The War for Energy

An Analysis of NATO's Energy Security Through the Lenses of the Copenhagen School

Master Thesis

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Abstract

The importance of energy in modern societies is increasing. However, energy in the future is becoming increasingly scarce and it is therefore important for a society to protect its energy supplies and energy routes. Energy has become a vital national security issue, as fuel for daily life, industries and the economy. This study represents an analysis of NATO's role in energy security through the lenses of the Copenhagen School. It investigates the three main threats to the energy security of NATO member states and analyses the responses of the Alliance. The three main threats investigated in this thesis are the threats posed by Russia, the conflicts in the South Caucasus and the Somalian piracy. This thesis will reflect on NATO's energy security policy and will analyse it through the securitization theory. NATO's responses to energy security threats are used in the analysis of the securitization of energy by the Alliance and the intensity of this process. This study argues that the relationship between NATO's energy security policy and the securitization theory is strong and clearly visible, through the presence of all six criteria of measuring intensity. The organisation proved that it is willing to play a role in energy security, with its military capabilities to protect energy infrastructure and with its expertise capabilities to provide platforms for discussions, science and development programmes. Creating institutions such as the Energy Security Centre of Excellence to raise awareness, call for diversification and interconnectivity and enhance expertise is part of NATO's role in energy security.

Keywords: Energy Security; NATO; Copenhagen School; Securitization Theory; Critical Energy Infrastructure; Diversification.

Foreword

This thesis is written as a completion of the master Crisis and Security Management, at the Faculty of Governance and Global Affairs at the University of Leiden. The programme of the master focuses on different security issues and gives a broad overview of the crisis and security management strategies. The subject of this thesis, NATO's securitization of energy, falls within the scope of the master's field. The securitization theory of the Copenhagen School was part of the master Crisis and Security Management, and energy security falls within the broader concept of security of the Copenhagen School.

The idea of this research originates from a personal fascination with the political game behind energy security, and how the private industry of energy is intervened by governments that have been convinced of the importance of energy for state survival. This interesting game of pipelines politics, unreliable transit countries, territorial uncertainties and power play make the world of energy security a lively and fascinating world. In the future, energy security is going to be more important, more intense, and more difficult, due to the increasing scarcity of resources, and therefore it is important for states and organisation to acknowledge the importance of energy.

The guidance, support and feedback of my supervisor Dr. M. de Haas was invaluable for this research project, and I would like to thank him for his contribution. His valuable insights and directions gave needful guidance to complete the research and write this thesis.

Tobias Sebregts

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Table of Contents

List of Acronyms and Abbreviations

BTC	Baku-Tbilisi-Ceyhan
BTE	Baku-Tbilisi-Erzurum
CSTO	Collective Security Treaty Organization
ENSEC COE	Energy Security Centre of Excellence
EU	European Union
IEA	International Energy Agency
IGO	Inter-Governmental Organisation
LNG	Liquefied Natural Gas
MEND	Movement for the Emancipation of the Niger Delta
NATO	North Atlantic Treaty Organization
NGO	Non-Governmental Organisation
OOS	Operation Ocean Shield
PfP	Partnership for Peace
PKK	Kurdistan Workers' Party
SPS	Science for Peace and Security
UN	United Nations
US(A)	United States (of America)
USSR	Union of Soviet Socialist Republics

1. Introduction

1.1 Problem Outline

Since the Berlin Wall came down in 1989, and with that the collapse of the bi-polar state system, the role of the North Atlantic Treaty Organization (NATO) has been uncertain and questionable. With the threat of the Union of Soviet Socialist Republics (USSR) gone, NATO's search for a new objective began. With its role in the Balkans in the 1990s, its operations in Afghanistan, and its recent intervention in Libya in 2011, NATO has been very active after the end of the Cold War (Jung, 2012: 43). In 2012, NATO's new role in international politics was defined in NATO's "Tackling New Security Challenges", a briefing document that discusses the ways in which the Alliance aims to tackle the new security challenges and how it is already doing it (NATO, 2012b). Before this briefing, NATO was already mentioning energy security in summits and documents, and was involved in several missions to protect energy supplies for member states (NATO, 2006; NATO, 2008; NATO, 2011). The briefing document states that the organisation should transform into an organisation that could better tackle modern security challenges such as fighting terrorism, promoting counter-piracy, developing missile defence systems, strengthening cyber security, preventing proliferation of weapons of mass destruction, working with partners, and reinforcing energy security (NATO, 2012b: 1). This new role revealed several difficulties in practice. Some challenges overlap, are very complex, difficult to counter, and are in need of cooperation between member and non-member states. One of the security challenges is reinforcing energy security among member states, because it has become a cornerstone of modernization, industrialization, and overall development of a state (Klare, 2008: 484).

Energy is becoming increasingly important for industrialized states, and for the development of its economy. The effects of a disruption in the supply of oil and gas could be devastating, as displayed by the 1973 Oil Crisis or the several gas disputes between Russia and Ukraine in 2006 and 2009 (Akins, 1973; Lee, 2017). States increasingly perceive energy as an issue for national security, and less as an economic issue. NATO, as a military defence organisation, is getting increasingly involved in the matter. During the Riga Summit in 2006, this role in energy security was first mentioned by NATO (NATO, 2006). In the next years, this role was

worked out and during the Bucharest Summit in 2008, the tasks of NATO in energy security were first defined (NATO, 2008). The first task consists of increasing strategic awareness among member states of the security implications of energy and energy developments. The second task is protecting critical energy infrastructure against threats. The third and last task is increasing the energy efficiency of the military (NATO, 2011).

Specifically, the second task, protecting critical energy infrastructure, increases the amount of threats NATO has to deal with, because article 5 of the North Atlantic Treaty states that an attack on one is an attack on all (NATO, 1949). Terrorists and pirates are increasing their focus on critical energy infrastructure to disrupt energy supplies to Western states (Klare, 2008: 492). From the protection of vital sea lanes against piracy in Somalia, to energy infrastructure protection in the South-Caucasus, NATO's new role in energy security increased its activity in the world (NATO, 2014b; Priego, 2008: 2). The decision of NATO to engage in energy security is not without doubts. The dilemma to incorporate energy in a military organisation such as NATO raises a lot of questions. Should a military organisation include an economic issue into its organization? This thesis will not deliberate on this specific dilemma, but will instead focus on how energy, an economic issue, is incorporated into NATO, a military organisation.

1.2 Research Question and Sub-Questions

This study focuses on how NATO is involved in energy, how NATO incorporates energy into the Alliance, how NATO is affected by energy security threats, how NATO responded to these threats and how NATO securitized energy into their security strategies. The research question this thesis will answer is:

- To what extent is energy security a vital security issue for the North Atlantic Treaty Organization?

To answer the research question, this thesis will answer the following sub questions:

- How is energy security being perceived by the North Atlantic Treaty Organization?

- What threats do the member states of the North Atlantic Treaty Organization have in the field of energy security?
- What responses does the North Atlantic Treaty Organization have against threats to the energy security of its member states?
- What is the relationship between the North Atlantic Treaty Organization's energy security policy and the securitization theory?

This study will use the securitization theory of the Copenhagen School by Waever, Buzan's notion of sectorial analysis of security, and the model which measures securitization intensity of Janeliūnas and Tumkevič to measure the existence of energy securitization by NATO. The use of this theory will be further explained in the theory section of this thesis.

1.3 Academic Relevance

This thesis will contribute to the academic knowledge, because it will give insights in NATO's transformation and its new role to tackle modern security challenges in international politics. This transformation is very interesting, because NATO has been dealing with this problem since the collapse of the USSR. Some scholars wrote about NATO's involvement in specific regions or challenges, such as NATO's involvement in the South-Caucasus (de Haas, et al, 2006; Priego, 2008) and NATO's involvement in energy with Russia (Monaghan, 2008; Smith Stegen, 2011). No scholar has written about NATO's role in energy by looking through the lens of the Copenhagen School. This popular theory on security has not been used to analyse NATO's role in energy. Furthermore, a knowledge gap in the academic literature about how NATO perceives threats to energy security as a vital security issue is present. Therefore, this thesis will contribute to the academic knowledge. The link with crisis and security management is very clear. Energy is an economic topic that is securitized, because energy has become a vital issue for the survival of society and state. This economic topic is transferred to the realm of security by using specific language. Therefore, politicians and other policymakers can use extraordinary means to counter threats. Energy has become integrated with national security. The use of the Copenhagen School as a theory links with crisis and security management in that this is a dominant theory in this domain.

1.4 Societal Relevance

The importance of energy in modern societies is increasing. However, energy in the future is becoming increasingly scarce and therefore it is important for a society to protect its energy supply. Energy has become a vital national security issue, as fuel for daily life (Klare, 2008: 484). The oil crisis in 1973 (Akins, 1973) and the several Russia-Ukraine gas disputes (Lee, 2017; Stern 2006: 50; Monaghan, 2008: 2), have demonstrated that an energy crisis can affect Western states, by disrupting the supply of oil and gas. Some of the advanced industrialized NATO member states are dependent on foreign energy, which is supplied from unstable regions, such as the Middle-East, the South-Caucasus or Russia (Gurbanov, 2015: 90). Terrorist organisations are increasingly targeting energy infrastructure, because they understand the importance of it for Western industrialized countries, which they perceive as an enemy (Monaghan, 2008: 5). Terrorists are increasingly focussing on vital energy infrastructure. For example, the Muslim extremists in the Middle-East, who observe the big impact of attacks on energy infrastructure could have on Western economies when targeting energy supplies. They increasingly express the need to target critical energy infrastructure (Klare, 2008: 492; Monaghan, 2006: 5; Monaghan, 2008: 2; Rühle, 2012: 391; Gurbanov, 2015: 93).

Cyber attacks, especially from other states, can target energy infrastructure and can have consequences. For example, the Stuxnet virus, that damaged the centrifuges of an Iranian nuclear facility in 2010 (Farwell & Rohozinski, 2011: 23; Rühle, 2012: 391; Butrimas, 2014: 16). Environmental change affects the energy sector, because oil and gas becomes increasingly scarce (Rühle, 2012: 391). Therefore, the protection of energy against threats is very important for industrialized states. This critical energy infrastructure that is used to supply dependent states needs to be protected from terrorists, pirates, wars and conflicts, and other threats. Another threat is a state that uses its energy policy to enhance dominance over another state, such as Russia over Ukraine or other European dependent states (Hadfield, 2012: 449; Klare, 2008: 488). Therefore, diversifying and securing energy by some NATO member states is a matter of national security (Baghat, 2006: 966).

1.5 Reading Guide

The structure of this thesis is as follows. After the introductory chapter, the second chapter will constitute the theoretical framework of the Copenhagen School. In this chapter, the basic outline of the Copenhagen School will be given, and the securitization theory and the security sector analysis will be explained. The third chapter introduces the research design of the thesis and describes the methods used in this study. The fourth chapter contains a literature review on the concept of energy security, that explains the concept of energy security so that it can be better understood throughout this research. The fifth chapter contains the analysis and answering of the first sub-question, concerning the incorporation of energy in NATOs security strategy. The sixth chapter answers the second sub-question, that contains the threats to energy security of NATO member states. The seventh chapter answers the third sub-question, concerning the responses of NATO, and the eight chapter answers the last sub-question, linking the theory of the Copenhagen School with NATO's energy security policy. The ninth chapter provides a conclusion and a discussion and the tenth and last chapter provides the bibliography.

2. Theory

2.1. Security Studies

A wealth of different theories of security studies exists. These theories formed "schools" of thought, which have different sub-divisions and views on security. Traditional security studies focussed on a narrow view on security, mostly concerning military security and the state as the object of security. During the Cold War, security studies increasingly aimed at the scientific study of security issues. The reason behind this was that government policy could be better developed, though innovation and research. Security studies was part of this research (Williams, 2008: 3). The traditional concept of security was subjected to contest, and different scholars argued for different concepts and thoughts on security. A key development within the academic world of security studies was the publication of Barry Buzan's book *People, States and Fear*. The book undermined traditional security studies fundamentally, because Buzan did not argue that security was only about states and the military. It focussed on humans as the referent object of security (Williams, 2008: 3). Buzan widened and deepened the concept of security, and this affected other academia to think differently about security. The widening and deepening of the concept of security created different schools on security, such as the Copenhagen School and the Welsh School (Williams, 2008: 3). These two schools are viewed as critical security studies, viewing security as something intersubjective and affected by different worldviews and discourses. Energy security is part of the wider and broader concept of security, and therefore these schools are best to analyse this form of security.

The Copenhagen School explores military and non-military threats to security (Buzan et al., 1998: 4). The school focuses on five different sectors that affect human security: the military sector, the political sector, the economic sector, the societal sector, and the environmental sector. Each sector has its own focal point and way of ordering priorities (Williams, 2008: 3). In the securitization theory, non-security issues can be transformed into security issues, which result in extraordinary means used by an actor (Waever, 1995: 55). The Welsh School of security studies or the Aberystwyth School focussed on deepening the understanding of security. This causes the students of the school to consider other referent object above and

below the state level. After this, the students broaden the understanding of security, which reveals a range of insecurities faced by an array of referent objects (Bilgin, 2008: 98). The students politicize security, in stead of securitize issues (Booth, 2005a). By doing this, the students reveal the political and constitutive character of security, and are able to de-centre the military and the focus on states as the referent object of traditional security agendas (Bilgin, 2008: 98). The difference between these two schools is that the Copenhagen School calls for de-securitization out of fear that state elites use zero-sum military and political measures against the securitized issues, which will not help to address human security (Bilgin, 2008: 98). The Welsh School however "prefers to hold on to 'security' as a concept for scholarly studies while scrutinizing its use in practice" (Bilgin, 2008: 98). This thesis uses the Copenhagen School for the analysis of the role of NATO within energy security. The reason for this is that the Copenhagen School acknowledges a broadened and deepened concept of security, where energy security has its place. Energy is present in all five security sectors of Buzan, and is therefore best analysed through the lenses of the Copenhagen School. The securitization theory within the Copenhagen School is a theory that is used to analyse the transformation of non-security issues into security issues, such as energy.

2.2. The Copenhagen School

At the end of the Cold War, the broadening and deepening of the concept of security began. Barry Buzan and Ole Waever's work was given the label of the Copenhagen School, due to the collective research agenda of these academics of the Copenhagen Peace Research Institute in Denmark (McDonald, 2008a: 68). Buzan, Waever, and de Wilde wrote the foundation of the Copenhagen School in 1998 in their book, *Security: A New Framework for Analysis*. Energy and energy security fits nicely in the theorem of the Copenhagen School. As stated in their book: "We argue against the view that the core of security studies is war and force and that other issues are relevant only if they relate to war and force /.../. Instead, we want to construct a more radical view of security studies by exploring threats to referent objects, and the securitization of those threats, that are non-military as well as military" (Buzan et al., 1998: 4). They want to explore military and non-military threats to security, by addressing the securitization of those threats (Buzan et al., 1998: 4). They explore these threats by looking at the build-up of those threats. They look at where or from who the threat is coming from and what referent objects are threatened. They furthermore investigate if the threat was securitized from low politics to high politics, so that extraordinary means can be

implemented. High politics concern the survival of the state and imply existential important issues, while low politics imply issues that are of less importance to a state than the high politics issues (Youde, 2016: 157).

The Copenhagen School creates a wider concept of security, and remains in the traditional theory of Constructivism, because it looks at security as a social construct where it is affected by identity and the concept is constructed differently by different actors (McDonald, 2008a: 68; Guzzini, 2011: 333; Özcan, 2013: 8). This is in line with the constructivists view of international politics, which is dominated by social constructs and identities. The Copenhagen School takes this constructivists approach, by not questioning what the threat really is, but rather defining security as "a quality actors inject into issues by securitizing them" (Buzan et al., 1998: 204). Buzan argues for this wider concept by saying that: "Global capabilities make it difficult for any state or society or individual to escape from the increasingly large consequences of actions taken by others. And it becomes increasingly difficult to act without coordination with others. The first reason for adopting a broad conception of security is therefore simply that the realities of the policy environment call for it" (Buzan, 1991: 370).

2.3. Security Sectors

An important conceptual development in *Security: A new framework for analysis*, was Buzan's notion of sectorial analysis of security (Özcan, 2013: 6). The Copenhagen School tackles the question of 'security for whom?', by looking at answers that refer to the referent object. The referent object is the thing that needs to be secured from the threat with a security action. Buzan argues that the military sector is not the only referent object of national security, but that it is one of many sectors that can be threatened (Özcan, 2013: 7). Buzan defines sectors as "arenas entailing particular types of security interaction" (Buzan et al. 1998: 7–8). These sectors "encourage different forms of relationships between relevant actors to develop and generally encourage different definitions of referent objects (the 'whom' in 'security for whom?')" (McDonald, 2008a: 70). The five security sectors The Copenhagen School identifies are the military sector, the societal sector, the political sector, the economic sector, and the environmental sector. These five arenas entail different forms of interactions with security, and have different definitions of referent objects (McDonald, 2008a: 70). The

Copenhagen School has broadened the scope of security to include these objects that are different than the state as the only referent object. Therefore, security has slowly developed from a traditional and military centred view, to a broader focus on people's security where humans serve as the referent object (Özcan, 2013: 5).

