# The European Union's Response to the CBRN Terrorist Threat:

## A Multiple Streams Approach

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**Abstract**

*This article examines how the European Union (EU) has sought to address the threat of CBRN terrorism using Kingdon's Multiple Streams Framework. It demonstrates that the EU has significantly developed its response to the CBRN terrorist threat, but that it has followed a piecemeal approach to a significant extent. It also argues that, in contrast to the intense debates about the CBRN terrorist threat and the large number of policy proposals generated, the EU has only adopted a limited number of 'hard law' instruments, although some of those have had a significant impact. This stands in contrast to the large body of 'soft law' that has gradually developed, albeit with all its limitations.*

## INTRODUCTION

In June 2003, the then head of the UK's Secret Service MI5, Eliza Manningham-Butler,

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warned that there was a 'real possibility' that terrorists could launch a chemical, biological, nuclear or radiological (CBRN) attack in the West (BBC News, 2003). She warned against 'renegade scientists' passing on information to terrorist groups, which would enable them to acquire or develop CBRN weapons. She then concluded that '[it was] only a matter of time before terrorists launch[ed] a chemical, biological or nuclear attack on a Western city' (BBC News, 2003). More recently, as the Syrian Civil War has continued to rage, there has been significant concern in Europe over the efforts by terrorist group Daesh[1] to obtain chemical weapons. Daesh has been identified as the first non-state actor to acquire the capability to produce a banned chemical warfare agent and to combine it with a projectile delivery system (Strack, 2017). Whilst one researcher asked 'what if [Daesh] launche[d] a chemical attack in Europe?' (Bar-Yaacov, 2015), another writing in *NATO Review* wondered whether this terrorist group could 'go nuclear' before warning that '[we] might soon enter a stage of CBRN terrorism, never before imaginable' (Rudischhauser, 2015). A particular concern for European governments has been the potential use of chemical weapons by so-called 'foreign terrorist fighters' returning from Syria to Europe (McLeish, 2017), especially in the wake of the collapse of the self-proclaimed caliphate.

Against this backdrop of an evolving, but persistent, terrorist threat, the European Union (EU) has become an increasingly important actor in counter-terrorism. In the aftermath of the terrorist attacks on 11 September 2001 (9/11), the EU Member States decided to considerably strengthen their counter-terrorism cooperation, as evidenced by the adoption of various ambitious programmatic documents in the following years (Argomaniz, 2011; Bures, 2011; O'Neill, 2012; Bossong, 2013; Baker-Beall, 2016; Kaunert, 2010b; Kaunert and Léonard,

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[1] In this article, we refer to this terrorist group as 'Daesh'. It is also known as 'Islamic State' (IS), 'Islamic State in Iraq and Syria' or 'Islamic State in Iraq and al-Sham' (ISIS), or 'Islamic State in Iraq and the Levant' (ISIL).

2019)[2]. Those notably included the 'Anti-terrorism Roadmap' (European Council, 2001), the EU Plan of Action on Combating Terrorism (Council of the European Union, 2004a) and the EU Counter-terrorism Strategy (Council of the European Union, 2005). Since then, EU counter-terrorism cooperation has continued to grow, as the persistence of the terrorist threat in Europe has led to new policy initiatives. Coolsaet (2010, 873) has gone as far as arguing that '[this] is without doubt the area where the role of the EU has grown most significantly in the first decade of the twenty-first century'.

Whilst this burgeoning EU counter-terrorism cooperation has received some academic attention, in particular in the first stage of its development just after 9/11, the specific matter of how the EU has dealt, if at all, with the CBRN terrorist threat has been largely overlooked. One of the issues that have received most attention in the academic literature on the EU counter-terrorism policy so far has been that of the effectiveness and value-added of EU cooperation. Whilst Bures (2011) has famously questioned whether the EU's counter-terrorism policy has been more than a 'paper tiger', Argomaniz (2010) has highlighted the existence of a gap between the adoption of various measures at the EU level and their implementation in practice at the national level. In contrast, other scholars have been more positive in their assessment (Occhipinti, 2003; Kaunert, 2010b). Nevertheless, most observers have tended to emphasise that the development of the EU's counter-terrorism policy has been largely reactive and event-driven, as periods of inertia have been followed by periods of intense activity as a result of specific terrorist plots or attacks (Argomaniz, 2009a; Coolsaet,

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[2] As this article focuses on the development of one of the dimensions of the EU's counter-terrorism policy, it mainly examines political and policy developments from 2001 onwards. This is because EU counter-terrorism cooperation began in earnest in the aftermath of 9/11 (Kaunert and Léonard, 2019), not necessarily because this article endorses the 'new terrorism' perspective in terrorism studies (Duyvesteyn, 2004; Neumann, 2009).

2010; Kaunert, 2010b; Bures, 2011; Bossong, 2013). More recently, Bures (2018) has again taken up this question of effectiveness, this time in relation to the EU's response to the foreign terrorist fighters. He has concluded that the EU's counter-terrorism action continues to be hampered by well-known challenges, such as differences amongst Members States with regard to both legal definitions and threat perceptions.

