Crisis and Regime Change: The Nuclear Nonproliferation Regime and the Challenge from Nuclear Terrorism.

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ABSTRACT

An indirect crisis, the terrorist attacks of September 11th, is used as a catalyst to review the tasks of the Nuclear Nonproliferation Regime. However, it is insufficient to initiate a comprehensive change to the regime to incorporate the challenge from non-state nuclear terrorism. There will not be a change *of* regime, understood in terms of principles and norms. Yet, potential for change *within* the regime exists, with regard to rules and procedures. This is demonstrated by analysing the organisational and state levels of the regime through a synthesis of rationalist and weak-cognitivist assumptions. The organisational level is more adaptable in light of new information and more susceptible to change. Two factors limit this change. Member states will handle issues arising from the crisis outside the venue of the regime. Also, consensual knowledge among actors remains key for significant change to occur. An indirect crisis lacks the force to cultivate an epistemic community able to promote such knowledge among decision-makers.

RÉSUMÉ

Cette thèse avance qu'une crise indirecte, telle les attaques terroristes du 11 septembre, joue le rôle d'un catalyseur qui permet de réexaminer les fonctions du régime de non-prolifération nucléaire. Cependant, cette crise ne peut provoquer un réel changement du régime face au défi du terrorisme nucléaire. Il n'y aura pas de changement du régime, en terme de principes et de normes ; par contre, un changement au sein du régime reste possible, en transformant règles et procédures. Ceci est démontré par une analyse des dimensions étatiques et organisationnelles du régime, à travers la synthèse des théories rationaliste et cognitiviste faible. L'organisation est plus flexible face aux données nouvelles et plus susceptible de changer. Deux facteurs limitent ce changement. Les États membres traiteront les questions émanant de la crise en dehors du cadre du régime. Une compréhension consensuelle de la crise entre les acteurs reste aussi la solution pour l'avènement d'un changement important. Une crise indirecte n'a pas l'impact nécessaire pour que la communauté épistémique puisse encourager cette compréhension chez les décideurs.

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Table of Contents

Abstract/Résumé	
Acknowledgments	
Table of Contents	
Epigraph	
Chapter one: Introduction.	1
Aims	2
Developing a Research Agenda	2
The NNPR and the Challenge from NT	
Outline of Thesis	
Chapter two: Concepts and Terminology	13
Independent Variable	14
Dependent Variable (What are International Regimes)	
Regime Change	
Dichotomous Regime Elements	
Empirical and Methodological Justification	
Nature of Regime Change	
Chapter three: An Overview of International Regimes	36
Theoretical Premises	
Rationalist Assumptions	
Weak-Cognitivist Assumptions	
A Synthesis	
States and Organisations in International Regimes	51
Chapter four: The Nuclear Nonproliferation Regime and the	
Challenge from Nuclear Terrorism	58
The Nuclear Nonproliferation Regime	60
The International Atomic Energy Agency	63
Non-state Nuclear Terrorism	
Potential NT Threats	
September 11 th and the NNPR	
Before 9/11	
After 9/11	

State-level Actors	75
Organisational Level Actors	79
A Changing NNPR?	84
Chapter five: Conclusion	89
Summary of the Results	
Predictions	92
Prescriptions	
Bibliography	96-104

Appendix 1: Abbreviations

Appendix 2: Certificates of Ethical Acceptability of Research Involving Humans

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Epigraph

Man is not imprisoned by habit. Great changes in him can be wrought by crisis -- once that crisis can be recognized and understood.

Norman Cousins - Saturday Review (Webster's Electronic Quotebase, 1994.)

Ah consensus ... the process of abandoning all beliefs, principles, values and policies in search of something in which no one believes, but to which no one objects; the process of avoiding the very issues that have to be solved, merely because you cannot get agreement on the way ahead. What great cause would have been fought and won under the banner 'I stand for consensus'?

Margaret Thatcher – Public Speech, 1981

Today we were unlucky, but remember we only have to be lucky once- you will have to always be lucky.

IRA message to the British Government, The Guardian, 1984

Chapter One: Introduction

The 11th of September 2001 is a date that is etched into history with chilling sobriety. The events of that day sent shock waves around the globe. The ramifications of the tragedy have been felt at every level of national consciousness: psychological, social, economic and political. Moreover, the international political landscape has been altered irrevocably. Undeniably, this situation presents an opportunity to learn from these events that cannot be ignored.

Thus, the backdrop to this investigation is the threat of international terrorism; the Hydra that poses a Herculean task for the many states, inter-governmental organisations and multilateral agencies committed to the fight against terrorism. It is a key issue that, in the past, has been widely acknowledged in terms of both state-sponsored terrorism and organised groups and has now been propelled to the top of the international agenda, with the focus accentuated upon non-state actors. As one official described it, "...the whole situation changed with the actions of September 11th, in particular the very fact that a group of people could implement these actions was a wake-up call for all of us: the international community, for the United Nations and the IAEA." Academic scholarship can adopt a wide-ranging spectrum of perspectives in an attempt to understand, analyse and explain issues pertaining to September 11th and its consequences.

This thesis poses questions relating to the impact of such a crisis on an international regime concerning the potential for change. This line of inquiry investigates the interactive relationship between a range of actors, notably states and organisations, to establish the

¹ Personal correspondence: Mr. G. Zlauvinen, Representative of the IAEA to the UN. NY: June 2002.

potential for, and identify changes that may occur within an international regime. Doing so may enhance our understanding of the processes at work within the structure of such a regime and with a more precise knowledge of the dynamics involved between the actors, the potential for regime change may be evaluated.

Aims

These broad generalisations form an overview of the analytical content of this thesis. Owing to the complexity of the subject matter, this thesis can neither develop a complete model of the impact of crisis nor is it able to offer a comprehensive theory concerning regime change. It is also beyond the scope of this thesis to examine fully all the different facets of international terrorism. Rather, this thesis has four objectives. 1) To evaluate the impact of an event, September 11th, on an international regime, specifically, the Nuclear Nonproliferation Regime (NNPR) and to understand the subsequent effects. 2) To identify the processes of interactions occurring between the principle actors within a regime, clarifying the paths leading to potential change. 3) To examine and analyse the potential for regime change in relation to the issue of nuclear terrorism in general but also focusing, in large part, on the challenge of non-state nuclear terrorism (NT). 4) To advance a number of predictions and prescriptions which concern the future of the NNPR, especially in relation to the spectre of NT.

Developing a Research Agenda

In constructing a research agenda that accounts for the above factors, this thesis seeks to address the problem by answering the following inter-linked questions: Can a crisis cause regime actors to revise the role of the regime? What is the potential for regime change? To

answer these questions, the relationship between the independent variable, crisis, and the dependent variable, potential regime change, will be investigated. To do so, the regime will be viewed as a duopoly of causal mechanisms intervening between the variables, aiming for a more complete picture of the relationship between crisis and potential regime change. The dual nature of a regime remains important here because it allows for the complexity of the interaction to be emphasised both in terms of the actors involved and the central elements associated with regimes.

The actors within an international regime are the member states and organisations. The elements can be understood as the principles and norms arranged by member states on one side, and the rules and procedures managed by organisations on the other side. To apply an empirical test to the theory, a case study is introduced. Namely, the impact of an indirect crisis, September 11th and the challenge of non-state nuclear terrorism, on the Nuclear Nonproliferation Regime, and look at the potential for this regime to change, is investigated. This will be explored later in this chapter.

This thesis will argue that an indirect crisis, such as the terrorist attacks of September 11th, can act as a catalyst for a review of the tasks of a regime but it is insufficient to initiate wholesale revision of a regime. Moreover, there will be a greater propensity to acknowledge issues arising from the crisis at the organisational level than at the state level. There will not be a change *of* regime but the potential for change *within* the regime exists at the organisational level. These dynamics ensure that the possibility for change exists. Oran Young has argued along these lines stating that regimes "...rarely become static" and that they partly consist of "...social practices that change continually- sometimes dramatically- in

response to both endogenous forces and exogenous pressures."² However, this change will be limited in scope.

A change of regime is considered improbable, but potential changes within the regime are possible, if constrained. Two factors account for this limitation. Firstly, the member states will subsume the specific issue into a broader agenda, placing the issue outside of the regime thus restricting the organisational actors' capacity to respond. Secondly, despite some organisational momentum towards addressing the problem, this will be limited because consensus will be needed at the organisational level to persuade the member states to respond to the challenge within the framework of the regime. An important criterion for achieving consensus among actors is the presence of an epistemic community willing to promote the knowledge around the issue. The lack of such a community will inhibit the possibility of the information gaining widespread acceptance.

Following the presentation of the theory, it remains pertinent to present a brief summary of the theoretical approaches and fundamental assumptions of this theory. The theoretical approach employed can be described as a synthesis between rationalist and weak-cognitivist perspectives. By combining several core assumptions from each strand, this synthesis allows for a more comprehensive explanation of the dual nature of a regime, incorporating a fundamental dichotomy, namely, the division between the *state* and the *organisational* level.

Briefly, the rationalist assumptions are as follows:

- 1. States are rational egoists that are concerned with advancing their interests.
- 2. The preferences of states are relatively stable over time.

² O. Young, 1999. Governance in World Affairs. Ithaca: Cornell University Press, p 133.

3. Common interests exist amongst states but this does not necessarily beget co-operation.³

Following on from the rationalist assumptions, the weak-cognitivist assumptions to supplement the rationalist perspective of regimes are that:

- 1. The knowledge held by actors is a significant factor in the decision-making process.
- 2. Consensus, as implied by 'consensual knowledge', is required between actors to instigate significant institutional momentum towards the scope of the problem at hand.⁴

These combined assumptions allow for a map of reality to be constructed that develops a more accurate picture of the dynamics operating with a regime and can better identify the potential for regime change. This is because the theoretical perspective seeks to explain both the structure and the processes of a two-tiered system.

This perspective affirms a critical assumption upon which this thesis bases its investigation. An analytical distinction can be drawn between the inter-related levels that exist within a regime: the state level and the organisational level. The rationalist perspective reflects the somewhat hierarchical nature of the relationship: the organisations operating within a regime tend to reflect the bidding of the member states. One UN representative described it as "...the dependence that we endure, in terms of budgetary support and political mandate. We do what we're told to do." On the other hand, a more cognitive approach allows for organisations to be viewed as actors in their own right, generating ideas and

³ R. Keohane, 1984. After Hegemony. Princeton: Princeton University Press. ch. 5

⁴ E. Haas, 1990. When Knowledge is Power: Three Models of Change in International Organisations. Berkeley: University of California Press, pp. 1-14, 20-23

⁵ Personal correspondence: Mr R. Rydell, Senior Analyst UNDDA. NY: June 2002

developing and re-examining the knowledge they hold and use.⁶ Therefore, the analytical distinction is a valid one.

The potential for regime change can be viewed in terms of changes to the central elements of a regime: the principles, norms, rules and decision-making procedures. A change of regime implies changes to the principles and norms, whereas change within the regime can occur in the rules and procedures. Furthermore, to evaluate the potential for change, some correlation can be drawn between this dichotomy and the distinction that exists between the member states and organisations. In other words, there will be greater potential for change to organisations, managing the rules and procedures within the regime, than to the fundamental beliefs governing the regime. Initially, change will be evaluated on the grounds of before and after the crisis event.

To complete the reality map, the outcomes at both levels regarding regime change can be enlightened by establishing a set of indicators that mark out causal processes of the regime actors involved that can illustrate momentum towards potential regime change. In brief, the indicators this thesis intends to use are as follows: the *recognition* and *definition* of the problem, the *perception of threat to perceived interests* and *agenda-development*. These measuring sticks will be further elaborated upon in the following chapter. Proper navigation of a map so-constructed should help indicate the direction of the road. In other words, the thesis arrives at a cumulative position and can make predictions and prescriptions based upon its findings, providing a basis for future avenues of research.

Having presented the key theoretical components and fundamental assumptions of the

⁶ For example see, K. Colijn, 1998. "Non-proliferation: reinforcing the IAEA nuclear safeguards regime in 1990s". In B. Reinalda and B. Verbeek, eds., 1998. *Autonomous Policy Making by International Organizations*. London and New York: Routledge, pp.98-105

argument, it is necessary to turn attention to the chosen case study. This thesis uses a 'disciplined-configurative' approach to the case study. Although recognising the uniqueness of the case study, the emphasis is to interpret the results in more general terms and to contribute to the accumulation of findings. It is an analytical-inductive method seeking to describe and explain a set of phenomena with the aim of drawing out prescriptive measures. It is beyond the scope here to provide the basis for any general theory relating to crisis or regime change, however, the case study does permit more detailed analysis of a specific situation that has been largely neglected.

The NNPR and the Challenge from NT

As presented previously, the relationship that will be investigated in this thesis is between crisis and potential regime change, qualified by the intervening processes, between actors inherent in the dual nature of a regime. To attest that the theoretical approach adopted in this thesis can stand an empirical verification, the case chosen here is the impact of September 11th on the Nuclear Nonproliferation Regime (NNPR) with regard to the challenge of non-state nuclear terrorism (NT).

This thesis maintains that the events of September 11th represent a crisis for the NNPR. Specifically, September 11th, as a trigger event, has highlighted the danger of NT and, therefore, underlies a challenge for the NNPR. It is recognised that the principle concerns of the NNPR revolve around proliferation and disarmament issues. These issues being affected by the crisis are not discounted from the case-study investigation, however, the focus on NT allows for a different set of conditions to be applied to the NNPR, especially when

⁷ A. George, 1979. "Case Studies and Theory Development: The Method of Structured, Focused Comparison". In P. G. Lauren ed., 1979. *Diplomacy: New Approaches in History, Theory, and Policy*. New York: Free Press. pp. 46-50.

considering regime change. Nuclear terrorism in general is an issue that demands the attention of the principle actors within the regime. They are: the member states, notably the Nuclear Weapon States (NWS) and the Non-Nuclear Weapon States (NNWS) and the organisational actors: the International Atomic Energy Agency (IAEA), parts of the United Nations systems, such as the Department for Disarmament Affairs (UNDDA) and the Security Council (UNSC).