Energy is used in almost every sector, and is therefore a very important element in global politics and economics in the current world system (Özcan, 2013: 11). Therefore, energy security is multidimensional and complex, because, in theory, it can be framed in every sector of security given by The Copenhagen School. Özcan argues that "energy securitization can be defined as a security type realized in different sectors (political, military, economic, societal and environmental), at different levels (international, regional, national and individual) and through different actors' (states, companies, non-governmental organisations, lobbies, international institutions, individuals, etc.) ability to maintain a secure and sustainable demand/supply of energy at affordable prices" (Özcan, 2013: 12-13). Energy should not be limited to one specific sector, but should be viewed as an issue that has links with all sectors. Therefore, "energy security could best be analysed in a more comprehensive 'widened' cross-sector manner, which would also allow the analyst to examine its impact on other referent objects in their respective sectors" (Christou & Adamides: 2013: 510). The threats related to energy usually lay in the political, military, and economic sector, and therefore it is best to analyse energy security in these respective existing sectors (Christou & Adamides: 2013: 514). These three sectors will be used to analyse NATO's energy security, by looking at how energy security and threats to energy security moved through these different sectors.

2.4. The Theory of Securitization

By adding the theory of securitization, this thesis will discuss how political/economic acts are transformed into security issues, by changing the perspective. By framing a certain topic or problem as a security problem, actors can use extraordinary means to deal with these issues (Waever, 1995: 55). The issue is lifted from a specific political action, matter or situation to a level that is beyond the scope of normal politics (Buzan et al., 1998: 23). If the issue has been included as a security issue, it has been securitized. Therefore, people from other states or other societies will have different interpretations of situations (Buzan et al., 1998: 24). With

the securitization theory, security is perceived as a site of negotiations between a speaker and an audience (McDonald, 2008a: 69). The political problem is pushed by a "securitizing move/speech act", that allows the problem to become a threat to security (Buzan et al., 1998: 25). If the threat then is accepted, the securitization process is completed. This also happened in the case of energy. Energy was considered an economic issue, but slowly transformed into a national security issue (Percival, 2008: 3). The other way around is similarly possible. This is called de-securitization, and this is the process where an issue is removed from the field of security and back into the realm of normal politics (McDonald, 2008a: 70). The theory of securitization is "based on a clear idea of the nature of security, and aims to gain an increasingly precise understanding of who securitizes, on what issues (threats), for whom (referent objects), why, with what results and, not least, under what conditions (what explains when securitization is successful)" (Waever & Buzan, 2004: 71).

The securitizing actor uses the securitizing move/speech act to identify the existential threat to the referent object and the urgency of it. With the securitizing move/speech act, extraordinary measures can be identified and executed to secure the referent object (Özcan, 2013: 9). The securitizing move/speech act takes the issue and frames it as a special kind of politics or as above politics. The theory can therefore be used to explain particular types of behaviours regarding security within international politics. When the issue is accepted by the audience and the extraordinary measures are authorized to be executed, only then the issue becomes fully securitized. The endangerment of the referent object must be proved in order to convince the audience of the threats to the object (Buzan, 1991: 25). Buzan et al. argue that "a successful securitization consists of three elements, namely: 'existential threats', 'emergency action', and 'effects on inter-unit relations by breaking free of rules" (Buzan et al. 1998: 26). The Copenhagen school argues that "security should be seen as a negative, as a failure to deal with issues of normal politics" (Waever, 1995: 29). Therefore, the Copenhagen School prefers de-securitization over securitization, because issues are moved out of the sphere of exceptionality, where state elites can use extraordinary measures, and into the ordinary public sphere. This study will not argue for the securitization or de-securitization of energy and its positive or negative effects, because of the subjective nature of such an argument. First, existential threats should be identified to the energy security of NATO member states. Secondly, the actions of NATO to these threats should be analysed, and at last, the effects on the relations with different actors should be identified to analyse the success of the securitization process of energy by NATO.

In Figure 1, the process of securitization and its elements have been put into a model. The main element of the securitization process is the "speech act". This act is performed by the securitizing actor, who acknowledges the threat to the referent object. The threat can be an existential threat, but also a threat that is an indirect danger to the referent object. An issue can be framed into a threat by the securitizing actor, so that the actor can perform extraordinary measures to deal with it and transform the issue from normal politics to high politics. High politics contain issues that concern the survival of the state and imply existential important challenges (Youde, 2016: 157). The facilitating conditions are the conditions present for the securitizing actor to make the "speech act". The actor should be an entity with great political influence to make the "speech act". If the actor is a government of a state, the conditions can contain the political environment present in the state or the economic status of the country. For an international actor, this can be the current status of international politics. The audience should accept the "speech act" of the securitizing actor in order to make the securitization move successful. The audience also authorizes the measures performed by the securitizing actor in order to successfully take away the threat. The measures undertaken by the actor are part of the intended outcomes of the "speech act" by the securitizing actor. In table 1 in section 2.7, this process is operationalized, so that the concepts in figure 1 can be used in this thesis. In table 1, the concepts are defined into definitions, and in indicators. Table 1 also identifies the sources where these indicators can be found.

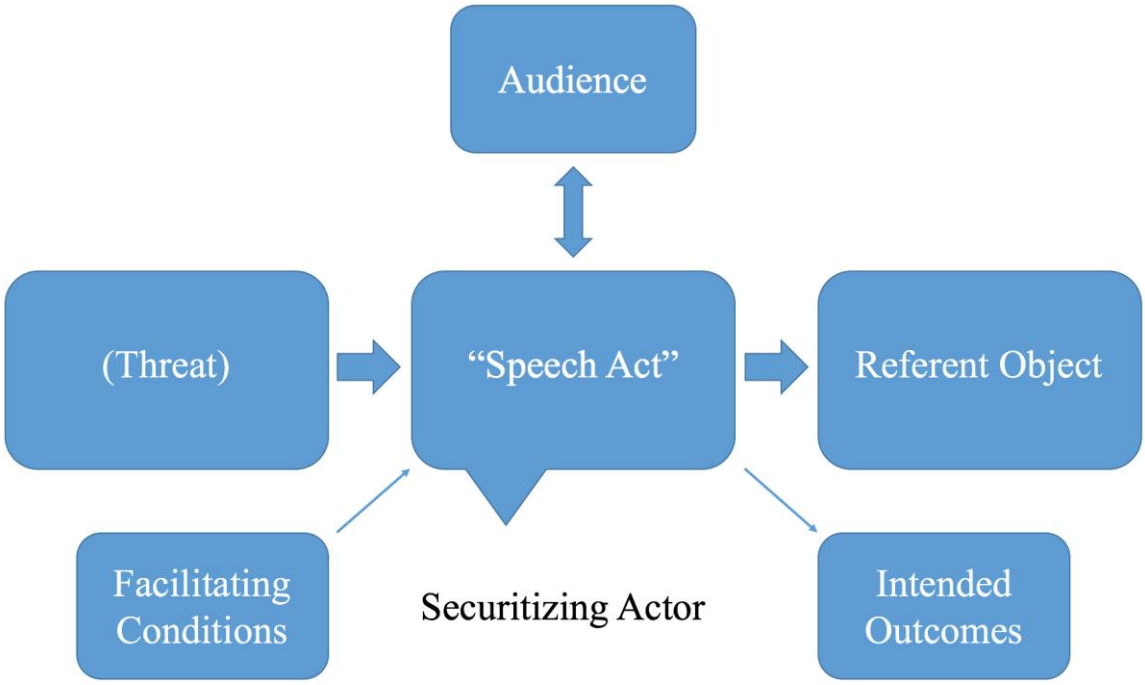


Figure 1: The process of securitization

2.5. The Intensity of Securitization

Janeliūnas and Tumkevič created a framework to measure the intensity of securitization, based on the questions of "how, why and do actors securitize energy in their strategic documents?" They seek to explore the causal mechanism of securitizing in the energy sector. Janeliūnas and Tumkevič's framework include the act of securitization, the securitization process and the consequences of the securitization of the issue. In their framework, they provide six criteria to measure the intensity of securitization. The first criterion is the inclusion of energy security in national security strategies. Energy security should be seen as a point of concern by the actor and should be expressed in its security strategy. This addition of energy security in the strategies is the most typical result of a securitization act, and this expresses the consensus to call energy insecurity a threat (Janeliūnas & Tumkevič, 2013: 70). The second criterion is the status of the energy sector in security strategies. This criterion covers the relationship between energy security issues with other security issues. The status of energy security issues can have two form. The first form is that it is an independent security sector, with specific risks, objects and objectives. The second form is that it only refers to energy supply at reasonable prices in order to promote economic growth, which indicates that energy security is mainly part of the economic sector and not an independent

security sector (Janeliūnas & Tumkevič, 2013: 70). The third criterion is the significance of energy threats. This covers the question: "are energy threats prioritised among other security risks or threats?" (Janeliūnas & Tumkevič, 2013: 71).

The fourth criterion is the timing of energy concerns. Short-term threats to energy security of the actor are of more concern than long-term threats. When there are more short-term threats to energy security present, the urgency of energy security is higher and this increases the intensity. The fifth criterion is the sources of energy threats. This criterion covers the external or internal threats to energy security. Janeliūnas and Tumkevič presume that when there is a dominance of external threats to the energy security, the actor is more prone to energy securitization and the intensity will be higher (Janeliūnas & Tumkevič, 2013: 71). The sixth and last criterion contains the extraordinary measures undertaken by the actor. Janeliūnas and Tumkevič ask if "the securitization of the energy sector create preconditions for using extraordinary measures in order to solve securitized problems?" (Janeliūnas & Tumkevič, 2013: 71). They argue that the more criteria for securitization found, the higher the intensity of securitization. Janeliūnas and Tumkevič apply this framework in a comparative case study to four countries, namely Estonia, Lithuania, Poland and Ukraine. However, instead of comparing different countries within this framework, this thesis will apply it only on NATO and NATO's role in energy security.

2.6. Criticism On the Theory of Securitization

Critics on the theory of securitization argue that the securitization framework is problematically narrow. The securitization act focuses on the speech of dominant actors, who are most of the time political leaders. This is defined narrowly, because it encourages the idea that securitization is only achieved when an institutionally legitimate actor speaks about about the issue on behalf of a political community, such as a state. This excludes other forms of representations, such as material practices or images, which are not part of the securitization move (McDonald, 2008b: 564). The focus within the theory of securitization lies on speech and its power to construct security. Another critique is that there is tension between "understanding securitization as a productive process by focusing on the per formative power of the speech act, and as a constructed process by claiming that security is inter-subjectively constituted" (Šulović, 2010: 5). This means that it is difficult to understand

securitization from a Constructivists perspective, because the facilitating conditions in which an audience accepts a securitization move are fixed and taken as givens in a conceptual framework provided by the Copenhagen School. This is at odds with the statement that security is a social construction (Šulović, 2010: 5). Moral and ethical critics argue that a normative conceptualization of securitization/de-securitization should be present within the framework of the securitization theory. The second argument by moral and ethical critics focuses on the disregard for the political consequences within the securitization theory (Taureck, 2006: 53). However, Taureck argues that this moral/ethical criticism is fundamentally flawed, because the aims of securitization theory is not to make a normative conceptualization of security and "being political plays a supplementary role to the groundwork provided by securitization theory" (Taureck, 2006: 60).

2.7. Operationalization of Theory

Concept	Definition	Indicator	Sources
Facilitating Conditions	The conditions present so that the actor can make a speech act.	These conditions are indicated by the fundamental base in which the securitizing actor makes the speech act, such as the political environment present, the current state of the economy, the current status of the actor etc.	Policy document, reports, statements and other primary sources of the securitizing actor. Data of secondary sources, such as academic articles and independent reports.
Threat	A person, actor, thing or phenomena that causes a direct or indirect danger or damage.	The thing or phenomena identified by the securitizing actor as a direct or indirect danger to the actor, or the thing it tries to protect. This is indicated by the securitizing actor.	Policy document, reports, statements and other primary sources of the securitizing actor. Data of secondary sources, such as academic articles and independent reports.
Audience	The individual, group, state or organisation that is targeted by the speech act.	The audience is recognized by looking at the individual, group, state or organisation to which the speech act is targeted.	Policy document, reports, statements and other primary sources of the securitizing actor. Data of secondary sources, such as academic articles and independent reports.
Speech Act	A move by the securitizing actor that identifies the threat to the referent object and the urgency of it.	The speech act is recognized by the attention given by the securitizing actor, and when the actor uses security related language in relationship with a non-security issue, such as energy.	Policy document, reports, statements and other primary sources of the securitizing actor. Data of secondary sources, such as academic articles and independent reports.

Concept	Definition	Indicator	Sources
Referent Object	The thing or object that needs to be secured from the threat.	The thing or object that is targeted by the threat, and is used by the securitizing actor to identify the importance and urgency of the threat.	Policy document, reports, statements and other primary sources of the securitizing actor. Data of secondary sources, such as academic articles and independent reports.
Intended Outcomes	Extraordinary measures that the securitizing actor can perform to deal with the threat.	The measures taken by the securitizing actor after the securitization of a phenomena, which are only facilitated by the use of the speech act and the securitization of a non-security issue.	Policy document, reports, statements and other primary sources of the securitizing actor. Data of secondary sources, such as academic articles and independent reports.

Table 1: The operationalization of the process of securitization

3. Methodology

3.1. Case Study

This thesis contains a single case study of NATO's role in energy through the securitization theory and which threats NATO has to the energy security of its member states. The method of this thesis is a single case study, which will examine in detail a specific role of NATO within a security domain, in order to gain an in-depth knowledge of this role (Yin, 2003: 40). Yin (2003, p.13) gives a suitable yet general description of the term case-study when he calls it "an empirical enquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident" (Yin, 2003: 13). The case study design is used in many situations to contribute to the knowledge of organizational phenomena (Yin, 2003: 1). Babbie divides case-studies into the three groups of descriptive, explorative, and explanatory research (Babbie, 2013: 17-18). This study contains a clear explanatory characteristic, since it seeks to explain a known phenomenon, the role of NATO in energy security, with a theoretical framework, namely the securitization theory by the Copenhagen School.

The research will only focus on NATO and not on other organisations, because it would not be feasible otherwise. Including other organisations, such as the European Union (EU) in this thesis would make it too big and too broad. With the tight time schedule, it will not be feasible. The decision to use NATO as the case for this study, is because the Alliance is mostly focussed on the collective security of its member states. Due to the military expertise, worldwide character and the strategic capabilities, it can perform military operations on a global scale. Therefore, NATO is a more relevant organisation than the EU, because of the global character of energy security. To produce an adequate answer to the research question, a case study design is most suited. For the answering of the research question and of the sub-question, an in-depth research in NATO's activities in the energy security domain is needed. For the first sub-question, an in-depth and thorough research in the primary sources of NATO is needed. These sources consist of policy documents, Summit declarations, treaties and statements of NATO. The second sub-question requires an in-depth analysis of the threats to the energy security of NATO member states. To gain these insights, I will have to analyse primary and secondary sources. The secondary sources consist of academic articles and

research reports by independent researchers, where the data of these sources is used in this thesis. The third sub-question requires an analysis of primary sources of NATO and secondary sources, such as reports, to gain insights of the responses of NATO against these threats. The fourth and last sub-question analyses the insights gained in the first three sub-questions through the securitization theory in a deductive manner. The case study design is very useful to get a holistic understanding of NATO's activities in energy security (Kumar, 2011: 123).

3.2. Data Collection

This thesis performs a qualitative document analysis of official NATO documents, resolutions, summits, treaties, discourse, and statements, all related to energy and energy security. This study also covers opinion documents and speeches of important NATO spokesmen. These official documents are specific and limited in time and scope, which suits a case study design perfectly. These primary sources will be picked from NATO's own online database, which is accessible for public at NATO's website. The primary sources are used to analyse the use of energy by NATO through the theory of the Copenhagen School. In order to avoid a one-sided view of NATO's role in energy security, different secondary sources, such as academic articles, will be used. These secondary sources will be analysed through a qualitative document analysis, and the data will be used in the analyses of the different sub-questions and research question. I will also use data sources of the International Energy Agency (IEA) and data sources of NATO to retrieve data for the analysis of the sub-questions. Reports of independent researches that cover elements of this study will be used in the analysis of the sub-questions. In the analysis of threats to NATO's energy security and the responses of NATO against these threat, NATO reports will be used to collect data.

The time period this thesis will address is from 2006 till 2016. In January 2006, after the first Ukraine-Gazprom (Russia) gas disputes talks about NATO's role in energy were opened and discussed between member states, during the 2006 Riga Summit (Monaghan, 2008: 2). This study covers the time period of ten years, where a lot has happened in regards to energy security and NATO. However, in NATO's 1999 Strategic Concept one sentence was devoted to the disruption of energy supplies (Rühle, 2012: 389). This special case is far separated from the time period in this thesis, but from 2006 till now, much more time and resources

have been dedicated to energy security, which is demonstrated in the current Strategic Concept (NATO, 2010b: 12).

