Ingeborg Tveter Lunde

The European Commission in Managing Transboundary Health Crises

A qualitative study on the capacities of the European Commission to manage transboundary health crises.

Bachelor's project in European Studies with Political Science
Supervisor: Tobias Etzold
May 2021

Bachelor's project

NTNU
Norwegian University of Science and Technology
Faculty of Humanities
Department of Historical Studies

NTNU
Kunnskap for en bedre verden

Ingeborg Tveter Lunde

The European Commission in Managing Transboundary Health Crises

A qualitative study on the capacities of the European Commission to manage transboundary health crises.

Bachelor's project in European Studies with Political Science
Supervisor: Tobias Etzold
May 2021

Norwegian University of Science and Technology
Faculty of Humanities
Department of Historical Studies

Abstract

The outbreak of the COVID-19 pandemic brought renewed attention to the complex are of public health within the European Union (EU). In recent years, crises have become increasingly transboundary in nature, and the pandemic demonstrated just how fast a crisis in one corner of the world can escalate into a global crisis. As the EU's Member States are interwoven in a unique manner, this leads the EU to have a particularly heightened need for coordinated response to such transboundary crises. While the EU has a unique set of competent institutions providing advice to its Member States, there were large initial discordances in countermeasures undertaken by the Member States.

For this reason, the thesis is a case study of public health in the EU, and transboundary crisis management. The thesis determines the capacities of the European Commission in managing transboundary health crises and how these have expanded following public health emergencies. This is done in a thorough qualitative document study of the EU's legal framework and analysis of the Commission's crisis management of the three health emergencies: SARS, H1N1 and COVID-19.

Sammendrag

Utbruddet av COVID-19 pandemien skapte fornyet oppmerksomhet rundt det komplekse temaet, helsepolitikk i den Europeiske Union (EU). Gjennom de siste årene har kriser blitt stadig mer grenseoverskridende, og pandemien viste nettopp hvor fort en krise i et hjørne av verden kan eskalere og bli til en global krise. Ettersom EUs medlemsstater er integrert på en unik måte, fører dette til at EU har et ekstraordinært behov for koordinert respons. Til tross for at EU har et unikt sett med kompetente institusjoner som rådfører medlemsstatene sine, var det tydelige uoverensstemmelser i medlemsstatenes tiltak for å motvirke spredningen av pandemien.

På bakgrunn av dette, er denne oppgaven et casestudie av helsepolitikk i EU og håndteringen av grenseoverskridende kriser. Oppgaven skal avgjøre EU-kommisjonens kapasitetsevne til å håndtere slike kriser og hvordan disse kapasitetene har utvidet seg etter helsekriser. Dette gjøres gjennom et grundig dokument studie av EUs juridiske rammeverk, samt gjennom en analyse av Kommisjonens tidligere håndtering av de tre helsekrisene: SARS, H1N1 og COVID-19.

Table of Contents

List of Abbreviations ix

1 Introduction 1

2 Conceptualization and Methodology 3

2.1 Conceptualization 3

2.1.1 Transboundary Crises 3

2.1.2 Capacities in Managing Transboundary Health Crises 4

2.2 Methodology 5

3 Empirical Evidence 6

3.1 Legal Framework for the EU’s involvement in the Public Health Sector 6

4 Empirical Analysis 8

4.1 Transboundary Crises and their Management 8

4.1.1 2002-03: SARS 8

4.1.2 2009-2010: H1N1 10

4.1.3 2020 – Present: COVID-19 12

4.2 Discussion 14

5 Conclusion 17

6 Bibliography 19

List of Abbreviations

Commission	European Commission
Decision	Decision 1082/2013 on serious cross-border threats to health
ECDC	European Centre for Disease Prevention and Control
EEA	European Economic Area
EMA	European Medicines Agency
EU	European Union
EWRS	Early Warning and Response System for communicable diseases
HSC	Health Security Committee
JPA	Joint Procurement Agreement
OLP	Ordinary Legislative Procedure
SARS	Severe Acute Respiratory Syndrome
TEU	Treaty on European Union
TFEU	Treaty on the Functioning of the European Union.
WHO	World Health Organization

1 Introduction

The European Union (EU) is founded on the idea of free movement and fading borders between EU countries as the free movement of goods, services, labor and capital has been a union priority since 1957 (Boin, Ekengren, & Rhinard, 2013, p. 100). This led to physical and technical barriers being lowered, regulations were made compatible and intertwined critical infrastructures (Boin et al., 2013, p. 100). In doing so, Member States became linked to one another, and while it can be argued that preserving the four freedoms has been the foremost EU-objective, it has not come without drawbacks. As a result, an incident in one corner of Europe can rapidly escalate into a crisis affecting the whole Union.

Throughout recent years, crises have become increasingly transboundary in nature, making crisis management exceptionally more complex for Member States to handle individually (Boin et al., 2013, p. 100). Arguably, the main purpose of the EU is the enabling of collective action in the face of transboundary crises that Member States cannot address on their own (Pacces & Weimer, 2020, p. 284). Examples of such transboundary crises include, but is not limited to: transport bombings in Europe, large-scale natural disasters, waves of immigrants, cyber-attacks and epidemics/pandemics (Ansell, Boin, & Keller, 2010, p. 195; Boin et al., 2013, p. 101). Continuing the latter, in the globalized world of the 21st century, travelling across borders has never been easier. This enables the transmission of infectious diseases around the globe to increase its speed and magnitude (Van-Kolfschooten, 2019, p. 634). This has become evident through various communicable disease outbreaks, such as: the BSE/mad cow disease (1990's), Severe Acute Respiratory Syndrome (SARS) (2002-03), the H5N1/bird flu (2005), the H1N1/swine flu (2009-10) and Ebola (2013-2016) (Boin et al., 2013, p. 118; Van-Kolfschooten, 2019, p. 636). Undoubtedly, the most recent and prominent example is the 2020 outbreak and ongoing COVID-19 pandemic (Beaussier & Cabane, 2020, p. 808).

While the EU's role in preparedness, monitoring and coordination of health emergencies has been enlarged over the past twenty years, Member States were surprisingly uncoordinated during the first wave of COVID-19 (Beaussier & Cabane, 2020, p. 808). The spread of COVID-19 made it explicit to the entire world that infectious diseases do not respect borders (Pacces & Weimer, 2020, p. 283). Consequently, the pandemic revealed a lack of effectiveness in EU health protection and exposed challenges in the EU's ability to provide joint and timely responses to large-scale pandemics (Beaussier & Cabane, 2020, p. 808). This appeared to be rather contradictory to the European Commission's (Commission) statement that in the event of a cross-border outbreak, response must be quick, targeted and coordinated (European Commission, 2020a).

It may be argued that the EU, as a diversely competent organization, should have an important role in managing transboundary health crises. Still, public health in the EU remains a national competence through Article 168 of Treaty on the Functioning of the European Union (TFEU) (Official Journal of the European Union, 2008). The Article also assigns different functions to the different institutions of the EU (Official Journal of the

European Union, 2008). However, it is the functions tasked to the Commission that will be of focus and will serve as the unit of analysis of this thesis in order to answer its research question: what capacities does the European Commission have in managing transboundary health crises and to what extent have these been expanded following public health emergencies?

In exploring the topic of the EU's management of transboundary health crises, one can see some kind of a thematic division in the literature. Existing literature tends to covers either the topic of transboundary crisis management (Ansell et al., 2010; Backman & Rhinard, 2017; Blockmans & Wessel, 2009; Boin et al., 2013; Boin, Rhinard, & Ekengren, 2014; Riddervold, Trondal, & Newsome, 2021), or EU health capacities (Bartlett & Naumann, 2021; Bishop, Hervey, & Young, 2017; Greer, 2006; Jordana & Trivño-Salazar, 2020; Mossialos, Permanand, Baeten, & Hervey, 2010). Rarely, the two are combined (Beaussier & Cabane, 2020; Hervey & De Ruijter, 2020). Two particular sources have been found to combine the two aspects of EU health competences in transboundary crisis management with inputs of previous crises (De Ruijter, 2019; Frischhut & Greer, 2017). Still, in the few existing cases, the exemplification of previous health crises are somewhat superficial. However, in light of the COVID-19 pandemic, there has been a significant expansion in literature regarding the EU's management of the crisis and/or predictions of a future European Health Union (Brooks & Geyer, 2020; Purnhagen, Ruijter, Flear, Hervey, & Herwig, 2020). This literature will be throughout the thesis in order to conceptualize the broad aspects of transboundary crises, capacity and capacity building.