A more elaborate picture of the NNPR in relation to NT will be presented in chapter four. However, at this juncture it is worth encapsulating the argument developed above into the context of the case study. In response to the crisis, institutional momentum will vary at the state and organisational levels. A change of regime is not considered probable. This is so because the challenge of NT appears outside the parameters and responsibilities of the regime; the threat is at odds with the state-centric aegis of the NNPR. As such, member states will be relatively inflexible in perceiving the challenge within the boundaries of the regime because this challenge is subsumed into the broader agenda dealing with international terrorism as a whole. On the other hand, actors at the organisational level will be more adaptable to the changing threat environment because knowledge is more readily available and can be more rapidly disseminated among organisational actors. Also, owing to a small degree of autonomy, the organisations within the NNPR are not completely bound by national interests and can formulate their own perspectives.

Under these circumstances, the potential for change within the regime will be greater at the organisational level. However, significant regime change, represented by concrete institutional movement towards developing a more comprehensive functional scope⁸ to

⁸ O. Young, op.cit., p 136.

adequately encompass the NT challenge, will only occur if there is consensus between the member states and the organisations concerning the nature and possible solutions to the problem. This consensus can ultimately occur through the processes of interaction that occur between the two sets of actors. The possibility of this is constrained because of two reasons. Firstly, as stated above, the member states will subsume the issue of nuclear terrorism into the broader agenda of international terrorism and concentrate on this issue outside of the NNPR, thus restricting the organisational actors' capacity to respond. Secondly, despite some organisational momentum towards addressing the problem, this will be limited because consensual knowledge espoused by an influential epistemic community at the national and international level is lacking.

Much of this debate stems from the fact that the challenge of nuclear terrorism in general may take several different forms. Particularly, with regard to non-state actors, some of the potential forms fall outside of the boundaries within which the NNPR operates. Accordingly, this thesis considers that non-state actors are free from the constraints of the NNPR. Therefore, it is the relative position of nuclear terrorists outside the gamut of the NNPR's realm of responsibility that creates a 'blind-spot'.

A significant part of this argument is based on the assumption that the current NNPR can be regarded as being state-centric. That is to say, the NNPR regards the properties of nuclear weapons and nuclear facilities to be the domain of nation-states. Many of the building blocks that form the NNPR are also state-oriented. The international treaties and agreements, the institutional apparatus and the regulatory mechanisms dealing with the range of issues that are dealt with by the NNPR operate predominantly at the state level. Therefore, despite the nature of the crisis, states are likely to act according to their rationalist tendencies and

predominantly view the crisis affecting the NNPR in terms of disarmament and proliferation issues.

It is fair to state that many aspects of nuclear terrorism can be dealt with using this state-centric approach. However, the current NNPR does not embrace the entirety of the challenge from nuclear terrorism, especially concerning issues relating to non-state actors. The driving issues of disarmament and proliferation can only partly account for this new challenge. To this end, the importance of organisational actors, propelled by the weak-cognitivist assumptions cannot be understated.

In the foreseeable future, it is along these lines that gaps will continue to appear in any prospective policy initiatives originating at either the state level or organisational level. However, this thesis contends there will be a certain, if insufficient, amount of change within the regime. An example of this is the extension of the organisational apparatus to further examine the challenge of NT. Moreover, interaction between the member states and the principle organisations that could lead to momentum towards agreed upon regime change requires a goal in the short-term.

This thesis anticipates that the 2005 Nonproliferation Treaty (NPT) Review Conference will provide such a focal point. It may be suggested that some degree of consensus between parties may be reached leading up to this time in the hope of being institutionalised at the Review Conference. An example of this would be agreement to improve standards concerning the protection of nuclear materials, building on the 1980 Convention on the Protection of Nuclear Materials (CPPNM). Considering the perspective

⁹ G. Bunn, 2000. *Physical Protection of Nuclear Materials Strengthening Global Norms*. International Atomic Energy Agency report, <u>www.iaea.org/worldatom/Periodical/Bulletin/Bull394/evolving.html</u>

of member states, partially 'blinding' them to the threat of nuclear terrorism and despite greater organisational awareness about the issue, the prospect for comprehensive regime change is bleak. This thesis contends that there will be a certain amount of momentum towards regime change in the relevant direction but not to the extent that belies the optimistic outlook that the NNPR will develop and adapt sufficiently to encompass all facets relating to nuclear terrorism, especially non-state nuclear terrorism. In other words, this thesis will demonstrate that the potential for change within the regime exists at the organisational level. However, this change is limited, because without a consensus between member states and organisations this change will not lead to an adequate solution encompassing all the dimensions of NT. Arguably, there is the possibility of severe consequences for the NNPR that could prove to be detrimental to the utility and legitimacy of the regime.

Outline of Thesis

Following on from this introductory chapter, chapter two seeks to define the essential concepts and terminology concerning the independent and dependent variables, which are as follows: crisis and regime change. The discussion on crisis incorporates the catalysing character of crisis and a review of literature that has previously studied crisis so as to pinpoint the precise definition of crisis used here. Following this, regime change is investigated initially by laying out the foundation of international regimes, and then elaborating on the fundamental dichotomy between principles and norms and rules and procedures. The indicators of change that will be used to outline the causal links leading to potential regime change will then be discussed. Finally, this chapter lays out aspects dealing with identifying types of regime change.

Chapter three seeks to develop the theoretical perspective used to explain the causal mechanisms found in the dual nature of a regime. From the literature, it is possible to extract different strands of thought and amalgamate them into a synthesis. The key components of the synthesis are the rationalistic and weak-cognitivist perspectives. The advantage of using this synthesis approach is that it has a good deal of explanatory capacity. Finally, this chapter will provide a brief overview describing the roles of the actors within international regimes given the theoretical backdrop.

Chapter four focuses on the case study of the NNPR and the challenges it faces from NT. Initially, to provide a baseline, a brief overview of the NNPR is developed. This is followed by an investigation into the nature of NT establishing its position in relation to the NNPR. The remainder of the chapter focuses on establishing the levels of regime change occurring within the regime towards this issue.

Chapter five is the concluding chapter that will include a recapitulation of the main arguments and findings. To close this thesis, several predictions and prescriptions will be made concerning the future of the NNPR in its confrontation with NT.

Chapter Two: Concepts and Terminology

This chapter will present the conceptual framework and key terminology, seeking to describe and define the independent and dependent variables used and thereby laying out the necessary parameters. Discussion and explanation of the causal mechanisms, the actors within a regime, is reserved for the following chapter.

This chapter has two aims. Firstly, to define the issue of crisis used in the context of this thesis. In doing so, the chapter proceeds by evaluating the catalysing properties of crisis. This is followed by a summary review and a discussion of crisis within the literature to enable a precise picture of crisis to be painted in relation to other uses of the term crisis. This discussion incorporates the distinction that emphasises both the state and the organisational levels. To conclude this section, there is a discussion relating to the 'indirect' nature of the crisis concerned and its effect on crisis as a stimulus.

Secondly, this chapter elaborates and defines the concept of regime change. To begin with, this section briefly establishes the essential components of international regimes. This is followed by the argument distinguishing between a change of regime and change within a regime. This includes a more detailed discussion of the dichotomous elements of regimes explaining the link between these elements and regime actors. Necessarily, this involves an explanation of the measuring indicators used as well as other methodological issues. The chapter concludes by discussing the nature of regime change providing a more substantive facet to the dependent variable.

Independent Variable

The independent variable of this thesis is crisis. The crisis in question investigated in the case study are the terrorist attacks by non-state actors on US soil on September 11th, 2001, resulting in approximately 3,000 deaths;¹⁰ to date, the most damaging terrorist attack ever in terms of fatalities and economic disruption. Therefore, crisis in this context can be viewed as a *crisis event*. In short, this thesis views crisis as an event that acts as a catalyst.

The catalysing properties of a crisis primarily reside in its ability to rapidly force new information to be acknowledged and confronted, either in conjunction with existing perceptions or as challenging the knowledge accepted by the status quo. Adler and Haas document this when they explore the relationship between policy makers and experts when confronted with a crisis situation. "Crises and dramatic events have the effects of alerting decision-makers to the limitations of their understanding of the issue-area and of either triggering their search for advice from an epistemic community of experts or increasing their reliance on a community with an established foothold."

Furthermore, in connection with an international regime, crisis can force the key actors, states and organisations, to revise the role of the regime in light of the new information and developments that are presented to them. This occurs because crisis will create a sense of urgency among the actors inculcating a belief that 'something must be done'. As Adler and Haas conclude, "...[c]rises and new developments not only accelerate the diffusion process but also lend urgency to the task of re-evaluating current policies and

¹⁰ The figure for the attacks on the Pentagon and the Pennsylvania site is 224. The exact number of deaths at the site of the World Trade Centre is still not known but estimates range between 2,780 and 2,820. Source-USA Today: Final Sept. 11 death toll remains elusive, 08/22/2002

¹¹ E. Adler and P. Haas, 1992. "Epistemic communities, world order, and the creation of a reflective research program". In *International Organization*, 46, winter, p 380

coming up with alternatives."12 Therefore, it can be argued that this sense of urgency invigorates motivation with the actors to respond. Necessarily, this is a product of the catalysing character of crisis.

The above sketch of crisis can be complemented by a review of previous work that has focused on crisis. It is important to note that crisis is a broad concept. It entails different attributes and can be used to convey different meanings and identify various patterns of interactions. Therefore, at this juncture, it is useful to examine previous literature that has emphasised different dimensions of crisis. In doing so, it provides the opportunity to extrapolate different components and form the precise concept of crisis used here. However, some perspectives of crisis do not relate to the thesis.

For example, it is possible to distinguish between a foreign policy crisis and an international crisis. The former concerns challenges to a single state's values; the latter focuses upon clashes arising from the conflicting foreign policies of states in the international system. 13 These can be summarily described as efforts attempting to understand the origins of crisis. In these instances, crisis can be construed as the dependent variable; meaning crisis is the resultant of interactions between states. Also, both these distinctions adopt the position that crisis represents a pattern of behaviour between state actors. This perspective misrepresents the context this thesis seeks to examine.

Besides this use, the concept of crisis has been applied as an independent variable. As an example, in the realm of international political economy, crisis has often been cited as an initiator of change in state policy, both foreign and economic. For instance, in examining the

¹³ M. Breecher and J. Wilkenfeld, 2000. A Study of Crisis. Ann Arbor: University of Michigan Press, ch. 1

effects of the OPEC oil crisis in 1973, John Odell writes, "...shifts of US foreign monetary policy were determined most by changes in the international financial situation. A persistent US deficit eventually led to exchange rate change." ¹⁴ Or, back in the field of international relations, it is possible to investigate crisis with regards to its outcome, whether diplomacy or war will prevail in a given situation.¹⁵

Also, it has been suggested that crisis periods tend to reinforce existing ideas. Phil Williams believes, "...crises are not always distinct turning points in international politics, at a minimum they tend to strengthen pre-existing trends."¹⁶

Ned Lebow furthers the argument by claiming that, "...the dominant characteristic of [...] crises is the resolve of leaders on both sides to advance or protect their perceived interests."¹⁷ Arguably, the resolve of a state to continue in one fashion will reflect upon their perceived interests. Therefore, these two linked factors, pre-existing trends and perceived interests, should yield some interesting results when further evaluated in the context of the case study.

A further perspective views crisis as being influential beyond the initial event and having a long-term effect on policy communities. Having studied three crisis periods. Gourevitch asserts that crisis will alter previous networks of policy communities and in doing so, "open[s] the system of relationships, making politics and policy more fluid." 18

¹⁴ J. Odell, 1979. "The US and the emergence of flexible exchange rates: an analysis of foreign policy change". In International Organization, 33, winter, p. 80

¹⁵ N. Lebow, 1981. Between Peace and War. Baltimore and London: John Hopkins University Press, ch. 1

¹⁶ P. Williams, 1972. Crisis Management: Confrontation and Diplomacy in the Nuclear Age. New York: Wiley, p.13 ¹⁷ N. Lebow, *op. cit.*, p 53

¹⁸ P. Gourevitch, 1986. *Politics in Hard Times*. Ithaca and London: Cornell University Press, p. 22

This means that an enduring quality of crisis is the consequences it will have on political relationships that are formed to overcome the crisis.

To a degree, these approaches resemble the position adopted here. Namely, investigating the outcome of a given crisis, its effect on pre-existing trends and perceived interests and the long-term aftermath of political relations between actors. However, they maintain that states are the key protagonists. That is to say, the crisis was initiated by states increasing the price of oil and other states responding to counter the effects. Or that war will result between states owing to a crisis. Also, the emphasis is on state perceptions and interests. The phenomena investigated can only be partially explained if state behaviour is the only factor considered here.

This brief overview illustrates a fundamental difference that can be distinguished between the concept of crisis used by other authors and the concept pursued here. Whereas several authors believe that crisis is firmly a product of state behaviour, it is proposed here that crisis can be, on occasion, initiated by actors operating beneath the state level. In being propagated by non-state actors, it is initially set apart from economic and foreign policy crises that occur between states. This is not to say that states affected by the crisis will not take action at the state level. On the contrary, it is expected for states to re-interpret the crisis in terms of state interaction, as demonstrated by the US-led war on Afghanistan in response to September 11th. However, this does not alter the initial point that non-state actors were responsible and that states and organisations have to be aware of this qualitative difference when faced with the dilemma of how to respond.