Several scholars have also examined the issue of EU-US counter-terrorism cooperation. This is perhaps not surprising given the importance of the terrorist attacks on 11 September 2001 for propelling EU counter-terrorism cooperation forward. As early as 26 September 2001, the European Council highlighted the importance of improving counter-terrorism cooperation with the US as one of the two key dimensions of its 'Anti-terrorism Roadmap', the other being the adoption of measures within the EU (European Council, 2001, 11-13). The ensuing EU-US counter-terrorism cooperation has significantly grown since then. Some scholars have described it as an asymmetric relationship, where the US has been the dominant partner and the EU overwhelmingly a 'norm-taker' (Argomaniz, 2009b; Pawlak, 2009a, 2009b, 2010; Rees, 2006, 2008). In contrast, others have argued that the EU-US counter-terrorism relationship can be seen as a more even partnership, which both sides are able to benefit from and influence (Kaunert, 2010b; Occhipinti, 2010). Interestingly, EU-US counter-terrorism cooperation has received academic attention mainly in the years following 9/11 and significantly less since then, reflecting the fact that there have recently been fewer policy developments in that policy area.

Finally, there have also been studies of specific dimensions of the EU counter-terrorism policy, including law enforcement and judicial cooperation (Deflem, 2006; Bures, 2010; Kaunert, 2010a; Occhipinti, 2015), intelligence cooperation (Müller-Wille, 2008; Den Boer,

2015), counter-radicalisation measures (Bakker, 2015; Martins and Ziegler, 2018), border controls (Léonard, 2015) and the measures for combating the financing of terrorism (Eckes, 2009; Kaunert and Della Giovanna, 2010; Bures, 2015). In contrast, other dimensions of the EU's counter-terrorism policy, such as the fight against the use of CBRN weapons for terrorist purposes, have received considerably less academic attention. However, given the concerns expressed by officials, policy-makers and researchers alike regarding the likelihood and the grave consequences of a CBRN terrorist attack, as previously discussed, it is important to investigate the EU's response to this significant threat.

In line with the aims of the special issue, this article focuses on the processes through which CBRN terrorism has been socially constructed as a security threat and how the EU has sought to develop various policy measures to address it. It does so through an application of the Multiple Streams Framework originally developed by Kingdon (1984), which is particularly well-suited to explore 'the relationship between ideas and public policy' (Béland and Howlett, 2016, 224). Thus, the article first presents Kingdon's framework, before applying it to the development of the EU's response to the CBRN terrorist threat. A detailed documentary analysis of both the key scholarly works and the official EU documents on the CBRN terrorist threat is carried out. The official EU documents under consideration are those produced by the EU-level key players in this policy area, namely the European Commission, the European Council, the Council of the EU, and more recently the European Parliament, Europol and the High Representative of the Union for Foreign Affairs and Security Policy. The final section of the article highlights the main findings of this empirical analysis.

## THE MULTIPLE STREAMS FRAMEWORK

In order to analyse the EU's response to the threat of CBRN terrorism, this article draws upon Kingdon's seminal work on policy change, more precisely his Multiple Streams Framework. In his 1984 book entitled *Agendas, Alternatives, and Public Policies*, he sought to explain 'what makes an idea's time come' (Kingdon, 1984, 1). According to him, policy change involves a set of processes, which include the setting of the agenda, the specification of policy alternatives, and an authoritative choice among these alternatives through a legislative procedure (Kingdon, 1984, 3). More precisely, he argues that, for policy change to happen, three 'streams', which are thought to operate largely independently from one another, must come together at the same time. Those are the 'problem' stream, the 'policy' stream, and the 'politics' stream (Kingdon, 1984, 92-93). Before examining Kingdon's framework in greater detail, it is important to acknowledge that the issue of the linkages between ideas and policies has received significant attention over the years. Some have conceptualised this relationship in terms of 'problem definition' (Rochefort and Cobb, 1994), whereas others have emphasised the importance of 'framing' (Daviter, 2011; Zito, 2011). For his part, Smith (2014) has argued in favour of drawing upon constructivist, institutionalist and sociological policy analysis in order to approach policy-making as 'political work' entailing three overlapping processes, namely problematisation, instrumentation and legitimation. Kingdon's framework has been said to be particularly suited to analysing the development of EU policies because 'it takes into account what are normally considered to be pathologies of the EU system, such as institutional fluidity, jurisdictional overlap, endemic political conflict, policy entrepreneurship and varying time cycles' (Ackrill et al., 2013). It allows for considering not only how issues are perceived and problematised, but also the range of policy solutions developed, as well as the processes through which some of those may be eventually selected and adopted.

More precisely, in Kingdon's framework, the *problem stream* refers to attempts by actors to construct policy problems through the use of indicators and external events. This is because 'conditions' should be distinguished from 'problems' (Kingdon, 1984, 109). There is a wide range of conditions, such as poverty or illnesses, but very few ever sufficiently capture the attention of decision-makers to become policy problems. The identification of problems is not an objective process. Rather, it depends on a wide range of factors and can be influenced by the use - or instrumentalisation - of specific events or crises, as well as references to statistical or non-statistical indicators (Kingdon, 1984, 91). Importantly, the very existence of indicators shows that a decision was made at some point to monitor certain activities, rather than others, on the basis of specific assumptions.