3.3. Unit of Analysis and Unit of Observation

The unit of analysis of this thesis, the subject, is NATO's energy security (Yin, 2003: 24). This is the case that this thesis will investigate. The unit of observations are the threats to NATO's energy security and the responses of NATO against these threats. These threats are linked to energy security and will be observed and used to answer the research question (Yin, 2003: 26). This thesis excludes other implications and variables, because it will only focus on threats to the energy security of NATO. Due to the limited material available for analysis, this study uses a qualitative method for analysis. A quantitative method does not suit this research, due to the nature of political documents and the limited material available. These documents contain a varying degree of hierarchy, authority, priority and influence, which makes a quantitative research method impossible. After the analysis of the use of energy within NATO sources, this study focuses on the analysis of threats to NATO's energy security and NATO's responses to these threats. This contains a qualitative text analysis of primary and secondary sources, namely official documents, policy documents, academic articles, news articles, and the application of the securitization theory on this case. At last, this will be analysed through the lenses of the Copenhagen School and the securitization theory.

3.4. Internal and External Validity

The use of qualitative research method is sometimes criticized for its lack of scientific internal validity, because it has risks of becoming subjective to personal opinions. However, this study will use several primary and secondary sources to minimalize this risk. Furthermore, it is hard to replicate the study in order to verify a high grade of validity. This case study has limited external validity, meaning that it is difficult to generalize to other contexts on the basis of the research (Yin, 2003: 37; Kumar, 2011: 123). Since this study is confined within specific NATO's context, the results cannot be widely generalized, however it can provide implications regarding other international organisations and their role in energy security. The framework of this research can be used for other organisations, such as the EU and the United Nations (UN), who also securitize energy within their security strategies. The

reliability of this study will be provided by the use of qualitative text analysis and a variety of different well-documented sources that provide material for the analysis (Yin, 2003: 38). The use of NATO's primary sources brings some difficulties. In a case study, it is important to recognize the total study population as one entity (Kumar, 2011: 123). This thesis views NATO as a unitary actor, but member states within NATO all have different agenda's and interests. Therefore, it is impossible to say that all NATO member states agreed on the policy NATO is carrying out. Secondary sources can be exposed to potential bias and personal opinions of authors and journalists. The usage of news articles and other media sources can bring difficulties and should be critically viewed and used with care. Therefore, different secondary sources should be used to exclude the potential subjectivity of one secondary source.

4. Energy Security

To understand the topic of this thesis, NATO's energy security, we have to understand the different concepts and definitions of energy security. However, to understand the concept of energy security, we have to understand the concept of security and the change it had over the past years. In the following section, the concept of security, energy and energy security will be discussed, and different definitions will be compared to each other. Security and energy security do not have an agreed definition, that is shared by all individuals, states, and organizations. The contested concepts are influenced by time, place, values, perception, religion, culture and more.

4.1. Security

The contested concept of security changed many times over the years. Many scholars discussed the term and did not come to a generally agreed definition. Every definition of security contains different issues, purposes, and specific values (COT, 2007: 4). The concept of security is influenced by different perceptions of different academia and therefore contain different threats, capabilities and values (Haftendorn, 1991: 5). The concept of security has changed over time, with three phases that can be identified. The first phase was the phase before the Cold War, where peace and security were maintained by international understanding, arbitration and democracy (Fox, 1949: 69). International institutions and law formed the pillars of security instead of military force (Baldwin, 1995: 119). The international community provided justice, security and cooperation for all (Haftendorn, 1991: 7). Baldwin identifies four recurring themes under scholars in the time period between 1945 and 1955. The first theme contained the perception of security as one amongst many values. The second theme included non-military forms of statecraft that should pursue national security, and not only military forms. The third theme contained the emphasis on caution and safety by the military policy and the last theme was that scholars were focused on the connection between domestic affairs and national security (Baldwin, 1995: 122).

During the Cold War, the definition of security was influenced by the enormous destructive capability of nuclear weapons (COT, 2007: 8). This phase was marked by three different

approaches to security. The first approach contained the balance of power theory (Waltz, 1979: 117). This theory contained the notion that the stability of the international system was influenced by the balance between the two superpowers, the United States (US) and the USSR, and during the Cold War these two powers balanced each other out (Mearsheimer, 1990: 20). The politics of each superpower was focused on the containment of the other superpower. The second approach to security was the deterrence policy. The two superpowers did not want to be aggressive towards each other, because of fear of mutual assured destruction (Mearsheimer, 1990: 20). Both the military power of the US and the USSR were relatively equal, and therefore deterred each other. The third and last approach was that of the bipolar world. International politics was dominated by the US and the USSR, and both states were searching for ways to increase their territorial and political power (COT, 2007: 12). Minor changes in the balance of power between the two superpowers did not have implications for both countries (Rosecrance, 1966: 314). The realist and traditional view on security dominated the time period of the Cold War. This view regarded the concept as a state-centred and military concept, which contained the use of military force to secure the state and the citizens of the state (COT, 2007: 17). After the Cold War, the concept of security shifted towards a more transnational concept, containing subjects such as terrorism, global crime, Inter-Governmental Organisations (IGO) and Non-Governmental Organisations (NGO), environmental security, energy, globalization, drug-and human trafficking etc. (COT, 2007: 14).

An important debate between scholars is the debate about whether security is an overdeveloped or an underdeveloped concept. Buzan (1991: 1) argued that security is underdeveloped, and gave four explanations. The first reason is that security is too complex for analysts, making the concept prone to easier concepts. The second explanation is the connection and overlap between the concept of security and the realist's concept of power (Buzan, 1991: 7-11). The third reason is that scholars viewed security as a concept that only existed within the realist theory, because realism dominated international politics in the 1970s. However, this realist view on security is too war-prone and too self-fulfilling. The last explanation Buzan gave is that policy makers used security as a justification for actions and policies that normally had to be explained (Buzan, 1991: 7-11). Garnett however argues that security has become an overdeveloped concept, and is afraid that this threatens the concept to become meaningless (Garnett, 1996: 12). The broadened concept of security invites a lot of

different types of security, and one of those is energy security, which is the overall concept of this thesis.

4.2. Energy

To understand energy security, this section will first look into the concept of energy. Energy is central in all human activities. Even in prehistoric times, humans must consume food to gain energy, and to gather more food and other vital materials, such as building shelter or weapons (Klare, 2008: 484). In a more complex society, energy is needed to fuel factories, railways, ships and so on. When a society evolves into an even more complex and more productive society, the need for energy increases. Modern, industrialized countries such as NATO member states are in need of a lot of energy (Klare, 2008: 484). Private companies in Western states largely perform the procuring, producing and delivering of energy to consumers. Klare states that "because the acquisition and delivery of adequate supplies of energy is considered so essential to the economic health of the nation, governments also play a significant role in key aspects of the energy procurement process" (Klare, 2008: 484).

In this study, energy refers to oil and gas most of the time. However, energy can also refer to hydro-power, nuclear energy, coal, charcoal or wood. To satisfy the rising demand for energy, policy makers will try to increase the supply of energy (Klare, 2008: 485). However, government officials are aware that they have to diversify their energy supply, so that a shortage in one of those materials will not lead to an energy crisis. They should furthermore take into account that global climate change could potentially be very destructive, and that the use of fossil fuels, such as oil, coal and gas, will contribute to that (Klare, 2008: 485). The intervention of the government in the private sector of energy is justified in the terms of energy security.

4.3. Energy Security

Energy security is a contested concept that means different things in different situations to different people. This variation can be explained by energy systems varying from one place to another. This gives rise to different energy insecurities. Another explanation is that

sometimes the term energy security includes other energy policy issues, such as energy poverty and climate change (Cherp & Jewell, 2014: 416). However, Cherp and Jewell state that "the presence of different meanings of energy security do not necessarily mean the existence of different concepts of energy security" (Cherp & Jewell, 2014: 416). It could mean that the same concept of energy security has different expressions under different conditions, and this could explain why different states have different energy priorities and policies (Cherp & Jewell, 2014: 416). Therefore, it is hard to find a standard, all-embracing definition of energy security. Klare states that most authors describe energy security as "the assured delivery of adequate supplies of affordable energy to meet a state's vital requirements, even in times of international crisis or conflict" (Klare, 2008: 484). If it is put simply, energy security constitutes "the reliable and affordable supply of energy on a continuing, uninterrupted basis" (Deutch & Schlesinger, 2006: 3). This encompasses two functions of energy security: making sure that there are sufficient supplies of energy to meet the demand and making sure that the delivery from point of production to the consumer is unhindered (Kalicki & Goldwyn, 2005).

A common definition of energy security used by scholars is the one of the IEA. The Agency defines energy security as "the uninterrupted availability of energy sources at an affordable price" (IEA, 2017). However, they distinguish two dimensions: long-term energy security and short-term energy security. Long-term energy security contains correct investments to ensure that in the future supply of energy is not disrupted and is in line with sustainable environmental needs and economic developments. Short-term energy security focuses on resilience of energy systems to react adequately to sudden changes to the supply-demand balance (IEA, 2017). The IEA furthermore differentiate the liquid market and the fixed market. The liquid market is the international oil market, where changes in supply and demand can easily be fixed by adjusting prices. Only in extreme events, the oil market can have a risk of physical unavailability, because oil is easily moved and shipped with super tankers (IEA, 2017). Fixed energy markets, such as the electricity and natural gas markets, have difficulties dealing with shocks and disruptions. This is because the transmissions systems are fixed and can not be moved. The natural gas market is mostly fixed, because natural gas is transported through pipelines and not in barrels on ships, with the exception of Liquefied Natural Gas (LNG) (IEA, 2017). Solutions such as LNG can have positive outcomes for states dependent on gas pipelines.

The definition of the IEA perceives energy security from an economic perspective. Klare argues for the definition of energy security from a government/political perspective. He states that "energy security is ensuring that appropriate incentives and policy instruments are in place to impel private firms to take the steps needed to produce and deliver adequate supplies of energy to meet the nation's requirements" (Klare, 2008: 484). De Haas et al. suggest a more military definition in that "energy security is a policy which considers the risk of dependence on fuel sources located in remote and unstable regions of the world and the benefits of domestic and diverse fuel sources" (de Haas, et al., 2006: 10). De Haas et al. differentiate two meanings of energy security, for the producing side and for the consuming side. The producing side must ensure "that gas and oil are produced, transported, delivered and paid for without hindrance", and the consuming side must have "undisturbed receipt of resources at reasonable prices, which ensure that their states continue to stably function" (de Haas, et al., 2006: 10).

Winzer focusses on threats to energy security and defines energy security as "the absence of, protection from or adaptability to threats that are caused by or have an impact on the energy supply chain" (Winzer, 2012: 41). He suggests that by narrowing down the concept to energy supply continuity, it can be measured more precisely (Winzer, 2012: 37). Another traditional definition is that energy security is the capability of a state to acquire certain energy resources, to continue the development of national power (Kalicki & Goldwyn, 2005: 9). This definition relates energy security to national security. Insecurities, geopolitical tensions, and disruptions of supply are usually caused by tensions in the oil- and natural gas market. States that are very dependent on their oil- and gas exports are prone to instability and therefore, being dependent on such a state, causes risks (Van Esch, De Jong & De Ridder, 2014: 93).

However, energy security does not only mean securing sufficient supplies of energy, but can furthermore mean the diversification of energy supplies. As a result of the growing concern about global climate change, restrictions on the use of fossil fuels can be increased (Klare, 2008: 485). Therefore, energy security also means "diversifying a state's primary sources of fuel and investing in climate-friendly alternatives – especially renewable forms of energy such as solar, biofuels and wind power" (Klare, 2008: 485). A definition that encourages the need for clean energy is the definition by Goldthau and Sovacool. They define energy security as "the way of equitably providing available, affordable, reliable, efficient,

environmentally benign, proactively governed, and socially acceptable energy services to end-users" (Goldthau & Sovacool, 2012: 235). Winzer states that all definitions of energy security have one thing in common and that is that energy security should enhance the security surrounding the supply of energy (Winzer, 2012: 41). This thesis will use the concept of Winzer stated above, because Winzer focusses on threats to energy security. NATO's core task in the energy security sector is the protection of the energy supply of its member states against threats posed by many different actors, such as pirates, states and terrorists, or phenomenon, such as cyber attacks or climate change. The definition of Winzer will be used in the following way. First, this thesis identifies the threats to the energy security of NATO member states. After the threats have been identified, this thesis focuses on the responses of NATO to cope with these threats.

5. NATO and Energy Security

This chapter focusses on how energy is securitized by NATO. This section will answer the following sub-question posed in the introduction: *how is energy security being perceived by the NATO?* First, this chapter will focus on the NATO summits and how energy security is used during these summits to gain a global impression. Secondly, NATO's use of energy will be discussed. At last, this chapter focuses on the different security sectors that cover NATO's energy security, and concludes with a small summary of the chapter.

5.1. Energy in NATO Summits

During the NATO Riga summit on the 28th and 29th of November, 2006 in Latvia, energy security was officially introduced to the organisation's summits. However, during the Cold War, the US was already pushing for the protection of vital energy transit routes in the Persian Gulf. Some European NATO member states joined, but other allies argued that this was a distraction from the real NATO task, namely keeping the peace in Europe (Rühle, 2012: 388, Klare, 2008: 487). Aimed to protect oil production in Saudi-Arabia and Kuwait, NATO member states joined the US in a coalition and defeated Iraq in the the Gulf War of 1991 (de Haas et al., 2006: 56). The building of the NATO pipeline system in Europe during the Cold War was to guarantee fuel supplies to NATO forces (Kavaliūnaitė et al., 2016: 28). In the Riga Summit in 2006 however, the organisation agreed that energy was too important to be left out of the organisation, and was officially introduced. They used safe and vague words to introduce energy as a security issue. In the declaration, they stated that "the Alliance security interests can also be affected by the disruption of the flow of vital resources" (NATO, 2006). The words 'can also be affected' give away that NATO was not sure about energy as a security issue. NATO did not want to make any hard statements, and therefore they ordered the "Council in Permanent Session to consult on the most immediate risks in the field of energy security, in order to define those areas where NATO may add value to safeguard the security interests of the Allies and, upon request, assist national and international efforts" (NATO, 2006).

It is clear that this was the first time that NATO discussed energy security within the organisation, because they were careful to come with hard statements. Words such as consulting, supporting, coordinating, and defining may appear vague (Monaghan, 2008: 4). Senator Richard Lugar, a Republican senator and Chair of the Senate Foreign Relations Committee, stated during the summit that energy security should be included under the scope of Article 5, because energy can be a potential source of conflict (Tranciuc, 2011: 122). During the Riga summit, NATO did not want to dive directly into the military dimension of energy security, but first wanted to estimate threat levels and prioritise threats. The heads of state and government of the member countries understood that energy security is a multidimensional concept, spread over different security sectors (Monaghan, 2008: 4-5). NATO did not pursue a leading role in energy security, with language such as "support a coordinated international effort" (NATO, 2006), and "upon request assist national and international efforts" (NATO, 2006). NATO was not sure about the role it could play in the energy sector, and therefore it used secure language and took the role of a supporting player. The limited agenda, discussed in the Riga declaration, shaped the stepping stone for official discussions about energy security in the organisation (Monaghan, 2008: 5).

The second NATO summit where energy security was discussed, was the summit organised between 2 and 4 April, 2008 in Bucharest, Romania. What preceded this summit was the dispute in December 2006 and January 2007 between Russia and Belarus about gas supplies (Mileski, 2010: 45). After this dispute, the Russia-Ukraine gas dispute in 2009 happened, which succeeded the gas dispute between the two countries in 2006 (Mileski, 2010: 45). These disputes resulted in a halt in gas supplies for Bulgaria, Croatia, Macedonia, Slovakia, Moldova and Serbia, and severe gas cuts in countries, such as Greece, Turkey, the Czech Republic, Hungary, Austria and Poland (Mileski, 2010: 45). During the Bucharest summit, NATO discussed the report "NATO's Role in Energy Security", that was prepared in response to the Riga summit. This report helped the heads of state and government of the member countries better understand the risks, threats, and possibilities NATO had in the field of energy security. The declaration stated that NATO engaged in the following activities: "information and intelligence fusion and sharing; projecting stability; advancing international and regional cooperation; supporting consequence management; and supporting the protection of critical energy infrastructure" (NATO, 2008). NATO still prioritized its role as a supporting actor. The report provided a major step towards the role NATO could provide in energy security. The Alliance stated that it wants to 'add value' to the field of energy

security, and again they stated the need for a report of the Council in Permanent Session that analysed the progress achieved in energy security (NATO, 2008). Together with the Riga summit, 'sharing' and 'supporting' were the key terms (Monaghan, 2008: 5). The Bucharest summit provided a clear statement of the activities of NATO in the field of energy security.

During the Strasbourg/Kehl Summit on 3 and 4 April 2009, NATO continued the discussion about what the role of the Alliance in energy security should be. The heads of state and government of the member countries stressed that the Alliance has implemented the recommendations provided in the Bucharest summit (NATO, 2009). During the Strasbourg/Kehl summit, NATO emphasised the dangers of the disruptions of natural gas supplies in 2006, 2007 and 2008. The Alliance stated that "the issues of a stable and reliable energy supply, diversification of routes, suppliers and energy sources, and the interconnectivity of energy networks, remain of critical importance" (NATO, 2009). This sentence came back every summit, and it clearly defined why energy is an important issue for NATO member states. In the declaration, the heads of NATO member states again focused on 'adding value' and "coordinating a number of organisations that are specialised in energy security" (NATO, 2009), which is repeated every summit. They furthermore announced that they declared their "continuing support for efforts aimed at promoting energy infrastructure security" (NATO, 2009). In the next summits, they enlarged this part by adding harder statements and more precise regions where protection is needed.