A state perspective also tends to neglect the role of organisations when confronted by crisis. There has been some research in this area, not all of which is relevant here. For

example, the role of international organisations and their efforts at crisis management have been analysed empirically, as a part of a wider study dealing with conflict, crisis and war. 19 Using their ICB data set, Brecher and Wilkenfield are primarily seeking to establish the efforts of "global organisations" in moderating crises, essentially to determine the effectiveness of the organisations.²⁰ This viewpoint does not provide a complete fit with regard to the aims here, because it seeks to examine an organisation's ability to abate a crisis.

On the other hand, analysis of the organisational level can complement a state perspective by providing an additional dimension. To a degree, the impact of crisis can illuminate the organisational framework. For instance, crisis management is seen as a measurement for "successful institutionalisation." However, this does not accommodate for an indirect crisis, an important distinction to be elaborated upon shortly. Yet, the organisational level will be responsive to crisis. For example, creating additional bureaucratic organs within existing institutions to address issues arising from the crisis.²² However, a caveat is in order when investigating the impact of crisis on the relationship between the state and organisational level actors. Rittberger et al. state, "such events... can help the negotiating parties to refocus on their common interest."²³ Yet, these claims have their limits, since organisations are initially the product of the member states "...indeed, national interests have played a significant part in the creation of all IGOs."²⁴ This means that if organisations within a regime are in large part the function of national interests, then their own response to crisis

¹⁹ M. Breecher and J. Wilkenfeld, op. cit., p 36

²⁰ *Ibid.*, p 186

²¹ E. Haas, 1990. op. cit. 86

²² Personal correspondence: Mr. V. Mantels and Ms. S.Nurro, Political Affairs, WMD Branch-UNDDA, NY,

²³ A. Hasenclever, P. Mayer and V. Rittberger, op. cit. p 75

²⁴ W. Feld, R. Jordan and L. Hurwitz, 1990. *International Organizations: A Comparative Approach*. Westport: Praeger, 3rd ed., ch. 7

will be somewhat restricted. This is most noticeable when addressing the fact that crisis can abruptly contribute to the processes that influence the agenda of a regime. This is a dimension of regimes that is, for the most part, dominated by member states. "...the stage of agenda formation encompasses the emergence of an issue on the political agenda, the framing of the issue for consideration in international forums and the rise of the issue to a high enough place on the international agenda to warrant priority treatment." The emphasis here is on the state level. So, the impact of a crisis event will be felt at both levels, however, the level of responsiveness at the organisational level will be influenced greatly by member states.

With regard to the case studied, the crisis event can be considered as an *indirect* crisis. That is to say, the events of September 11th were not directly related to the NNPR in the sense that no nuclear material was used by the terrorists and no nuclear facilities were attacked. However, there are repercussions for the NNPR because the events of September 11th increased concern about international terrorism and, as a by-product, speculation concerning weapons of mass destruction increased. Thereby, nuclear terrorism was placed, among other forms of terrorism, under a spotlight.

It is important to note that the NNPR has faced significant amount of 'direct' crises, especially since the end of the Cold War. These crises include the break up of the former Soviet Union and the potential for nuclear technology and expertise to proliferate²⁶ as well as the development of Iraqi nuclear capabilities brought to light by the Gulf War in 1991.²⁷ A

²⁵ M. Levy, O. Young and M. Zurn, 1995. "Study of International Regimes". In *European Journal of International Relations*, 1, 3, pp. 282

²⁶ M. Bunn, 2000. 'A Detailed Analysis of the Urgenty Needed New Steps to Control Warheads and Fissile Material'. In J. Cirincione, ed., 2000. Repairing the Regime: Preventing the Spread of Weapons of Mass Destruction. New York and London: Routledge pp. 71-126

²⁷ R. Butler, 2000. 'Inspecting Iraq'. In J. Cirincione, ed., 2000. Repairing the Regime: Preventing the Spread of Weapons of Mass Destruction. New York and London: Routledge pp. 175-184

further crisis facing the NNPR is the behaviour of North Korea in the early 1990's and in the present day.²⁸ These are 'direct' crises because they impact on the realm of the regime's responsibilities and there have been efforts by the actors in the regime to contend with these situations. For example, strengthening the Safeguards system with the implementation of the '93+2' programme in light of Iraq's and North Korea's attempts to circumvent the safeguards of the regime.²⁹ These cases are important in terms of their consequences on the regime but they consist of challenges that are firmly rooted within the confines of the regime and the protagonists involved are individual states.

Conceiving of the crisis as being 'indirect' is beneficial to the thesis from an investigative perspective when attempting to gauge potential regime change. The challenge to the regime is outside its present boundaries because the protagonists were non-state actors and because nuclear capabilities were not directly involved. This sharpens the distinction afforded between the state and the organisational level. The member states of the NNPR are also entities outside the realm of the NNPR and can act and respond to stimuli on many levels. States view September 11th as a crisis having ramifications upon many different dimensions. States will naturally focus their attention on issues that are brought immediately into question by the crisis. In that sense, states are essentially myopic in terms of their response to crisis. For example, as September 11th did not directly relate to nuclear issues, the threat of nuclear terrorism was subsumed into, and became a part of, the wider discussion concerning the problem of international terrorism as a whole. The organisational level

²⁸ J. Robertson, 2003. "North Korea Nuclear Crisis—Issues and Implications". Canberra: Dept. of the Parliamentary Library. pp. 1-35

Global Security, 2002. "North Korea Nuclear Crisis: February 1993-June 1994".

http://www.globalsecurity.org/military/ops/dprk nuke.htm

²⁹ K. Coliin *op. cit.* pp. 94-98

involved in the NNPR necessarily has greater scope to draw attention to the specific issue of nuclear terrorism, because for the most part, the organisational level is confined to the NNPR.

To some degree, the extent to which crisis can affect and manipulate the contextual sphere relevant to a regime, has been investigated. For instance, as Oran Young elegantly notes in his seminal piece 'Governance in World Affairs' in reference to environmental regimes, "...[m]ore or less severe crises affecting both the biophysical setting and the social setting within which regimes operate are perfectly possible. Today, an acute awareness exists of the significance of discontinuous or nonlinear changes as they affect both natural and social systems..."

This position moves closer to a key strand of thinking within this thesis, that is the propensity for change as a result of crises. Therefore, specifically for the purpose of this thesis, the catalysing dynamic of crisis will be viewed as a stimulus for potential regime change. It is this issue of regime change and the general issue of international regimes to which I now turn.

Dependent Variable

What Are International Regimes?

Before discussing regime change, it is pertinent to provide a brief overview concerning international regimes. Although reference will be made to substantial parts of the literature, this discussion does not consist of an extensive literary review of regime theory.³¹ Instead, a more general outline of the essential concepts contained in regime theory will be developed. The central research agenda of regime theory over the last twenty years has

³⁰ O. Young, 1999. op. cit. p. 138

³¹ In part, because there is a constraint on space, the body of literature covering 'regime theory' is expansive and would require more space than is permitted. Moreover, an extensive literature review is superfluous to the specific focus of the thesis. For a comprehensive review of the literature on regime theory, see M. Levy, et. al. op. cit. pp. 267-330

focused on questions such as- do regimes matter?³² And, how regimes matter?³³ The literature has centred on issues of regime formation, effectiveness and persistence.³⁴ Two broad notions concerning international regimes are agreed upon, relatively widely,³⁵ emphasising that regimes are social institutions dealing with recognisable issue-areas. In the words of Oran Young, "Regimes are social institutions governing the actions of those interested in specifiable activities."³⁶ However, there is no overarching theory concerning international regimes.³⁷ In part, this is because a precise, agreed upon definition of international regimes does not exist,³⁸ even though there have been several attempts to formulate definitions.³⁹ It is not viable to engage in a discussion as to the advantages and

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³² S. Krasner ed., 1983. *International Regimes*. Ithaca and London: Cornell University Press

³³ See R. Keohane, *op. cit.*; L. Martin, 1999. "An Institutionalist View: International Institutions and State Strategies". In TV Paul and J. Hall, eds., 1999. *International Order and the Future of World Politics*. Cambridge: Cambridge University Press, pp.78-98; L. Martin and B. Simmons, 1998. "Theories and Empirical Studies of International Institutions". In L. Martin and B. Simmons, eds., 2001. *International Institutions: An International Organization Reader*. Cambridge and London: MIT Press. pp. 437-465

³⁴ For a comprehensive review of the literature on regime theory, see M. Levy, O. Young and M. Zurn, op. cit. pp. 267-330

³⁵ A more 'cognitive' approach may question the intersubjective nature of social institutions as well as dispute the clear demarcation of regime issue-areas. See F. Kratochwil and J. Ruggie, 1986. "International Organization: The State of the Art on an Art of the State". In *International Organization*, 40, 4.

³⁶ O. Young, 1989. "International Regimes: Problems of Concept Formation". In P. Diehl, ed., 1989. *The Politics of International Organizations*. Chicago: Dorsey Press, ch. 3, p. 28

³⁷ A. Hasenclever et al. op. cit.., pp. 8-11

³⁸ M. Levy et al., op. cit., p. 270

³⁹ The first recognised definition is found in J. Ruggie, 1975. "International responses to technology: concepts and trends". In *International Organization*, 29, 3, p. 570. He states, "a set of mutual expectations, rules and regulations, plans, organizational energies and financial commitments, which have been accepted by a group of states". A systemic definition views international regimes as, "intermediate factors between the power structure of an international system and the political and economic bargaining that takes places within it. The structure of the system... profoundly affects the nature of the regime (the more or less loose set of formal and informal norms, rules, and prdures relevant to the system)", cited in R. Keohane and J. Nye, op. cit., p. 21. The 'lean' definition in response to Krasner's 'complex' definition comes from R. Keohane, 1989. "Neoliberal Institutionalism: A Perspective on World Politics". In R. Keohane, 1989. *International Institutions and State Power: Essays in International Relations Theory*. Boulder: Westview Press, p. 4. He states, "Regimes are institutions with explicit rules, agreed upon by governments, that pertain to particular sets of issues in international relations." From a behaviorial standpoint, Young defines regimes as, "practices consisting of recognized roles linked together by clusters of rules or conventions governing relations among occupants of these roles." O. Young, 1989. *International Cooperation: Building Regimes for Natural Resources and the Environment*. Ithaca and London: Cornell University Press, p. 12

disadvantages of comparable definitions. Instead, it is more beneficial to select one specific definition and substantiate the choice. A widely acclaimed definition is found in Stephen Krasner's introductory chapter of "International Regimes". In this influential publication he lays out what has now become the oft-cited mantra of regime theorists. The so-called consensus definition establishes regimes as, "...implicit or explicit principles, norms, rules, and

decision-making procedures around which actors' expectations converge in a given area of international relations. Principles are beliefs of fact, causation, and rectitude. Norms are standards of behavior defined in terms of rights and obligations. Rules are specific prescriptions or proscriptions for action. Decision-making procedures are prevailing practices for making and implementing collective choice."

This is not a cut-and-dried classification and has attracted criticism from different quarters, in large part, because of its imprecise nature and the vagueness of its content both conceptually and in its practical application to the real world.⁴² It is recognised that, to a certain extent, the criticism is warranted since the conceptual lines between certain elements in the definition are not precisely drawn out and therefore overlapping tendencies exist in the interpretations of each of the four constructs.

In sum, despite the above the criticism, the argument maintained is that state actors govern, dictate and are held to the principles and norms of a regime, whereas the

⁴⁰ See A. Hasenclever et al., *op. cit.* pp. 8-23; and M. Levy et al., *op. cit.* pp. 270-279, for debate on the comparable differences on definitions.

⁴¹ S. Krasner, op. cit.p. 2, In S. Krasner ed., op. cit pp. 1-22, some examples where this passage or parts of this passage have been cited in, include: A. Hasenclever et al., op. cit., p. 9; M. Levy et al., op. cit., p. 321 (end 2); T. Gehring, op. cit. p. 15 (fn 1); R. Keohane, 1984. op. cit., p. 57;

⁴² The classic example of this criticises international regimes for its "woolliness", found in S. Strange, *op. cit.* p. 56, In P. Diehl, ed., *op. cit.*, 51-65

organisational level is concentrated on upholding and arranging the rules and decision-making procedures. Naturally, this distinction can not hold true of all regimes. For example, the lack of formalised structure in implicit regimes does not mean that rules and procedures are not present in that system but their location will not be found in an organisational apparatus. However, in terms of an explicit regime, as is the case here, this is a useful distinction.⁴³

Regime Change

Moving away from these traditional aspects of regime theory, the focus here is on regime change, which will be considered as the dependent variable. Concretely, what potential change can be foreseen happening to a regime? In brief, the argument put forward below indicates two concepts.

Firstly, as a whole, a regime will not change drastically in light of an indirect crisis. That is to say, the member states will not fundamentally alter the overall principles and norms of the regime. There will not be a change of regime. In the case of the NNPR, the regime will not change drastically vis-à-vis NT; meaning preventing proliferation and pursuing disarmament will remain the guiding principles. However, the second argument considers that there is potential for change to occur within the regime, mainly a change of the rules and procedures within the regime. The basis of this claim is that the organisational actors operating within the regime are more adaptable to their environment and can play a key role in the formulating of rules and the decision-making process and thereby incorporate a greater range of issues than is feasible at the state level. Although, it is important to note that there are limits to the extent of change that can occur at the organisational level.

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⁴³ M. Levy, et al., op. cit. p. 271-273

From the brief synopsis above, it is clear that change is not a singular construct and can be interpreted in different ways. Regime change is a broad concept and cannot be completely encompassed here. However, this section does seek to enquire into the following-what is meant by regime change, and how can potential regime change be identified? In doing so, it is important to elaborate on the central elements of regimes and investigate them with regard to change. Also, through developing the indicators used to measure change, it will be possible to identify which of the central elements of regimes are more conducive to change. Furthermore, it is important to provide a synopsis of the literature that has previously dealt with regime change from which the precise notion of regime change used here can be crystallised.

