both within the Civil Defence and Civil Protection mechanisms, a clear and detailed framework determining the roles, responsibilities, powers, rights and functions of incoming actors has yet to be established. However, in this respect Italy does not stand alone in the EU. Similar observations can be made in relation to other countries, such as Spain, France, Belgium, Ireland and Germany. For example, with regard to the latter, it is unclear which federal body is responsible for requesting international disaster relief and liaising with international aid providers. In the case of outgoing assistance, pursuant to the bilateral agreements between Germany and neighbouring or other European States, the relevant agency to be contacted to request assistance is usually the Federal Ministry of the Interior. In Sweden the legislation in force provides for the request for international assistance to originate from a local or regional authority when needed. However, a comprehensive and detailed framework concerning the management of (incoming) international assistance has yet to be developed.

A set of basic principles and rules governing the duties and functions of foreign first responders providing assistance are established instead in Estonia. In fact the Estonian law regulates the modalities through which the Estonian Rescue Board can involve an administrative authority of another country in rescue operations (and explosive ordnance disposal) on the territory of the Republic of Estonia. The competence and powers of the foreign authority should be established and outlined by international agreements. In The Netherlands international assistance is properly outlined in an operational manual. The Manual is divided in three parts dealing separately with the topics of National Disaster Response, Cross-Border Assistance (Germany and Belgium) and International Assistance (EU and non-EU) respectively. It clarifies that foreign assistance may be provided to The Netherlands via various organisations such as the EU, NATO and UN, but it can also be rendered directly by a neighbouring country or any other country. The procedure described in the Manual is applicable in each and every circumstance, regardless of where the assistance is coming from. Moreover, the Manual carefully explains which are the local or national authorities, entitled to request assistance, and which are the bodies that play a role in the deployment of external help. Despite its undisputed importance and uniqueness, the Manual presents two shortcomings: firstly, it has not been legally embedded and,
secondly, its application is limited to incoming foreign inter-State relief, both from EU Members and non-EU Members, but does not cover at all the incoming relief rendered by non-State actors like NGOs or the Red Cross.\textsuperscript{90}

The national frameworks of many surveyed countries lack specific norms dealing with the governance of international incoming assistance. The EU Host Nation Support Guidelines represent a relevant step forward, but each and every Member State should promote its implementation at the domestic level through the adoption of laws and regulations to discipline this sensitive issue.

**Conclusive Remarks**

The comparative analysis undertaken has shed light on several crucial issues that stress the urge to foster and implement an integrated response to CBRN events or threats. As emerged from the information collected and elaborated in the course of this contribution, some important aspects still need to be duly addressed in order to fill the gaps identified.\textsuperscript{91} In the first place, States are encouraged to adopt a more coherent, accessible and comprehensive normative framework dealing with CBRN crises and emergency management. This could be achieved through a rationalisation of the national laws and regulations, which, ideally could be enshrined in one exhaustive text able to cover all the aspects related to the response to CBRN events, including the ‘–e’ factor. Secondly, this paper has highlighted the importance to better clarify the interplay between the different stakeholders, especially when there is a plurality of mechanisms established to deal with emergency response, like in Italy. Such clarification could significantly contribute to prevent procedural uncertainties that may delay the delivery of effective response to CBRN threats. Furthermore, a more sound approach can help reducing potential conflicts of competence between the authorities that are responsible for the management of the mechanisms at stake. A simplified approach to this issue could start with a better definition of the circumstances under which each mechanism can be activated.

Another important issue identified in the analysis is that communication strategies are instrumental to respond promptly and efficiently to a CBRN event. Therefore EU Member States are urged to improve their communication system on two levels. \textit{In primis} communication should be significantly enhanced among those involved in the response, i.e. first responders and law enforcement agencies. Secondly, the communication system needs to be duly regulated to allow a constant and reliable flow of information between the authorities and the public. Pivotal in this sense is the role of the media, which inform the population affected and can significantly contribute to the management of the crisis. Concerning the first level of communication, which can be described as ‘internal,’ it should be stressed that an efficient and reliable crises information and communication system needs to be based on new ICT and infra-
structures. Such a system is essential to accomplish effective command and control during a crisis or an emergency, as well as to produce intelligence, i.e. information that may be used by decision makers and stakeholders for countering potential or actual CBRN threats. Regarding the ‘external’ level of communication, it is trivial to note that a faulted information system and the lack of rules adopted to regulate the media can seriously hinder an effective response to a CBRN event and spread the panic among the population. Given the potentially dangerous consequences that a unreliable or insufficiently regulated flow of information could generate in a situation of emergency, and in particular during a CBRN event, States are recommended to adopt at least soft-law instruments, e.g. non-binding guidelines or set of principles, to improve the cooperation and the exchange of information between relevant authorities and media, both public and private. A comprehensive regulation should encompass also the flow of information available online, e.g. through blogs or social networks, by individuals employing new ICT, e.g. smart phones. For example, guidelines could be drafted and implemented to steer private individuals’ behaviour and instruct them to share only trustworthy information.