As a result of the scarcity in literature on the specific topic, taking pre-existing literature into account, this thesis will shed light on health capacities in managing transboundary crises within the EU, in addition to an analysis and discussion regarding the expansion of these capacities following health crises.

In comparing the existing literature the common feature of using a qualitative research design, becomes evident. This is often done with a focus on official and legal documents to present empirical evidence and arguments. The same research design will be used in this thesis, as this will allow for the best answer to the research question. Additionally, a thorough analysis of SARS, H1N1 and COVID-19 will contribute in answering to what extent capacities have expanded following health emergencies. However, as COVID-19 is an ongoing pandemic, it cannot be analyzed in a concluding manner but can provide insight into the current effectiveness of the Commission capacities and any possible future expansion.

Consequently, the paper is threefold: (1) a conceptualization of key terms will be made along with an methodological outline, before (2), the empirical evidence of the thesis will be encapsulated in order to provide the basis of the thesis' (3), empirical analysis and discussion of the Commission's capacities to manage transboundary health crises. Lastly, the thesis will conclude its findings, with the main claim being that Commission has more capacities to manage transboundary health crises than initially thought, and that these expansions have to a large extent been forged in crisis, following the SARS epidemic and the H1N1 pandemic.

2 Conceptualization and Methodology

2.1 Conceptualization

As mentioned, the thesis offers insight into the rather broad aspects of transboundary health crises, capacity and capacity building, thus making it necessary to elaborate and contextualize these further.

2.1.1 Transboundary Crises

Firstly, it is important to explicate that in this thesis, transboundary crisis management refers to internal cross-border crises within the EU. Also noteworthy is that the term "cross-border" is frequently used in various sources in reference to transboundary crises.

A crisis can be defined as a threat against the core values or life-sustaining functions of a social system, requiring urgent action under conditions of deep uncertainty (Ansell et al., 2010, p. 196). Since crises have become increasingly transboundary in nature, one can define a transboundary crisis within the EU to be an acute threat to the life-sustaining systems or critical infrastructures of multiple Member States (Boin et al., 2014, p. 131). Also, by integrating Member States to have open borders, an increase in vulnerability towards transboundary crises, becomes evident (Boin et al., 2014, p. 131). Transboundary crises can be set apart from localized crises as they require unprecedented coordination and room for extreme adaptation under circumstances where this is hard to accomplish (Ansell et al., 2010, p. 204). This being closely related to the defining characteristic that transboundary crises generate problems in that they originate, travel and manifest across multiple boundaries: geographic, political, cultural and legal (Backman & Rhinard, 2017, p. 262).

Ansell, et.al (2010, p.196), contextualizes transboundary crises into the three dimensions of boundaries, functionality and time: The first dimension refers to boundaries, as crises typically fall within a specific geographical area. However, transboundary crises do not respect territorial boundaries and can therefore threaten multiple cities, countries or even continents. Furthermore, a crisis can cross boundaries both horizontally and vertically. Vertical-crossing refers to lower levels of government (cities or provinces) needing assistance from the higher levels of government (national, regional or international). Whereas, horizontal-crossing refers to crises that cross political jurisdictions operating at the same level of government, such as two cities or two countries. Transboundary crisis management becomes increasingly difficult when both horizontal and vertical coordination is needed. The second dimension refers to functionality. While a crisis can often fall neatly within one policy area, transboundary crises are characterized by the crossing of functional boundaries, often threatening severe life-sustaining systems or infrastructure. The third dimension is time, as many crises have delimited specters of time with a defined beginning and end, while transboundary crises can transcend time and fester deep roots that will have implications for years to come. (Ansell et al., 2010, p. 196).

Arguably, managing transboundary health crises can be contextualized into all these dimensions. Health crises cut across large geographical areas, spreading along both horizontal and vertical dimensions. Thereby creating the necessity of coordination among

all levels of government, going beyond multiple national-political jurisdictions. Moreover, health crises cross functional dimensions: "Health is a precondition for our society and economy to function" (European Commission, 2020a, p. 1). Thus, demonstrating how health is of utmost importance for a society to function. As health affects various aspects of life, health crises can transcend time in multiple ways. For instance, the primary focus during a health crisis will be containment and to ensure people's health safety. However, measures to ensure this can cause major future repercussions, for example by severely hurting the economy. As health crises clearly cuts across all three dimensions, the area's complexity is made clear, thereby underlining the importance of having effective transboundary crisis management capacities.

2.1.2 Capacities in Managing Transboundary Health Crises

The need for effective tools to manage transboundary crises is clear. Still, EU Health law and policy has been conceptualized as a "patchwork" of various different policy domains, and described as differential, accidental and discontinuous (Guy & Sauter, 2017, p. 17). This thesis will clarify what this "patchwork" consists of and in order to do so, conceptualization of capacities and capacity-building in the management of transboundary health crises, is necessary.

Boin, et.al (2014, p.132) argue that crises such as the Chernobyl nuclear power plant explosion in 1986 and the 1990s Creutzfeldt-Jakobs disease (BSE crisis) were some of the EU's earliest encounters with transboundary crises and exposed the EU's inability to provide a quick and coordinated response. These demonstrated that at a minimum, the EU needs to have capacities to share information, foster rapid and joint decision-making and to speak with a unified voice, in order to manage such crises (Boin et al., 2014, p. 132). In this sense, the expansion of capacities in managing transboundary health crises can be argued to have occurred in the aftermath of health crises (Frischhut & Greer, 2017; Hervey & De Ruijter, 2020).

For instance, Frischhut & Greer (2017, p.331) argue that two major communicable disease crises led Member States to willingly transfer health competences onto an EU level through the 1992 Maastricht Treaty. In their argument, this transfer followed the 1980s HIV/AIDS pandemic and the BSE crisis due to the involvement of EU institutions in managing these (Frischhut & Greer, 2017, p. 321). Moreover, Hervey & De Ruijter (2020, p.730) make three similar arguments: (1) that in 1992, the tobacco advertising litigation saga and the HIV/AIDS pandemic formed important backdrops of discussion during the Maastricht treaty; (2) in the amendments of health through the Amsterdam Treaty, the BSE crisis had put enormous political pressure on Member States to develop a "Union" answer and; (3) by 2008, the anthrax scare in 2001 followed by the H5N1 influenza and SARS, led to a strengthening of EU health capacities though the Lisbon Treaty amendments. Thus, capacity-building refers to developments in EU public health capacities, over time.

The further refinement of the term "crisis management capacities" is necessary. Over time, the term has refined into seven steps: detection, sense-making, decision-making, coordination, meaning-making, communication and accountability (Backman & Rhinard, 2017, p. 262). The aim of these seven being to capture both the process and the challenges involved in effective transboundary crisis management (Backman & Rhinard, 2017, p. 262). As the thesis seeks to determine the Commission's crisis management capacities, a broad definition of the term will be used: the politico-administrative features

of the European Commission relevant to one or more of the seven tasks of effective crisis management mentioned above (Backman & Rhinard, 2017, p. 262).

2.2 Methodology

The thesis takes the form of a qualitative method with a focus on document studies to conduct its empirical evidence. A document study is a way to generate qualitative data and can be used in both pure document studies and as secondary data (Tjora, 2017, pp. 182-183). This thesis will be a pure document study building upon case-specific-, general- and research documents in order to gain empirical evidence (Tjora, 2017, p. 183). As this thesis is a case study of public health in the EU and transboundary crisis management, all studied documents will be case-specific towards this topic. The thesis includes the study of general documents including EU legislation, official publications and reports of the Commission and its affiliated agencies, in addition to their official web pages.

While many EU institutions would serve as interesting units of analysis, the Commission has been found to house the most capacities to manage transboundary crises. As the EU's largest bureaucratic and supra-national organization, the Commission is constantly working in line with European interests (Backman & Rhinard, 2017, p. 262; Hooghe & Rauh, 2017, p. 198). Furthermore, the Commission is the policy-initiating institution, with the virtually exclusive Treaty right to draft legislative proposals, constituting the beginning of the ordinary legislative procedure (OLP). Thus, the Commission can initiate health policies. Also, the Commission continuously publishes reports, communications and information on its affairs which greatly enriches the document study of the thesis. Therefore, despite document studies being somewhat time consuming due to the necessity of studying vast amounts of documents, the research design is very beneficial as it provides great diversity on the topic at hand. Furthermore, the availability of numerous official documents ensures that the empirical evidence gathered stems from the most reliable source possible.