Dichotomous Regime Elements

Principles, norms, rules and decision-making procedures are the central elements of regimes considered here. To expand from Krasner's definition, principles are fundamental beliefs and underlying justifications, for example, believing that, "...the spread of nuclear weapons into many hands would further jeopardize prospects for international peace and security." Norms govern the propriety to which members are expected to adhere, instilling general rights and obligations, for example, the right for certain states to possess nuclear weapons but the general obligation put upon all member states of the NNPR not to help any other state obtain these weapons. Rules are a more solid manifestation of norms that makes the various arrangements between parties more explicit. For example, some rules regulating the behaviour of member states of the NNPR on issues such as safeguards and supplying of

⁴⁴ R. Smith, 1987. "Explaining the nonproliferation regime: anomalies for contemporary international relations theory". In *International Organisation*, 41, 2. p.257.

⁴⁵ M. Levy, O. Young and M. Zurn, op. cit., p. 273.

materials can be found in the Statute of the IAEA. Decision-making procedures facilitate the cooperation of member states through a system of negotiated customs, for example, periodic NPT review sessions held every five years enabling regime constituents to congregate and deliberate with one another in the aim of formulating policy. These examples used to illustrate the central attributes of regimes offer a cursory glance of some key aspects of the NNPR and will be elaborated upon in chapter four. Having defined the central elements of regimes, it is important to consider them in the context of potential change.

The key distinction that Krasner proposes relating to regime change is that, "...changes in rules and decision-making procedures are changes within regimes, provided that the principles and norms are unaltered." He continues by stating, "...changes in principles and norms are changes of the regime itself. When norms and principles are abandoned, there is either a change to a new regime or a disappearance of regimes from a given issue-area."

In other words, changes within a regime indicate that a regime will fundamentally remain the same despite the possibility of institutional arrangements pertaining to the regime being subjected to alterations. Whereas, a departure from the essential qualities previously ascribed suggests the more profound changing of a regime. This distinction alludes to the notion that principles and norms have a static quality and an innate longevity attached to them. Arguably, changes to these qualities, although far-reaching, are a time-consuming and

⁴⁶ The full text of which can be found here: http://www.iaea.org/worldatom/Documents/statute.html

⁴⁷ G. Bunn, 1995. "Options for extending the NPT: Which are permitted? How should the NPT extension conference choose among them?" In T. Rauf ed., 1995. Extending the Non-Proliferation Treaty: Perpetuating the Global Norm. Ottawa: Canadian Centre for Global Security, Aurora Papers 27.

⁴⁸ S. Krasner *op. cit.* p. 3.

⁴⁹ *Ibid.*, p. 4.

arduous process. Whereas, even though rules and procedures can be stable and durable, they are more malleable to a range of factors. This means that these elements are more conducive to institutional impetus towards change and this may occur over a shorter span of time. Although this distinction does not elaborate on particular regime change, it does provide an initial dichotomy from which to analyse regime change.

In light of this dichotomy, it is meaningful to reiterate a fundamental assumption of this thesis and integrate it with the above distinction. By breaking down the concept of a regime into two distinct, yet inter-related, analytical units: state level actors and organisational level actors, it allows for the central elements of a regime to be bracketed with the specific actors. This develops a greater analytical capacity in determining the substance and processes of regime change as well as offering more precision in attributing the greater potential for regime change at a specific level. In short, it is argued that states create the principles and norms of a regime and organisations manage the rules and procedures within the regime.

To further this position, the following line of reasoning is advanced. States, with their collective interests in mind, not only originally determine the guiding principles and norms that provide the basis of a regime but also changing these elements necessarily requires the volition to do so by the member states. From this, it is important to note that the organisations created by states, as material representatives, to operate a regime are initially conceived from these essential principles and norms. In part, the aim is to uphold these pre-determined characteristics, thereby minimising their influence on moulding these particular elements. On the other hand, with regard to the more progressive realm of rules and procedures of a regime, even though states play a major role in their initial arrangement, the nexus of rules

and procedures rests primarily with the organisations. Therefore, as guardians of the rules and procedures within a regime, organisations are well placed not only to implement them, but also to judge their continued viability and, if necessary, call attention to suitable changes that may be required. In this respect they are capable of exerting greater influence on member states to spark institutional change. ⁵⁰

This template places member states and organisations within the conceptual framework of a regime. It provides a simplified picture that illustrates the primary significance of state level actors, without trivialising the value of organisational level actors. However, it does not provide detailed answers to the questions of the relationship between the two levels with regard to their respective roles. These questions are reserved for the following chapter. In terms of regime change, this model firmly places the greater potential for regime change at the organisational level, meaning that there is a greater propensity for change within a regime as opposed to a change of regime. This is not a spurious link as the subsequent discussion on the indicators of change and certain methodological issues will demonstrate.

Empirical and Methodological Justification

The indicators used to outline the causal links indicating impetus towards potential regime change, which will be applied to the case study, can be broadly summarised as follows: the *recognition and definition* of the problem, the *perception of threats to interests* and *agenda-development*. Recognising the emergence of new issues and information may lead to a reappraisal of previously conceived ideas and this in turn may affect the meaning of the phenomenon. In other words, identifying new factors that require evaluation is a first step

⁵⁰ E. Haas, 1990. op. cit. p. 173

for actors. Recognising and defining new issues will occur at the two levels. Accordingly, it will be of consequence to observe, at both the state and organisational levels, how these indicators will affect the principles and norms and the rules and procedures of a regime. Suffice it to say at present, it is considered that the causal process of recognising and defining new issues will have a greater impact within the regime at the organisational level. ⁵¹

The second indicator centres on the proposition that new information may provide alternative sources of threat and their impact on pre-conceived interests. The interests of member states play a key role in designing a regime. Principles and norms tend to reflect the interests of the member states and this aspect will be developed in chapter three.⁵² Despite the capability of the organisational level to assess what constitutes a significant threat to the regime, the ability to re-transmit these assessments at the state level will not necessarily be successful. In part, this is because the new issues brought to light by the organisational actors may be subsumed into a larger set of issues. Moreover, the new assessment may challenge pre-defined interests and therefore be in conflict with existing principles and norms. So, although the organisational level may react to new perceptions of threat, its ability to act is limited by the inculcated beliefs of the member states, as Ernst Haas stated. "...the notion of habit-driven behaviour should teach us to expect the impulse to reject new knowledge, thus explaining why international organizations produce few important or institutional innovations. Some, we know, do occur, but they tend to be vulnerable to the volatility of perceived interest on the part of member governments."53 Again, this can lead to the

⁵¹ For example: IAEA Document "Protection Against Nuclear Terrorism", S/2001/1164, 2001.

⁵² R. Keohane and J. Nye, 1983. *Power and Interdependence*. Boston: Little, Brown and Company. Ch. 3

⁵³ E. Haas, op. cit., p. 170

evaluation that this causal process will indicate a greater possibility for change within a regime, although restricted, whereas momentum towards change of the regime is improbable.

Finally, the emergence of new information can affect the development of an agenda. New issues are perceived to require attention and are incorporated into the workings of the system, thereby impacting upon a previously constructed hierarchy of issues. Despite this, the interests of member states, who regard their interests to be of greater concern, will significantly influence agenda-development. However, it is questionable whether the development of the agenda can be influenced by the workings of the organisational level actors. Organisations, however, are able to frame issues obligating member states to acknowledge rising concerns enabling, "...consideration in international forums and the rise of the issue to a high enough place on the international agenda." The upshot of this is that causal progression towards change within a regime will more likely be indicated if there is institutional agreement between the parties about the issues on the agenda.

In assessing the impact of a crisis event on a regime, in terms of its capacity for change, September 11th is employed as the crisis event which marks out an initial dividing line to assess the criteria for change. From this point, comparisons can be drawn detailing the actions and perspectives of the actors operating in a regime. That is to say, it provides the opportunity to contrast the position of the actors in relation to an issue, before and after the event. It is clear from a methodological standpoint that this dividing line has limitations. In terms of September 11th, not much time has passed since the event in question and a balanced temporal comparison does not presently exist. In other words, there is insufficient

S. Strange, 1989. "Cave hic dragones: A Critique of Regime Analysis". Abridged version inn P. F. Diehl, ed., 1989. The Politics of International Organizations: Patterns and Insights. Chicago: Dorsey Press, p. 55
 cf. C. Archer, 1992. International Organizations. London and New York: Routledge, 2nd ed. Ch. 4

⁵⁶ M. Levy, O. Young and M. Zurn, op. cit., p. 282

hindsight. Although this is partially remedied by the empirical use of interviews to assess current views 'on the ground', the limitations imposed by the time frame effects the ability to investigate all facets of regime change. This applies specifically to the ability to test for potential changing of the regime, since, as mentioned previously, principles and norms change over a longer period of time.

Nevertheless, it is possible for change within the regime to occur in a short space of time and the germinal stages of potential change can more easily be developed and identified. Therefore, considerable attention is given here to change occurring within the regime. This latter point provides a certain utility when considering the predictive element of this thesis. Identification of the initial direction the road will take allows for the possibility of plotting its future course.

Up to this point, the discussion has centred on elaborating what is meant by regime change. In sum, a distinction can be made between a change of regime and change within a regime. This distinction incorporates a split in the central elements inherent in regimes, with changes in principles and norms signifying a change of regime and changes in rules and procedures signifying change within a regime. The thrust of the argument adopted from this distinction is that states within a regime are the primary actors, especially concerning the formulation and maintenance of the principles and norms. Organisations are a secondary cog but their relevance to the rules and procedures can not be underestimated. This categorisation is further complemented when the indicators of regime change used here are taken into account, and the important methodological issue of elapsed time is considered.

Establishing the parameters of regime change is key but it does not provide the analysis of regime change with the necessary detail of how potential regime change can be

identified. A discussion on the nature of change that can potentially occur in a regime is warranted because it provides a greater substantive composition of regime change than mere definition.

Nature of Regime Change

In dealing with the nature of regime change this thesis draws significantly from two sources. Firstly, the framework established by Oran Young in his chapter, 'Toward a Theory of Institutional Change', found in 'Governance in World Affairs'. In brief, he describes a range of change⁵⁷ that can materialise, this encompasses the following: type, forms, patterns and processes of change. From this, Young elaborates upon sources of change. He distinguishes three analytically distinct concepts: endogenous forces, exogenous forces and causal mixes of both forces. This attempt to bring into focus the point of origin of regime change provides an interesting unit of comparison. As stated by Young, "...the purpose of differentiating among a variety of sources of institutional change is to understand the range of forces at work." With regard to the theory put forward here, crisis is the exogenous catalyst that can stimulate endogenous arrangements. As will be elaborated upon in the case study chapter, the notion of causal mixes is an essential ingredient in the spurring of institutional momentum towards potential change within a regime.

Moreover, Young focuses on consequences of change, ⁶⁰ this analysis incorporates the following: effects on regime performance, effects on institutional character and broader consequences. Within the institutional character construct, Young outlines the differences

⁵⁷ O. Young, op.cit., p 135

⁵⁸ *Ibid.*, p 147

⁵⁹ *Ibid.*, p 154

⁶⁰ *Ibid.*, p. 155

between 'developmental' and 'adaptive' changes.⁶¹ There are nuances between these two types of changes but they are contemporaneous with the concept of change occurring within a regime established earlier in this section. The potential exists for these types of changes to impact upon the rules and procedures of a regime. Developmental changes can be regarded as the logical progression that is seen to be innate within a regime. Whereas, adaptive changes consist of changing the regime to be more in tune with its environment, Young argues that both characteristics can improve the robustness of regimes. He states, "... both developmental and adaptive changes generally enhance the resilience of international regimes. Developmental changes do so by fleshing out arrangements to realize their full potential. Adaptive changes, by contrast, take the form of adjustments that improve the fit between institutions and the biophysical and social settings within which they operate."62 However, these types of change will not alter the principles and norms of a regime, and as such, they are unable to bring about a change of regime. They do, however, allow for changes to occur within a regime that can bring into sharper focus issues that require attention. To this end, examination of the case study will seek to substantiate the potential for developmental and adaptive changes.

The second source is Ernst Haas' influential 'When Knowledge is Power'. In seeking to elucidate on how organisations redefine problems, Haas distinguishes between the concept of 'learning' and the concept of 'adaptation'. While remaining within the bounds of applying this context to organisations, it is possible to make a parallel observation with regard to the dichotomy formulated previously concerning regime elements. He suggests that 'learning' is

⁶¹ *Ibid.*, p. 158 ⁶² *Ibid*.

harder to come by than 'adaptation'. 63 At the heart of his argument concerning learning are the following.

Learning occurs, in part, when actors bring into question assumptions upholding 'programs' 64 bringing about alterations in their conduct. Secondly, primary objectives and the processes used to attain them are modified. Last but not least, for actors to learn, they need to have come to some agreement of what is considered to be 'consensual knowledge'65. While saving the more detailed discussion on this construct until the next chapter, it is important to note that, 'learning' consists of redressing the consensual knowledge in light of new information that challenges previous assumptions. Understandably, this is not readily achieved. The contention can be made that this pattern of conditions resembles the necessary requirements for a change of regime to occur. This situation conceivably demonstrates a shift away from the original principles and norms. Meaning, by associating learning closer to a change of regime than to change within a regime, it permits an argument to be made that the actors are faced with several daunting impediments in their ability to spark change. To reiterate an initial point made in this section, organisational actors are limited in the extent to which they can induce change within a regime. They do not have the capabilities to precipitate a change of regimes. Therefore, 'learning' in this respect is not a task that is foreseeable at the organisational level. Relative to the case study detailed in chapter four, a lack of 'learning' is conspicuous by its absence.