From the analysis carried out, another issue surfaced which concerns the importance of intensive and, whenever possible, multi-agency training designed to strengthen the cooperation among all the stakeholders involved in the response to a CBRN event. The intensification of training and exercises is essential to guarantee an integrated and effective response, which could truly benefit from a multi-party approach. Moreover, specific training and exercises should be developed for the populations and communities most likely to be affected by CBRN crises or emergencies. Finally, the research undertaken has shown that incoming international support to face CBRN crises or emergencies should be promoted and better regulated, both at the international and at the national level. With regard to the latter, whenever gaps emerge, ascribable to the lack of international laws or implementation thereof, it is important that the national authorities step in to duly regulate the matter. At the European level, for example, notwithstanding the fact that the Host Nation Support Guidelines constitute a fundamental action in pursuing harmonisation, further efforts should be made in order to discipline in a sound and uniform level the incoming assistance in case of emergencies, and in particular CBRN events. All the aspects stressed in this paper and summarised in the conclusive remarks came across as crucial to improve the response capabilities and strategies both of individual Member States and the European Union at large and to enhance the level of security within the EU borders.
Notes


4 The present paper stems from a European Union funded project under the title “Chemical, Biological, Radiological and Nuclear (‘CBRN’) Integrated Response in Italy: Enhancing On-site Cooperation between Safety and Security Organisations” (hereinafter ‘the project’ or ‘CBRN project’). Information about the project, its partners and the results is available at http://www.cbrn-response.eu/.


12 It has to be stressed that the following conventions concern “nuclear safety,” i.e. the prevention and mitigation of nuclear accidents and the harmful effects of radiation on human health and the environment. See the 1986 Convention on Assistance in Case of a Nuclear Accident or Radiological Emergency; the 1986 Convention on Early Notification of a Nuclear Acci-


16 Website of NATO, NATO A-Z, Combined Joint Chemical, Biological, Radiological and Nuclear Defence Task Force; It is worth recalling that NATO does not only deal with crisis of military nature. In other words, the Organisation’s adopted concept of “crisis management” goes beyond military operations to include issues such as the protection of populations.


22 Declaration on Article 222 of the Treaty on the Functioning of the European Union, no. 37, annexed to the Final Act of the Lisbon Conference.


26 Council Decision of 8 November 2007 Establishing a Community Civil Protection Mechanism, 1 December 2007, available at http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32007D0779(01); The Community Mechanism was accompanied and financed by the Council Decision No. 2007/162/EC of 5 March 2007 Establishing a Civil Protection Financial Instrument. The Community mechanism was originally set up by Council Decision No. 2001/792/EC of 23 October 2001 establishing a Community mechanism to facilitate reinforced cooperation in civil protection assistance interventions. All the cited Decision have been recently substituted by Decision 1313/2013/EU (see next footnote).


European Commission, Communication from the Commission to the European Parliament and the Council on Strengthening Chemical, Biological, Radiological and Nuclear Security in the European Union – an EU CBRN Action Plan. These three principles together demand that European-level CBRN policy must be required in addition to individual MSs’ initiatives (subsidiarity); must be an appropriate response to the perceived need for policy (proportionality); and must encourage and facilitate coordination and support amongst MSs (solidarity).


European Commission, Communication from the Commission to the European Parliament and the Council on Strengthening Chemical, Biological, Radiological and Nuclear Security in the European Union – an EU CBRN Action Plan. However it nonetheless has a strong emphasis on countering the terrorist threat.

Fostering a Comprehensive Security Approach: Exploratory CBRN Case Study


Nowadays the Spanish legal order acknowledges the distinct concepts of Civil Protection, on one side, and National Defence on the other. The latter refers primarily to armed conflicts where, however, the structures and mechanisms provided by the Civil Protection may be deployed as well – with the purposes of safeguarding citizens’ lives and integrity, and public goods. Civil Protection refers primarily to peacetime dangerous situations (terrorism included), where the Spanish army can provide its assistance too. The Organic Law No. 5/2005 on National Defence, that replaced the Organic Law No. 6/1980, does not adopt a formal definition of “Civil Defence” anymore. It establishes that the Council of National Defence will, in war time, coordinate the civil protection system, and that in peacetime the Armed Forces shall, together with other state and public authorities, preserve the security and well-being of the citizens in cases of grave risks, catastrophes and calamities. See Ley Orgánica 5/2005, de 17 de Noviembre, de la Defensa Nacional, in BOE núm. 276, 18 de Noviembre de 2005, available at http://www.defensa.gob.es/ume/Galerias/Descargas/051118_LODN.pdf.