As conceptualized, capacity-building refers to changes over time. For this reason, the empirical sections of this thesis will investigate changes in EU health capacities, specifically the Commission's capacities by investigating legal changes set out by the treaties of Maastricht, Amsterdam and Lisbon. Moreover, three examples of transboundary health crises will be analyzed in order to show the development of Commission capacities following health emergencies. The three examples being: SARS, H1N1 and COVID-19, as these a have been found to contribute the most to expanding Commission capacities within health. The three examples will be analyzed along the conceptualization's seven steps of crisis management capacities: detection, sense-making, decision-making, coordination, meaning-making, communication and accountability.

In addition, various EU agencies will be examined, when their capacities are closely linked to the Commission, such as the European Centre of Disease Prevention and Control (ECDC), the network committee for Early Warning and Response System to communicable diseases (EWRS), the Health Security Committee (HSC) and the European Medicines Agency (EMA).

Combined, all empirical evidence will create a complete image of the Commission's capacities in managing transboundary health crises, thus allowing to answer the research question of the thesis.

3 Empirical Evidence

3.1 Legal Framework for the EU's involvement in the Public Health Sector

As demonstrated, managing transboundary health crises has a natural cross-cutting dimension and thus cannot be limited to a single legal document (Frischhut & Greer, 2017, p. 315). This section will demonstrate the enlargement of EU and Commission capacities over the years, through various treaty reforms and decisions. For instance, Decision 1082/2013 on serious cross-border threats to health (Decision) was a vital contribution to expanding EU capacities in matters of health, and will therefore be elaborated upon.

Health capacities were first inserted onto an EU-level with the 1992 Maastricht Treaty, renamed the Treaty on European Union (TEU) (Bartlett & Naumann, 2021, p. 8). Since then, the EU has been required under Article 129 to contribute to the attainment of a high level of health protection for its citizens (Official Journal of the European Communities, 1992). The TEU tasked the EU with capacities to prevent "major health scourges", to encourage cooperation between Member States, and if deemed necessary, lend support to their action (Official Journal of the European Communities, 1992). The TEU further allocated the Commission with the specific capacity of taking any useful initiative to promote such coordination (Official Journal of the European Communities, 1992).

Adding to Article 129 TEU, the amended Article 152 of the Amsterdam Treaty explicated how Union action was to complement national policies directed towards improving human illness, diseases, and to obviate sources of danger to human health (Official Journal of the European Communities, 1997).

The most recent EU-treaty amendment is the 2008 Lisbon Treaty (TFEU), and therefore regulates the EU's responsibilities in the public health sector through a number of articles (Official Journal of the European Union, 2008). Firstly, Article 6 expanded the EU's coordinating role to have competences to carry out actions that support, coordinate or supplement actions of the Member States in the protection and improvement of human health. More importantly was the amendment and renumbering of Article 152 of the Amsterdam Treaty to Article 168 TFEU, as the sole article dedicated to public health. Article 168(1) introduced transboundary health crises as a Union competence, in that any action shall cover the fight against major health scourges by monitoring, early warning of and combating serious cross-border threats to health. Moreover, Article 168 allocated capacities to the Commission to work in close contact with Member States to promote coordination through initiatives aimed at: "the establishment of guidelines and indicators, the organization of exchange of best practice, and the preparation of the necessary elements for periodic monitoring and evaluation." (Official Journal of the European Union, 2008).

Additionally, acting in accordance with the OLP, Article 168(5) states that the European Parliament (EP) and the Council may adopt incentive measures designed to protect and improve human health to combat serious cross-border threats to health on proposal from

the Commission (Official Journal of the European Union, 2008). To exemplify; Decision 1082/2013 was on proposal from the Commission and greatly expanded the EU's capacities in matters of health as it:

> […] lays down rules on epidemiological surveillance, monitoring, early warning of, and combating serious cross-border threats to health, including preparedness and response planning related to those activities, in order to coordinate and complement national policies (Official Journal of the European Union, 2013).

The aim of the Decision being to further support cooperation and coordination amongst Member States in controlling the spread of severe human diseases and to combat other serious cross-border threats to health (Official Journal of the European Union, 2013). Moreover, its Article 2(1a) declare communicable diseases to be a serious cross-border threat to health requiring of public health measures (Official Journal of the European Union, 2013). This illustrates a significance in capacity-building for transboundary crisis management in health.

Importantly, the decision itself specifically defined serious cross-border threats to health to be:

> A life-threatening or otherwise serious hazard to health of biological, chemical, environmental or unknown origin which spreads or entails a significant risk of spreading across the national borders of Member States, and which may necessitate coordination at Union level in order to ensure a high level of human health protection (Official Journal of the European Union, 2013).

This definition can be considered a vital contribution to the legal texts of the EU in managing transboundary health crises. The Decision also clarifies methods of cooperation and coordination between the various EU actors (Official Journal of the European Union, 2013), such as the Commission and its affiliated agencies. However, as the Decision was passed in 2013, it cannot be applied to the health crises prior to this. In this thesis, the Decision is only relevant in the analysis of COVID-19. Its importance in expanding the Commission's health capacities will be analyzed in more detail in the thesis' discussion.

4 Empirical Analysis

4.1 Transboundary Crises and their Management

This section will cover the Commission's management of three previous health crises and demonstrate the expansion of its capacities following these. The examples will be analyzed along the previously mentioned seven steps of crisis management capacities: detection, sense-making, decision-making, coordination, meaning-making, communication and accountability. This allows for a structured review of the Commission's crisis management capacities, and to reveal gaps in its ability to manage health crises. This will further help determine whether, and if so, these gaps led to an expansion in the capacities of the Commission, as has been argued or implied by several scholars (Frischhut & Greer, 2017, p. 322; Greer, 2006, p. 139; Hervey & De Ruijter, 2020, p. 730)

4.1.1 2002-03: SARS

In 2002-03, SARS, a respiratory disease in humans evolved into an epidemic (European Centre for Disease Prevention and Control, 2015). The step of detection was a slow process as the disease originated in November 200, in China, but the World Health Organization (WHO) did not recognize it until three months later (European Centre for Disease Prevention and Control, 2021d; World Health Organization, 2021). At that point in time, the EU-level mechanism responsible for the detection and control of communicable diseases was the Communicable Diseases Network (European Commission, 2003a, p. 1). However, it was not until early April 2003 that the committee to the EU Communicable Disease Network agreed on long-term future actions to better address SARS in Europe (European Commission, 2003a, p. 1). Clearly, the Network's detection was inefficient. Still, the plan outlined important future actions on issues related to the SARS crisis, including actions for the Commission (European Commission, 2003a, p. 1). Thereby demonstrating the Commission's beginning steps of sense-making.

A more effective EU-level mechanism was the Early Warning and Response System for communicable diseases (EWRS), established in 1998 as a legally binding system of the Commission (Official Journal of the European Communities, 1998). The system obliges public health authorities of Member States to report existing mechanisms, proposed procedures and implemented countermeasures for the prevention and control of communicable diseases (Official Journal of the European Communities, 1998). During the SARS epidemic, the system was extensively used for updates on the epidemiological situation and to exchange information on countermeasures (Commission of the European Communities, 2005). The epidemic was a significant test of the usefulness of the EWRS, and it was found that it effectively fulfilled its function (Commission of the European Communities, 2005).

Moreover, decision-making throughout the crisis was organized better and occurred faster. For instance, the Commission produced a report on SARS-measures undertaken by Member States which revealed that in the ten weeks after the WHO alert, multiple countries had achieved a great deal (European Commission, 2003b, p. 4). This included: rapid and consistent measures on the early detection of cases, implementation of

isolation measures, as well as guidance to health professionals and the public on the identification of possible SARS cases (European Commission, 2003b, p. 4). In addition, the report revealed a smooth coordination between the EU and its Member States in the implementation of consistent measures, such the implementation of the Commission's common guide to health professionals (European Commission, 2003b, p. 4). This demonstrates the further meaning-making steps to manage the crisis, through the Commission's attempts of mitigating the implications of the epidemic.