In contrast, adaptation is more attainable since it does not challenge the boundaries of the regime in terms of its purpose and worth. The fundamental goals remain the same but

⁶³ E. Haas, *op. cit.*, p. 9 ⁶⁴ *Ibid.*, p. 3

⁶⁵ *Ibid.*, p. 23

there is scope for different approaches to be used. Also, it is possible that new purposes can be grafted onto previously established objectives.⁶⁶ With regards to the case study, adaptation provides an alternative to learning, with which to compare the actors of the NNPR and will arguably provide a better fit with the reality on the ground.

This brief summary of two relevant academic contributions has endeavoured to provide more substantive fabric concerning regime change to enhance the definition and the indicators of change already put forward. Accordingly, within the context of the case study, investigating potential change that can occur within a regime allows for the following conditions to be considered. Causal mixes of endogenous and exogenous forces as a source of change, developmental and adaptive changes occurring to the institutional character of the regime, and learning and adaptation as the underlying *modus operandi* for the actors within a regime. As suggested in this chapter, much of the discussion on regime change is determined by the processes at work within a regime, namely, the interaction between the state level actors and the organisational level actors. This is the subject of the following chapter.

⁶⁶ *Ibid.*, p. 3

Chapter Three: A Theoretical Overview of International Regimes

To recapitulate, this thesis aims to demonstrate that crisis can act as a catalyst facilitating a review of the tasks of the regime but it is insufficient to initiate a wholesale revision of the regime. Moreover, because of the dual nature of international regimes, there will be a greater propensity to acknowledge the crisis at the organisational level than at the state level. Therefore, there will not be a change of regimes, understood as a change of the principles and norms guiding the regime; but the potential for change within the regime exists at the organisational level, which can be translated as a modification in the rules and procedures of the regime. However, this change will be limited in scope.

The broad subject of this chapter is the causal mechanisms apparent within the dual nature of an international regime. Causal mechanisms can be understood as operating between the independent and dependent variables, linking cause and effect. Bennett explains that a causal mechanism, "refers in one way or another to an intervening connection between independent variables and the outcome of dependent variables. In its most developed form, a causal mechanism account relates all causation to the physical transfer of energy, matter, or information between entities." The causal mechanisms investigated within the regime are the state and organisational actors. The underlying theoretical premises used to explain the processes, occurring among these actors, within a regime are the central focus here. Despite the assumptions coming from two different schools of thought a theoretical synthesis is attainable. Furthermore, it is argued here that such a synthesis is desirable because it can

⁶⁷ A. Bennett, 1999. "Causal Inference in Case Studies: From Mill's Methods to Causal Mechanisms". Presented at the American Political Science Association Conference, Atlanta, Georgia. p. 5 Available at: http://www.georgetown.edu/faculty/bennetta/APSA99.html

better elucidate the dual nature of a regime. In short, this approach provides a more comprehensive analytical tool by providing greater understanding of the interactions between the two sets of actors within a regime.

To complement this theoretical component, a more narrative commentary describing the roles of states and organisations with international regimes will also be presented. Understanding the interactive relationship between the actors within a regime will help to foresee the potential changes to a regime. By elaborating on the dual nature of the regime, it will be possible to strengthen the argument that the prevalent role of the member states and the primacy of their interests and preferences will signify that reconsideration of the main principles and norms guiding the regime is improbable. Moreover, by eliciting the relationship between the two sets of actors, the potential for change to rules and procedures instigated at the organisational level can be observed. However, in large part, the scope for optimism is limited because meaningful change within the regime requires consensus among the participants. In this case, the conditions for consensus are lacking thus constraining organisations to a narrow range of change that carry little weight. Explaining the interaction among the actors will help to advance understanding that consensus is difficult to attain.

Theoretical Premises

To a certain extent, investigation into international regimes has resulted in substantial jostling for *primus inter pares* among the three broad schools of thought: realism, liberalism and constructivism. These theoretical approaches may be summarised respectively as, power-based, interest-based and knowledge-based.⁶⁸

⁶⁸ A. Hasenclever et al., op. cit. ch. 1; M. Levy, O. Young and M. Zurn, 1995. "Study of International Regimes". In European Journal of International Relations, 1, 3, pp. 283-285

There is an increasing belief, that applied on their own, these perspectives do not comprehensively answer important questions about regimes.⁶⁹ The focus here is on integrating strands of the latter two approaches. The realist, power-based approach is not considered here, partly, because realism views actors as being concerned about the relative gains of others. This means that a competing state's gains through an agreement will necessarily result in a loss from one's own possible gains, i.e. a zero-sum same. This places the whole question of co-operation through an international regime in serious doubt, however, this thesis does not seek to question the relevance of international regimes.

Another contentious aspect of the realist view assumes that power is a goal, an end in itself.⁷⁰ The perspective here is more comfortable with viewing power as a means of achieving other objectives. Power is not completely dismissed here, as is reflected in this approach. The interest-based approach utilised can be correctly identified as being neoliberalist.⁷¹ Neoliberalism allows for considerations of power to be taken into account because it initially adopts a systemic perspective in which the distribution of capabilities are

Work in this vein, cited here, include: M. Barnett and M. Finnemore, 1999. "The Politics, Power and Pathologies of International Organizations". In L. Martin and B. Simmons, eds., 2001. International Institutions: An International Organization Reader. Cambridge and London: MIT Press pp.403-436; L. Martin, 1999. "An Institutionalist View: International Institutions and State Strategies". In TV. Paul and J. Hall, eds., 1999. International Order and the Future of World Politics. Cambridge: Cambridge University Press, pp. 78-98; O. Young, 1999. op. cit, pp. 189-216; K. Abbott and D. Snidal, 1998. "Why States Act through Formal International Organizations". In Journal of Conflict Resolution, 42, 1, pp. 6-8; Martin L. and Simmons B., 1998. "Theories and Empirical Studies of International Institutions". In International Organisation, 52, 4, pp. 729-757; A. Moravcsik, 1997. "Taking Preferences Seriously: A Liberal Theory of International Politics". In International Organisation 51,4, pp. 541-547; A. Hasenclever et al., 1997, op. cit. pp. 211-224; T. Gehring, 1992. Dynamic International Regimes: Institutions for International Environmental Governance. Frankfurt: Peter Lang. pp. 23-57; R. Smith, 1987. "Explaining the nonproliferation regime: anomalies for contemporary international relations theory". In International Organisation, 41, 2, pp. 253-281

⁷⁰ These two assumptions of realism are espoused by J. Grieco, 1988. "Anarchy and the limits of cooperation: a realist critique of the newest liberal institutionalism". In *International Organization*, 42,3, pp. 485-507

⁷¹ R. Powell, 1994. "Anarchy in international relations theory: the neorealist-neoliberalist debate". In *International Organization* 48,2, pp. 313-44.; R. Keohane, 1989. "Neoliberal Institutionalism: A Perspective on World Politics". In R. Keohane, 1989. *International Institutions and State Power: Essays in International Relations Theory*. Boulder: Westview Press, pp. 1-20; R. Keohane, 1984. *After Hegemony*. Princeton: Princeton University Press.

regarded as important in determining the structural constraints facing the actors.⁷² Although systemic implications are duly noted, the focus here is more geared towards explaining the processes and interaction between actors that lead to eventual outcomes this requires a complexity beyond a purely systemic approach.⁷³

The fundamental assumptions extrapolated from the interest-based, neoliberalist school and the knowledge-based, constructivist school can be surmised as being *rationalist* and *weak-cognitivist* assumptions respectively. Used in conjunction with one another, this chapter will demonstrate that combining several core assumptions from each strand allows for a more comprehensive analysis of international regimes. Comprehensive in this sense means that it will be possible to investigate two separate but inter-linked levels: the state level and the organisational level. It is worthwhile restating and developing these assumptions.

Rationalist Assumptions

Briefly, the rationalist assumptions used here can be stated as the following:

- 1. States are rational egoists that are concerned with advancing their interests.
- 2. The preferences of states are relatively stable over time.
- 3. Common interests exist amongst states but this does not necessarily beget co-operation. ⁷⁴

Rationality can be taken to signify that actors, "... have consistent, ordered preferences, and that they calculate costs and benefits of alternative courses of action in order to maximize their utility in view of those preferences." Egoism does not imply selfishness on the part of actors but, "... that their utility functions are independent of one another: they

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⁷² T. Gehring, op. cit. pp. 41-43

⁷³ R. Keohane, 1989. op. cit. pp. 103-106

⁷⁴ R. Keohane, 1984. op. cit., ch. 5

⁷⁵ *Ibid.* p. 27

do not gain or lose utility in view of those preferences."⁷⁶ However, actors neither have access to complete information on which to base their decision, nor can they consider every option available to them. These limitations tie rationality into it's 'bounded' form.⁷⁷ Furthermore, actors do not always judge that their interests are mutually exclusive of other states and can consider them to be reinforcing of an actor's own interest. This suggests that the actors have an empathetic character as opposed to an egoistic character.⁷⁸ These are important caveats to consider in the context of analysing international regimes because it furthers the argument that regimes foster co-operation.⁷⁹

The second rationalist assumption assumes stable preferences over time. This is partly a method of avoiding post-decision rationalisation of choices being considered as reflective of shifting preferences. Moreover, as Hasenclever et al. state, "... assuming stable preferences- by which is meant stable *preferences over outcomes*- does not preclude explanation of a change in behaviour (reflecting a change in "preferences over policies")."⁸⁰ This suggests an important distinction between preferences over outcomes and preferences over actions. Rationalist theory automatically assumes preferences over outcomes and does not seek to explain their origins. On the other hand, rationalist thought does seek to analyse a unit's preferences over actions, thus trying to explain an actor's behaviour towards already formulated goals. So if outcomes are a given, then they can be assumed to be relatively stable over time. Relevant here is the fact that exogenously specified outcomes allow the

76 Ibid.

⁷⁷ Ibid., p. 110. The concept was originally devised by H. Simon, 1955. "A behavioral model of rational choice". In *Quarterly Journal of Economics*, 69, 1, pp. 99-118

⁷⁸ A. Hasenclever et al. op. cit., p. 30

⁷⁹ R. Keohane, 1989. op. cit. pp. 106-109

⁸⁰ A. Hasenclever, et. al. op.cit., p. 24

⁸¹ L. Martin, 1999. op. cit. p. 84

⁸² R. Powell op. cit. pp. 317-321

implantation of other theoretical approaches to explain why the specified outcomes are reached.⁸³ This plays a significant role in developing a synthesis of approaches.

With regard to the third rationalist assumption, regimes are established to facilitate cooperation, however, mutual interests existing amongst states do not inevitably equate to cooperation. Shared goals among actors do not assume a harmony of interests. Co-operation between states is a complex process demanding that the parties consider their policy actions in conjunction with the preferences of the other. Succinctly stated, "intergovernmental cooperation takes place when the policies actually followed by one government are regarded by its partners as facilitating realization of their own objectives, as the result of a process of policy coordination." States acceding to an international regime in the hope of easing the route to cooperation enter into this arrangement with an armoury of preconceived interests and objectives. Cooperation is a political exercise requiring open lines of communication between parties and the wherewithal to accept and induce changes in behaviour to achieve given objectives.

Rationalist assumptions assert the primacy of state interests that, while they remain stable over time, do not preclude the potential for cooperation because the interests of states are not seen as being mutually exclusive. Despite this, cooperation is not automatic and requires political will among like-minded actors to co-ordinate their actions towards shared goals. This approach is predominantly statist and is a powerful tool in explaining state behaviour. However, this approach offers a unitary view of regimes and cannot explain fully the dual nature of a regime. Additionally, this theory is incomplete because it views outcomes

83 Ibid.

⁸⁵ *Ibid.*, p 51-52

⁸⁴ R. Keohane, 1984. op. cit. ch. 4

preferred by states as exogenous. No preceding explanation of how goals materialise is necessary from this perspective. Given the issue area under consideration and the approach undertaken, it is necessary to supplement this theoretical position with an approach that can provide more detailed explanation as to how outcomes are reached. 86 For an inductive investigation such as this, geared towards some policy prescription, an explanatory capacity is essential.⁸⁷ To these ends, it is important to fuse elements of weak-cognitivism alongside rationalist assumptions.

Weak-Cognitivist Assumptions

The assumptions that will be used under the guise of weak-cognitivism are as follows:

- 1. The knowledge held by actors is a significant factor in the decision-making process.
- 2. Consensus, as implied by 'consensual knowledge', is required between actors to instigate significant institutional momentum towards the scope of the problem at hand.⁸⁸

A brief aside is necessary. Cognitivism can be categorised as either 'strong' or 'weak'. 89 In sum, the approach of strong-cognitivism challenges the fundamental underpinnings of rationalist thought and views knowledge as having a more essential role in the development of international relations and tries. On the other hand, weak-cognitivism does not view rational schools of thought as being fundamentally flawed as it can be regarded as being consonant with some of the premises of rational thought. However, this perspective still considers rational theories to be missing a part of the picture.

⁸⁶ R. Powell, op. cit. p. 320

⁸⁷ A. George, *op. cit.* p. 48
⁸⁸ E. Haas, 1990. *op. cit.* pp. 1-14, 20-23

⁸⁹ Hasenclever et al., op. cit., pp. 136-139

Knowledge is the central focal point for cognitivists and is sometimes regarded as an alternative type of power. Whowledge... significantly shapes behaviour and expectations [of actors] Knowledge is viewed here as an explanatory variable that contributes the ideas, values, perceptions and beliefs of an actor and through a process of feedback, is also the accumulation of these dimensions. The genesis and evolution of ideas requires investigation to enhance understanding of what knowledge represents here.