As for the *policy stream*, it concerns the process of policy formation. A key idea here is that policy alternatives are regularly generated in processes that are separated from the identification of conditions as policy problems. Whilst ideas are generated and flow through a policy community, some of those will be selected and become policy alternatives (Kingdon, 1984, 116). This can generally be explained by several of their characteristics, including technical feasibility, value acceptability for the policy community, and successful anticipation of future constraints, such as budget constraints (Kingdon, 1984, 122-151). Another important idea in Kingdon's account is that policy communities in which ideas are generated '[hum] along on [their] own' (Kingdon, 1984, 117). They comprise specialists in a given policy area, including, amongst others, government officials, bureaucrats, experts, think tanks and lobby groups. These actors frequently interact and get to know each other's ideas and policy proposals. As a result, they develop shared debates and logics of persuasion. As underlined by Kingdon (1984, 133), '[in] some respects, the bulk of the specialists do

eventually see the world in similar ways, and approve and disapprove of similar approaches to problems'.

The *politics stream* mainly concerns the issue of the adoption of policy proposals. This can be influenced by a variety of factors, namely public mood, electoral results, social movements, ideological distributions in the political institutions, and changes in government (Kingdon 1984, 152-172). While the key activity in the policy stream is persuasion, the main activity characterising the politics stream is bargaining in order to build a winning coalition. This may involve granting concessions to some actors in order to gain their support for a given proposal.

Having briefly examined each of the three streams, it is now possible to go back to the crucial question of how policy change occurs. According to Kingdon, whilst streams largely flow independently from one another, they may come together at the time of a 'focusing event', such as a crisis. A problem has been acknowledged, a policy solution has been developed and is available, and there is some change in political circumstances, such as fluctuation in public opinion. At that time, a window of opportunity opens for a short period of time, thereby enabling a policy entrepreneur to push for a new policy. Thus, the role of policy entrepreneurs is crucial when the three streams come together. They seize the opportunity offered by the opening of the policy window to lobby and seek support for a specific policy proposal. Some resources are likely to help policy entrepreneurs in their endeavours, such as time, reputation, expertise, political connections, negotiating skills and an authoritative position in decision-making, amongst others (Kingdon, 1984, 180-181).

Although some criticisms have been levelled at Kingdon's framework, notably what has been perceived as an undue importance given to contingency or an over-emphasis on problem construction at the agenda stage (Howlett, McConnell and Perl, 2015, 421), it has established itself as one of the most influential approaches in public policy analysis (Béland and Howlett, 2016). The next section analyses the development of the EU's policy against the CBRN terrorist threat through the lenses of this Multiple Streams Framework.

**THE EU'S POLICY RESPONSE TO THE CBRN TERRORIST THREAT**

Before examining how the EU has addressed the CBRN terrorist threat, it is necessary to briefly present each of the CBRN weapons. *Chemical weapons* inflict harm through the toxic effects of chemical reactions (Ackerman, 2019). They are often categorised in five classes, namely irritants, choking or pulmonary agents, blister agents, blood agents and nerve agents (Newsome and Jarmon, 2016, 174). *Biological weapons* are harmful as a result of the infection of their target with biologically-produced toxins or pathogenic micro-organisms, which can be contagious or not (Ackerman, 2019). Historically, the greatest biological threats have been salmonella, botulinum, anthracis, and ricin (see The Hague Centre for Strategic Studies, 2016). *Radiological weapons* disperse radiological material, that is, material that radiates harmful electromagnetic energy. An example would be a so-called 'dirty bomb' (Ackerman, 2019). *Nuclear weapons* have an immense power of destruction derived from nuclear reactions – either nuclear fission, nuclear fusion, or a combination of the two processes. As explained by Newsome and Jarmon (2016, 187), '[a] single nuclear weapon detonated in a city could destroy built structures for dozens of miles, kill hundreds of thousands of people directly, render the city uninhabitable for decades, and distribute radioactive material globally (depending on weather and climatic conditions)'. In practice, there have been very few instances of successfully carried out terrorist attacks involving

CBRN materials. In June 1990, the Tamil Tigers used chlorine gas in an assault against a Sri Lankan Armed Forces Special Task Force camp in East Kiran (Hoffman, 2009). In Japan, the 'Aum Shinrikyo' cult used chemical weapons against various targets between 1990 and 1995, including phosgene, hydrogen cyanide, and the nerve agents sarin and VX (Hughes, 1998; Danzig et al., 2012). Concerning the use of biological weapons by individuals and terrorist groups, one can mention the use of salmonella by a cult in 1984 in the US, the failed attempts by the 'Aum Shinrikyo' cult to use anthracis and botulinum against several targets, as well as the mailing of letters containing anthracis spores or powdered ricin to various recipients, including US Senators and the US president, in the last few years (Newsome and Jarmon, 2016, 177-183).

Analysing the EU's policy response to the CBRN terrorist threat, one can distinguish two main periods in its development. Each of them is characterised by the prominence of a specific terrorist group on the international stage, al Qaeda in the case of the first period, which extended until about 2011 and Osama bin Laden's death, and Daesh as far as the second period is concerned. Political and policy developments in each of these periods are analysed through the lenses of the Multiple Streams Framework. In an adaptation of Kingdon's framework – which was originally created in the context of US politics, with a particular focus on the Congressional system – to the EU's context, the political stream focuses on the adoption of 'hard law', i.e. legal instruments that have binding force. This is in contrast to 'soft law', which includes guidelines, recommendations and conclusions identifying aims and targets that Member States should reach in specific areas, as well as action plans, strategies and programmes laying down the common measures that Member States are planning to develop and adopt with regard to certain policy issues (Terpan, 2013).