The report also stated that during the crisis, the Commission had a strong will to rapidly communicate vital information to the public, through various media channels (European Commission, 2003b). However, certain flaws in these communications were noted, as its content somewhat varied throughout the Community (European Commission, 2003b, p. 4). On the other hand, communication within the EU did not experience the same inconsistency as reliable information was rapidly communicated through the EWRS (Commission of the European Communities, 2005). The EWRS proved paramount in ensuring the consistent exchange of information between the Commission and EWRS-members regarding the measures undertaken by Member States to control the spread of SARS as it allowed the coordination of responses at national and EU-level (Commission of the European Communities, 2005). The messages were of such usefulness that in the event of a future health crisis, Member States requested the availability of situation reports providing assessments for decision-makers (Commission of the European Communities, 2005). While the EWRS successfully fulfilled its function, certain flaws became evident as well as the need to take accountability for such flaws. Therefore, system adjustments were made to secure the efficient exchange of information in times of large influxes of messages (Commission of the European Communities, 2005), in the event of a future crisis.

Incidentally, the SARS epidemic put communicable disease control on the political agendas, and concerns for future pandemic influenzas kept the topic relevant (Frischhut & Greer, 2017, p. 322). As the crisis unveiled certain insufficiencies in the detection- and sense-making capacities of the Commission, the need to take accountability for this became clear. This led to the Commission's proposal for the creation of an independent EU public health agency: the European Centre for Disease Prevention and Control (ECDC) (Official Journal of the European Union, 2004). The proposal was passed on its first reading, signaling the urgency and consensus derived from the crisis (Frischhut & Greer, 2017, p. 322). Thus, Regulation 851/2004 became law in the spring of 2004 with a mandate to serve as a source for independent scientific advice, assistance and expertise with the mission of identifying, assessing and communicating current and emerging threats to human health from communicable diseases (Official Journal of the European Union, 2004). The regulation further emphasizes the importance of a close and collaborative relationship between the ECDC and the Commission to promote effective coherence between their respective activities in the case of a public health emergency (Official Journal of the European Union, 2004). The creation of the ECDC brought disease control onto an EU-level, and is therefore to be considered a vital step in expanding EU capacities for disease prevention and control. Still, its existence is complimentary and does not replace pre-existing national centers for disease control or other European agencies (Official Journal of the European Union, 2004). Nonetheless, the establishment of the ECDC will prove indispensable in the management of the succeeding health crises.

4.1.2 2009-2010: H1N1

While SARS may be considered the first "severe and readily transmissible new disease to emerge in the 21st century" (World Health Organization, 2021), on 11 June 2009, influenza A(H1N1) became the first officially declared pandemic of the 21st century (Health Protection Agency, 2010, p. 5; World Health Organization, 2017, p. 8). However, the Commission was first notified of the outbreak on 24 April 2009 (Health Protection Agency, 2010, p. 5), allowing for early detection. On the same date, the step of sense-making was activated in the ECDC as it raised its Public Health Event status to Level 1 (on a scale from 0-2) (European Centre for Disease Prevention and Control, 2011). From then, Member States and the Commission entered into an immediate emergency mode (European Centre for Disease Prevention and Control, 2010, p. 7).

Furthermore, the Commission was also quick to initiate steps of sense-making, by holding regular meetings with the Health Security Committee (HSC) and EWRS stakeholders (European Centre for Disease Prevention and Control, 2010, p. 7). While the significance of the EWRS was made evident by the SARS epidemic, the HSC was a somewhat new contribution to manage health crises. The HSC brings together the high-level health representatives of the EU's Member States and EEA countries under the chairmanship of the Commission (European Commission, 2011). Established in 2001 after the U.S. anthrax attacks, the HSC was initially tasked with coordinating and supporting health security preparedness plans and response capacity against biological and chemical agent attacks (European Commission, 2011). However, in 2007, EU Health Ministers expanded the mandate to include pandemic preparedness and coordination of emergency planning at an EU level (European Commission, 2011).Throughout the H1N1 pandemic, the HSC served as a forum for coordination between Member States representatives and the Commission.

Similar to the ECDC and the Commission, the HSC also contributed to the steps of sense-making, even before H1N1 was declared a pandemic. Already on 30 April 2009, the Ministers of Health through the HSC adopted Council conclusions on the H1N1 influenza, highlighting the need for coordination (European Commission, 2009b, p. 3). It further called upon the Commission to facilitate information-sharing and cooperation between Member States with particular focus on risk evaluation, risk management and medical countermeasures (European Commission, 2009b, p. 3). This allowed the step of decision-making within the Commission to begin early. One of the first EU-level countermeasures was the adoption of a legally binding case definition (European Commission, 2009b, p. 3). From this onward, Member States were obliged to report incidences of the influenza in accordance with the definition through the EWRS (De Ruijter, 2019, p. 134). The importance of such decision-making becomes clear in that it ensured that all Member States were reporting incidences of the same kind. However, as the pandemic accelerated, individual case-reporting became impossible to sustain and therefore, this was stopped in order to shift the focus towards trends (European Centre for Disease Prevention and Control, 2010, p. 7). While the EWRS had been strengthened to handle a magnitude of messages after the SARS epidemic, the amount of individual-case reports simply became too many and too irrelevant to keep up with.

Nevertheless, the need to trace the contacts of infected people prompted a furthers EWRS-expansion. In response to the H1N1 pandemic, contact-tracing was formally re-allocated from being a sole Commission capacity, to be a part of the EWRS (in liaison with the Commission) (Official Journal of the European Union, 2009). This allowed Member States to communicate details on individuals through the EWRS for the purpose

of contact-tracing, all the while respecting data privacy and data protection (De Ruijter, 2019, p. 135). This EWRS-expansion was particularly important as it linked multiple parties together: the Commission, public health authorities in Member States, the ECDC and EEA Countries (European Commission, 2009a). Taken as a whole, the outlined countermeasures demonstrate the decision-making steps taken by the Commission to ensure a swifter approach to crisis management.

Moreover, on 15 September 2009, the Commission adopted a strategy paper on how to best support Member States to effectively respond to the pandemic and assured that the Commission led the EU's coordination through "well-established structures" such as the HSC, the ECDC and the EMA (European Commission, 2009b). The paper further emphasized the importance of close coordination between Member States and to support those in less favorable situations in order to mitigate the impacts of the pandemic (European Commission, 2009b). This highlighted important steps of the Commission in promoting coordination between Member States.

Furthermore, the paper emphasized the importance of vaccination as the most effective means to prevent the spread of the virus (European Commission, 2009b). A countermeasure in which the HSC had a crucial role in coordinating: it identified risk groups for vaccination, discussed availability of vaccines and its side-effects, agreed on travel advice from the health perspective and advised on hygiene measures (European Commission, 2009c). These were further accentuated through a joint HSC and EWRS statement on H1N1 "target and priority groups for vaccination", based on scientific support from the ECDC and the EMA (European Commission, 2009c). Yet again, important steps of coordination between the Commission and its affiliated agencies becomes evident, which in turn demonstrate a matured approach in managing transboundary health crises. The strategy paper can also be argued to have been important steps of meaning-making and communication in the crisis. For instance, it can be argued that by promoting vaccination, the Commission and its affiliated agencies knew and understood the H1N1 influenza very well.

Combined, all mentioned publications demonstrate the important steps taken to communicate information to the public from the Commission and its affiliated agencies. The ECDC was particularly important in ensuring reliable and consistent risk assessments and reports on the H1N1 throughout the pandemic (European Centre for Disease Prevention and Control, 2009a, 2009b). Despite the pandemic being milder than anticipated, an ECDC report revealed flaws in the surveillance and healthcare systems of even the well-prepared Member States (European Centre for Disease Prevention and Control, 2017). This led many countries to re-evaluate and adjust their preparedness and response activities (European Centre for Disease Prevention and Control, 2017). The crisis further demonstrated the ECDC's ability to learn from its flaws. Particularly evident flaws were difficulties in communication and challenges to keep up and provide appropriate, coordinated crisis/risk communication in the rapidly evolving media landscape (including social media) (European Centre for Disease Prevention and Control, 2011, p. 2).