During the Lisbon summit on the 19th and 20th of November 2010, NATO had declared that they were going to further develop their capacity in energy security. They "will enhance consultations and cooperation with partners and other international actors, as agreed, and integrate, as appropriate, energy security considerations in NATO's policies and activities" (NATO, 2010a). This suggested that NATO is increasing its role in energy security in areas where they could 'add value'. The Lisbon declaration gave us three main elements of NATO's energy security, namely "safe and constant access to energy supplies, diversification of routes, suppliers and energy resources, and respectively the inter-connection of the energy grids" (Tranciuc, 2011: 123). The Lisbon summit declaration moved beyond the restrictive and defensive language of the Bucharest summit declaration, and it contributed to the evolution of energy security in the security agenda of NATO (Rühle, 2012: 391). In the Lisbon declaration, NATO used harder language such as 'critical importance' and 'contribute to energy security' (NATO, 2010a), instead of 'supporting' and 'sharing' (NATO, 2008). In

addition, NATO had the Strategic Concept to adhere to in the summit, which was developed in 2010 and contained an overview of ongoing activities and future activities of NATO.

During the Chicago summit, held on the 20th and 21th of May 2012, NATO stressed the responsibility of national governments in the issues covered by the concept of energy security (NATO, 2012a). However, NATO should closely follow the developments in energy security and assist member states were needed. In the declaration, NATO still used the same language as in the previous declarations (NATO, 2012a). NATO stressed the need for improving the energy efficiency in the military and work on a case-by-case basis with partners. NATO furthermore established a NATO-accredited Energy Security Centre of Excellence (ENSEC COE) in Lithuania (NATO, 2012a). During the Wales summit on the 4th and 5th of September 2014, NATO discussed the Russia-Ukraine crisis, the instability in the Middle-East and the instability in the North-Africa region. NATO wanted to "enhance our awareness of energy developments with security implications for Allies and the Alliance", and "enhance training and education efforts" (NATO, 2014a). The role of NATO to aid national governments in energy security shaped into form. NATO understood that due to its international character, it could help national governments to increase energy security within the region of the member state.

In the Warsaw summit on the 8th and 9th of July 2016, NATO greatly improved and increased its tasks in regard to energy security. This was due to the ongoing conflicts in Libya, in the Middle-East and in Ukraine (NATO, 2016f). NATO stressed the potential political and security implications of energy developments for NATO member states, which were demonstrated by "the crises to NATO's east and south" (NATO, 2016f). To increase the resilience against economic and political pressure, the declaration once more stressed the need for "stable and reliable energy supply, the diversification of import routes, suppliers and energy resources, and the interconnectivity of energy networks" (NATO, 2016f). The economic and political dimension of energy got the heads of the member states' attention. In this declaration, NATO argued that it needs to enhance the capacity of member states to protect critical energy infrastructure. It additionally argued that it needs to enhance the resilience against disruptions of energy supplies, which could affect the national and collective defence, such as cyber or hybrid threats (NATO, 2016f). These summit declarations build upon each other and every year it increases the amount of words spent on energy security. In 2006, NATO started with safe and vague language, but in 2016 they used

clear and precise language to announce their activities and roles in energy security. This language is used to move an economic issue, such as energy, in the security realm and convince member states that action is needed.

5.2. Incorporating Energy in NATO

In 2008, Martin Erdman, then NATO Assistant Secretary General for Political Affairs and Security Policy delivered a speech at the ICI workshop on "Exchange of Experience on Security Aspects of Energy Infrastructure" where he stated that NATO member states are increasingly becoming dependent on imported energy (Erdmann, 2008). Together with the reliance on long transport routes, such as super tankers or pipelines, it makes it more vulnerable and complex. Erdmann stated that "all in all, it is clear to see why energy security has become a legitimate issue of debate in our Alliance – among NATO Allies, but also among Allies and Partner countries" (Erdmann, 2008). In his speech, Erdmann delivered some points to include energy security in NATO. The first point he made is that energy security is not an isolated challenge, but part of a broader set of security challenges NATO has to deal with in the 21st century. This complex security agenda consisted of climate change, nuclear proliferation, food security, terrorism, water shortage and regional conflicts, requires political, economic and military responses (Erdmann, 2008). The second point Erdmann made is that energy security is related to other threats and challenges, such as terrorist attacks on energy supplies, or rising oil prices that lead to rising food prices (Erdmann, 2008). The third point he made is that energy security is not only the assured supply of fossil fuels, but also energy efficiency and diversification of energy supplies. The fourth point is that energy security is more than oil and gas, and that NATO should think in long-term interests and solutions. He stated that "energy security is not a call to arms, it is simply a motivation for us to think long-term" (Erdmann, 2008). The fifth point is that NATO, as an organisation, offers the ideal platform to create a secure environment for its member states (Erdmann, 2008).

Not only Erdmann speaks about including energy security in NATO, also Jaap de Hoop Scheffer, then NATO Secretary General, wrote about energy security in 2008. He stated that he firmly believes that "the security dimension of our energy supply, and hence the need for NATO to focus on this issue, will become even stronger in the future, for a variety of

reasons" (De Hoop Scheffer, 2008: 56). De Hoop Scheffer stated that modern economies increasingly become dependent on oil, gas and other fuels that are scarce. Another concern De Hoop Scheffer identified is that Western countries produce increasingly less energy, and therefore they become more reliant on energy import from unfriendly and unstable regions, such as Middle-East or Russia (De Hoop Scheffer, 2008: 56-57). A third concern is that the exporting countries are also using more of their energy for themselves and a fourth concern is the protection of critical infrastructure. A last concern is that climate change affects the security of NATO member states and has impacts on energy exploration and transit routes (De Hoop Scheffer, 2008: 57). By using words, such as 'increasingly dependent', 'increasingly scarce', 'unfriendly and unstable regions', and 'protection', energy is becoming a securitized issue for NATO. Together with the summits and the intensified attention for energy in speeches of important NATO spokesmen, energy became part of the security agenda of NATO.

With the new Strategic Concept in 2010, energy security became an official part of the policy agenda of NATO. In the text, NATO was convinced of the impact energy insecurity can have on member states. Therefore, NATO stressed that greater international efforts is required to ensure resilience against threats, disruptions and attacks. NATO had agreed to "develop the capacity to contribute to energy security, including protection of critical energy infrastructure and transit areas and lines, cooperation with partners, and consultations among Allies on the basis of strategic assessments and contingency planning" (NATO, 2010b: 17). The Strategic Concept was drafted by a small group of drafters led by the then Secretary General, Anders Fogh Rasmussen (Rühle, 2012: 391). The Strategic Concept included non-traditional security challenges and tasked NATO to contribute to energy security, by protecting energy infrastructure, routes and transit areas, cooperate with partners, and consult member states on strategic assessments and planning (NATO, 2010b, 17).

Not only summits, speeches, or policy documents, but also practical examples of international events contributed to the incorporation of energy on the security agenda of NATO. For example, Iran's threats to block the Strait of Hormuz, and the repeated attacks on fuel supplies of NATO forces in Afghanistan in 2011 (Rühle, 2012: 391). Additionally, the 'Stuxnet' virus that damaged Iranian centrifuges at a nuclear facility in 2010 displayed the impact of cyber viruses on critical energy infrastructure. The terrorist attacks by the PKK in 2008 on critical energy infrastructure in Turkey contributed to the need for a coordinated

response to energy insecurities (Rühle, 2012: 391). These international events and crises shaped NATO's approach to energy in several ways. It proved that the emphasis on energy security in the Strategic Concept was correct and needed (Rühle, 2012: 391). It emphasised that energy security was a global phenomenon, and not only restricted to European gas disputes. It additionally showed that supplying military operations with energy could be affected by attacks on the fuel supplies (Rühle, 2012: 391). The events exposed that energy security was related to other emerging security challenges, such as terrorism, climate change, cyber, and piracy (Rühle, 2012: 391).

The dependency of NATO member states on imported energy was the decisive factor to securitize energy, and this dependency is increasingly growing (NATO, 2010b: 12). When only looking at oil and gas, NATO member states account for 6% of the discovered oil fields. 18% of the global oil production is in NATO member states, and therefore very low. The necessary consumption of oil in NATO member states in 2011 was 39% of the global oil consumption. In the gas sector, NATO member states contain 7% of the gas reserves on Earth. The member states produce 34%, and the consumption needed is 50% of the global gas consumption (Tranciuc, 2011: 122). It is clear that NATO member states are dependent on imported energy, and therefore it increases the risks of a potential crisis and all of its consequences. NATO's added value in energy security is that it offers a platform that brings North-America and Europe together and includes states that are not part of the EU, or are located in different regions in the world (NATO, 2011: 2; Rühle, 2012: 390). However, the US is a special case because it has become the biggest producing country in gas and second biggest in oil. This is a result of the increase in producing shale energy. The US still has to import crude oil for consuming and producing, and can not adjust its economy on the domestic production of shale energy (IEA, 2016: 11-13). NATO included energy into their security agenda, and uses its military, strategic and political capabilities to help member states increase their energy security.

5.3. NATO's Energy Security in Different Sectors

Energy security is a multidimensional concept that moves between different sectors. In each sector it has different security interactions (Buzan et al. 1998: 7–8; Özcan, 2013: 12-13). Energy is essentially an economic issue and including this in a military defence organisation,

such as NATO, raised some concerns. There were also concerns about the potential Russia-bashing in the energy security debate. This is due to the key role of Russia in energy security as an energy supplier of many dependent NATO member states (Rühle, 2012: 390). NATO members still try to avoid the militarisation of energy security (Rühle, 2012: 393), however a role of the military in the protection of critical energy infrastructure is unavoidable. The role of NATO intertwines two sectors, namely the military sector and the political sector. The military sector is represented in the logistical and practical planning of the protection of energy supplies, to increase and stabilize member states' secure energy imports (Monaghan, 2008: 2; Mileski, 2010: 44). This part of NATO's energy security policy contains the responses of NATO to threats to energy supply routes and energy facilities, mostly posed by pirates, insurgents and terrorists. Between 1990 and 2005, at least 300 attacks on energy facilities over the world have been documented (Moran & Russel, 2009: 9).

The political sector came to prominence during the Russia-Ukraine gas disputes in 2006 (Rühle, 2012: 389). Russia used energy as a tool for political coercion (Hadfield, 2012: 449; Klare, 2008: 488), and this event triggered the energy security discussion within NATO. This sector mostly contains NATO as a political organisation that includes a secure environment where states can discuss energy security issues (Monaghan, 2008: 2; Tranciuc, 2011: 119). The political security of energy mostly covers the political pressure posed by states with a lot of power in the energy sector, such as Russia and Saudi-Arabia (Mileski, 2010: 44). Sometimes the military, environmental and the economic sector overlap. For example, NATO's task to make the military more energy efficient combines military, environmental and economic factors. It makes the military more economically efficient and better for the environment. The inclusion of different security issues from different security sectors, such as energy or climate, makes it that NATO is no longer an exclusively military, collective defence organisation, but a security organisation (Tranciuc, 2011: 122). This is because NATO is no longer only focussed on the defence of member states, but also their security. This means that it is no longer bound to the territories of its member states. With minor steps into the economic and environmental sectors, NATO's energy security moves mostly in the military and political security sectors.

5.4. Conclusion

NATO's transformation from a collective defence organisation into a security organisation that tries to increase security of its member states over the border is not without bumps and concerns. Part of this transformation is the inclusion of energy as a security issue. The dependency on imported energy is growing and rising powers, such as China and India, will increasingly consume more energy. Fossil fuels, such as oil and gas, will become scarcer and more expensive (NATO, 2011: 2). Energy supply systems are targeted by pirates, insurgents and terrorists, because the impact on the economy of industrialized states becomes greater (Klare, 2008: 492; NATO, 2011: 2). Cyber-attacks, climate change, terrorist threats, and piracy are all interconnected with energy security (Tranciuc, 2011: 122). In this chapter, NATO deliberately securitized energy into their security agenda, such as the protection of critical energy infrastructure or by organising a platform for cooperation and discussion about energy security issues between member states, private companies, think tanks, and partner countries (NATO, 2011: 1). As a result of the intensified focus on energy in speeches and opinion documents by important NATO spokesmen and the increasing focus on energy during the NATO summits, energy became part of the security agenda of NATO. The security sectors that are most prominent in NATO's energy security are the political and military sector. To complete the securitization of energy, NATO had to identify the perceived threats and challenges in this domain. In the next chapter, these threats will be discussed.

6. Threats to Energy Security

This chapter focusses on the threats to the energy security of NATO member states. The sub-question posed in this section is: *what threats do the member states of NATO have in the field of energy security?* The three threats explored in this thesis are the threat of Russia, threats posed by the conflicts in the South-Caucasus, and the threats to important maritime routes. NATO member states must deal with more threats to their energy security than only these three, such as climate change, cyber attacks or terrorism in the Middle-East (Bagdonas, 2016: 4-10). However, the scope of climate change is too broad to include in the thesis. Cyber attacks are usually difficult to investigate due to secrecy and difficulties in traceability, and the conflict in the Middle-East is ongoing and therefore hard to find data on. Therefore, these examples are not feasible for this thesis. The first threat that is discussed is the threat posed by Russia.

6.1. Russia

The oil crisis of 1973-1974 proved that energy imports from countries in the Middle-East were unstable, and the energy exports from the USSR to Europe gained strategic relevance that doubled between 1980 and 1990. After the collapse of the USSR in 1991, Russia stayed the main gas provider of Europe, and in 2013 Russia supplied 29% of the solid fuels, 33% of the oil and 39% of the natural gas consumed in Europe (Siddi, 2017: 108). After the collapse of the USSR in 1991, there was a positive belief that Russia would follow European political and economic values. During this time, the energy relationship between the two sides was perceived as a huge factor and catalyst for this convergence. However, in the 2000s, Russia grew further apart from the values of European countries, and condemned the EU and NATO's expansions in the direction of the Russian border. The relationships between Russia and NATO/EU became more distrustful and tense, and the energy interdependency between European countries and Russia became a source of European vulnerability (Dannreuther, 2016: 914-915). In the 2000s, several gas disputes between Russia and former USSR countries occurred. Dependency on Russian energy supplies was viewed as a threat by Eastern European countries. Russia could influence European countries in their interests and weaken European harmony and unity. This geopolitical energy relationship has brought the

two power centres to follow and promote two different models of energy security. The European model defends and promotes a liberal framework, that increases energy security by deregulation, liberalisation, and by promoting the transnational market and frameworks. The Russian model is based on the realist approach, seeking power and influence through Europe's energy dependency (Dannreuther, 2016: 914-915). The realist approach assumes that all states will pursue their own interests, and that states compete with each other in a struggle for power (Morgenthau, 1985: 5). For Russia, energy security is perceived as a zero-sum game, you either win or you lose.

The historical background of the relationship and the developed infrastructure creates its own logics of durability and continuity. It makes it harder and more expensive for Europe to decrease the dependency on Russian energy. The interdependent relationship means that Europe is dependent on Russian energy supplies, while Russia is dependent on the European market and its ability to ensure that the supplies reached this European market. Both Russia and Europe understand this interdependency, and made sure that during the Ukrainian Crisis in 2014 the energy supply was kept out of the conflict (Dannreuther, 2016: 916). However, in the past, Ukraine was twice victim of a gas dispute with Russia in 2006 and 2009. Other European states, such as Belarus had a conflict with Russia about stable and secure energy supplies in 2007 (Siddi, 2017: 109-110), which will be explained further on in this section. The importance of energy resources is increasingly perceived as a source of power, security and influence. Casier argues that "by trying to get control over energy production and transmission (pipelines), states seek to strengthen their relative position in the international system" (Casier, 2011a, 494). This struggle goes hand in hand with the minimizing of energy dependency and diversification of energy supplies. For most of the NATO member states that are fully dependent on Russia for their energy supplies, the dependency is a concern of national security (Rühle, 2012: 389). This section of the chapter analyses if it is justified that some NATO member states view their energy dependency on Russia as a threat.

6.1.1. Energy Supply from Russia

Russia is the world's leading producer and exporter in the natural gas sector and the second leading in the oil sector. The discovered and undiscovered oil and gas supplies of Russia are considered to be one of the largest in the world (Monaghan, 2006: 3; Hadfield, 2008: 232). In

the 2000s Russian gas, oil and pipeline companies steadily came under government control, making the energy sector part of the government, for foreign policy leverage and assuring national security (Hadfield, 2008: 232). When Putin was reshaping Yeltsin's Russia into a centralized state system with large governmental control, the energy sector was incorporated in the bureaucratic model of Putin's government (Baev, 2012: 178). However, just as stated above, Russia is similarly dependent on Europe for its energy market. In 2000, the European oil market provided Moscow with $8.1 billion in tax revenues, and even more in the gas market. Moscow used this money to rebuild its economy, to rebuild its military, to increase its internal stability and to strengthen the relationships with neighbouring countries (Jaffe & Manning, 2001: 134). Before the collapse of the USSR in 1991 most of the energy export pipelines ran through USSR territory. After the collapse this territory became independent from the USSR and states were formed that served as transit states, such as Belarus and Ukraine. Policy makers in Moscow became anxious of NATO's expansion drift and feared that most of the export pipelines ran through NATO countries (Jaffe & Manning, 2001: 134). Approximately 60 percent of the Russian energy is exported to Europe, and for Russia it is difficult to diversify its energy exports (Casier, 2011b: 542-543). Exporting to new markets will need an expensive pipeline infrastructure, and a lot has been invested in the existing pipeline infrastructure between Russia and Europe. However, Russia is signing deals with China for energy exporting, but these do not come near the energy deals Russia has with European countries (Casier, 2011b: 542-543).