Such 'soft law' measures belong to the policy stream as they outline policy alternatives and are not binding on Member States.


**In the shadow of al Qaeda**

Shortly after the terrorist attacks on 11 September 2001, the United Nations Security Council adopted Resolution 1373 (2001), which '[noted] with concern the close connections between international terrorism and […] illegal movement of nuclear, chemical, biological and other potentially deadly materials'. Going further, a report of the US Administration to the United Nations Security Council in June 2003 warned that 'there [was] a high probability that al Qaeda [would] attempt an attack using a CBRN weapon within the next two years' (CBS News, 2003). In 1998, the then leader of al Qaeda, Osama bin Laden, had himself announced his intention to acquire and to use weapons of mass destruction (Mowatt-Larssen, 2010). Furthermore, he had declared in an interview with a Pakistani journalist in November 2001 that al Qaeda possessed chemical and nuclear weapons. This statement, combined with the fact that several links between various 'rogue' scientists and members of al Qaeda had been uncovered (Mowatt-Larssen, 2010), led the US intelligence and security services to assess that 'there was a real possibility that al Qaeda could develop a crude nuclear device' (Bunn and Wier, 2006, 145). In a speech given in February 2004, US President George W. Bush claimed that '[what] has changed in the 21st century is that, in the hands of terrorists, weapons of mass destruction would be a first resort – the preferred means to further their ideology of suicide and random murder' (quoted by Wright, 2007, 58).

Against that backdrop, the United Nations Security Council passed Resolution 1540 in April 2004, which identified the 'proliferation of nuclear, chemical and biological weapons, as well as their means of delivery' as 'a threat to international peace and security'. It created three

main obligations for all the United Nations Member States, namely '[to] refrain from providing any form of support to non-State actors that attempt to develop, acquire, manufacture, possess, transport, transfer or use nuclear, chemical or biological weapons and their means of delivery', '[to] adopt and enforce appropriate effective laws which prohibit any non-State actor to manufacture, acquire, possess, develop, transport, transfer or use nuclear, chemical or biological weapons and their means of delivery, in particular for terrorist purposes', and '[to] take and enforce effective measures to establish domestic controls to prevent the proliferation of nuclear, chemical, or biological weapons and their means of delivery'.

Although there had not been any instance of terrorist attack involving CBRN weapon by al Qaeda, and despite the warnings against 'excessive alarmism' over the issue of CBRN terrorism (see CATO Institute, 2017), the 2006 US National Strategy for Combating Terrorism still proclaimed that '[our] greatest and gravest concern (…) is WMD in the hands of terrorists' (White House, 2006, 12). In 2010, US President Obama emphasised once again that 'organi[s]ations like al Qaeda are in the process of trying to secure nuclear weapons or other weapons of mass destruction and would have no compunction at using them' (CNN, 2010). Furthermore, it was not only the US authorities that were concerned about the threat of CBRN terrorism, emanating in particular from al Qaeda. The security services of European countries, most notably the UK, shared this assessment, as previously shown by the quote of the then head of MI5.

The concerns of these officials and policy-makers were shared to a significant extent by researchers and experts. Already in 1999, Stern (1999: 1) had opened her influential book *The Ultimate Terrorists* with the following question: 'What if terrorists exploded a homemade

nuclear bomb at the Empire State Building in New York City?' She had argued that, although the probability of the use of nuclear weapons by terrorists remained low, it had recently increased and that such an event would have devastating consequences (Stern, 1999). In another prominent book also published in 1999 and entitled *The New Terrorism: Fanaticism and the Arms of Mass Destruction*, Laqueur (1999) argued that the nature of terrorism was evolving, as it was moving away from the calculated use of violence for political gains towards fanaticism and the pursuit of catastrophic destruction. According to him, '[for] the first time in history, weapons of enormous destructive power [were] both readily acquired and harder to track', leading him to warn against what he saw as a 'radical transformation, if not a revolution, in the character of terrorism' (Laqueur, 1999, 4). This echoed the opinion of other experts, who were also warning against the threat of so-called 'super-terrorism', 'mega-terrorism' or 'hyper-terrorism'. Such terms aimed to denote that Western countries now faced a new type of terrorist groups, which were perceived to be more dangerous and less predictable than their predecessors (Neumann, 2009, 3). It was also assumed that these 'new' terrorists would be particularly interested in using CBRN weapons because of their catastrophically devastating effects. Scholars and experts also highlighted the wide range of possible uses of CBRN weapons in terrorist attacks. For example, in the case of nuclear weapons, besides acquiring such weapons themselves, terrorists could commit acts of sabotage against nuclear plants (Laqueur, 1999, 72) or hijack a civilian aircraft and deliberately crash it on a nuclear power plant, which would cause a nuclear catastrophe resulting in significant human losses and environmental damage (Council on Foreign Relations, 2006; The Parliamentary Office of Science and Technology, 2004; Gale and Armitage, 2018, 1246).