As mentioned, the H1N1 pandemic was not as frightening as initially believed. However, it was important to learn from and to take of accountability for the flaws that were brought to lights. For instance, while the EMA demonstrated an important resilience during the pandemic, the pandemic highlighted weaknesses in the access and purchasing power of the Member States in procuring pandemic vaccines and vaccination (European

Commission, 2021c). For this reason, the Commission was asked to take accountability and develop a mechanism for the joint procurement of medical countermeasures (European Commission, 2021c). Thus, in 2014, the voluntary Joint Procurement Agreement (JPA) was established to ensure the availability of sufficient quantities of pandemic vaccines and medicines at a correct price, in the event of a cross-border health threat (European Commission, 2014). Still it is important to note that the EMA was successful in authorizing five H1N1 vaccines within five months of its identification, thus allowing the Commission to issue the respective authorizations of these vaccines within days (European Medicines Agency, 2011, p. 6).

Due to lessons learnt from the H1N1 pandemic, the Commission published a statement explaining that it made the EU "better prepared than ever to tackle cross-border and global health threats", followed by a continued acknowledgement of the importance of closer coordination across sectors and between Member States (Commission of the European Communities, 2009). Such post-pandemic statements also signal the taking of accountability.

Taken as a whole, it can be argued that the H1N1 pandemic demonstrated a more mature approach to crisis management by the EU, through "well-established structures" (Commission of the European Communities, 2009). This can be seen through the re-allocation of important capacities to the correct structures with the right competences for the task, in addition to the use and expansion in the roles of pre-existing Commission-related structures such the HSC, ECDC, EWRS and the EMA.

4.1.3 2020 – Present: COVID-19

The COVID-19 pandemic is the ongoing spread of an infectious disease caused by a newly discovered coronavirus (Norwegian Institute of Pubilc Health, 2021). The first EU-level detection of the virus was on 9 January 2020, through an alert notification on the EWRS (European Commission, 2021g). While this allowed for early detection, the sense-making step of the crisis occurred at a slower pace. The HSC's second meeting regarding COVID-19 on 22 January 2020, demonstrated the first step at sense-making through the conclusion that the global spread of COVID-19 was likely and that its potential impact was high (European Commission, 2020d; European Commission 2021). While at this meeting, Italy and France confirmed the presence of certain response measures, the EU's first case of COVID-19 was reported in France on 24 January 2020 (European Centre for Disease Prevention and Control, 2021e; European Commission, 2020d).

On 2 March, Commission President von der Leyen continued sense-making steps by establishing a COVID-19 response team including all strands of action (medical, economic, mobility, transport), to coordinate the EU's response to the disease (European Commission, 2021g). Despite continuous monitoring, reporting and risk assessments of the outbreak, it can be argued that the sense-making steps failed, as the disease continued to spread and the WHO officially declared COVID-19 to be a pandemic on 11 March 2020 (World Health Organization, 2020).

Only following the declaration of COVID-19 as a pandemic, did the first clear asense-making step occur, through the ECDC's sixth risk assessment on 12 March 2020:

> […] there is a need for immediate targeted action. The speed with which COVID-19 can cause nationally incapacitating epidemics once transmission within the community is established, indicates that in a few weeks or even days, it is likely that similar situations to

> those seen in China and Italy may be seen in other EU/EEA countries or the UK (European Centre for Disease Prevention and Control, 2020b).

As this statement became true, difficulties arose in coordinating an EU-leveled response. Similarly to the H1N1 pandemic, a lack of solidarity between Member States became evident through clear discordances in countermeasures taken, with a majority of so-called "us-first" responses (Pacces & Weimer, 2020, p. 293). Such responses included the closing of national borders and a stop in supply chains (European Commission, 2020c). To exemplify, some Member States imposed national export restrictions on protective medical equipment (PPE) as a means to protect their own citizens (Brown, 2020). These being particularly worrisome as they proved both ineffective in combatting the pandemic and violated principles of the EU's internal market (European Commission, 2020a, p. 1).

However, after the initial shock of COVID-19, the Commission was able to take action against several discordances, and promoted cooperation between its Member States. For instance, the Commission implemented an immediate regulation requiring exports of PPE to non-EU countries to be subject to export-authorization by Member States and as a result, the applicable Member States unblocked their initial restrictions, allowing for the export of PPE within the EU (Brown, 2020). To counteract the pandemic's disruptive effects on transport and mobility within the EU, the Commission launched guidelines to protect health and ensure the availability of goods and essential services (European Commission, 2020c), thereby increasing coordination within the EU.

In responding to COVID-19, both the HSC and the ECDC proved to crucial. From January to November 2020, the HSC convened more than 40 times to discuss risk assessments, guidance from the ECDC, preparedness and response measures implemented, as well as the capacities and needs of Member States (European Commission, 2020a, p. 6). The ECDC also provides continual COVID-19 risk assessments in addition to an updated timeline of the pandemics events (European Centre for Disease Prevention and Control, 2021a, 2021e). While this is not a direct capacity of the Commission, the ECDC proved important in managing the crisis and is connected to the Commission through daily contact with the DG SANTE (European Centre for Disease Prevention and Control, 2021b).

The steps of meaning-making, communication and accountability, are aspects that are more difficult to discuss and assess for the COVID-19 crisis as it is still ongoing. However, based on the availability of information about its current crisis management, it can be argued that the communication capacity on the EU-level is relatively strong. This can be seen through the extensive Commission and ECDC timelines of EU-action, and continuous HSC risk assessments (European Centre for Disease Prevention and Control, 2021e; European Commission, 2021g). In addition, all information regarding the crisis management of COVID-19 as previously reviewed by the thesis, suggest the relatively strong communication from the Commission and its affiliated agencies. Furthermore, the Commission is already showing signs of meaning-making and accountability. For instance, in November 2020, the Commission begun to discuss the topic of building a "European Health Union" and possible expansions of EU capacities (European Commission, 2020a, p. 1), which will be subsequently discussed.

Moreover, lessons learnt from the H1N1 pandemic can be seen to have influenced the management of COVID-19. For instance, the JPA that was established after H1N1 experienced a significant increase in signatories during the initial stages of COVID-19. From February 2020 to April 2020, twelve more countries became signatories of the

agreement (European Commission, 2021d). It becomes evident that the desire to join the Agreement rose with the outbreak as the last two signatories prior to the increase were in June 2019 and April 2016 (European Commission, 2021d). Also, the early Commission-involvement in precuring vaccines and delivering them to Member States possibly stem from lessons-learnt after the H1N1 issues in procuring vaccines (European Commission, 2021g). Additionally, the Commission created a new procedure to facilitate and speed up approval of adapted vaccines against COVID-19 variants (European Commission, 2021a). It can be further argued that the expansion and improvements made to the EWRS, following the H1N1 pandemic were successful, as no sources have been found relating to issues within the system. This being despite EU/EEA Member States reporting all laboratory-confirmed cases of COVID-19 through the EWRS, every 24 hours (European Centre for Disease Prevention and Control, 2021c).

4.2 Discussion

Clearly, health crises are unpredictable but recurring events. The three previous crises demonstrate how fast an outbreak can turn into a crisis and in turn how fast a crisis can spread around the world. Thus, the importance of advanced planning and preparedness in mitigating the impact of a health crisis, becomes clear. It is made further apparent how intertwined EU Member States are, and how contingent they are of one another. In light of COVID-19, this has also been acknowledged by the Commission: "Fragmentation of effort in tackling cross-border health threats make all Member States collectively more vulnerable" (European Commission, 2020a, p. 2). This section will discuss some key observations from the previous examples as well as analyze the expansion of capacities that came with the 2013 Decision.

The empirical evidence demonstrated the general increase in the EU's capacities to manage transboundary health crises over multiple treaty amendments, whereas the empirical analysis has demonstrated expansions in the capacities of the Commission, following such crises. The expansion of the Commission's capacities can also be seen through the expansion in the capacities of its affiliated agencies and the generally matured approach to manage transboundary health crises. The Decision further accentuates this view in its statement that health emergencies similar to SARS and H1N1 would benefit from an EU-wide response thus leading to the adoption of the Decision (Publications Office of the European Union, 2020).