For its own survival it is crucial for Russia to have access to the European market. Russia exports 192 billion cubic meters of natural gas per day and 222 tons of oil per day (IEA, 2016: 11-13). Russia is dependent on the revenues of these exports to keep its own economy steady. This paradox, that the importer too has power over the supplier, is opposite of the realist view of international politics, where the energy supplier usually holds power over the energy consumer. Despite of some short gas disputes, Russia has been a reliable supplier of energy to European countries for over forty years (Casier, 2011a: 506; Smith Stegen, 2011: 6506). However, the EU and NATO have doubts about this reliability. Russia and European states increasingly understood that the interdependent relationship should not be influenced by conflict. This understanding was realized with the construction of the Nord Stream pipeline in 2011, that secured a stable and continuously gas flow to Western European states (Dannreuther, 2016: 916). The Nord Stream gas pipeline connects Russia directly with Germany, without the use of a transit state. The pipeline is financed and owned for the most

part by Gazprom and Russia (Lott, 2011: 56). However, as a result of the gas disputes in the past, Eastern European NATO member states still fear the use of energy as a political weapon. This fear originates from the historical relationship with Russia and the dependency on Russia as a single provider for energy (Monaghan, 2006: 4; Schmidt-Felzmann, 2011: 575). With the Orange Revolution in 2004 in Kiev, Ukraine adopted a pro-EU and pro-NATO stance. Therefore, Russia's gas company Gazprom demanded higher prices and Ukraine disagreed with those prices. This disagreement resulted in the disruption of Russian gas in 2006 and in 2009, which affected the society and economy of several European states (Siddi, 2017: 109-110). The gas disputes exposed European states to risks and vulnerabilities, and showed that transit states, such as Ukraine that tapped into the gas pipelines, have a complicated role in energy relations (Winrow, 2007: 217). In Map 1, the transit pipelines in Ukraine are displayed. Another country that had a gas dispute with Russia is Georgia. Other countries that are now NATO member states, are eager to distance themselves from Russia due to gas disputes in the past (Winrow, 2007: 228).

Map 1: Ukrainian gas pipeline system (East European Gas Analysis, 2014)

6.1.2. Energy as A Weapon

The several energy disputes between Russia and Eastern European countries proved that energy can be used as a 'weapon', for political influence and coercion. The liberal ideology of European countries, which is based on the free market, clashes with the realist view of Russia, which is based on power politics. States who are highly dependent on a single supplier of energy, have a different definition of energy security, which implies the diversification of energy supplies and reducing the energy dependency on a single provider (Klare, 2008: 487). This is because these countries are sensitive and vulnerable for political pressure of the supplier, such as the cases of Ukraine, Georgia, Bulgaria, and Romania. The disruptions of gas supply from Russia to Ukraine in 2006 and 2009 are examples of the use of energy to influence politics of the importing state (Smith Stegen, 2011: 6505). Casier argues that Russia has used its energy as a weapon for foreign policy goals, in regard to former Soviet republics (Casier, 2011b: 545). Russia is using different pricing for different countries, to punish or reward former Soviet republics and other energy partners in Europe. Russia furthermore tries to maximize its control over the oil and gas reserves in the Central Asia and Caspian Sea regions, by having control over transit pipelines. For example, Russia had build a transit pipeline to transport gas from Central Asia countries to Europe, over Russian territory. This pipeline, which was build with agreement of Central Asia countries, guaranteed transit fees and control for Russia (Sakwa, 2008: 260). Through these actions, Russia gained control over energy infrastructure in former Soviet republics and by different pricing, Russia demonstrates its willingness to use energy as a foreign policy tool (Casier, 2011b: 545).

The rise of energy as a weapon goes hand in hand with the resurgence of resource nationalism, where exporting states are more protective over their energy supplies and are using less of its resources for export (Smith Stegen, 2011: 6504). To acquire an energy weapon, Russia had to consolidate its own resources. It had to gain control over its oil and gas fields by pushing out foreign companies and to nationalize Russian energy companies, effectively pushing back the wave of privatization of the 1990s (Smith Stegen, 2011: 6507). After this was done, Russia had to gain control over the transit routes as explained in the example in the paragraph above. Russia has been actively present in the development of new transit routs to transport energy to Europe. Russia gained control over the resources and pipelines within Russia and over the border, including the Nord Stream pipeline (Smith Stegen, 2011: 6508). After the gained control, Russia should create threats, disruptions and price hikes for importing countries. This should increase the need for a constant, stable and

safe supply of energy for importing countries. With the several disruptions in energy supplies by Russia to Ukraine in 2006 and 2009 and Lithuania in 2006, Russia has used its energy to gain political power (Smith Stegen, 2011: 6509). These actions should imply a response of the targeted state. The targeted state should modify its behaviour when there is a disruption or a threat, and a rewarded state should continue its support for Russia (Smith Stegen, 2011: 6510).

In the recent conflict between Russia and Ukraine in 2014, energy was used as a tool for hybrid warfare. In the operational battleground during a war or conflict, hybrid warfare is a tactic that uses conventional, unconventional, irregular, criminal and terrorism means or activities. It combines state and non-state actors in order to achieve its goals (Lanoszka, 2016: 177). Hybrid warfare is not new, and using propaganda, covert activities and economic blockades has been used through history. Due to increasing interdependencies between countries and the innovation in means and methods, the effects of hybrid warfare can be increased (Drent et al., 2015: 11). Using gas pipelines to influence society by cutting off the gas supply can paralyse a whole country, if it is largely dependent on energy imports. Russia used political, military, strategic, informational, economic, communicative and non-military instruments to annex Crimea in the Ukraine conflict in 2014 (Drent et al., 2015: 11). It used energy to increase the political pressure on Ukraine, in order to achieve the political goal, just as in the 2006 and 2009 gas disputes (Drent et al., 2015: 10). The effectiveness of the hybrid warfare tactics, including in the energy dimension, was demonstrated during the Russia-Ukraine crisis, because Russia had control over a whole array of available tools, such as propaganda, fake news, energy, special forces etc. (Rühle & Grubliauskas, 2015: 7). The threats Russia imposes against NATO member states, are mostly directed to new member states in the neighbourhood of Russia. States such as Ukraine and Georgia, where NATO is investing in, have had disputes with Russia in the past.

6.2. Energy Security in The South Caucasus

The South Caucasus is a region of strategic importance, laying as a crossing point between Asia, the Middle-East and Europe. The region serves as a base for hegemonic powers to influence neighbouring areas. The US uses this region to support its global geo-strategy and Russia considers the South Caucasus as its traditional backyard (De Haas et al., 2006: 11).

Due to the presence of many valuable energy resources, the strategic importance of this region further increases. De Haas et al. argued that “tensions and conflicts between local, regional and global powers, the leadership of separatist regions, and organised crime are causes for the continuation of instability in the South Caucasus and as a consequence influence the geopolitical status of local (Armenia, Azerbaijan, Georgia) and regional (Turkey, Iran) actors” (De Haas et al., 2006: 11). After the collapse of the Soviet Union, the independent Georgia and Azerbaijan created their own energy policies, enabling Western investments into their country, and constructing several pipelines to transport energy to Europe, which is displayed in Map 2 (Gurbanov, 2015: 89). As a result of the construction of several gas pipelines that transported gas from the South Caucasus region to Europe, Europe could reduce the energy dependency on Russia (Sipos-Kecskeméthy & Sebö, 2009: 406). Several security incidents in the South Caucasus threatened the critical energy infrastructure and brought this on the agenda of Europe, regional states and NATO. These incidents included the occupation by Armenia of Azerbaijani territories, the Russia-Georgia war in 2008, the ongoing conflicts in Nagorno-Karabakh, and the bomb attacks by the terrorists of the Kurdistan Workers' Party (PKK) on the pipelines in Turkey and South Ossetia’s separatists in Georgia (Gurbanov, 2015: 89).

Due to the strategic importance and the energy security of European countries, critical energy infrastructure must be protected against threats. Any attack could damage the energy fields, terminals, pipelines, storages or other transportation facilities, and could decrease the flow of oil and gas from Azerbaijan through Georgia and Turkey to Europe (Gurbanov, 2015: 90). Stability in this region is key for the flow of oil and gas to Europe, and instability makes this region less attractive for Western investments. The combination of Russia’s usage of energy as a power tool and the unstable and unreliable supplies from the Persian Gulf region make the energy supplies to Europe via the South Caucasus crucial (De Haas et al., 2006: 11). NATO and Russia understand the importance of the region, and try to have influence in the area.

Map 2: Natural gas pipelines in the South Caucasus and Eastern Europe (Gilboa, 2013: 24)

6.2.1. Russia's Role in The South Caucasus

Russia has been trying to take control over the transportation pipelines of energy from the Caspian Sea region to Europe, so they can control the energy resources in this region (Winrow, 2007: 219). From the 1990s, when the oil and gas fields in the Caspian Sea region started producing, Russia made it clear that it would do everything to ensure that the energy would be transported via Russian pipelines through Russian territory, to collect transit fees (Smith Stegen, 2011: 6508). Russia furthermore fuelled the Nagorno-Karabakh conflict between 1988-1994 between Azerbaijan and Armenia, where an important non-Russian pipeline route was being discussed (Smith Stegen, 2011: 6508). Many people died and the ethnic conflict for territory is still ongoing. Armenia receives weaponry from Russia and benefits from Russian support. Russia also has a large military base at Gyumri, Armenia. This base contains 3000 Russian military personal (German, 2012: 218). In addition,

Armenia is part of the Collective Security Treaty Organization (CSTO), where it finds allies, that counter the hostile powers, such as Turkey and Azerbaijan, in the South Caucasus region (German, 2012: 221). The Russian federal security service, the FSB, got blamed for the explosions in January 2006 that damaged pipelines to Georgia on Russian territory (De Haas et al., 2006: 15). This increased the efforts taken by Georgia to diversify its energy supplies and integrate more with Western organisations and European states (De Haas et al., 2006: 15). The soft power ability of Russia is shown in the South Caucasus region, with the ability to invest in pipelines and to influence governments in this region with relationships dated back to the Soviet times. However, Russia demonstrated its hard power in Georgia in August 2008, where it invaded Georgia to halt NATO enlargement, humiliate the Georgian government, and boost the morale of the Russian military. The invasion proved that Russian soft power was not working in the region, and that Russia from now on preferred to use hard power over soft power (Nixey, 2012: 2).

6.2.2. Threats to NATO's Energy Security

The ongoing territorial Nagorno-Karabakh conflict, the conflicts in Abkhazia (1989-2008) and South-Ossetia (1989-2008), and the invasion of Georgia by Russia in 2008 caused threats to the oil and gas pipelines in the region (Gurbanov, 2015: 91-92). Within Georgia, both the Abkhazia and South-Ossetia regions declared themselves independent of Georgia, and have been recognised by the Russian government as independent states. The two regions are dependent on Russia for their economic survival and security (Ambrosio & Lange, 2016: 673). As part of the Nagorno-Karabakh conflict between Armenia and Azerbaijan, Armenia held military exercises in October 2012 to target critical energy infrastructure in Azerbaijan. Therefore, Armenia was prepared to attack this infrastructure in case of war (Gurbanov, 2015: 93). During the Russian invasion of Georgia in 2008, Russian military jets dropped bombs on energy infrastructure, and South Ossetia's separatists tried to blow up the pipelines. This threatened the energy security of the region and the energy security of Europe. During the conflicts and the targeting of transit pipelines in the north of Georgia, Azerbaijan had to temporarily suspend its energy transportation through the pipelines (Gurbanov, 2015: 91-92).

In Turkey, terrorists of the PKK attacked the Baku-Tbilisi-Ceyhan (BTC) pipeline prior to the Russia-Georgia war on August 5, 2008, suspending the energy delivery to Europe

(Gurbanov, 2015: 93). More than one million barrels of oil per day are delivered through Georgia to the port of Ceyhan in Turkey from the Azeri-Chirag-Gunashli fields in the Caspian Sea off the coast of Baku in Azerbaijan (Sovacool, 2012: 210). The BTC pipeline bypasses Russia and is therefore an important diversification pipeline for Europe. The PKK began attacking energy infrastructure more frequently, to damage the economy and to influence domestic politics in Turkey, such as the bomb attacks on the Kirkuk-Ceyhan pipeline (Gurbanov, 2015: 93). The Kirkuk-Ceyhan pipeline transports oil from the Iraqi city of Kirkuk to Ceyhan, and delivers more than one million barrels of oil per day. The attacks ended with the 2013 ceasefire agreement between Ankara and the PKK (Gurbanov, 2015: 93). These terrorist attack could severely damage pipelines and create a halt to energy supplies. For NATO member states, it is vital to have an uninterrupted flow of energy supplies coming into Europe, but also to make sure that the continuity and operational mobility of the NATO military missions is guaranteed (Gurbanov, 2015: 93). Energy supplies are important for fuelling tanks and other military tools. With the conflicts in the South Caucasus, and the terrorist attacks in Georgia and in Turkey, this flow of energy supplies is threatened. Securing the pipelines from threats will enhance Europe's energy security, and in addition the energy security of NATO member states. In the next chapter, NATO's strategy to secure these pipelines will be explained.

6.3. Threats to Maritime Routes

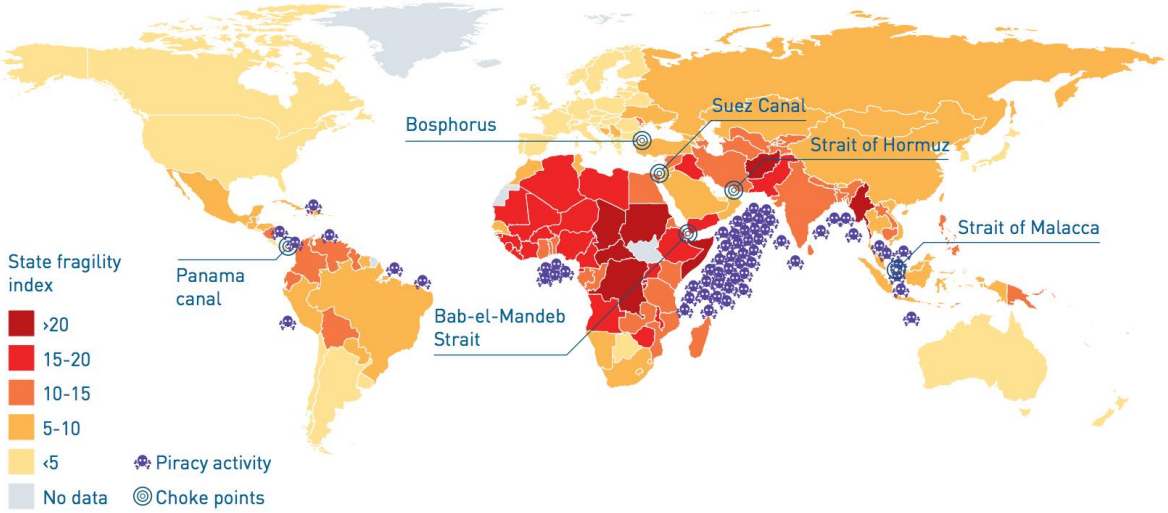
During the energy transport over sea, most tankers and ships need to navigate their way into narrow passages, waterways or straits, which are known as chokepoints. A chokepoint is hard to bypass, if at all, and has a limited capacity of ships and tankers that can pass the narrow passage (Rodrigue, 2004: 360). Many tankers and ships pass these narrow waterways, making it tricky and difficult to navigate. They have to reduce speed, making the ships easy target for an attack (Van Esch et al., 2014: 59). Particularly oil barrels are easily shipped with a tanker, making these sea routes valuable for the worldwide oil trade. The oil market is a liquid market, meaning that it is not tied to regional pipelines, and therefore easy to move via a tanker. However, LNG can be shipped with tankers, and is likewise prone to attacks, but the share of the LNG trade globally is minimal compared to the total natural gas trade (Van Esch et al., 2014: 59). This section focuses on the maritime oil trade, and covers the threat to maritime routes posed by pirates in the strategic waters surrounding Somalia.

6.3.1. Piracy in Somalia

In 2008, the number of hijacked ships and hostage taking increased with 11% in comparison with 2007. The number of total attacks on ships reported was 293. In 2008, 49 ships were hijacked, 11 crew members did not survive, 889 crew members were taken hostage, and 21 crew members went missing (Mineau, 2010: 64). In 2009, this number dramatically increased. A total of 406 incidents of piracy were reported worldwide. There was additionally a shift in location of most of the attacks. Where in 2008 most of the attacks happened in the Gulf of Aden, in 2009 most of the attacks were located off the east coast of Somalia (Onuoha, 2010: 197-198). The attacks of pirates varied in different locations at the east and south coast of Somalia, and included waters such as the Southern Red Sea, the straits of Bab El Mandeb, at the coast of Oman and the Arabia Sea, the Gulf of Aden and the Indian Ocean. However, the number of successful pirate attacks dropped from 2008 to 2009. This was caused by the presence of international navies, combined with the growing awareness of crewmembers and the training they had in dealing with pirate attacks (Onuoha, 2010: 197-198).