Importantly, experts usually argued that the likelihood of terrorist attacks involving CBRN weapons was very low. For example, Laqueur (1999, 4) noted that he did 'not suggest that most terrorist groups [would] use weapons of mass destruction in the near future'. For their part, Newsome and Jarmon (2016, 169) claimed that '[for] the terrorist, firearms and explosives are familiar, mature, portable, cheap, easy-to-use technologies', whereas 'the terrorist would need new intents and capabilities to acquire and use CBNR weapons'. In the same vein, Post (2005, 148) emphasised that '[besides] the motivation or the willingness to inflict mass casualties by any means, terrorists must possess the technical and financial capabilities to obtain the materials and skills to weaponize such materials and carry out an attack'. Likewise, Bunn and Wier (2006) argued that 'the danger [of a nuclear terrorist attack] should not be exaggerated' (see also Lustick, 2006; Mueller, 2006). Nevertheless, after including such a caveat, most researchers tended to emphasise that, although the likelihood of a CBRN terrorist attack remained low, it had increased since the 1990s '[due] to globalization, which facilitates the spread of knowledge, capabilities and materials' (Meulenbelt and Nieuwenhuizen, 2015) and that an attack of that type could have extremely severe consequences (Laqueur, 1999; Stern, 1999; Combs, 2018).

Whilst the use of CBRN weapons became identified as a problem in the problem stream, policy alternatives to address it began to be generated in the policy stream. At the European Council meeting in Ghent in October 2001, tackling CBRN terrorism was highlighted as an important area for EU action, besides the five priorities that had been identified in the 'Anti-terrorism Roadmap' as the main components of the nascent EU counter-terrorism policy, namely police and judicial cooperation, international legal instruments, measures against the financing of terrorism, air security, and the coordination of the EU's global action (European Council, 2001). This resulted in the adoption of key policy documents in the following years,

in particular the 'Programme to improve cooperation in the European Union for preventing and limiting the consequences of chemical, biological, radiological or nuclear terrorist threats' in 2002 (Council of the European Union, 2002), the 'EU Strategy against proliferation of Weapons of Mass Destruction' in 2003 (also known as the 'Thessaloniki Action Plan') (Council of the European Union, 2003) and the 'EU Solidarity Programme on the consequences of terrorist threats and attacks (revised/widened CBRN Programme)' (Council of the European Union, 2004b). Furthermore, the EU Counter-Terrorism Strategy, which was adopted in December 2005, highlighted the importance of '[working] with partners and international organisations on […] non-proliferation of CBRN materials […], as well as [providing] technical assistance on protective security to priority third countries' (Council of the European Union, 2005, 11).

A first 'EU CBRN Action Plan' aiming to strengthen CBRN security in the EU was subsequently adopted in 2009 (Council of the European Union, 2009). It is evident from the introductory section of this document that concerns about the potential acquisition of CBRN materials by terrorist groups played a crucial role in the development of this action plan (Council of the European Union, 2009, 2). It identified the 'overall goal of the new CBRN policy' as '[reducing] the threat and damage from CBRN incidents to the citizens of the European Union, by way of a coherent, prioritised EU CBRN Action Plan, which involves all relevant stakeholders, including industry Representatives' (Commission of the European Communities, 2009, 5). The action plan, which comprised more than 100 measures, identified three main priorities, namely prevention, detection, as well as preparedness and response. 'Prevention' focuses on identifying high-risk CBRN materials and ensuring that these materials and the related facilities are kept secure and are controlled. 'Detection' concerns the important issue of having the capacity to actually detect CBRN materials, which

is crucial for both prevention and response. Finally, 'preparedness and response' cover a wide range of issues involved in the response to and recovery from CBRN incidents, such as emergency planning, information flows, modelling tools, and criminal investigation capacity. The adoption of this action plan led to several achievements, including the adoption of three (non-binding) EU lists of high-risk substances (concerning chemical, biological and radioactive/nuclear materials, respectively) and the development of information exchange and training on CBRN-related issues at the EU level (Council of the European Union, 2014, 36).

During that period, four pieces of legislation relevant to CBRN terrorism were adopted in the political stream. The first was the important Council Framework Decision of 13 June 2002 on combating terrorism, on the basis of a proposal that was pushed through by the European Commission following the opening of a window of opportunity in the aftermath of 9/11 (Kaunert, 2010b; Kaunert and Léonard, 2019). It is a key piece of legislation in the EU's counter-terrorism policy because, for the first time, it established a shared definition of terrorism for all EU Member States. Its Article 1 laid down that the 'manufacture, possession, acquisition, transport, supply or use of weapons, explosives or of nuclear, biological or chemical weapons, as well as research into, and development of, biological and chemical weapons' was to be deemed a terrorist offence. Another piece of legislation relevant to addressing the CBRN terrorist threat was adopted in 2009, namely Council Regulation (EC) No 428/2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items. However, in terms of policy change, it did not have the ground-breaking nature of the previous legislative instrument. It was mainly adopted to clarify the EU's rules on dual-use items, as there had been various amendments made to the original Council Regulation of 2000. The third legislative act relevant to CBRN terrorism adopted during that period was Decision No 1082/2013/EU on serious cross-border threats to health.

It notably established an 'Early Warning and Response System' (EWRS) in relation to serious cross-border threats to health, which notably included threats of biological origin, threats of chemical origin, as well as threats of 'unknown origin'.[3] Nevertheless, although there were some references to CBRN security in the explanatory memorandum included in the legislative proposal of the European Commission (2011), it is evident that this policy instrument mainly stemmed from public health debates and was only informed by CBRN-related concerns to a limited extent.