In regards to expanding the capacities of the Commission, the Decision allocated the task of ensuring coordination and information exchange between Member States and pre-existing structures of the EU, such as the ECDC, EWRS, HSC and EMA (Official Journal of the European Union, 2013). Otherwise, the Commission's involvement is mainly to be consulted with or to be worked in liaison with in serious cross-border threats to health (Official Journal of the European Union, 2013). At first glance, the expansion may seem minor. However as made evident by the H1N1 analysis, the Commission's management of health crises greatly matured through the re-allocation of tasks and expansion in the capacities of its affiliated agencies. Therefore, in further analysis of the Decision it is relevant to investigate how the Decision expanded the capacities of these agencies. Evidently, the Decision further matured the crisis management capacities of these agencies, consequently strengthening the Commission's overall capacities.

Firstly, after its expansion in 2007, the HSC proved significant in managing transboundary health crises, as can be seen through the H1N1- and COVID-19 pandemic. It can be argued that its significance in coordinating countermeasures for the H1N1

pandemic led to the subsequent legal formalization of its capacities through the Decision. The Decision formalized the HSC as the platform in which Member States and the Commission are to consult each other for the purpose of coordinating efforts to develop, strengthen and maintain their respective capacities for the monitoring, early warning and assessment of, and response to, serious cross-border threats to health (Official Journal of the European Union, 2013). The Decision further expanded the HSC's coordinating role to be the platform of the EU's rapid response to serious cross-border health threats (Official Journal of the European Union, 2013). This includes being the forum in which Member States exchange information on adopted measures and along with the Commission, define actions to take on preparedness, planning, response and risk and crisis communication (European Commission, 2021b, 2021f). The HSC was also tasked with ensuring the consistent and coherent information of messages to health care professionals and the public (Official Journal of the European Union, 2013). This can, for instance, be seen in the management of COVID-19, through its many risk assessments.

Secondly, while the EWRS was already a legally binding system for the reporting and sharing of information, the Decision further expanded its functions to apply to an increased number of health threats, including threats of biological, chemical, environmental or unknown origins (Official Journal of the European Union, 2013). While the EWRS is owned by the Commission, the Decision also connected the EWRS and ECDC by allocating the ECDC with the task of operating the EWRS's IT platform (European Commission, 2021e; Official Journal of the European Union, 2013). Additionally, the Decision stated that the Commission is to strengthen cooperation and activities with structures such as the ECDC and the EMA, to improve methods and processes related to the coverage of vaccine-preventable diseases is provided. Thus, the Decision formally linked the Commission and its affiliated agencies with one other, thereby demonstrating both an expansion of the Commission's capacities and a further matured approach to manage transboundary health crises.

On another note, while the crisis management of COVID-19 cannot be analyzed in a concluding manner, the pandemic demonstrated shortcomings in existing EU mechanisms for managing health crises and highlighted the need for a more structured EU-leveled approach to manage future health crises (European Commission, 2020e). On 11 November 2020, the Commission took its first steps towards building a European Health Union by announcing a proposal for a new Regulation on serious cross-border threats to health to replace the 2013 Decision (European Commission, 2020a, p. 1; 2020b).

The proposal further underlines a previous finding of this thesis, namely that the legal obligations of Member States is limited to reporting on EWRS and cooperation within the HSC (European Commission, 2020e). While these have proven to be vital in managing health emergencies, the COVID-19 pandemic illustrated their inability to: facilitate a timely common EU-leveled response, coordinate crucial aspects of risk communication and ensure solidarity between Member States (European Commission, 2020e). Thus, the proposed revision aims to create a more robust mandate for coordination by the Commission and its affiliated agencies, through new elements including: strengthening preparedness, reinforcing surveillance, improving data reporting, and to make EU agencies such as the ECDC and the EMA, more operational (European Commission, 2020b).

In parallel, the Commission has proposed to expand the legal mandate of ECDC. The draft regulation includes changes that would reinforce the ECDC mandate in order to better support Member States and the Commission (European Centre for Disease Prevention and Control, 2020a). This includes better support in: epidemiological surveillance via integrated systems enabling real-time surveillance; preparedness and response planning, reporting and auditing; the provision of non-binding recommendations and options for risk management, and more (European Centre for Disease Prevention and Control, 2020a).

Moreover, the H1N1 and COVID-19 analysis emphasized the importance of the HSC, COVID-19 further demonstrated its importance as a key forum for the exchange of information and in developing common positions in certain areas. However, COVID-19 also made it apparent that the HSC has limited abilities to enforce or coordinate national responses (European Commission, 2020a, p. 6). Therefore, the new proposal suggests an allocation of additional responsibilities to adopt guidance and opinions in order to better support Member States in the prevention and control transboundary health crises.

Importantly, the desire for capacity-building within EU to manage transboundary health crises is not only recognized by EU-policymakers. In fact, European citizens have been increasingly clear that they believe the EU should have more competences in protecting their health, particularly from transboundary health threats (European Commission, 2020a, p. 1). A public opinion survey reveals that 68% of respondents agree that the EU should have more competences to deal with such crises (European Parliament, 2020). This further goes along with the Commission's opinion that: "coordinating and where necessary pooling efforts at a European level will deliver more effective responses" (European Commission, 2020a, p. 1). Moreover, the Commission calls for strengthened collective effort at EU level to fight the ongoing pandemic and any future health emergencies (European Commission, 2020a, p. 2). It becomes clear that the Commission was not satisfied by the collective efforts at that time, as the communication underlines the need for "consistent, coherent and coordinated" public health measures to maximize effect and minimize the danger (European Commission, 2020a, p. 2).

5 Conclusion

The intention of this thesis was to determine what capacities the European Commission has in managing transboundary health crises and to what extent these have been expanded following public health emergencies? In order to answer the research question, the thesis examined the increase in capacities of the EU and the Commission through various treaty amendments. Furthermore, the crisis management of three health emergencies was analyzed along seven steps of crisis management capacities (detection, sense-making, decision-making, coordination, meaning-making, communication and accountability). This was done in order to demonstrate the expansion of the Commission's capacities, in addition to an analysis on the capacities of the Commission's affiliated agencies, including the ECDC, EWRS, HSC and EMA.

In short, the empirical sections have demonstrated the importance of coordination within the EU in order to effectively manage public health emergencies such as SARS, H1N1 and COVID-19. Yet, it is also made evident that the Commission has had few legal capacities to enforce the coordinating of policies between Member States during these emergencies. Still, the empirical analysis has shown that the Commission has made use of its somewhat limited capacities, by encouraging coordination through the publications of guidelines, reports of best-practices, reports on lessons-learnt from crises, and communications.

The empirical analysis further accentuates that the capacities of the Commission in managing transboundary health crisis have expanded following the exemplified health emergencies. Interestingly, it is made clear that the expansion in the Commission's capacities is closely connected to the expansions of its affiliated agencies, including the ECDC, EWRS, HSC and EMA. By combining the capacities of the Commission with the capacities of these structures, it can be argued that the Commission in fact a relatively wide-ranging set of competences in responding to public health emergencies. More so than the traditional legal analysis of the treaty framework suggested. Furthermore, it becomes clear that the process of establishing some of these structures and consequently expanding its capacities has occurred following health crises.

For instance, SARS clearly put the capacities of the Commission to a test, consequently leading to the creation of the ECDC, an indispensable EU capacity to manage health crises. The further expansion of the HSC mandate can also be considered vital, as demonstrated in the analysis of the H1N1 pandemic. Additionally, the poor coordination relating to the vaccines during H1N1 led to the creation of the JPA, which had continued importance during COVID-19. Taken as a whole, the empirical sections of the thesis illustrate a pattern in which public health emergencies has led to incremental but crucial steps in expanding EU-leveled capacities to manage transboundary health crises.

Additionally, the SARS and the H1N1 crises allowed for important lessons-learnt, that led up to the adoption of the Decision, which was a vital contribution to expand the capacities of the Commission. The H1N1 analysis also demonstrated an important development, namely the matured approach by the Commission in managing transboundary health crises, through its use of various EU structures and mechanisms. The discussion further demonstrated how the Decision was paramount in the further

maturing of the Commission's approach to managing transboundary health crises, as seen through the expansion and formalization of important capacities and tasks of its affiliated agencies.

The conceptualization of the thesis stated that previous health crises demonstrated the need for capacities to share information, foster rapid and joint decision-making and to speak with a unified voice in managing transboundary health crises. As laid forward by the empirical evidence, analysis and discussion of this thesis, multiple factors contribute to the conclusion that such capacities have been established. This can be argued through the creation and expansion of important structures and mechanisms on an EU-level. And, while the COVID-19 crisis has demonstrated certain weaknesses and flaws in the structures and mechanisms on the EU-level, continued attempts to learn from these, have already been made evident. This can be seen through various Commission proposals to further strengthen, expand and formalize important capacities in managing transboundary health crises.