To understand the increase of piracy in the Gulf of Aden and the coast of Somalia, the situation of Somalia should be explained. After the regime of Siyad Barre, the country descended into chaos and civil war. Since the regime, complete chaos has become normal in Somalia. The rare moments of stability and peace did not last long and the situation in Somalia worsened over time (Sauvageot, 2009: 256). In the mid-2006, Islamist militias took over the country and established a government of Islamic Courts, brought stability for six months, and haltered the rise of piracy. However, this takeover was perceived as a hostile threat by the neighbouring countries, and led to an Ethiopian intervention backed by the US (Sauvageot, 2009: 256). This intervention brought back conflict, chaos, anarchy, war, and humanitarian disaster. This caused the country to be an ideal haven for pirates, and increased the amount pirate attacks on tankers and ships, as displayed in Map 3, which combines state failure with piracy incidents. With the lingering food crisis combined with the constant fight between Islamist insurgents and the government, Somalia is a failed state and ideal for terrorists and pirates to be their base of operations (Gebhard & Smith, 2015: 108). The absence of an effective government gives pirates the freedom to enhance their pirate activities. Therefore, the absence has an effect on the energy security of the region and on the

energy security of the world, because the pirates make it harder for oil and LNG tankers to pass through the waterways surrounding Somalia.



Map 3: State fragility compared with maritime chokepoints and piracy activity (Van Esch et al., 2014: 62).

6.3.2. Importance to NATO

The piracy at the strategic chokepoints challenges the economic and security interests of many states, including NATO member states. Not many hints were there to predict the sudden increase in piracy, however the number of attacks was growing steadily. The ongoing chaos in Somalia is an important factor that dramatically increased the amount of pirate attacks (Sauvageot, 2009: 252). Over 23.000 ships pass trough the Gulf of Aden every year and this strategically important international waterway carries a third of the crude oil in the world from the Middle-East to Europe, America and Asia (Baniela, 2010: 193). This represents roughly 7% of the world's oil transport over water (Percy & Shortland, 2013: 542). Many shipping companies avoid the Gulf of Aden and go around the Cape of Good hope, which delays transport, increases the amount of miles travelled and increases the costs by enormous numbers. The concentration of pirate activities in the Gulf of Aden is considered the highest in the world, with 37 percent of all attacks reported in 2008 (Garrett & Hendrickson, 2009: 9). In 1994, crude oil tankers were attacked 25 times in this area. This number increased to 43 in 2010 and in the first three months of 2011, this number increased to 30 (Khondaker, et al., 2013: 196). Due to the several international anti-piracy missions, the number of pirate attacks in the waters surrounding Somalia since 2012 dropped dramatically

and executing pirate activities was almost impossible since 2013 (Pecak, 2015: 43). In 2015 and 2016, no attempted attacks of pirates in Somalia were conducted (ICC International Maritime Bureau, 2016: 5).

Once the pirates have boarded the ship and successfully hijacked it, they sail it to the coast of Somalia and demand a ransom. In 2008, with the seizure of a 1000 foot Saudi super tanker by Somali pirates, the crisis got the attention of international organizations. The Saudi super tanker carried 2 million barrels of oil, estimated around 100 million US dollars, and was heading to the US (Garrett & Hendrickson, 2009: 9; Van Esch et al., 2014: 61). In 2009, the Greek super tanker the Maran Centaurus with 28 crew members was hijacked. The ransom paid to the pirates was between $5.5 million and $7 million (Onuoha, 2010: 198). Between the years 2008 and 2010, during the major piracy crisis, the costs of the global piracy were estimated at $7-$12 billion US dollars per year (Bowden, 2010: 25; Van Esch et al., 2014: 63; Percy & Shortland, 2013: 542). At the peak of the piracy crisis in 2010, Somali pirates held 790 crewmember's hostage. However, this number slowly decreased to 250 in 2012, which is a result of the international mission against piracy (UNODC, 2013: 35-36). Thus, the reward of piracy can be high and with the lack of ability to monopolize violence by the Somalian government, these pirates can move freely and keep attacking important maritime routes. The importance of the Gulf of Aden and other waters around Somalia is demonstrated by the amount of tankers passing by and the major international trading routes located there (Gebhard & Smith, 2015: 108). Many resources are imported through these tankers and specifically the oil sector is affected by the piracy in Somalia. The importance of these strategic waterways is also reflected in the amount of piracy in this area, because pirates understand the strategic importance of the ships and tankers passing for industrialized states and attack and overtake them.

6.4. Conclusion

The three threats examined in this thesis are the threats of Russia, the threats of dangers to energy pipelines in the South Caucasus and the threat of piracy at the Horn of Africa, the Gulf of Aden and the coast of Somalia. NATO invests in securing these threat to the energy security of its member states, which will be explained in the next chapter. The role of Russia as sole supplier of energy to certain NATO member states and potentially using that energy

to influence domestic politics is perceived as a threat to these member states. The ongoing conflicts and terrorist attacks in the South Caucasus region decreases the amount of energy exported to European states, making it harder to diversify the energy imports of NATO member states. The piracy in Somalia, the Gulf of Aden and the region at the Horn of Africa poses a direct threat to the global oil trade and to crewmembers working on the tankers and ships. These three threats can have a negative impact, such as a disruption or higher pricing of energy, on the energy security of NATO member states, and therefore it is important for NATO to be active as a security organisation, providing security for its member states. The next chapter will discuss the responses of NATO to these threats.

7. Responses to Threats

Responses are required to the threats of Russia, conflicts in the South Caucasus and piracy at the Horn of Africa posed in the previous chapter. This chapter focusses on these responses by NATO. This chapter covers the third sub-question: *what responses does NATO have against threats to the energy security of its member states?* In the briefing document "Tackling New Security Challenges" in 2012, NATO states that it will use its intelligence sharing, consultation and planning capabilities to enhance energy security of member states. It has developed a platform for experts, member states, and private companies to work together to discuss energy security issues and to protect critical energy infrastructure (NATO, 2012b: 13). NATO's three core tasks within the energy security sector are increasing strategic awareness among member states about energy security, protecting critical energy infrastructure against threats, and enhancing the energy efficiency of the military (NATO, 2011). These three tasks are reflected in the responses of NATO against the three threats posed in the previous chapter.

7.1. Responses to Russia

NATO's response against the threat posed by Russia is much bigger than only in the energy sector. NATO does not have an adequate response to Russia's re-emergence as a regional hegemon, that uses soft and hard power to have influence in neighbouring countries. The invasion of Georgia and the annexation of Crimea by Russia in 2014 are examples of this re-emergence of Russia in the region. In this section the diversification of energy supplies, the diversification of transit routes, and the response to the threats of energy in hybrid warfare will be discussed.

7.1.1. Diversifying Energy Routes and Supplies

The diversification of their energy suppliers, sources and routes is crucial for some NATO member states, such as the Baltic states, Finland, Poland, the Czech Republic and Bulgaria. These countries are threatened as a result of Russia being the single energy provider for that country. The added value of NATO within this diversification problem is that it uses its

platform, including large energy providers, such as the US, Canada and Norway, and transit states, European states, private companies and experts, to increase the awareness among governments to enhance diversification and interconnectivity (Monaghan, 2009: 3). Therefore, NATO has a larger platform to discuss these matters, in comparison to the EU. For example, Turkey, which has a difficult relationship with the EU, but is a NATO member and a crucial energy transit state for European member states. The search for more diverse energy imports leads to instable regions, prone to conflicts, terrorism and piracy (Monaghan, 2009: 3). This diversification leads NATO member states to regions such as the South Caucasus, which will be discussed further in this chapter. NATO also increases its attention towards Nigeria, where the Movement for the Emancipation of the Niger Delta (MEND) tries to take over control of the oil production in the Niger Delta. This affects supplies, the price of oil, and the effective exploitation of oil in this region. Nigeria is an important supplier of oil for European states (Monaghan, 2009: 3). NATO contributes to the protection of important resource routes in the Mediterranean Sea with the Operation Active Endeavour and Operation Sea Guardian. These NATO naval operations started in 2001(NATO, 2012b: 13). With these operations, NATO is monitoring, controlling and protecting ships traveling the Mediterranean Sea. The drive to diversify from Russian energy supplies by NATO member states, increases the attention given to alternative suppliers, routes and supplies. It furthermore increased NATO's activity outside of the territory of member states, such as the anti-piracy missions in Somalia and involvement in the South Caucasus.

Individual European countries, that are member of NATO and the EU, use the EU more as a platform for this diversification, due to the political and economic nature of the Union. Several pipeline projects were discussed that diversify the transit routes and energy suppliers. The Nabucco pipeline project would have connected the EU with gas fields in the South Caucasus, the Middle-East and the Caspian Sea region and was independent of Russian control (Smith Stegen & Palovic, 2014: 647). The pipeline would have diversified the energy supply to Europe, and would have connected Austria with Azerbaijan, Iran and other countries in the Middle-East and South Caucasus. However, due to investors and suppliers stepping out of the project in 2013, the construction of the Nabucco pipeline was terminated (Smith Stegen & Palovic, 2014: 651). Another pipeline project that was cancelled was the South Stream pipeline. This pipeline connected Russia directly to Bulgaria and the EU, through the Black Sea (Banciu, 2015: 55). This pipeline bypassed Ukraine as a transit country, but was cancelled by Russia in December 2014 due to obstacles from the EU and

Bulgaria, the annexation of Crimea in 2014, and because of the sanctions implied by Europe on Russia (Vihma & Turksen, 2015: 45). In February 2015, after the abandoning of the South Stream, Russia, Gazprom and Turkey announced the Turkish Stream, which is an alternative for the South Stream. The Turkish Stream gas pipeline would deliver gas from Russia to Turkey through the Black Sea, and construction will begin in 2017 (Vihma & Turksen, 2015: 45).

These pipelines supplied Europe with energy supplies from the South Caucasus or diversified the transit routes, to bypass unreliable transit states, such as Ukraine, Poland, Belarus or the Baltics. The several gas disputes between Russia and neighbouring countries led to the idea by Western European states to diversify its energy import routes in order to bypass these unreliable transit states. This led to the construction of the Nord Stream pipeline in 2011, that directly connected Russia with Germany, without the need of an unreliable transit state (Proedrou, 2007: 340; Schubert et al., 2014: 52). This Russian initiative made Russia less dependent on Ukraine to transit its energy to Europe, and therefore better able to influence Ukraine. The Nord Stream pipeline guarantees a non-stop gas flow to Europe, which is crucial for Russia's and Europe's energy security (Värk et al., 2011: 24; Schubert et al., 2014: 52). However, this does not diversify Europe's energy imports, and increases the dependency on Russian energy. Due to the interdependent energy relationship between Europe and Russia and as a result of Europe's energy needs, the guarantee of a non-stop, secure and stable gas flow to Europe has more positive effects then negative. The several gas disruptions between Russia and Ukraine in 2006 and in 2009, and in 2007 between Russia and Belarus opened a window of opportunity for European states to enhance the need to seek for alternative energy suppliers. The disruptions increased the relations with energy exporters in the South Caucasus region (Gilboa, 2013: 27).

A response by NATO to the threat of Russia was including Ukraine and Georgia into the organisation. The coloured revolutions in both countries created a pro-Western view and both countries wanted to expand their relations with the EU and NATO. However, these pro-Western revolutions sparked hostile reaction from Russia and Putin, stating they saw the enlargements of the EU and NATO as a direct security threat (Wolff, 2015: 1109). NATO's enlargement talks sparked the Russian invasion of Georgian territory in 2008, to warn NATO about further enlargement towards Russian border. However, enlargement talks between NATO and Ukraine increased during the Ukraine crisis of 2014. Russia feared every policy

that moved Ukraine more towards the West and eventually towards membership of NATO and the EU (Cross, 2015: 163; Wolff, 2015: 1110). The inclusion of Ukraine and Georgia in NATO could enhance the protection of critical energy infrastructure. However, the enlargement of NATO as a response to the threat posed by Russia only created more conflict and instabilities in the regions. For Lithuania, another country that is mostly dependent on Russian energy, energy security is inseparable from the EU and NATO membership. The membership of Lithuania in these organizations enhances energy security within the country (Molis & Vaisnoras, 2014: 13). For example, the institution of ENSEC COE that has established a platform where experts provide the Alliance with worldwide solutions in the strengthening of the protection of energy infrastructure, implementation of technology, collaboration between science and industry, and the consumption of resources (Molis & Vaisnoras, 2014: 28). ENSEC COE can help NATO member states by providing experts' knowledge about diversification from Russian energy imports. It can also provide information about how NATO member states can protect themselves against Russia's use of energy as a tool for foreign policy and Russia's 'energy weapon'. Countries that have problems securing their energy needs are helped by NATO and its institutions. Further on in this chapter the several anti-piracy missions and the involvement of NATO in the South Caucasus will be explained. Together with the platform to discuss energy security, NATO contributes to the energy security of member states.

The intervention in Ukraine and the annexation of Crimea by Russia brought NATO back to its core business. After a couple of stabilization mission, such as the crisis management operations in the Balkans or the operation in Afghanistan, the territorial defence under Article 5 of the North Atlantic Treaty was once more, as during the Cold War, under threat. The use of energy within the hybrid warfare tactics of Russia raised the attention for diversification once more. In the Wales summit declaration, NATO raised awareness for the interconnectivity of energy networks (NATO, 2014a). This means that energy infrastructure should be better connected and should additionally work the other way around. In the European pipelines, energy usually flows from Russia towards Europe, through a transit state such as Ukraine. In Map 1, this gas flow is indicated with the red and blue arrows, flowing from Russia to Europe. Interconnectivity means that it should also work the other way around, so that European states can supply Ukraine or other transit states with energy if Russia decides to uphold energy supplies. This makes countries that are prone to disruptions better able to withstand such disruptions. This results in a decrease of Russian influence in

domestic politics that is caused by Russian energy policies. Furthermore, the calls for diversifications and interconnectivity by NATO helps member states to better withstand Russia's 'energy weapon'. When a member state has a diverse mix of energy supplies, routes and suppliers, it is better able to cope with disruptions or when Russia raises the price for energy. NATO also supports the EU, with its sanctions against Russia after the annexation of Crimea in 2014 and raises awareness among member states, specifically through ENSEC COE (NATO, 2014a).

7.2. Responses to Threats in The South Caucasus

With the ongoing Nagorno-Karabakh dispute between Armenia and Azerbaijan, the conflicts happened in the Abkhazia and South Ossetia regions between Georgia and the separatists, and the war between Georgia and Russia, proves that this region is instable and prone to conflicts. The response of NATO to the instabilities, conflicts, and threats to the critical energy infrastructure in the South Caucasus region was the set up of several Partnership for Peace (PfP) programmes. Through these programmes, partner countries agree to participate in NATO's defence policies and military reforms. The partner countries can additionally participate in NATO's exercises and operations, so that the military of these countries can adapt to the standards set by NATO. Armenia, Azerbaijan, and Georgia joined the PfP in 1994, and these countries moved closer to NATO through this programme (de Haas et al., 2006: 55). At the Riga Summit, on the 28th and 29th of November, 2006 in Latvia, the Alliance supported a "coordinated, international effort to assess the risks to energy infrastructure and to promote energy infrastructure security" (NATO, 2006). NATO's intentions to commit itself to the protection of critical energy infrastructure was present. A partnership between NATO and the region was born, as a result of the importance of Caspian Sea energy supplies to Europe. Azerbaijan and Georgia reached out to NATO, so that NATO can boost the security of the region and reduce the influence of Russia. Both countries work together with NATO to protect the pipelines against threats and to expand their military cooperation (Sokolsky & Charlick-Paley, 1999: 91). An example of the military cooperation between NATO and Azerbaijan/Georgia is the contribution of Azerbaijan's forces in the peacekeeping operation of NATO in Kosovo in 1999. Azerbaijan's active support in the NATO operation in Afghanistan in 2002 is also an example of this military cooperation (Gilboa, 2013: 32). Georgia is also actively contributing to NATO missions, such as the

contribution of Georgian forces in the Kosovo mission in 1999 (Gilboa, 2013: 33). The protection of energy infrastructure by Georgia and Azerbaijan in cooperation with NATO is discussed in the following section.

7.2.1. NATO in The South Caucasus

NATO's PfP program was intended to include newly democratized states that were formed after the fall of the SU, with an extensive program. The newly democratized states were assisted by the program with the transformation into a democracy and to be a potential member of NATO (NATO, 2016a). The PfP program in the South Caucasus allowed the states to strengthen and enhance the military cooperation with other NATO member states, particularly with the US and Turkey. Within the program, Georgia and Azerbaijan increased their cooperation with each other and moved their foreign policies towards the West (Gilboa, 2013: 29). Both countries joined the PfP program, but it was Georgia that wanted to become a full member of NATO. Georgia is the most pro-Western country in the region and feared the presence of Russia in the region (de Haas et al., 2006: 19; NATO, 2017). Azerbaijan's relationship with NATO is balanced with strong relations, but its not seeking for membership. Armenia's future with NATO is uncertain, due to the presence of its major enemy Turkey in NATO. Azerbaijan is also a major enemy of Armenia, and has close relations with NATO countries as an energy supplier (Gilboa, 2013: 29).