Goldstein and Keohane segregate beliefs into three categories, two of which will be considered here, 'principled beliefs' and 'causal beliefs'. The former set of beliefs is based on normative considerations evaluating, "...right from wrong and just from unjust." These beliefs are sometimes expansive in their appeal and shifts in these beliefs tend to signify important changes in perspectives and policy. Alterations of these beliefs are relatively infrequent and take considerable time to occur. Causal beliefs lend themselves to the establishment of methods to achieve a set of objectives. Goldstein and Keohane view this category of beliefs to be a subset of the other two categories, "...[c]ausal beliefs imply strategies for the attainment of goals, themselves valued because of shared principled beliefs, and understandable only within the context of broader world views." The cause-effect relationship on a set of issues is open to scrutiny and the advancement of knowledge and the

⁹⁰ R. Smith, 1987. "Explaining the nonproliferation regime: anomalies for contemporary international relations theory". In *International Organisation*, 41, 2, p. 280

⁹¹ E. Haas, op. cit. p. 7

⁹² *Ibid.* ch. 1

⁹³ The first category is defined as 'world views' and is not considered here. Goldstein J. and Keohane R., 1993. "Ideas and Foreign Policy: An Analytical Framework". In J. Goldstein and R. Keohane, eds., 1993. *Ideas and Foreign Policy*. Ithaca and London: Cornell University Press, pp. 3-30

⁹⁴ *Ibid.*, p 9

⁹⁵ For example, the issue of changing perceptions on the issue of human rights after World War II. K. Sikkink, 1993. "The Power of Principled Ideas: Human Rights Policies in the United States and Western Europe". In J. Goldstein and R. Keohane eds., op. cit., pp. 139-172

⁹⁶ *Ibid.*, p 10

development of new information. This implies that policy will be reconsidered and the potential for change is increased.

Fundamentally, however, ideas are an abstract concept that are ever present but necessarily do not always materialise. Policy makers maintain certain beliefs, which may bring into focus their own interests, but this does not imply that policy choices will be the result. To study the influence and role that ideas have on policy, Goldstein and Keohane point to a triumvirate of approaches used to categorise ideas. ⁹⁷ The first approach outlined by the authors, holds that a chosen idea plots the course down which the policy maker will travel. Meaning that once an idea is selected, it restricts what action can be taken because other ideas have been discarded. Secondly, ideas are taken to represent a focal point in a coordination scenario among actors and they can be considered as a cohesive element that brings actors to some institutional arrangement. The third approach considers the role of ideas once actors have reached an agreement. Existing policy is the culmination of previously accepted and institutionalised ideas. Once ideas have been embedded in the organisational framework, those ideas-cum-policy will bear on future initiatives, even if the original beliefs setting up the policy have altered.

The second and third formulations are especially relevant. For example, without focal points of agreement, the ability to form regimes is minimal.⁹⁸ Without coordination, nothing can materialise between actors. Furthermore, the third route lends itself to the notion that international regimes are robust. Ideas having been formulated into policy and established within a regime seem to persist over time.⁹⁹ Robustness signifies the durability of regimes

⁹⁷ *Ibid.*, p 11-26

 ⁹⁸ G. Garrett and B. Weingast, 1993. "Ideas, Interests and Institutions: Constructing the European Community's Internal Market". In J. Goldstein and R. Keohane eds., op. cit. pp. 173-206
 ⁹⁹ M. Levy, et al. op. cit. pp. 287-290

faced with changing circumstances.¹⁰⁰ In other words, knowledge has been translated into interests and expressed as policy formulations. Noticeably, this resilient characteristic of regimes is predominantly explained from a neoliberalist, and therefore, rationalist perspective. "...international regimes often prove robust when confronted with challenges stemming from changes in the perceived benefits and costs of living up to commitments, the distribution of power among the participants, or the overall relationship of the parties." ¹⁰¹ It is of interest to note that the same authors continue by stating, "...if a regime seems too weak as initially constituted to achieve its institutional goals, moreover, this may trigger a dynamic leading to a strengthening [sic] of the regime itself." ¹⁰² The concept of robustness implies that changes can also precipitate a consolidation of the central elements of a regime.

Knowledge is a primary process indicating what can lead states to chosen outcomes. With regard to organisations, to some extent, they can be viewed in the following manner. "International organizations are coalitions of coalitions. They are animated by coalitions of states acting out their interests." Despite this, organisations do show a tendency of formulating their own knowledge, outside the realms of national interests, asserting themselves as individual actors in their own right. This will be elaborated upon further in the commentary section on states and organisations.

Consensus among actors is significant because, without it, the ability to establish a foundation from which to act cohesively is constrained. Onsensus over issues among

¹⁰⁰ O. Young, op. cit., p. 112

¹⁰¹ M. Levy, et al. op. cit. p. 290.

¹⁰² Ibid.

¹⁰³ E. Haas, op. cit. p. 18

M. Barnett and M. Finnemore, op. cit. pp. 419-424; Feld W., Jordan R. and Hurwitz L., 1994. International Organizations: A Comparative Approach. Westport: Praeger. pp. 133-179; E Haas., 1990 op. cit. p. 170; C. Pentland, 1989. "International Organizations and Their Roles". Diehl P. F., ed., 1989. The Politics of International Organizations: Patterns and Insights. Chicago: Dorsey Press.p. 11-14

¹⁰⁵ D. Ozga, 2000. "Back to Basics on the NPT Review Process". In Security Dialogue 31,1, pp. 49-50

groups of actors can lead to collective understandings between states. This is a required a priori condition for the expectations of states to converge and this can lead to the formation of international regimes. 106 In sum, without consensus the ability to create a regime is nonexistent. Consensus insinuates a widespread agreement over relevant knowledge. If knowledge is a type of power, consensual knowledge is an even more potent form. 107 Once a regime is formed, consensual knowledge is maintained until such a time when new knowledge is available that challenges the suppositions of the previously held beliefs, even if the embedded conviction impacts upon the perception of the new information.

Ernst Haas has defined consensual knowledge as, "...generally understandings about cause-and-effect linkages about any set of phenomena considered important by society, provided only that the finality of the accepted chain of causation is subject to continuous testing and examination through adversary procedures... Consensual knowledge is socially constructed and therefore inseparable from the vagaries of human communication. It is not true or perfect or complete knowledge."108

Comprehending the scope of the problem and devising solutions that are manageable to the respective parties requires common ground agreed upon by the actors for co-operative action to be taken. Consensual knowledge fulfils this role. As Haas points out in the above quote, that although it may be inaccurate or inadequate, consensual knowledge is passed as the prevailing wisdom. Although consensual knowledge is a progressive path that provides the opportunity for actors to learn, it is not a uniform phenomenon. This is reflected in the

 $^{^{106}}$ O, Young, 1999. op. cit . pp. 50-78; Levy et al. op. cit. pp. 283-285 107 M. Levy, et al. op. cit. p. 283

¹⁰⁸ E. Haas, op. cit., p. 21

variations of the way states react to consensual knowledge and the extent to which actors that are diffusing the knowledge can exert "bureaucratic power". 109

Importantly, epistemic communities play a role in the development and transfer of knowledge among actors, the aim of which is to bring together perceptions and beliefs of an issue area. Consensus is an important objective for an epistemic community to achieve if it wants to influence policy. According to Peter Haas, consensus is what sets apart epistemic communities from other types of groupings, such as government agencies, social movements and disciplines. Furthermore, he differentiates consensus into two categories: beliefs and knowledge. "...it is the combination of having a shared set of causal and principled (analytic and normative) beliefs, a consensual knowledge base, and a common policy enterprise (common interests) that distinguishes epistemic communities..." In this instance, epistemic communities are comparable to conduits passing information and ideas that are policyoriented in their sphere of influence to other groups and government agencies, through a transnational web of communication. This propagation of knowledge among actors in different settings performs a function of policy diffusion. 111 Epistemic communities also provide a certain utility to decision-makers during crisis periods as well, "...crises and dramatic events have the effects of alerting decision makers to the limitations of their understanding of the issue-area and of either triggering their search for advice from an epistemic community of experts." This emphasises the fact that because of crisis situations, epistemic communities play an important role in the development of consensus between

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¹⁰⁹ P. Haas, op. cit., p.30

¹¹⁰ *Ibid.*, p. 18

¹¹¹ E. Adler and P. Haas, 1992. "Conclusion: epistemic communities, world order, and the creation of a reflective research program". In *International Organization*, 46, 1, pp. 375-385.

¹¹² *Ibid.* p. 380

actors that in time can become consensual knowledge. For the argument presented here, it is important to underline the significance of the role of epistemic communities in the diffusion of knowledge among actors and the development of consensual knowledge. This is because an epistemic community may not always be present. It has been argued that epistemic communities can be useful agents to reduce institutional inertia. Although the counter argument can be made that some epistemic communities will be in support of the prevalent trends in knowledge and policy. Also, there will be several different issue-areas that will garner the support of epistemic communities vying for the attention of decision-makers. Moreover, it is argued here that a given issue-area without the support of an epistemic community to disseminate the related knowledge and to promote a consensus prohibits the possibility of developing consensual knowledge. In terms of the taxonomy laid out by Peter Haas, the issue-area will remain in the realm of disputed or absent knowledge.

Weak-cognitivism places the processes of knowledge centrally in its theoretical premise. Not only does "opening up the billiard ball" allow knowledge an important role in state behaviour but the organisational level can also be considered, thus emphasising the dual nature of a regime. The dynamics between states and organisations are more clearly illustrated through this perspective. It allows for greater understanding of the relationship between the two levels. The necessity of consensus demonstrates this. Broadening the appeal of knowledge will involve consensus between relevant actors within the regime. Consensual knowledge stems from this widespread acceptance but it requires influential epistemic

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¹¹³ O. Young, 1999. op. cit. p. 126

¹¹⁴ E. Haas, 1990 op. cit. p. 41-45

¹¹⁵ P. Haas, op. cit. p. 12-20

¹¹⁶ *Ibid.* p. 18

¹¹⁷ R. Smith, op. cit. p. 281

communities to transmit this phenomenon among the actors. 118 Pertinently, a lack of such communities will seriously hinder the advancement of knowledge to gain wider support ensuring this knowledge is located sporadically among actors.

A Synthesis

This chapter has elaborated upon certain central assumptions used from rationalist and weak-cognitivist theories as a way of providing a more comprehensive explanation of the dual nature of a regime. Crisis will have an impact on the member states and organisations within a regime and it is the interactive relationship between the two levels that will dictate the potential for regime change. It is argued here that this interactive relationship is best understood by adopting a synthesis of the two perspectives discussed above.

Singular theoretical approaches do not often fully encompass the subject matter. 119 As descried here, the rationalist assumptions are unable to examine the origins of state outcomes. The weak-cognitivist assumptions used here do not have the elegance implicit in asserting the primacy of interests as the initial point of departure. In the words of one set of authors, "...although rationalist approaches are generally powerful for explaining how policy preferences change when external constraints or information conditions change, alternative approaches, such as constructivism, are necessary for explaining more fundamental, internal changes in actors' goals." 120

The fundamental claim for a synthesis has been drawn out through the preceding discussion and needs only brief mention here. The argument made here is the two parts may be viewed sequentially, forming a causal chain of how goals are chosen by actors:

E. Haas, 1990 op. cit. p. 46-49
 Supra, fn 68, for a list of works advancing the merits of combining complementary strands of theory.

¹²⁰ L. Martin and B. Simmons, op. cit., p. 743

preferences before outcomes. Elaborating on a synthesis on how individual states define their interests, to assert the priority of liberalism before realism, Moravscik states the following. "Preferences determine the nature and intensity of the game that states are playing and thus are a primary determinant of which systemic theory is appropriate and how it should be specified."¹²¹

Within the context of regimes, the synthesis developed here can consider that, "...weak cognitivism in the study of regimes is an attempt to fill a gap in interest-based theorizing by supplying a theory of interest change." This allows for a greater understanding of the interaction between the state and the organisational level because knowledge and consensus are placed a priori to developing interests. In this case, if the propensity for change within a regime exists, it must necessarily involve organisational actors, since possessing knowledge and seeking consensus are components of the organisational level. Also, this theoretical approach implicates the primacy of state interests as part of the institutional makeup of organisations. Regimes are fundamentally interest-based and to a large degree this effects organisational bodies within the regime as well. Also, the robustness of the regime increases once interests are institutionalised, making the interests of member states entrenched and recalcitrant to change. These interests will be reflected at the organisational level. In light of this dual nature within a regime, explained through a synthesis of approaches, it is useful to elaborate on the roles of states and organisations in an international regime.

¹²¹ A. Moravcsik, op. cit. p. 542

¹²² A. Hasenclever et al., op. cit., p. 137

States and Organisations in International Regimes

A more general outline of the essential concepts concerning international regimes has already been developed in the previous chapter. In light of the preceding theoretical section, the primary objective of this section is to provide a more concrete picture of states and organisations and their interactive relationship within an international regime. It is important to note that specific reference to the Nuclear Nonproliferation Regime will be predominantly reserved for the following chapter. It is of merit to explore the interaction of states and organisations within the broader context of international regimes before a particular regime is brought under the microscope.

Member states are not only potential beneficiaries of regimes but are also responsible for creating them in the first place. In a system of anarchy, it is perhaps not surprising that much of the literature on regime theory initially investigated the following question: do regimes matter?¹²³ This was partly in response to realist perceptions that international cooperation would be extremely limited. 124 Moreover, this was also an effort to resolve the puzzle of how individual actors co-ordinate their affairs with one another to achieve mutual gains.

Rationalist assumptions previously described indicate that states are rational egotists seeking co-operation if common interests exist and reciprocal gains are the expected outcome in the aim of achieving previously established goals. International regimes provide an opportunity for expectations to converge and subsequently provide a platform where common

¹²³ L. Martin, 1999. op. cit., pp.78-98; S. Krasner, op. cit. pp. 5-11 ¹²⁴ J. Grieco, op. cit. 495-503

interests can be corroborated and joint gains realised. As Keohane states, "...international regimes depend on the existence of patterns of common or complementary interests that are perceived or capable of being perceived by political actors. This makes common action to produce joint gains rational." Another perspective, by the same author, makes the point that, "Regimes are more like contracts, when these involve actors with long-term objectives who seek to structure their relationships in stable and mutually beneficial ways." This contractarian element identifies actors as having pre-conceived interests and therefore in acceding to an explicit regime, it assumes that these interests will carry significant value in developing the principles, norms, rules and decision-making procedures of a regime.