Given the pattern in which capacities to manage transboundary health crises have expanded following public health emergencies, and the scale of the COVID-19 pandemic, it will be interesting to see what the future holds for EU health policy. The proposals laid forward by this thesis suggest the current desire of policy-makers to build a European Health Union, and if one were to assume the future of EU health capacities based on the wishes of EU citizens, it can be argued that a future European Health Union is very likely. Still keeping in mind that the current documents are only proposed expansions, and that these are predictions and hypotheticals, not facts.

6 Bibliography

Ansell, C., Boin, A., & Keller, A. (2010). Managing Transboundary Crises: Identifying the Building Blocks of an Effective Response System. *Journal of Contingencies and Crisis Management, 18*(4).

Backman, S., & Rhinard, M. (2017). The European Union's capacities for managing crises. *Journal of Contingencies and Crisis Management*, 261-271.

Bartlett, O., & Naumann, A. (2021). Reinterpreting the health in all policies obligation in Article 168 TFEU: the first step towards making enforcement a realistic prospect. *Health Economics, Policy and Law, 16*, 8-22.

Beaussier, A.-L., & Cabane, L. (2020). Strengthening the EU's Response Capacity to Health Emergencies: Insights from EU Crisis Management Mechanisms *European Journal of Risk Regulation, 11*(4), 808-820.

Bishop, L. E., Hervey, T. K., & Young, C. A. (2017). *Research Handbook on EU Health Law and Policy*. Cheltenham, United Kingdom: Edward Elgar Publishing.

Blockmans, S., & Wessel, R. A. (2009). The European Union and Crisis Management: Will the Lisbon Treaty Make the EU More Effective? *Journal of Conflict & Security Law, 14*(2), 265-308.

Boin, A., Ekengren, M., & Rhinard, M. (2013). *The European Union as Crisis Manager: Patterns and Prospects*

Boin, A., Rhinard, M., & Ekengren, M. (2014). Managing Transboundary Crises: The Emergence of European Union Capacity. *Journal of Contingencies and Crisis Management, 22*(3), 131-142.

Brooks, E., & Geyer, R. (2020). The development of EU health policy and the Covid-19 pandemic: trends and implications. *Journal of European Integration, 42*(8), 1057-1076.

Brown, C. P. (2020). EU limits on medical gear exports put poor countries and Europeans at risk. *Peterson Institute for International Economics*. Retrieved from https://www.piie.com/blogs/trade-and-investment-policy-watch/eu-limits-medical-gear-exports-put-poor-countries-and#:~:text=EU%20limits%20on%20medical%20gear%20exports%20put%20poor%20countries%20and%20Europeans%20at%20risk,-Chad%20P.&text=Faced%20with%20dangerous%20shortages%20at,fight%20the%20COVID%2D19%20pandemic.

Commission of the European Communities. (2005). *Report on the Operation of the Early Warning and Response System of the Community Network for the Epidemological Surveillance and Control of Communicable Diseases (DECISION2000/57/EC) During 2002 and 2003.* (COM(2005) 104 final). Brussels

Commission of the European Communities. (2009). *Pandemic (H1N1)2009*. (COM(2009) 481 final). Brussels: Commission of the European Communities

De Ruijter, A. (2019). *EU Health Law & Policy : The Expansion of EU Power in Public Health and Health Care*. Oxford: Oxford University Press.

European Centre for Disease Prevention and Control. (2009a). *ECDC Interim Risk Assesment: Human cases of influenza A(H1N1)v*. ECDC

European Centre for Disease Prevention and Control. (2009b). *Guide to public health measures to reduce the impact of influenza pandemics in Europe: 'The ECDC Menu'*. Stockholm: ECDC

European Centre for Disease Prevention and Control. (2010). *The 2009 A(H1N1) pandemic in Europe: A review of the experience*. Stockholm: ECDC

European Centre for Disease Prevention and Control. (2011). *Review of ECDC's response to the influenza pandemic 2009/10*. (241111 ECDC). Stockholm: ECDC

European Centre for Disease Prevention and Control. (2015). Severe acute respiratory syndrome (SARS). Retrieved from https://www.ecdc.europa.eu/sites/default/files/documents/Severe%20acute%20respiratory%20syndrome%20%28SARS%29%20AER.pdf

European Centre for Disease Prevention and Control. (2017). *Guide to revision of national pandemic influenza preparedness plans - Lessons learned from the 2009 A(H1N1) pandemic*. Stockholm: ECDC

European Centre for Disease Prevention and Control. (2020a). Commission presents proposals for expansion of ECDC mandate. Retrieved from https://www.ecdc.europa.eu/en/news-events/commission-presents-proposals-expansion-ecdc-mandate

European Centre for Disease Prevention and Control. (2020b). *Novel coronavirus disease 2019 (COVID-19) pandemic: increased transmission in the EU/EEA and the UK – sixth update*. Stockholm: ECDC

European Centre for Disease Prevention and Control. (2021a). COVID-19. Retrieved from https://www.ecdc.europa.eu/en/covid-19

European Centre for Disease Prevention and Control. (2021b). ECDC partnerships. Retrieved from https://www.ecdc.europa.eu/en/about-us/who-we-work/ecdc-partnerships

European Centre for Disease Prevention and Control. (2021c). EU level surveillance of COVID-19. Retrieved from https://www.ecdc.europa.eu/en/covid-19/surveillance

European Centre for Disease Prevention and Control. (2021d). Facts about severe acute respiratory syndrome (SARS). Retrieved from https://www.ecdc.europa.eu/en/severe-acute-respiratory-syndrome/facts

European Centre for Disease Prevention and Control. (2021e). Timeline of ECDC's response to COVID-19. Retrieved from https://www.ecdc.europa.eu/en/covid-19/timeline-ecdc-response

European Commission. (2003a). *Future Actions*. European Union Retrieved from https://ec.europa.eu/health/ph_threats/com/sars/sars_future_actions_en.pdf

European Commission. (2003b). *Measures Undertaken by Member States and Accession Countries to Control the Outbreak of SARS*. (280503V3). European Union

European Commission. (2009a). Background on the Health Security Committee and the Early Warning and Response System authorities [Press release]

European Commission. (2009b). *Commission adopts EU strategy on Pandemic (H1N1) 2009* (IP/09/1323). Strasbourg: European Union

European Commission. (2009c). HSC/EWRS Statement on Influenza A(H1N1) 2009: target and priority groups for vaccination [Press release]

European Commission. (2011). EU Health Security Committee. Retrieved from https://ec.europa.eu/health/sites/health/files/preparedness_response/docs/hsc_factsheet_en.pdf

European Commission. (2014). Public health: Joint purchasing of vaccines and medicines becomes a reality in the EU [Press release]

European Commission. (2020a). *Building a European Health Union: Reinforcing the EU's resilience for cross-border health threats* (COM (2020) 724 final). Brussels: European Commission

European Commission. (2020b). Building a European Health Union: Stronger crisis preparedness and response for Europe [Press release]

European Commission. (2020c). *Guidelines for border management measures to protect health and ensure the availability of goods and essential services*. (C(2020) 1753 final). Brussels: European Commission

European Commission. (2020d). *Health Security Committee Summary the cluster of pneumonia cases associated with novel Coronavirus in Wuhan, China*. European Commission

European Commission. (2020e). *Proposal for a Regulation of the European Parliament and of the Council on serious cross-border threats to health and repealing Decision No 1082/2013/EU*. (COM(2020) 727 final). Brussels: European Commission

European Commission. (2021a). Coronavirus: new procedure to facilitate and speed up approval of adapted vaccines against COVID-19 variants [Press release]

European Commission. (2021b). Health security and infectious diseases: Crisis management. Retrieved from https://ec.europa.eu/health/security/crisis-management_en

European Commission. (2021c). Health security and infectious diseases: Preparedness and response planning. Retrieved from https://ec.europa.eu/health/security/preparedness_response_en

European Commission. (2021d). Health security and infectious diseases: Signing ceremonies for Joint Procurement Agreement. Retrieved from https://ec.europa.eu/health/preparedness_response/joint_procurement/jpa_signature_en

European Commission. (2021e). Health security and infectious diseases: Surveillance and early warning. Retrieved from https://ec.europa.eu/health/security/surveillance_early-warning_en#:~:text=The%20Early%20Warning%20and%20Response%20System%20(EWRS)&text=EU%20countries%20can%20alert%2C%20share,is%20operated%20by%20the%20ECDC.