The PfP programs included energy issues into their program (Molis & Vaisnoras, 2014: 23). For example, the NATO Science for Peace and Security programme (SPS), that has a workshop that brings together representatives from the governmental, security, and scientific sectors to address and discuss emerging security threats to vital energy networks. This workshop is actively led by Georgian scientists and it benefits from the large network of NATO (NATO, 2016d: 2). Additionally, Azerbaijan actively cooperates with NATO in various science programmes and activities, including energy security (NATO, 2014c). In the SPS programme, Azerbaijan and NATO discuss enhancing energy security and protecting energy infrastructure. Together with scientists they identify security threats to the BTC pipeline and the Baku-Tbilisi-Erzurum (BTE) natural gas pipeline, such as earthquakes, or terrorist threats (NATO, 2016e: 2). The BTE pipeline delivers gas from the Shah Deniz gas

field in Azerbaijan to Turkey and runs parallel to the BTC pipeline, that is explained previously in this thesis (Suleymanov, Aras & Hasanov, 2016: 26).

NATO implemented its military, strategic, and intelligence sharing capabilities to actively commit itself to the protection of critical energy infrastructure (NATO, 2011). This commitment is furthermore present in the South Caucasus region, where NATO and the US are actively involved with the security of BTC-pipeline and the BTE gas pipeline (Kim & Eom, 2008: 102; NATO, 2016e: 2). The placement of NATO military bases in Azerbaijan and the modernisation and development of the military of Azerbaijan through the PfP programs indicates the use of NATO's capabilities to strengthen the military of the country to better protect energy infrastructure (Kim & Eom, 2008: 102). The inclusion of the South Caucasus countries within NATO through PfP and SPS programmes, gives away the commitment of NATO to protect energy infrastructure. By cooperating with regional actors, scientists and other international organizations, NATO supports the coordinated and international effort to enhance energy security and energy infrastructure protection in the South Caucasus. The South Caucasus plays an important role in the diversification of energy suppliers, routes and sources of NATO member states that are dependent on Russian energy. Enhancing the protection of critical energy infrastructure by NATO in this area contributes to this diversification, because energy from the South Caucasus region is a good alternative from Russian energy. Specifically, Georgia wants to decrease the influence of Russia within the region, and NATO is willing to provide the necessary means to counter Russia.

7.3. Responses to Piracy

NATO's role in energy security covers the protection and surveillance of important maritime routes and chokepoints. The anti-piracy operations secure the maritime routes where commercial ships and tankers transport important resources, such as oil and LNG (NATO, 2011). With the humanitarian operation Allied Provider, launched in 2008, NATO escorted vessels of the UN World Food Programme at the Horn of Africa with a UN Security Council resolution (NATO, 2016c). The mission delivered 33.000 tonnes of humanitarian aid in eight weeks to the failing state of Somalia (Alderwick & Giegerich, 2010: 15-16; Sauvageot, 2009: 258). In 2009, Allied Provider was succeeded by the Operation Allied Protector, which became Operation Ocean Shield (OOS) in August 2009. OOS warships and aircrafts patrolled

and protected the waters at the Horn of Africa, the Gulf of Aden, the Western Indian Ocean, and the Strait of Hormuz (NATO, 2014b: 1). OOS additionally helped regional countries to develop their own capacities to counter piracy and to protect tankers and ships (NATO, 2012b: 14; Pecak, 2015: 66). These capacity building programmes contained educational courses, training, participation in military exercises, and the enhancement of regional stability through security reforms (NATO, 2014b: 1).

NATO's OOS vessels conducted helicopter surveillance to trace and identify ships. The operation prevented hijackings, countered piracy, and suppressed armed robberies. It escorted UN vessels that deliver humanitarian aid to Somalia. The operation to counter piracy evolved over time and in 2012, it began to focus on the pirate's logistics and support-base (NATO, 2016b). The mission focussed on attaching tracking beacons to mother ships, disabling pirate vessels or skiffs, and destroying ships that were suspected to be used as pirate or armed robber ships. NATO's response to the piracy at the Horn of Africa was to prevent and to stop piracy, with naval escorts, deterrence, cooperation with other anti-piracy operations, and attacking and destroying pirate ships (NATO, 2016b). NATO cooperated with other international naval forces, such as the EU naval operation, the US-led maritime forces, and independent states that deployed naval forces, such as India, Iran, China, Japan, Russia, Saudi Arabia, Yemen and South Africa (Pecak, 2015: 66). Together with the other missions, NATO reduced piracy at the Horn of Africa in such a way that in May 2012, no ship had been captured by pirates. During the next three years, some pirate incidents in the region have been reported, but in 2015 and 2016, no attempted attacks were conducted by Somalian pirates (ICC International Maritime Bureau, 2016: 5). Since the beginning of the mission, the OOS vessels disrupted 308 attacks of pirates (Pecak, 2015: 67). However, pirates remain a threat, that continued to possess the intentions and capabilities to attack and capture ships. The situation in Somalia, that is the root cause of piracy, still remains the same.

The operation of NATO ended on 15 December 2016, and with the several NATO missions, the region was made safer for tankers and ships to pass through. Therefore, tankers and ships of NATO member states do not have to make extra costs and miles to transport the energy resources, which redirected into higher energy prices. The missions were not specifically focused on energy transports, but on the protection of all ships and tankers moving through the Horn of Africa. However, due to the increased importance of energy resources and the transport of it with super tankers, NATO contributed to the protection of critical maritime

energy infrastructure. With safe maritime transportation routes, NATO member states can increase the diversification of routes to supply energy, which contributes to the energy security of NATO member states that are dependent on one or two different transportation routes. Safe and secure maritime routes enhance the possibilities for exporting states to transport energy in different ways to the importing countries.

7.4. Conclusion

This chapter provides an overview of the responses of NATO to threats of the energy security of member states. The call for diversification of energy supplies, routes and suppliers is the catalyst of the several operations NATO has executed. The involvement in the protection of critical energy infrastructure in the South Caucasus and NATO's anti-piracy operations at the Horn of Arica are executed, as a result of the need for diversification of suppliers, routes and supplies of energy. NATO is furthermore trying to cope with the hybrid tactics, and the role of energy in it, which Russia demonstrated during the Crimea annexation in 2014. The calls for diversification and interconnectivity are measures to decrease the impact of disruptions in import dependent countries. The status of Russia as a reliable and stable supplier of energy is doubted by some NATO member states, and this increases the need to diversify the energy imports. This brings NATO member states further towards the alternative energy suppliers in the South Caucasus and Middle East. NATO and its institutions provide a platform for cooperation and discussion between scientists, government officials and private energy companies. The anti-piracy missions at the Horn of Africa provide an alternative supply route where oil and LNG tankers can safely transport important energy resources. These NATO's responses all contribute to the diversification of energy supplies, suppliers, and routes, that is needed to enhance energy security within NATO member states.

8. Relating Theory to Policy

In this chapter, NATO's use of energy will be analysed through the Copenhagen School. The sub-question that this chapter will answer is: *what is the relationship between NATO's energy security policy and the securitization theory?* The Copenhagen School's main objective is to tackle the question of "security for whom?". The answer to this question is the referent object, the object that is threatened and needs to be secured. If the referent object is threatened, a security action is a logical response of the actor (Özcan, 2013: 7). This chapter will analyse the use of energy by NATO through the Copenhagen School, and it will determine the intensity of the process of energy securitization. Figure 1, introduced in the theory section of this thesis, will be used to structure this analysis.

8.1. Securitization of Energy by NATO

Scholars within the Copenhagen School argued that "threats to national security should not only be conceived in military terms, rather they should be securitized by the relevant actor before it can be regarded as a security issue" (Özcan, 2013: 8). The scholars developed the theory of securitization, which focused on the process of classifying the threat and could be applied in all sectors (Waever, 1995: 55; Buzan et al., 1998: 24). The securitization theory takes the constructivists approach, by not questioning what the threat really is, but rather defining security as "a quality actors inject into issues by securitizing them" (Buzan et al., 1998: 204). Constructivism looks at security as a social construct where it is affected by identity and the concept is constructed differently by different actors (McDonald, 2008a: 68). When NATO officially mentioned energy security for the first time during the Riga summit on the 28th and 29th of November, 2006 in Latvia, they did not question or mention the threats to the energy security of NATO member states (NATO, 2006). After the gas disputes between Ukraine and Russia in 2006, several Central and Eastern European NATO member states began to transform energy as an economic issue into a security issue and forced the concept of energy security into agenda of the Alliance (Rühle, 2012: 389). They injected security into the issue of energy, without mentioning which threats NATO had within this domain. By adding energy within the security concept, NATO broadened and deepened the

concept. The non-traditional security issue, energy, covers several security sectors, such as the economic, political, environmental and social sector.

8.1.1. Facilitating Conditions

The Copenhagen School connects two challenging approaches within security studies. These approaches are the traditional approach and the widening approach. The traditionalists consider the state as the main body within security. They consider security policy to be the use of armed forces against threats, to increase security for the state and its citizens (Huysmans, 1998: 487). The widening approach perceives human security as the major issue, instead of state security. Human security is perceived as a goal that should be strived by all, and "the objective of human security is to safeguard the vital core of all human lives from critical pervasive threats, and to do so without impeding long-term human flourishing" (Alkire, 2002: 3). The wideners argue that the end of the Cold War changed the security approach, and the referent object changed from the state to the individual. This brought alternative thoughts into security studies. Scholars of the Copenhagen School argue that the traditional approach is unable to describe and respond to the current security needs (Özcan, 2013: 7). Therefore, the Copenhagen School attempts to define security beyond a broader concept and towards a deeper concept. A broad concept of security consists of many different sectors, namely the military, political, social, economic and environmental sectors. A deep concept of security consists of the human as a referent object of security, while accepting non-state actors as the main agents of security (Krause & Williams, 1996: 230). The School aims to help security policy makers, decision-makers, political activists and analysts by posing the following question: "why do you call this a security issue? What are the implications of doing this – or not doing it?" (Lobo-Guerrero, 2006: 443). This classification helps to understand why and how an issue becomes securitized. The School positions itself between the traditionalists and the wideners in terms of defining security (Özcan, 2013: 7).

The traditionalist and the widening approaches are reflected within the current structure of NATO. In the past, the objectives of NATO were the traditional military defence of its member states and increasing the security within its territories. NATO approached security as the safety of the member states against external threats. Since the end of the Cold War, this view changed as a result of the collapse of the main enemy of NATO, the USSR. This created

a window of opportunity within the organisation to broaden and deepen the concept of security, while keeping state security as their main objective (Kfir, 2015: 219). The organisation transformed to better tackle modern security challenges (NATO, 2012b). Just as the Copenhagen School, NATO included economic, political, social and environmental security next to the traditional military security. NATO increased its presence over the borders of the member states, with mission in the former Yugoslavia, Afghanistan, Iraq and Libya (Jung, 2012: 43). This approach is not in line with the traditionalist approach, and went beyond securing the state. These missions were focussed on humans as referent objects. NATO committed itself to promote democracy and with its military capabilities engaged in complex peacekeeping missions to help societies democratize and improve life standards (Kfir, 2015: 219). These missions were different compared with the missions executed during the Cold war, because those were focussed on withholding the expansion of the USSR. After the collapse, the missions began to focus on state building and promoting democracy (Kfir, 2015: 221). This broadening and deepening of the concept of security within NATO furthermore increased the use of energy security within official documents and NATO missions. Not only the Summit Declarations and official policy documents such as the Strategic Concept are examples of this. The missions in the South-Caucasus and the anti-piracy operations at the coast of Somalia indicate this broadening and deepening of the concept too. The new way of thinking about security affected NATO and shaped conditions that facilitated the addition of energy within NATO's security strategy.

Throughout this thesis, the significance of energy in modern societies has been acknowledged. This shapes a facilitating condition, because it forms a window of opportunity for NATO to include energy within its security strategy. The importance of energy facilitated and reinforced the speech act of NATO about energy at summits, and eventually led to the inclusion of energy in NATO's security strategy. Another facilitating condition is the significance of NATO on the international level of politics. NATO is a worldwide organisation committed to the security of its member states. The involvement of NATO in new security challenges, such as such as fighting terrorism, promoting counter-piracy, strengthening cyber security, preventing proliferation of weapons of mass destruction, and reinforcing energy security, opened new opportunities for NATO to enhance its worldwide character. This significance helped the organisation to convince the member states to enhance its role within the security domain of energy and to defend the referent object against threats. It helped convince the audience of NATO's new role in tackling modern security challenges.

8.1.2. Threats and The Referent Object

In the definition of energy security by Winzer, the threats to the stable and secure supply of energy are highlighted. He defined energy security as "the absence of, protection from or adaptability to threats that are caused by or have an impact on the energy supply chain" (Winzer, 2012: 41). Some of the threats to the energy security of NATO member states are explained in this thesis. The three main threats to the energy security of NATO member states are the threats posed by Russia, by the conflicts in the South Caucasus and by the piracy in the strategic waters surrounding Somalia. These threats are all affecting a stable and secure supply of energy. There are more threats identified by NATO, such as climate change and cyber attacks (Bagdonas, 2016: 4-10), but these are not included in this thesis, as explained in chapter six. The referent object with every threat is different, but is overall the same, namely the energy security of NATO member states. The referent object in the case of Russia is mostly the energy security of European NATO member states. The referent object in the case of the South Caucasus' conflicts is again mostly the energy security of European NATO member states. However, the situation in the South Caucasus also affects the energy security of Georgia, Azerbaijan and Armenia, which all have PfP or SPS programs with NATO. In the case of the piracy in Somalia, the referent object is the worldwide maritime energy trade, which affects the energy security of all NATO member states.

8.1.3. Audience

The securitization move takes the issue and frames it as a special kind of politics or as above politics. The theory can therefore be used to explain particular types of behaviours regarding security within international politics. When the issue is accepted by the audience and the extraordinary measures are authorized to be executed, only then the issue can become fully securitized. The endangerment of the referent object must be proved in order to convince the audience of the threats to the object (Buzan, 1991: 25). In the case of NATO's securitization of energy, the audience are the member states. In all the NATO Summits since 2006, energy security has been mentioned and discussed. Several policy documents go deeper into the threats to the energy security of member states. NATO raised awareness among member states, which has been proved by the increasing activity by individual member states to diversify energy routes, supplies and suppliers (Monaghan, 2009: 3; Proedrou, 2007: 340;

Wisniewski, 2011: 75; Schubert et al., 2014: 52). The numerous plans and missions by NATO to increase energy security have proved that the audience has accepted the securitization of energy by the organisation. The audience plays an important part of NATO's securitization of energy because it authorizes the measures taken by NATO (Côté, 2016: 549). In this case of securitization, the audience is also the referent object, which makes it easier for the audience to accept the speech act and approve the measures taken by the securitizing actor.

8.1.4. Speech Act

Speech acts are vital in regard to the securitization theory. An actor uses a speech act when it uses precise and detailed language to transform a 'low/normal politics' issue, to a 'high politics' issue. Low politics concern less important issues to a state then high politics. High politics contain issues that concern the survival of the state and imply existential important challenges (Youde, 2016: 157). They label an issue as important and urgent, and legitimizes special responses by an actor (Smith, 2005: 85). Securitization is perceived as a successful speech act, "through which an intersubjective understanding is constructed within a political community to treat something as an existential threat to a valued referent object, and to enable a call for urgent and exceptional measures to deal with the threat" (Waever & Buzan, 2004: 491). Senator Richard Lugar and former NATO Secretary General Jaap de Hoop Scheffer were important figures in the securitization of energy within NATO. By using words, such as 'increasingly dependent', 'increasingly scarce', 'unfriendly and unstable regions', energy was introduced as a resource worth fighting for (De Hoop Scheffer, 2008: 56-57). Through the speech acts, energy becomes an existential threat, that needs to be secured with actions that go beyond normal political procedures (Özcan, 2013: 9). The securitizing actor uses speech acts to identify the existential threat to the referent object and the urgency of it. With the speech act, extraordinary measures can be identified and executed to secure the referent object (Özcan, 2013: 9).

The Copenhagen School argues that "when a securitizing actor uses a rhetoric of existential threat and thereby takes an issue out of what under those conditions is 'normal politics', we have a case of securitization" (Buzan et al. 1998: 24). Under 'normal politics', energy is an economic issue, where energy companies are involved in providing energy to the citizens of a

state. However, as a result of the increasing importance and scarcity of energy resources, states and organisations have moved energy to a level of national security. States are increasingly involved in the security of stable energy supplies, defined within the term of energy security. The threats to the energy security of states are perceived as existential threats. NATO argued that "the issues of a stable and reliable energy supply, diversification of routes, suppliers and energy sources, and the interconnectivity of energy networks, remain of critical importance" (NATO, 2009). In the fifth chapter of this thesis, the uplifting of energy from 'normal politics', to the domain of international security by NATO is analysed, and focusses on the discourse of NATO on energy. With the intensified attention for energy in speeches and opinion documents of important NATO spokesmen, such as Martin Erdman, Jaap de Hoop Scheffer and Senator Richard Lugar, in combination with increasing attention for energy during the NATO summits, energy became part of the security agenda of NATO. Buzan argues that the "the way to study securitization is to study discourse (speech) and political constellations (gathering)" (Buzan et al. 1998: 25). This is reflected in the discourse analysis of Summits, policy documents, and speeches in chapter five. The Summits play an important role in the securitization of energy. This is where the leaders of NATO member states gathered to discuss security issues and objectives of the Alliance. The speech act is targeted to the NATO member states present during the summits and this audience accepted the intensified attention towards energy.