Finally, the fourth legislative act relevant to tackling the threat of CBRN terrorism passed during that period was Decision 1313/2013/EU on a Union Civil Protection Mechanism (UCPM), which was adopted by the European Parliament and the Council in December 2013. This instrument has considerably strengthened cooperation between participating states in the field of civil protection in order to effectively respond to man-made and natural disasters (Boin et al., 2013; Ekengren et al., 2006; Fuchs-Drapier, 2011; Bossong and Hegemann, 2015). It is to be interpreted in the light of the solidarity clause established by Article 222 of the Treaty on the Functioning of the European Union, which has established a legal obligation for the EU and its Member States to assist each other in situations where an EU country is the object of a terrorist attack or a natural or man-made disaster. The UCPM has two key components, namely the European Emergency Response Capacity (EERC) and the Emergency Response Coordination Centre (ERCC). The EERC (also known as the 'Voluntary Pool') was launched in 2014. At the time of writing, it brings together pre-committed assets from 23 participating states, which are ready for deployment to a disaster zone at short notice. These include rescue or medical teams, specialised equipment, transport

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[3] Health threats of radiological or nuclear origin are dealt with by the provisions of the Treaty establishing the European Atomic Energy Community.

equipment, and experts. It is from this pool that resources are drawn to respond to assistance requests. The EERC also incorporates the European Medical Corps, which consists of ready-for-deployment health emergency assets, such as specialised medical teams, field hospitals, and mobile laboratories. This has a potentially important role to play in implementing medical counter-measures in case of a CBRN attack. Pre-defined arrangements of response resources are called 'civil protection modules', two of which are specific to CBRN, namely 'CBRN detection and sampling', and 'search and rescue in CBRN conditions' (European Commission, 2012: 6).

**In the shadow of Daesh… and Russia**

As al Qaeda underwent a process of decline, especially after the death of its leader Osama bin Laden in 2011, Daesh – originally one of its splinter groups – rose to prominence on the international stage and proclaimed a new 'caliphate' in 2014 (Martin and Solomon, 2017). Concerns were rapidly expressed by researchers and officials alike over the group's interest in acquiring CBRN weapons. From 2012 onwards, repeated allegations were made that chemical weapons, such as chlorine, sarin and sulphur mustard agents, had been used in the Syrian conflict, not only by the regime forces, but also by Daesh (McLeish, 2017; UN News, 2019). It was also reported that the terrorist group had 'developed at least a small-scale chemical weapons program[me], and may have manufactured low-quality blister agent or obtained chemical arms from undeclared or abandoned [Syrian] stocks' (Chivers, 2015). In an article on Daesh and chemical weapons written in 2016, Quillen (2016) argued that 'a clearer picture emerges of a dedicated and increasingly successful chemical weapons program[me] that threatens military forces and civilian populations around the world'. European states, in particular, became increasingly concerned about the possibility that returning foreign fighters involved in the Syrian conflict might use chemical weapons

(McLeish, 2017). Shortly after the terrorist attacks in Paris in November 2015, which were perpetrated notably by several terrorists with links to Syria, French Prime Minister Manuel Valls declared the following: 'We must not rule anything out. I say it with all the precautions needed. But we know and bear in mind that there is also a risk of chemical or bacteriological weapons' (Withnall, 2015). In the same vein, a briefing of the European Parliamentary Research Service (2015) released a month later urged the EU and its Member States to 'prepare for the possibility of a chemical or biological attack on their territory' by Daesh.

Furthermore, in its 2016 European Union Terrorism Situation and Trend (TE-SAT) report, the EU Agency for Law Enforcement Cooperation (Europol) (2016, 8) noted that '[the] phenomenon of individuals travelling for terrorist purposes to conflict zones increases the risk that expertise in the use of chemical weapons can be transferred to the European Union by returning foreign terrorist fighters'. In addition, the frequent appearance of CBRN-related topics in online terrorist propaganda was highlighted in the 2018 TE-SAT report of Europol (2018, 14). In particular, it was noted that there was a significant increase in the number of tutorials for conducting small-scale CBRN attacks being uploaded on the Internet. Those usually recommended using toxic industrial chemicals that are available in the EU thanks to their dual-use nature (Europol, 2018). As for the European Commission (2017), it emphasised that the threat of CBRN terrorism had a low probability, but carried high impact risks. 'Even at a small scale, a CBRN attack may have a considerable impact on the societies and economies against which they are used, resulting in significant and lasting disruption, widespread fear and uncertainty' (European Commission, 2017, 2).

Against that backdrop, a large number of policy alternatives have been developed in the policy stream. In May 2012, the European Commission (2012) released a Progress Report on

the Implementation of the EU CBRN Action Plan. It highlighted that '[the] CBRN Action Plan with its 124 actions presents a real challenge to the Commission and Member States, both in terms of its sheer size, i.e. the number of actions, as well as coordination requirements' (European Commission, 2012, 3). Perhaps surprisingly then, given this conclusion, the following main step was to bring CBRN issues together with another policy issue, namely the security of explosives, which had also previously been the object of an action plan in the form of the EU Action Plan on Enhancing the Security of Explosives of 18 April 2008. This led to the development of 'Draft Council Conclusions on the New CBRNE Agenda' in November 2012 (Council of the European Union, 2012), which were followed in May 2014 by the adoption of a 'Communication on a new approach to the detection and mitigation of CBRN-E risks' by the European Commission (2014). This document put forward various actions aiming to facilitate practical cooperation for the detection and mitigation of CBRN-E risks at the EU level, including better detection of threats, better research and improved training initiatives.