However, for an explicit regime to be operational it needs an organisational framework through which member states can function to enable the co-operative goals of the regime to materialise. In other words, "the fact that regimes, being no more than sets of principles, norms, rules, and procedures accepted by states, do not possess the capacity to act, whereas organizations can respond to events." Therefore, it can be argued that organisations operating as a part of a regime are the bureaucratic apparatus embodying the spirit of the regime. Yet, a note of caution is warranted because the regime and organisations are strongly meshed together and should not be synthetically pulled apart. On the other hand, member states interact with organisations through a range of activities, hence differentiating the two levels. For instance, by initially creating the organisations "...international organizations, administrations, and treaties owed their origin to

¹²⁵ R. Keohane, 1984. op. cit., p. 78

¹²⁶ R. Keohane, 1982. "The demand for international regimes". In *International Organization*, 36, 2, p.146

¹²⁷ W. Feld, et al. op. cit. ch. 7; O. Young, 1999, op. cit., p. 4

¹²⁸ Hasenclever et al., op. cit., p. 11

¹²⁹ F. Kratochwil and J. Ruggie, op. cit. pp. 19-25, In P. Diehl, ed., op. cit. 17-27

technological and welfare demands that developed in the national societies of which they are composed."130

More pragmatically, states interact with the organisations by supplying budgetary allocations, location and staffing, as well as generally influencing the work of the organisations through setting out their formal objectives and determining their preferences and tasks by manipulating the agenda of the organisations. In short, organisations can be used as an outlet by competing states seeking to further their own self-interests.¹³¹ These conditions demonstrate the dominant interests of member states in the interactive relationship between the two sets of actors.

At first glance it would seem that organisations operating within an international regime exist to serve the purposes of the member states. This aspect of organisational life has been well documented in the literature on international organisations. In the words of one scholar, who views organisations as, "...instruments for the collective pursuit of foreign policy goals, international organizations are subject to evaluation by member states in terms of utility. From national capitals, the whole field of international organizations is likely to be perceived as an array of more or less useful pieces of machinery through which to enhance national policy aims." Another offers the opinion that "...the most usual image of the role of international organizations is that of an instrument being used by its member for particular ends." Even on the ground, this impression is present, to recite a previously given quote, "...in terms of budgetary support and political mandate. We do what we're told to do." The

¹³⁰ E. Haas, 1964. Beyond the Nation-State. Stanford: Stanford University Press, p. 92.

¹³¹ W. Feld et al., op. cit., pp. 254-276

¹³² C. Pentland, 1989. "International Organizations and Their Roles". In P. Diehl, ed., op. cit., p. 6

¹³³ C. Archer, 1992. International Organizations. London and New York: Routledge, p.135

¹³⁴ Personal correspondence: Mr R. Rydell, UNDDA, June 2002.

impression is clear, 135 international organisations are explicit arrangements through which member states attempt to further their national interests. This author does not disagree with this assessment of international organisations. However, simply reducing them to the role of 'patsy' for the member states ignores other important attributes. These attributes are the central elements of the interactive relationship of organisations with member states: the possession of knowledge and the search for consensus.

International organisations also fulfil a function of providing an 'arena' in which member states can congregate "...to discuss, argue, co-operate or disagree." ¹³⁶ In doing so, they provide "institutional channels" that influence the way states interact with one another, thereby altering the previous association between states. An offshoot of this congregational aspect of organisations is that the interests of member states may be subject to change. To a certain extent, this demonstrates a form of interaction originating at the organisational level while simultaneously allowing for systemic distributions of capabilities to remain relevant. Although the organisation is a vessel for state interaction, it does purport to have an effect on proceedings. "As such, international organizations become an institutional manifestation of the general set of restraints placed on states by the international system. Their effectiveness as modifiers of state behavior will depend to a great extent on the general structural pattern of the system." 137 At first glance, it may seem that this role performed by organisations demonstrates an element of causality occurring within international regimes. The links in the chain reflect the stipulation that ideas can influence changes in interests, thereby illustrating

¹³⁵ Other authors who propose similar views on the instrumentation of organisations include: F. Kratochwil and J. Ruggie, op. cit. pp. 20-22, 17-27; O. Young, 1989. op. cit. 1-29; S. Strange, op. cit. pp. 52-56, In P. Diehl, ed., op. cit.51-65; W. Feld, et al., op. cit. pp. 254-276

¹³⁶ C. Archer, op. cit., p.141

¹³⁷ C. Pentland, op. cit., p. 10

the initial proposal put forward supporting a theoretical synthesis. However, the argument is incomplete because any modification of state behaviour is occurring at the systemic level and does not account for the concept of knowledge.

At this juncture, a third factor should be taken into account when dealing with international organisations- their ability to act as an independent actor. As summed up by Inis Claude, "...an international organization is most clearly an actor when it is most distinctly an "it", an entity distinguishable from its member states." However, Claude is not overly optimistic as to the independence of international organisations. He states, "...it can hardly be expected to rank as a major participant in international affairs or even as an autonomous one..." There are constraints to the amount of independence available to organisations, however, some suggest that autonomous international organisations operating within a given international regime is maintainable. 140

Also, Abbott and Snidal, in a discussion focusing on the issues of 'centralization' and 'independence', argue the following point. "Independence, in particular, enables IOs (international organisations) to shape understandings, influence the term of state interactions, elaborate norms, and mediate or resolve member states' disputes." ¹⁴¹

Therefore, if organisations can be considered as independent actors, than it can be posited that they are capable of possessing knowledge that can be differentiated from the concerns of interests of the member states. ¹⁴² In this regard, international organisations will possess the ability of formulating their own specific ideas, values and beliefs. Although the genesis of the organisation is derived from the preferences of member states and a political

¹³⁸ I. Claude, 1971. Swords into Plowshares. London: Random House, p. 13

¹³⁹ Ibid

¹⁴⁰ M. Barnett and M. Finnemore, op. cit. 411-419; C. Pentland, op. cit., p. 12

¹⁴¹ K. Abbott and D. Snidal, op. cit., p. 9

context remains in place, since the individuals in organisations are not apolitical and carry their own interests. 143

Notwithstanding this, a scenario could develop between state and organisational actors. In light of new information, the knowledge held in an organisation will not necessarily be identical to that which is held by member states. This knowledge could potentially be disseminated. This new information gathered and developed by the organisation could be further transmitted along the transnational networks, specialist communities and government agencies with which they are associated. Consensus could gradually develop over the issue, as this knowledge may become widely regarded as being important and could gain backing from other parts of a regime. Eventually, a level of consensus concurring to its validity may occur creating new consensual knowledge. Ultimately, this knowledge *could* filter through to decision-makers at the national policy level leading to potential change in policy that would reflect new interests held by the state. These new interests, in turn, could eventually have an effect on the instigating regime, such as creating new tasks and responsibilities.

This scenario demonstrates more than just the precedence of preferences that arise from knowledge and consensus, before outcomes that are reflected by interests. It has been purposely couched in normative phrasing to underline the fact that a vital ingredient to the causal chain has been omitted- the role of an epistemic community to perpetuate and transmit the knowledge along the chain. Without an epistemic community, the chain collapses relatively early on. This illustrates a fundamental belief that consensus regarding knowledge, or consensual knowledge, is problematic if there is not the necessary network for diffusion.

M. Barnett and M. Finnemore, op. cit. p. 412; E. Haas, 1990., op. cit., p. 170
 Ibid.; E. Haas, 1990., op. cit., p. 2

The advancement of knowledge is necessarily restricted without the endorsement of an epistemic community.

Ultimately, the theoretical premise developed here explains interaction within an international regime as a dual carriageway between the member states and the organisations within the regime. The purpose of the next chapter is to use this template and apply it to the workings a specific regime with regard to a certain set of circumstances. That is to say, investigating the Nuclear Nonproliferation Regime and the challenged posed by non-state nuclear terrorism.

Chapter Four: The Nuclear Nonproliferation Regime and the Challenge from Non-State Nuclear Terrorism

The fundamental points developed in chapter two focused on the concepts of crisis and regime change, as the independent and dependent variables of the investigation. In this context, the crisis in question is the events of September 11th, 2001. This crisis event, perceived to be an *indirect* challenge to the Nuclear Nonproliferation Regime, is viewed in terms of its catalysing properties in sparking institutional momentum among regime actors with regard to revising the role of the regime.

Regime change can be differentiated between a change of regime and a change within a regime. Alterations in principles and norms represent the former and changes in rules and procedures signify the latter. An important element of this distinction is the association of member states with the arranging and defining of the principles and norms of a regime with the rules and procedures being primarily managed by the organisations within the regime.

Chapter three established a theoretical premise of the relationship between regime actors in their role as causal mechanisms. Part of this theoretical construction focused on certain rationalist assumptions, placing the emphasis on the pre-eminence of the interests of member states. The interests were identified as being ingrained and obdurate, as well as preferences remaining stable over time. Also, it was highlighted that shared common interests do not necessarily beget cooperation. In addition to this, two weak-cognitivist elements were proposed to complement the rationalist approach. The first is the belief that knowledge is the central focal point, contributing to the perceptions and values held by an actor. The other weak-cognitivist element emphasises the importance of consensus among actors in identifying a set of problems and adopting a range of solutions that are regarded as crucial in

perpetuating knowledge. It was further noted that the existence of an epistemic community willing to underscore the knowledge is a prerequisite for consensus. The ability to gain consensus among actors without the support of an epistemic community is very difficult.

Drawing from the theories discussed in the preceding chapters, the following argument can be made. An indirect crisis event will galvanise the actors within an international regime to review the role of the regime. However, it will be insufficient to precipitate a change of regime, recognisable by a change in principles and norms. On the other hand, potential for change within the regime exists. This potential for change to the rules and procedures is more apparent at the organisational level than at the state level. It is important to note that the indicators used: recognition and definition, perception of the threat to interests and agenda development, are causal processes occurring among actors that are identifiable and will demonstrate momentum towards concrete change within the regime. Nonetheless, it is argued that the extent of these changes will be restricted.

The causal links illustrate the scope for change within the regime will be limited because member states will prefer to tackle the issues arising from the crisis outside the venue of the regime, denying the organisational actors significant capacity to respond to issues arising from the crisis. Also, consensus among actors is a prerequisite for significant institutional change within the regime to occur. The indirect nature of the crisis is not sufficiently compelling to bring the actors to an agreed consensus. Additionally, the lack of an epistemic community to divulge the information among policy makers will underline divisions among parties, reducing the possibility of consensus, thus, limiting the potential for change within the regime to be adopted beyond the organisational framework. Crucially, this state of affairs should not detract from the issues that arise from the crisis, bringing to light

potentially significant challenges to the regime in question. In other words, in the context of the case study presented in this chapter to illustrate this argument, non-state nuclear terrorism (NT) does pose a challenge to the legitimacy and credibility of the Nuclear Nonproliferation Regime (NNPR).

This chapter will continue in the following fashion. Initially there will be a brief overview of the NNPR, including an outline of the International Atomic Energy Agency (IAEA). This is followed by the challenge from NT to the NNPR being briefly summarised, demonstrating that the potential for NT exists and that the challenge it poses is the 'blindspot' of the current NNPR system. The remainder of this chapter will focus on the actions of the key protagonists of the NNPR towards NT before and after September 11th. To evaluate the actions post-September 11th, the indicators of change are used to illustrate the causal processes occurring among the actors that could shed some light on potential concrete changes to rules and procedures within the regime.

The Nuclear Nonproliferation Regime

The current NNPR is state-centric. The NNPR regards nuclear weapons and facilities to be the domain and responsibilities of the proprietary nation-states. To date scholarly study of the NNPR has focused almost uniquely on the state relations effecting the regime and the systemic implications of the regime.¹⁴⁴ Moreover, the state-centred supremacy of the NNPR

¹⁴⁴ For some examples of work on state relations within the NNPR see, J. Cirincione, ed., 2000. Repairing the Regime: Preventing the Spread of Weapons of Mass Destruction. New York and London: Routledge; R. Thakur, 2000. "Envisioning Nuclear Futures". In Security Dialogue 31, 1, pp. 25-40; Frankel F. R., ed., 1995. Bridging the Nonproliferation Divide: The United States and India. Lanham, New York and London: University Press of America.; K.C. Bailey, op. cit.; M. Reiss, 1988. Without the Bomb, Chapter 1: Changing Perspectives on Nuclear Proliferation. New York: Columbia Press University, pp. 3-36.; R. Smith, op. cit.; J. Nye, 1981. "Maintaining a nonproliferation regime". In International Organization, 35, 1, pp. 15-38. For some work on the systemic implications of the NNPR see, Bandyopadhyaya J. and Mukherjee A., 2000. "International regimes and world peace: a case study of NPT and CTBT". In International Studies, 37, 4, pp. 303-333; TV. Paul, 2000.

is reflected in the guiding principles and norms of the regime that focus on the key issues of limiting proliferation between states and the contentious issue concerning nuclear weapons disarmament. The rules and procedures, despite being hosted by the organisational component of the NNPR, are also directed towards the member states establishing a workable framework.