European Commission. (2021f). Health Security Committee (HSC). Retrieved from https://ec.europa.eu/health/preparedness_response/risk_management/hsc/members_en

European Commission. (2021g). Timeline of EU Action. Retrieved from https://ec.europa.eu/info/live-work-travel-eu/coronavirus-response/timeline-eu-action_en

European Medicines Agency. (2011). *Pandemic report and lessons learned: Outcome of the European Medicines Agency's activities during the 2009 (H1N1) flu pandemic* (EMA/221017/2011). London, United Kingdom: European Medicines Agency

European Parliament. (2020). *Public Opinion in Times of COVID-19: A Public Opinion Survey Commissioned by the European Parliament First Results - 14 July 2020*. European Parliament

Frischhut, M., & Greer, S. L. (2017). EU public health law and policy - communicable diseases. In T. K. Hervey, C. A. Young, & L. E. Bishop (Eds.), *Research Handbook on EU Health Law and Policy* (pp. 315-346). Cheltenham, United Kingdom: Edward Elgar Publishing.

Greer, S. L. (2006). Uninvited Europeanization: neofunctionalism and EU in health policy. *Journal of European Public Policy, 13*(1), 134-152.

Guy, M., & Sauter, W. (2017). The history and scope of EU health law and policy. In T. K. Hervey, C. A. Young, & L. E. Bishop (Eds.), *Research Handbook on EU Health Law and Policy* (pp. 17-35). Cheltenham, United Kingdom: Edward Elgar Publishing.

Health Protection Agency. (2010). *Assesment Report on the EU-wide Response to Pandemic (H1N1) 2009*. United Kingdom: European Commission

Hervey, T., & De Ruijter, A. (2020). The Dynamic Potential of European Union Health Law. *European Journal of Risk Regulation, 11*, 726-735.

Hooghe, L., & Rauh, C. (2017). The Commission services: A powerful permanent bureaucracy. In I. D. Hodson & J. Peterson (Eds.), *The Institutions of the European Union* (4th ed., pp. 188-210). Oxford: Oxford University Press.

Jordana, J., & Trivño-Salazar, J. C. (2020). EU agencies' involvement in transboundary crisis response: Supporting efforts or leading coordination? *Public Administration*, 515-529.

Mossialos, E., Permanand, G., Baeten, R., & Hervey, T. (2010). Health Systems Governance in Europe: the role of European Union Law and Policy. In E. Mossialos, G. Permanand, R. Baeten, & T. Hervey (Eds.), *Health Systems Governance in Europe* (pp. 1-250).

Norwegian Institute of Pubilc Health. (2021). Facts about the SARS-CoV-2 virus and COVID-19 disease. Retrieved from https://www.fhi.no/en/op/novel-coronavirus-facts-advice/facts-and-knowledge-about-covid-19/facts-about-novel-coronavirus/?term=&h=1

Official Journal of the European Communities. (1992). *Treaty on European Union*. (NoC 191 / 1). European Union

Official Journal of the European Communities. (1997). *Treaty of Amsterdam Amending the Treaty of the European Union, the Treaties Establishing the European Communities and Certain Related Acts*. (97/C 340/01). European Union

Official Journal of the European Communities. (1998). *Setting up a network for the epidemiological surveillance and control of communicable diseases in the Community*. (2119/98/EC). European Union

Official Journal of the European Union. (2004). *REGULATION (EC) No 851/2004 of the European Parliament and of the Council of 21 April 2004 establishing a European centre for disease prevention and control*. (851/2004). European Union.

Official Journal of the European Union. (2008). *Consolidated Versions of the Treaty on the European Union and the Treaty on the Functioning of the European Union*. (2008/C 115/01). European Union

Official Journal of the European Union. (2009). *COMMISSION DECISION of 10 July 2009 amending Decision 2000/57/EC on the early warning and response system for the prevention and control of communicable diseases under Decision No 2119/98/EC of the European Parliament and of the Council*. (2009/547/EC). European Union

Official Journal of the European Union. (2013). *DECISION No 1082/2013/EU of the European Parliament and of the Council of 22 October 2013 on serious cross-border threats to health and repealing Decision No 2119/98/EC*. (1082/2013/EU). European Union

Pacces, A. M., & Weimer, M. (2020). From Diversity to Coordination: A European Approach to COVID-19. *European Journal of Risk Regulation, 11*(2), 283-296.

Publications Office of the European Union. (2020). *Combating serious cross-border threats to health: Summary of Decision No 1082/2013/EU on serious cross-border threats to health*.

Purnhagen, K. P., Ruijter, A. D., Flear, M. L., Hervey, T. K., & Herwig, A. (2020). More Competences than You Knew? The Web of Health Competence for European Union Action in Response to the COVID-19 Outbreak. *European Journal of Risk Regulation, 11*(2), 297-306.

Riddervold, M., Trondal, J., & Newsome, A. (2021). *The Palgrave Handbook of EU Crises*. Cham, Switzerland: Palgrave Macmillan.

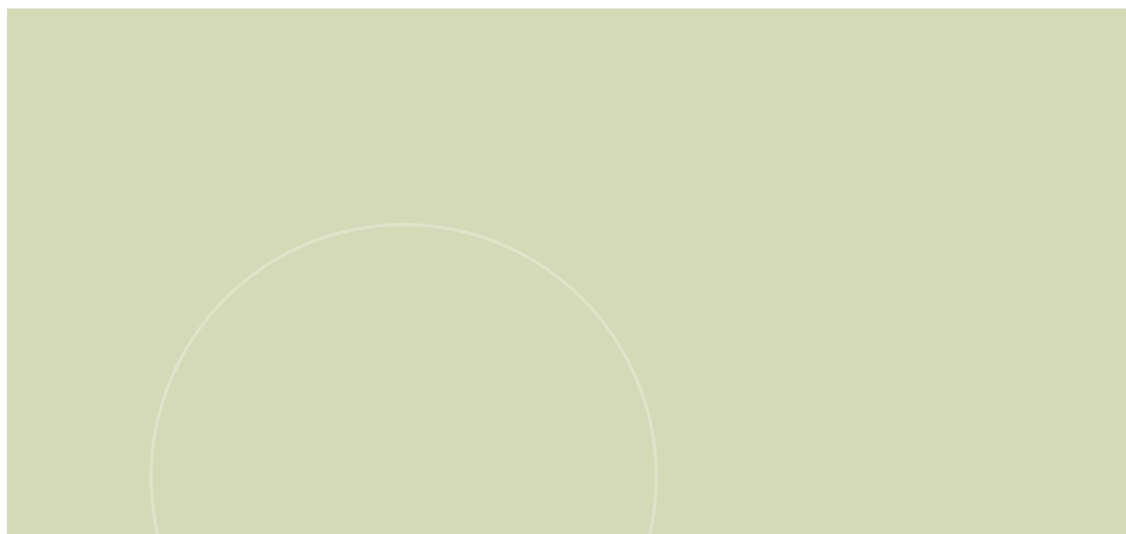
Tjora, A. (2017). *Kvalitative Forskningsmetoder i praksis* (3. edition ed.). Oslo: Gyldendal Norsk Forlag AS.

Van-Kolfschooten, H. (2019). EU Coordination of Serious Cross-Border Threats to Health: The Implications for Protection of Informed Consent in National Pandemic Policies. *European Journal of Risk Regulation, 10*(4), 635-651.

World Health Organization. (2017). Pandemic Influenza Risk Management: A WHO guide to inform & harmonize national & international pandemic preparedness and response. *Global Influenza Programme*, 6-62.

World Health Organization. (2020). WHO Director-General's opening remarks at the media briefing on COVID-19 - 11 March 2020. Retrieved from https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020

World Health Organization. (2021). Severe Acute Respiratory Syndrome (SARS). Retrieved from https://www.who.int/health-topics/severe-acute-respiratory-syndrome#tab=tab_1



NTNU
Kunnskap for en bedre verden