However, this new emphasis on the link between CBRN materials and explosives appeared to be downplayed in later developments. In 2017, the European Commission published a Communication on an Action Plan to enhance preparedness against chemical, biological, radiological and nuclear security risks (European Commission, 2017). The introductory section of this document, which bore the title 'the evolving threat' (European Commission, 2017, 2), clearly showed that terrorism concerns were the main source of impetus for the further development of EU cooperation against CBRN risks. The European Commission notably underlined that 'there [were] credible indications suggesting that terrorist groups might have the intention of acquiring CBRN materials or weapons and [were] developing the knowledge and capacity to use them' (European Commission, 2017, 2). Against this

backdrop, the action plan – which Member States have been called to fully implement by the end of 2019 (European Commission, 2018a, 14) - identified four priorities: (1) reducing the accessibility of CBRN materials, (2) ensuring a more robust preparedness for and response to CBRN security incidents, (3) building stronger internal-external links in CBRN security with key regional and international EU partners, and (4) enhancing the knowledge of CBRN risks. Thus, the 2017 CBRN Action Plan contained several measures aiming to reinforce civil protection preparedness and response to CBRN incidents (European Commission, 2017, 7-8). First of all, it was foreseen that the European Commission and the Member States would improve training and exercises for civil protection first responders. Moreover, Member States were encouraged to commit new CBRN capacities to the EERC, which should be strengthened, including the EU Medical Corps.

However, 2018 saw yet a new re-definition of CBRN threats, this time in the context of the Salisbury attack. In March 2018, Sergei and Yulia Skripal were poisoned with a Novichok class agent (McLeish and Revill, 2018). They eventually managed to recover (BBC News, 2018), but another member of the public died following her exposure to the nerve agent.[4] In a Joint Communication of the European Commission and the High Representative for Foreign Affairs and Security Policy adopted in June 2018, CBRN threats were now included under the umbrella of 'hybrid activities by states and non-state actors'. Following the European Council's statement that 'it [was] highly likely that the Russian Federation [was] responsible' (Council of the European Union, 2018, 1), the Joint Communication highlighted how the 'nerve agent attack in Salisbury last March further underlined the versatility of hybrid threats and the multitude of tactics now available' (European Commission and High Representative

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[4] The Russian authorities had already been accused of having masterminded the poisoning of former spy Alexander Litvinenko with radioactive polonium-210 (BBC News, 2016).

of the Union for Foreign Affairs and Security Policy, 2018, 1). As a result, CBRN risks played a far more prominent role in the Joint Communication of 2018 than in its predecessor of 2016 (European Commission and High Representative of the Union for Foreign Affairs and Security Policy, 2016). The European Commission and the High Representative (2018, 10) concluded that '[the] March incident in the UK underlined the wide spectrum of hybrid warfare and the particular need for resilience in the face of Chemical, Biological, Radiological, and Nuclear-related threats'.

Against the backdrop of these debates focusing on Daesh and the Salisbury attack, as well as the development of a wide range of policy alternatives, the EU adopted three main legislative instruments relevant to the threat of CBRN terrorism during that period. The first was Directive (EU) 2017/541 of the European Parliament and of the Council of 15 March 2017 on combating terrorism. As shown by the explanatory memorandum attached to the proposal, the European Commission (2015) took advantage of the opening of a window of opportunity following various terrorist attacks in Europe involving foreign terrorist fighters to push through an instrument strengthening the existing legislative provisions aiming to combat terrorism, which had been adopted in 2002. Of particular relevance to combating the threat of CBRN terrorism was Article 8, which requires Member States to criminalise the intentional receiving of training for terrorist purposes, including 'receiving instruction on the making or use of explosives, firearms or other weapons or noxious or hazardous substances'. The second key legislative instrument adopted during that period was Council Regulation (EU) 2018/1542 of 15 October 2018, which put in place new restrictive measures against the proliferation and use of chemical weapons. This instrument enabled the EU 'to impose sanctions, consisting of travel bans to the EU and asset freezing for persons and entities involved in the development and use of chemical weapons anywhere, regardless of their

nationality or location' (European Commission, 2018a, 14). Its recital made a direct reference to the Salisbury attack, which opened a window of opportunity for this new piece of legislation to be passed. The third legislative instrument relevant to CBRN terrorism was Decision (EU) 2019/420 of 13 March 2019, which established 'rescEU' in order to strengthen the UCPM. 'RescEU' focuses on the setting up of a new EU reserve of capacities, as well as the establishment of a new EU Civil Protection Knowledge Network in order to facilitate the sharing of knowledge and best practices (European Commission, 2018b). One of the main justifications provided by the European Commission for the creation of rescEU implicitly referred to threats such as CBRN threats, as it noted that 'the emerging risks landscape creates the need to collectively reflect on capacities needed to face *risks of low probability but with a high impact*, currently lacking in Member States' (European Commission, 2018b, 2; italics added). However, although this instrument may eventually support responding to CBRN threats, the main driving force behind its development was actually natural disasters, in particular forest fires.