The Swedish crisis and emergency management system is nowadays mainly based on the Civil Protection mechanism that is normally triggered during peacetime crises or emergencies. Prior to 1995, in case of war or under the threat of war, Sweden relied also on its “Civil Defence” mechanism that embraced all non-military activities carried out by the society to withstand an armed attack. The Swedish crisis and emergency management system is nowadays mainly based on the Civil Protection mechanism that is normally activated during peacetime crises or emergencies. However, Civil Protection may be also step in in case of armed attack affecting Sweden, alongside the Military Defence. See the Civil Protection Act, Lag (2003:778). The English version is available at Swedish Civil Contingencies Agency, https://www.msb.se/Upload/Om%20MSB/Lag_och_ratt/Civil%20Protection%20Act%2020101227.pdf?epslanguage=en.


A crisis is described as “a situation in which a vital interest of society is affected or is at risk of being affected.” See Act of 11 February 2010, containing provisions for the fire services, disaster management, crisis management and medical assistance (Safety Regions Act),


56 See the Civil Contingencies Act (2004). The main goal of the Act is to create a modern Civil Defence framework. The Act, alongside its supporting statutory and non-statutory guidance, provides the framework for civil protection activity by local emergency planners and responders across the whole country. Available at www.legislation.gov.uk/ukpga/2004/36/notes/contents.


58 There are a few acts and regulations that are relevant and applicable if an emergency occurs, e.g. The Chemicals Act 2008, the Health Act 1947 and the Health Act 1953, regulating the notification, surveillance, investigation and control of infectious diseases; The Radiological Protection Act 1991 setting up the Radiological Protection Institute of Ireland (RPII).


60 The Flammables and Explosives Act (2010), Lag (2010:1011). This Act deals with the handling and import of flammables substances and explosives. It aims at preventing and limiting loss of life, injury, and damage to the environment and property as a result of fire or explosion.

61 The Political-Strategic Committee (Comitato Politico-Strategico or CoPS) is the most important body that deals with planning and national strategic guidance in crises situations. The CoPS is convened by the Prime Minister, who is its chairman, and consists of the Ministers of Foreign Affairs, Interior, Defence, Economy and Finance. CoPS was established according to the Legge 23 agosto 1988 No. 400, and subsequent amendments, art. 5 par. 2(h), in G.U No. 214 s.o del 12.09.1988, available with text in a consolidated version at: http://www.govern.it/Presidenza/normativa/allegati/L_19880823_400.pdf.


Fostering a Comprehensive Security Approach: Exploratory CBRN Case Study


71 The NCC’s main tasks encompass the dissemination of information and the coordination of administrative measures between various ministries (when a crisis affects several policy areas at once) and provincial and municipal authorities. Further information is available at the Website of the National Coordinator for Security and Counterterrorism, https://english.nctv.nl/organisation_en/who_is_nctv/the_organisation/.


75 The exercise is organised in accordance to the Law about the civil protection and disaster management of the Federation (Zivilschutz- und Katastrophenhilfegesetz ZSKG) of 2 April 2009 (BGBl. I p. 693).


79 The activities of the Police Force with regard to CBRN events are regulated by manuals and guidelines such as: a Model Response to CBRN events (2006), The Police Strategic Management of CBRN Events (2008), the Police Tactical Management of CBRN Events (2011), the CBRN Bronze Commanders and CBRN Supervisors Handbook (2011).

80 International Federation of Red Cross and Red Crescent Societies, “Analysis of Law in the EU and a Selection of Member States pertaining to Cross-Border Disaster Relief. Synthesis Report and Recommendations,” 2010, p. 21: “Personnel sent to assist Member States in the
aftermath of a disaster may possess specific skills and qualifications that are regulated in the affected State. Regulated professions include doctors, nurses, paramedics and engineers. For professionals with foreign qualifications, permission to practice is dependent on a process of recognition. For qualifications obtained within the EU, existing EU law calls for a so-called ‘automatic’ system of recognition when services are provided on a temporary basis. However, states are still allowed to take up to one month for processing the request.” The Report is available at https://www.ifrc.org/Global/Publications/IDRL/country%20studies/EU-IDRL-Study-Synthesis-Report.pdf. See also Civil Protection Cooperation for the Candidate Countries and Potential Candidates, Analytical Study on Host Nation Support, Lot 3, Europaid/128936/C/Ser/Multi, 2012, available at http://ipacivilprotection.eu/hns_study.pdf.

In general, the established CBRN emergency or crisis management cooperation mechanisms do not provide detailed rules coping with the subject matter.


In Germany, rather than a national focal point, various focal points exist whose responsibility is determined according to the legal basis of the international request for assistance. Notably, according to the key principle governing the incoming assistance, the assisting actors have to subordinate themselves to the orders of the local authorities in charge of disaster relief. See for instance the bilateral agreements signed with neighbouring countries, Art. 3 German-French, German-German-Danish, German-Danish Agreement.


Besides the international agreements, there are also further provisions detailing the functions of foreign authorities that, upon request of the Ministry of Interior, are asked to contribute to carry out policing activities within the Estonian jurisdiction.


Matteo Bonfanti authored the part, entitled “An Overview of the International and European Cooperation Frameworks Concerning Response to CBRN Crises” of this contribution, Francesca Capone authored the part on “Mapping National Frameworks in Europe: Main
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