8.1.5. Intended Outcomes

Buzan poses the following question: "when does an argument with a particular rhetorical and semiotic structure achieve sufficient effects to make an audience tolerate violations of rules that would otherwise have to be obeyed? (1998: 25). If by means of an argument about the priority and urgency of an existential threat the securitizing actor has managed to break free of procedures or rules he or she would otherwise be bound by, we are witnessing a case of securitization." (Buzan et al. 1998: 25). The increasing talks about NATO's enlargement towards the Russian border, made Russia anxious. The increasing presence of NATO in the South Caucasus for the protection of critical energy infrastructure, was one of the causes for the Russian invasion in 2008, which was not an intended outcome (Gurbanov, 2015: 100). Georgia is an important transit state for the diversification of energy supplies to European member states and the South Caucasus region is a strategic location for NATO, the US and

Russia (De Haas et al., 2006: 11). This is additionally reflected in the anti-piracy missions of NATO to protect strategic waters far from NATO territory. The responses of NATO against the threats to the referent object are described and explained in chapter seven.

In the securitization process, the security issues that are perceived as a threat to the referent object can be placed within three different levels: the non-politicized level, the politicized level and the securitized level (Buzan & Hansen, 2009: 214). The first level contains issues that are unnecessary for the government and the public to deal with. The politicized level is part of public policy, meaning that the public discusses these issues and the government deals with them. The third and last is the securitized level, which contains top priority issues that include existential threats which need extraordinary measures to tackle them (Collins, 2007: 111). The securitization move is therefore "the move that takes politics beyond the established rules of the game and frames the issue either as a special kind of politics or as above politics" (Buzan, 1991: 23). A stable and constant flow of energy resources is so important for industrialized states, that an increasing number of states create policies that include energy within the security domain (Janeliūnas & Tumkevič, 2013: 66). Even supranational organisations, such as NATO, the EU and the UN are involved in energy security. Therefore, the energy issue is even further transformed beyond national politics and into the realms of international politics. This demonstrates that energy security is an important issue for many member states within NATO and other organisations. The securitization of energy within the security strategy of NATO, created a window of opportunity to use the capabilities of NATO to enhance energy security in member states.

The goal of the Copenhagen School with the theory of securitization is "based on a clear idea of the nature of security, securitization studies aims to gain an increasingly precise understanding of who securitizes, on what issues (threats), for whom (referent objects), why, with what results and, not least, under what conditions (what explains when securitization is successful)" (Waever & Buzan, 2004: 71). In this study, NATO securitized energy, on the threats posed by Russia, the conflicts in the South Caucasus and the piracy at the Horn of Africa, because these were perceived as most important to NATO member states. The referent object is the energy security of NATO member states. NATO securitized energy, as a result of the significance of energy resources for Western industrialized states and daily life (Klare, 2008: 484). Particularly the Eastern European member states who are dependent on unreliable and unstable states for most of their energy imports. As a result of the several gas

disputes these countries had with Russia, and the several conflicts in the Middle-East, energy became an important issue for debate within NATO and other international organisation, such as the EU and the UN. The results consist of PfP and SPS programmes with several countries, the calls for diversification and interconnectivity, several anti-piracy missions, the institution of ENSEC COE, raising awareness among member states, the increase of resilience against energy used as a weapon by Russia.

8.2. The Intensity of Energy Securitization by NATO

The intensity of securitization can differ amongst individuals, countries, and organisations. Some actors give a higher priority to the energy issue then other actors, by treating energy as an autonomous security sector within the security strategies of the actors (Janeliūnas & Tumkevič, 2013: 67). Some actors treat energy security as part of the economic security sector, while others recognize it as an independent sector that should be treated separately from other sectors. Janeliūnas and Tumkevič created a framework to measure the intensity of securitization, based on the questions of "how, why and do actors securitize energy in their strategic documents?" act (Janeliūnas & Tumkevič, 2013: 70). The criteria provided by Janeliūnas and Tumkevič include the act of securitization, the securitization process and the consequences of the securitization of the issue. They argue that the more criteria for securitization found, the higher the intensity of securitization of energy by NATO. The first criterion contains the insertion of energy security within NATO security strategies. Energy security is mentioned many times in the Strategic Concept of 2010 (NATO, 2010b), Summit Declarations (NATO, 2006; NATO, 2008; NATO, 2009; NATO, 2010a; NATO, 2012a; NATO, 2014a; NATO,2016) and policy documents of NATO (NATO, 2011; NATO, 2012b), and is therefore perceived as a threat and this could be evaluated as a securitization act (Janeliūnas & Tumkevič, 2013: 70).

The second condition is the position of the energy sector within security strategies. This can be evaluated by the following questions: "is the energy sector described in strategic documents as an independent security sector with specific objects, risks and objectives, or does energy security refer only to energy supply at reasonable prices in order to promote economic growth?" (Janeliūnas & Tumkevič, 2013: 70). Within NATO's security strategies energy security is presented as an independent security sector. This sector contains specific

objectives, threats, risks and referent objects, which are mentioned in the several policy documents of NATO. NATO furthermore included specific measures to increase energy security among member states, such as raising awareness or providing the protection to critical energy infrastructure. The third criterion is the significance of energy threats. Janeliūnas and Tumkevič ask if the energy threats are prioritised among other security risks or threats (Janeliūnas & Tumkevič, 2013: 71). NATO's calls for diversification, the presence of the Alliance in the South Caucasus and the several anti-piracy missions to protect critical energy infrastructure, indicate that energy threats are important among other security threats. However, NATO is also active in other missions and activities, not related to energy security. Therefore, energy is not the number one priority of the organisation, but falls among a broad spectrum of several other security risks, threats and challenges.

The fourth criterion is the timing of energy concerns. This relates to the urgency and with what means NATO tackled the energy threats. This criterion is based on how NATO responded to current critical energy risks that had to be resolved immediately. These should have the priority above potential energy risks that could become problems in the future (Janeliūnas & Tumkevič, 2013: 71). The several gas disputes between NATO member states and Russia opened a window of opportunity to increase discussion about the potential energy weapon and solutions to deal with it. NATO called for diversification of energy supplies, and increased its attention towards the South Caucasus and the protection of critical energy infrastructure at the Horn of Africa and other important transit regions. The potential energy weapon of Russia was perceived as a direct threat, and NATO provided responses by diversifying the energy imports of dependent member states, by trying to secure the South Caucasus. The fifth condition is the sources of energy threats. Janeliūnas and Tumkevič presume that an external energy threat is more prone to energy securitization than a domestic energy threat. NATO's rival Russia is the dominant threat in NATO's energy security strategies, and many dependent member states view Russia's dominance over their energy sector as a threat. After the end of the Cold War, around 1990, Russia was perceived as a cooperative partner. However, Russia under Putin increasingly started to differentiate further away from the West, and with gas disputes with Ukraine in 2006 and 2009, the invasion of Georgia in 2008 and the annexation of Crimea in 2014, Russia was perceived as the "other" and the external threat NATO had to counterbalance.

The sixth criterion are the extraordinary measures undertaken by the actor to deal with threats to their energy security. Janeliūnas and Tumkevič ask if the "securitization of the energy sector creates preconditions for using extraordinary measures in order to solve securitized problems?" (Janeliūnas & Tumkevič, 2013: 71). In the case of NATO, it did. The calls for diversification and awareness increased the activity of NATO outside its territory. The presence of NATO in the South Caucasus and at the Horn of Africa has increased, in order to deal with threats to energy security. All the criteria are present in the process of energy securitization by NATO. This means that the intensity of securitization is very high, and the energy sector has become an important security sector within NATO.

8.3. Conclusion

Ole Wæver argues that the securitization theory not only explains "who does securitization and how" or "when it happens", but in addition "what securitization does" (Waever, 2011: 466). This study argues that the securitization of energy by NATO increased the presence of NATO in this security domain. However, it further increased the amounts of conflicts and missions, NATO contributed in, such as the Russian invasion of Georgia, which was due to NATO enlargements, or the anti-piracy missions at the Horn of Africa. Energy is used in every sector within the Copenhagen School. The political, social, economic, environmental and military sector all include energy as part of the sector. Roberts argues that "we live today in a world completely dominated by energy" (Roberts, 2004: 5). The concepts in figure 1 and table 1, in the theory section of this thesis, are present during the successful securitization of energy by NATO. As understood in the energy securitization process of NATO and the high intensity of it, NATO acknowledges the importance of energy in the 21st century. The process of securitization is clearly displayed in the establishment of NATO's energy security policy. To answer the sub-question posed in the introduction of this chapter, this study argues that the relationship between NATO's energy security policy and the securitization theory is strong and clearly visible, through the presence of all six criteria of measuring intensity.

9. Conclusion, Limitations and Further Research Recommendations

9.1. Conclusion

This thesis aimed to research how NATO securitized energy and how NATO incorporated energy into their security strategy. Before the main research question can be answered, this conclusion focusses shortly on the sub-question posed in this thesis. This conclusion will provide a short summary of all sub-questions and their answers, before answering the main research question. The short summaries of all sub-questions and the main research question will guide the reader through the central elements of this study.

The first sub-question, *"how is energy security being perceived by NATO?"*, provides an analysis of NATO's incorporation of energy within its security strategies. NATO included energy as an emerging security risk, using Summits to raise awareness among member states and call for diversification, interconnectivity and the protection of critical energy infrastructure. In chapter five, these summits are analysed and a clear increase of attention and words devoted to energy security is shown. In the beginning, safe and vague words were used, and the Alliance's role in energy security remained unclear. Later, the summit declarations provided a clear overview of NATO's role in energy security. Combined with several policy documents, NATO intensified the use of energy as part of the security domain, and securitized energy as part of the emerging security threats that NATO is committed to.

To complete the securitization of energy, NATO had to identify the perceived threats and challenges the Alliance had in the energy security domain. The second sub-question, *"what threats do the member states of NATO have in the field of energy security?"*, identifies three threats that have an impact on the energy security of NATO member states. The first threat that is examined in this chapter is the threat posed by Russia. The dependency of some NATO member states, such as the Baltic states, Finland, Poland, the Czech Republic and Bulgaria, is perceived as a direct threat to the energy security of these states. Due to the several gas disputes in the past, specifically the ones with Ukraine in 2006 and 2009, and the previous and present aggression of Russia in neighbouring countries, such as Georgia and Ukraine, negatively influenced Russia's stable and reliable reputation. The second threat is

the ongoing conflicts in the South Caucasus as a threat to the critical energy infrastructure located in this region. The South Caucuses region plays an important role in the diversification of energy suppliers, routes and supplies of NATO member states. The third threat is the danger posed by piracy at the Horn of Africa, the Gulf of Aden and the coast of Somalia. These strategic waterways become increasingly important, as a result of the increasing importance and scarcity of energy resources, that are shipped with super tankers. The Somalian pirates pose a direct threat to the global oil trade, that plays an important part in the diversification process.

To get an overview of NATO's energy security policy, the responses NATO has for these threats should be identified. The analysis in chapter seven aimed to answer *"what responses does NATO have against threats to the energy security of its member states?"*, found that NATO uses its expertise, strategic and military capabilities to respond to Russia's threats, the conflicts in the South Caucasus and the Somalian pirates. The response to Russia is raising awareness among member states, call for diversification of suppliers, routes and supplies, and call for interconnectivity of energy infrastructure systems. The creation of ENSEC COE, an institution where experts, government officials and private companies come together to discuss energy security, is an example of NATO using its capabilities to enhance energy security among its member states. With the PfP and SPS programmes, NATO enhances collaboration with the South Caucasus countries, Azerbaijan, Armenia and Georgia. With individual programmes and the protection of critical energy infrastructure in the region, NATO is enhancing the diversification of NATO member states. A stable and secure import of energy from the South Caucasus region is crucial for this diversification. NATO is using its military capabilities to secure international waterways against piracy, mainly in the strategic waters surrounding Somalia. The anti-piracy missions of NATO, in collaboration with the EU and the UN, were such a success, that in 2012 no ship had been captured by pirates. During the next three years, a few pirate incidents in the region have been reported, but in 2015 and 2016, no attempted attacks by pirates in Somalia were conducted (ICC International Maritime Bureau, 2016: 5).

Chapter eight, subsequently, analyses the relationship between the securitization theory and NATO's energy security policy, and aimed to answer "*what is the relationship between NATO's energy security policy and the securitization theory?"*. This chapter applies the securitization theory of the Copenhagen School on the involvement of NATO in the energy

sector, and comes to the conclusion that NATO successfully completed the securitization of energy within the Alliance. This chapter furthermore provides a framework for analysing the intensity of the securitization process, and concludes that the intensity of NATO's energy securitization is very high. To answer the sub-question posed above, this study argues that the relationship between NATO's energy security policy and the securitization theory is strong and clearly visible, through the presence of all six criteria of measuring intensity.

With this short summary of the chapters that analysed and answered the sub-questions, this study aims to answer the following main research question, *"to what extent is energy security a vital security issue for the North Atlantic Treaty Organization?"*, which leads to the following conclusion. Since the official acknowledgement of energy security as an emerging and crucial security issue for NATO member states at the Riga Summit in 2006, NATO has been involved in several missions to enhance energy security for its member states. NATO offers a platform where states from different regions all over the world discuss security matters. During the NATO Summits and with several policy documents, NATO raised awareness among member states to diversify their energy supplies, routes and suppliers, and increase interconnectivity in energy infrastructure. NATO helped member states with this diversification, by increasing its presence in the South Caucasus and with the anti-piracy missions in the strategic waters surrounding Somalia. Particularly with the anti-piracy missions, the Alliance committed itself to enhance energy security by stabilizing and securing maritime energy infrastructure. With the increasing presence in the South Caucasus, NATO additionally used its capabilities to enhance the protection of critical energy infrastructure. However, with the aggression of Russia towards Georgia, NATO lacked a common strategy for the region. These actions by NATO proved that the Alliance was willing to play a role in energy security, with its military capabilities to protect energy infrastructure and with its expertise capabilities to provide platforms for discussion, PfP and SPS programmes, and creating institutions such as the ENSEC COE to raise awareness and enhance expertise in energy security.

In a short time period, energy became securitized by NATO and was quickly incorporated into the security strategy. This process had a very high intensity and this was required to meet up with the changes in international security, where energy security quickly rose to the highest levels of priority (Klare, 2008: 488). The urgency of protecting energy security was clear for NATO and this started the securitization of energy. The matter of urgency to

securitize energy and incorporate it into the security strategies, and the intensity of the process make energy security a vital security issue for NATO. However, because energy is prominent in a lot of different security sectors, such as the military sector, the societal sector, the political sector, the economic sector, and the environmental sector, NATO as a military organisation has less influence in these different sectors than for example the EU, that has a political and economic identity that could cover different security sectors better. Therefore, working together with the EU would bring the best out of both organisations, as seen in the cooperation between NATO and the EU in the anti-piracy missions by both organisations (Gebhard & Smith, 2015: 107). Nevertheless, NATO has put its mark on energy security and can be perceived as an organisation that is committed to enhancing energy security of its member states, as part of its new role in combatting emerging security challenges.

9.2. Limitations and Further Research Recommendations

There are clear limitations to this thesis, which have an important impact on the conclusions it has produced. First of all, as is stated in chapter six, NATO member states experience more threats to their energy security then the three threats discussed in this thesis. Examples of these threats are the effects of climate change, the ongoing conflicts in the Middle-East and cyber attacks committed at critical energy infrastructures. To get a complete overview of NATO's energy security policy, these other threats and responses should be incorporated into the thesis. However, as explained in chapter six, these threats are not feasible to include in this thesis, due to the short time period and the difficulties researching those threats. This study provided an analysis of the three main threats NATO member states had and NATO's responses to these energy security challenges. For further research, the other threats could be incorporated into the analysis to provide a complete overview of the Alliance in the energy security domain.

Secondly, this study has a particular focus on NATO as a unified organisation. However, NATO is not an entirely homogeneous organisation and some member states, such as Turkey, France or the US, can dominate the strategic agenda of the Alliance. However, for the analysis this study has performed, this is not really relevant. This study investigated the responses of NATO as a unified actor and not individual NATO member states. Due to feasibility and limitations in time and scope, this study perceived NATO as a unified actor.

Therefore, further research could assess the influence of dominant member states in the decision-making process and in the energy securitization process within the organisation. For example, a research on how the US, as a dominant actor, influences NATO energy security policy for its own objectives.

A third limitation of this study is the lack of a comparison between organisations on how they securitized energy. This comparison could reveal differences in ways of securitization, the process of securitization, the intensity of securitization and the implications it has on security strategies. For example, a comparison between NATO and the EU, which differ in character could reveal differences in the securitization process. Analysing different organisations further enhances the external validity, because the findings can be generalized better. Additional research could compare different organizations and reveal these differences and implications. Further research could also deepen the understanding of what the effects and implications are of the securitization of energy. Securitization and de-securitization have positive and negative effects on international politics. The Copenhagen School puts "an ethical question at the feet of analysts, decision-makers and political activists alike: why do you call this a security issue? What are the implications of doing this – or not doing it?" (Lobo-Guerrero, 2006: 443). By researching the implications of the securitization of energy, policy makers can better understand and anticipate positive or negative consequences of this phenomenon.

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