**CONCLUSION**

This article set out to examine how the EU has sought to address the threat of CBRN terrorism. It is an important topic for analysis as the existing literature on the development of EU counter-terrorism cooperation has tended to neglect this policy dimension. This is problematic since there have been growing concerns, especially after 9/11, that terrorist groups could use CBRN weapons. More recently, some observers have been particularly alarmed that foreign terrorist fighters could return to Europe armed with the knowledge or the materials for conducting terrorist attacks involving chemical weapons, as there have been serious allegations of their use in the Syrian conflict. Drawing upon Kingdon's Multiple Streams Framework, this article has presented four main findings.

First of all, the EU has significantly developed its response to the CBRN terrorist threat. However, as has largely been the case with its counter-terrorism policy more generally, it has followed a piecemeal approach to a significant extent. Although CBRN terrorism has been identified as a significant security threat, the EU has not followed a specific strategy to address it. Interestingly, in the first stages of the development of EU counter-terrorism cooperation, policy documents on the specific matter of CBRN terrorism were adopted, but this issue was subsequently subsumed under other policy issues. Thus, some form of EU response to CBRN terrorism has gradually emerged in a somewhat haphazard way as the result of the adoption of various instruments mainly developed for addressing other policy issues (e.g. health, crisis management) or broader issues (e.g. CBRN materials in general) that also contain measures relevant to tackling the CBRN terrorist threat.

Secondly, the application of the Multiple Streams Framework has revealed high levels of activity in both the problem and policy streams. With regard to the problem stream, CBRN terrorism has been widely identified as a security threat, particularly in the aftermath of 9/11. After the acute character of the threat had somewhat decreased as a result of the non-use of CBRN weapons by al Qaeda in contrast to predictions, it grew again with the strengthening of Daesh and the realisation that they had acquired and used chemical weapons. Nevertheless, there have been prolonged debates, especially amongst researchers, as to the likelihood of a CBRN terrorist attack, given the very few instances in which terrorist attacks to date have actually involved CBRN weapons. In general, studies have tended to emphasise the existence of significant hurdles for terrorists seeking to acquire and use CBRN weapons, but have agreed that the consequences of a CBRN attack could be devastating, making it a 'low-probability, but high-risk' type of event.

Concerning the policy stream, one can note that a high number of policy alternatives have been generated for addressing the threat of CBRN terrorism. It is also striking to observe that, apart from some policy documents in 2002-2003 that were dedicated to the specific issue of CBRN terrorism, most policy proposals have considered this issue as part of tackling a broader issue, such as dealing with CBRN materials in general or 'hybrid threats', as epitomised by the 2018 Joint Communication. This could be seen as an attempt at presenting this specific issue of CBRN terrorism – which is characterised by a very low probability – in ways that are seen as more conducive to the adoption of policy measures to tackle it. The fact that the numerous predictions around the use of CBRN weapons by al Qaeda did not materialise may have made the use of such strategies even more important. However, this has meant that the EU's response to the CBRN terrorist threat has developed in a fragmented fashion and has faced significant coordination challenges, given the high number of stakeholders involved.

Thirdly, activities in the political stream have been more limited, especially in comparison with the problem and policy streams. The proportion of binding legal instruments in the EU's policy against the CBRN terrorist threat has been rather modest, although it is important to acknowledge that some of those concern crucial issues, such as the legislation requiring Member States to criminalise the manufacturing, possession, acquisition, transport, supply or use of CBRN weapons. Nevertheless, it remains that a very significant proportion of the EU's policy outputs concerning the CBRN terrorist threat has taken the form of 'soft law', with all its limitations. In particular, it is not clear to what extent the policy objectives that have been identified in the various strategies and action plans have been fulfilled in practice as there are no clear reporting mechanisms or obligations for Member States. It is therefore difficult to

assess the extent to which policy change has taken place in practice and even more challenging to evaluate the effectiveness of the EU's response to the CBRN terrorist threat. Furthermore, there appears to be two main reasons for this relative lack of translation of numerous policy debates and policy proposals into concrete pieces of legislation. First of all, as shown in the analysis of the problem stream, the likelihood of a terrorist attack involving CBRN weapons has generally been evaluated as being very low, which means that other policy issues may have regularly taken precedence. Moreover, and linked to that first reason, is the fact that there have been numerous proposals being debated on the basis of different ways of interpreting and presenting the CBRN terrorist threat, thereby making it more difficult for a specific policy proposal to emerge from the policy stream.

Finally, with regard to focusing events, the article has demonstrated that no CBRN terrorist attack has been necessary for a window of opportunity to open for measures related to CBRN terrorism to be pushed through. The empirical analysis has shown how, in practice, the focusing events were high-profile terrorist attacks, such as 9/11 and the terrorist attacks in Paris and Brussels in 2015 and 2016. Those were important in confirming the existence of a significant terrorist group. At the same time, there was a widely shared assumption that, given their symbolic and lethal power, major terrorist groups would seek to acquire and use CBRN weapons. In that way, a terrorist attack with conventional weapons could become a focusing event enabling the opening of a window of opportunity, which would then be seized by those seeking to develop the EU's response to the CBRN terrorist threat.

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