This statist approach is best exemplified by briefly considering the overall institutional make up of the NNPR. The central treaty that embodies the principles, norms, rules and procedures of the NNPR is the Treaty on the Nonproliferation of Nuclear Weapons (NPT), established in 1968. There are six tenets that provide the guidelines for state behaviour concerning nuclear weapons. The first two articles deal respectively with the prohibition of selling and buying of nuclear weapons and weapons-grade materials and capabilities between nuclear weapon states (NWS) and non-nuclear weapon states (NNWS). Furthermore, the NWS may not assist and the NNWS may not ask for assistance in the attempted manufacturing of nuclear weapons. The third article concerns the proper procedure for the safeguards of all nuclear material in order to verify that some material of ambiguous uses is not channelled to the development of weapons. In article three of the NPT, the International Atomic Energy Agency (IAEA), which will be discussed in greater detail, is invested with authority to authenticate that states are observing the "safeguards system", which includes all nuclear material that is used for civilian purposes. Article four outlines the transfer of nuclear material for the development of peaceful nuclear programs to all NPT signatories. This includes ambiguous material that in practice can be manipulated to

manufacture nuclear weapons. Article five allows the NWS to continue testing the effects of 'peaceful nuclear explosives', ensuring that any practical uses be disseminated among all NPT signatories. The sixth article seeks to block future arms races between NWS and tries to encourage the NWS towards disarmament¹⁴⁵. At the 1995 NPT Review Conference, the NPT was extended indefinitely.¹⁴⁶ The 2000 NPT Review Conference saw the establishment of the '13 Steps' towards nuclear disarmament.¹⁴⁷ Currently, the annual Preparatory Committee sessions are being held in preparation for the upcoming 2005 NPT Review Conference.

Additionally, there is an array of treaties covering the non-testing in neutral zones (Antarctic Treaty, 1959; the Outer Space Treaty, 1967; and the Seabed Arms Control Treaty, 1972). Treaties have also been used to establish nuclear weapons free zones in these regions: Latin America, South Pacific, Southeast Asia and Africa (respectively, the Treaty of Tlatelolco, 1967; the Treaty of Rarotonga, 1985; the Bangkok Treaty, 1995; and the Pelindaba Treaty, 1996). Another treaty that has been open to state ratification since 1996 is the Comprehensive Test Ban Treaty (CTBT). This treaty would impose a moratorium on nuclear weapons testing on member states. Another important treaty, dealt with in more detail further below, is the 1980 Convention on the Physical Protection of Nuclear Material (CPPNM). Brought into force in 1987, its primary function is to ensure the security of

¹⁴⁵ The outline of the six articles of the NPT has been elaborated from M. Reiss, op. cit.p.19-20.

¹⁴⁶ J. Dhanapala, 2001. 'The State of the Regime'. In J. Cirincione, ed., 2000. Repairing the Regime: Preventing the Spread of Weapons of Mass Destruction. New York and London: Routledge p. 15

¹⁴⁷ Middle Powers Initiative Briefing Paper, 2002. Priorities for Preserving the Nuclear Non-Proliferation Treaty in the New Strategic Context. Sanfrancisco: Global Security Institute p. 11

¹⁴⁸ For an overview of these treaties see, T. Rauf, 1997. "Nuclear Weapon Free Zones". International Organizations and Nonproliferation Projects for CNS. http://cns.miis.edu/cns/projects/ionp/archive.htm

¹⁴⁹ Independent Commission on the Verifiability of the CTBT, 2000. "Final Report". London: Veritec

¹⁵⁰ http://www.iaea.org/worldatom/Documents/Legal/cppn status.pdf

nuclear materials during international transport but it also has restricted application to the use of nuclear materials in the domestic setting. ¹⁵¹

Before focusing attention on the IAEA it is worth briefly summarising the organisational composition of the NNPR. Other than the IAEA, this includes the Nuclear Suppliers Group (NSG) formed in 1976, providing a forum for the major suppliers to ensure that trade in nuclear materials does not undermine safeguards protocol. ¹⁵² Also, in 1977 the International Nuclear Fuel Cycle Evaluation (INFCE) was initiated to provide technical information relating to proliferation risks resulting from different types of nuclear technologies. ¹⁵³ One can also make a case for the inclusion of other organs of the United Nations system, since some of their functions place them under the auspices of the NNPR. This includes the Department of Disarmament Affairs (UNDDA) and the Security Council (UNSC). ¹⁵⁴

The International Atomic Energy Agency

The IAEA was established in July of 1957, having evolved from President Eisenhower's 'Atoms for Peace' programme in 1953. The framework of the Agency is composed of three inter-linking organs: The Board of Governors, the General Conference and the Secretariat. The polity with the most influence is the Board of Governors. It is a political

¹⁵¹ A. Nilsson, 1999. "Strengthening the Security of Nuclear Material: Physical Protection". In *The IAEA bulletin*, 41, 4, p. 33. G. Bunn, 1997. *Physical Protection of Nuclear Materials: Strengthening Global Norms*. IAEA report, http://www.iaea.org/worldatom/Periodicals/Bulletin/Bull394/evolving.html

¹⁵² P. Van Ham, 1994. Managing Non-proliferation Regimes in the 1990s: Power, Politics and Policies. New York: Council on Foreign Relations Press, pp. 15-17; J. Nye, op. cit. p. 21; http://projects.sipri.se/expcon/NSG documents.html

¹⁵³ D. Fischer and P. Szasz, ed. J. Goldblat, 1985. Safeguarding the Atom: A Critical Appraisal. London and Philadelphia: Taylor and Francis, pp. 106-107; J. Nye, op. cit. p. 24-29
¹⁵⁴ D. Fischer et al. op. cit. p. 11

¹⁵⁵ L. Scheinman, 1974. "IAEA: Atomic Condomium?" In R. Cox and H. Jacobson *The Anatomy of Influence: Decision Making in International Organization*. New Haven and London: Yale University Press. p. 216

entity, comprising of representatives from thirty-five member states. Other than nominating a candidate for the post of Director-General of the Secretariat, 156 its tasks centre on overseeing safeguard arrangements that include the creation, adaptation and implementation of the 'safeguards system' and verifying compliance by member states. It also arranges the financial elements of the 'safeguards system' as well as approving the IAEA's annual budget. These tasks are reported to the General Conference for approval.¹⁵⁷ The General Conference is an assembly of the member states that meets annually and its formal functions are relatively limited. It discusses the annual report from the Board of Governors and has the power to ask the board for reports on other matters. 158 Its other primary function is to approve the budget as proposed by the board. On the other hand, it provides an important forum for discussion, "...in which those not represented on the board can express their views and exchange information and in which member states can finalize bilateral or multilateral agreements in the nuclear field."159 The third part of the IAEA is the secretariat, housed in Vienna and employing a total staff of over 2200. 160 Other than the political representatives, the majority of the staff are experts in their field of specialisation. It is the conduit through which the board and the member states carry out tasks relating to technical assistance and the 'safeguards system'.

It is worth noting that the IAEA provides a fertile ground for potential epistemic communities to develop, given that the IAEA is an amalgam consisting of representatives of national governments, a range of technical experts spanning the whole nuclear field and

¹⁵⁶ http://www.iaea.org/worldatom/About/Policy/Board/

¹⁵⁷ D. Fischer et al. op. cit. p.11-13; L. Scheinman op. cit. p. 217-218

¹⁵⁸ L. Scheinman op. cit. p. 218

¹⁵⁹ Ihid

¹⁶⁰ http://www.iaea.org/worldatom/About/

housed under an international bureaucracy designed as a multilateral forum for discussion and negotiation. Under such conditions, the potential exists to derive a collective set of beliefs surrounding cause and effect relationships, denoting consensus, that can then be translated into policy. ¹⁶¹ Conspicuous by its absence, is the lack of an epistemic community, post-September 11th, forming around the issue of NT compared with other issues. This will be discussed further below.

The role of the IAEA can be broken down into two broad areas. These are, to provide technical assistance for member states and to maintain the 'safeguards system'. Fundamentally, the IAEA is a technical agency that can provide specialised co-operation and guidance for member states at their request. It is principally used for the advancement of nuclear energy for civilian purposes, not just developing nuclear energy¹⁶² as a power resource but also on issues such as agricultural and health needs.¹⁶³ Moreover, the 'safeguards system' came about because of the potential for nuclear infrastructure, materials and technology to be diverted from peaceful uses to more military-oriented purposes. The Board of Governors approved the 'safeguards system' 1965', this framework for states outside of the NPT is contained in 'Information Circular' INFCIRC/66 (and INFCIRC/66/Revision (Rev.) 2). After the inception of the NPT in 1970, the IAEA devised an exemplar agreement (INFCIRC/153)¹⁶⁴ that would be the cornerstone for negotiations between those parties within the NPT. It is not necessary to enter fully into the technical specifics of each arrangement in this thesis, in part because the concern of the 'safeguards

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¹⁶¹ K. Colijn, 1998. "Non-proliferation: reinforcing the IAEA nuclear safeguards regime in 1990s". In B. Reinalda and B. Verbeek, eds., 1998. *Autonomous Policy Making by International Organizations*. London and New York: Routledge, p. 100

¹⁶² http://www.iaea.org/worldatom/Programmes/Nuclear Energy/

¹⁶³ http://www.iaea.org/programmes/ri/

¹⁶⁴ D. Fischer et al. op. cit. p. 23

system' focuses on behaviour at the state level. However, these agreements provide insight into the functioning of the IAEA. In short, the focus of these agreements is to enable verification by the IAEA of the actions of member states, through the following methods: material accountancy, containment and surveillance. These methods are carried through using steps including: reviewing the design of nuclear facilities, checking facility accounts, requesting regular reports from the state and the possibility of on-site inspections. In sum, these agreements, that are essential to the 'safeguards system', set out the rules and procedures that guide the IAEA in their relations with states and their nuclear materials.

This constellation of treaties and organisations are the building blocks of the NNPR. Evidently, the focus of these instruments of the regime is at the state level, namely, the relationship between member states over an array of nuclear issues including, proliferation, disarmament, safeguard systems and export controls.

Non-state Nuclear Terrorism

It is beyond the scope of this case study to offer a comprehensive appraisal of the potential nuclear terrorist threat emanating from non-state actors. However, it does remain pertinent to offer a brief overview of NT that encapsulates the key issues. That is to say, the potential for NT does exist and that, to some extent, it is a challenge outside the current boundaries of the state-centric NNPR.

Nuclear terrorism in general is a broad theme that has been approached from a wide range of perspectives. ¹⁶⁷ Some investigate dangers of proliferation and smuggling from states

¹⁶⁵ *Ibid.* p. 25

¹⁶⁶ *Ibid* p. 27-29

¹⁶⁷ A comprehensive overview of the subject can be found in Y. Alexander and P. Leventhal, eds., 1987. Preventing Nuclear Terrorism: The Report and Papers of the International Task Force on Prevention of Nuclear Terrorism. Massachusetts: Lexington Books.

with weakened nuclear infrastructure such as the Russian nuclear archipelago. Other scholars look at possible policy options to counter the threat. A further area that has received considerable attention is the nature of the actors willing to carry out attacks with WMD. This line of enquiry evaluates the type of terrorist group willing to consider the use of nuclear threats. In part, this area of investigation looks at behavioural characteristics of potential nuclear terrorists. These issues fall outside the scope of this case study and will not be dealt with here.

It is important to note that much of the literature on the subject focuses on the threat to individual or groups of states.¹⁷¹ This is undoubtedly an important avenue of investigation. However, there has been a surprising lack of attention paid to investigating the concept of terrorism, specifically nuclear terrorism, with regard to international regimes.¹⁷² In this case, by seeking to understand potential regime change, it is necessary to address this challenge from the perspective of an international regime.

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¹⁶⁸ R. Lee, 1998. Smuggling Armageddon. New York: St. Martin's Press.

¹⁶⁹ F. Cilluffo, 2001. Combatting CBRN Terrorism. Washington DC: CSIS Publications.

¹⁷⁰ N. Gurr and B. Cole, 2000. The New Face of Terrorism: Threats from Weapons of Mass Destruction. New York: St Martins Press. J. Stern, 1999. The Ultimate Terrorists. Boston: Harvard University Press. B. Hoffman, 1998. Inside Terrorism. New York: Columbia University Press. See also, G. Allison et al., 1996. Avoiding Nuclear Anarchy. Cambridge and London: The MIT Press. And L.R. Beres, 1987. Terrorism and the Global Society: The Nuclear Threat. Boulder, Colo.: Westview Press.

 ¹⁷¹ For example, P. B. Heyman, 2001. "Dealing with Terrorism: An Overview". In *International Security*, 26, 3, pp 24-38.
 172 Three pieces that counter this negligence are: M. Crenshaw, 1989. Terrorism and International Co-

Three pieces that counter this negligence are: M. Crenshaw, 1989. Terrorism and International Co-operation. New York: Institution for East-West Studies, pp.51-56. Also, see, S. Moglewer, 1987. "International

Potential NT Threats

Several different types of NT have been outlined previously.¹⁷³ There is a spectrum of gravity in Kellen's framework ranging from the making/stealing, and detonating a nuclear device to, "holding off-site of nuclear plant personnel".¹⁷⁴ It is clear that not all threats will challenge the NNPR, just as not all threats are imminent. The construction and detonation of a thermo-nuclear device by non-state actors, which is at the very top end of the threat spectrum of gravity, currently remains unlikely.¹⁷⁵ However, different types of credible threats exist that may have some bearing on the NNPR. Two types of threat are summarily discussed below. These are attacks on nuclear facilities and the use of radiological devices.

Article III of the NPT, "...seeks to assure that materials and facilities in non-nuclear-weapon states are used for peaceful purposes..." and Article IV, "...assures the right of all nations to access benefits of nuclear energy." This means that member states are allowed to develop nuclear facilities and to retain radioactive materials for the purposes of harnessing its peaceful uses. There are approximately four hundred and forty nuclear reactors in over forty countries providing energy resources. The meltdown of a nuclear reactor, dispersing radiation into the surrounding environment, has catastrophic consequences on many different levels. It is not inconceivable to imagine nuclear reactors and other facilities being

Safeguards and Nuclear Terrorism". pp 248-258. And G. Bunn, 1987. "International Arrangements against Nuclear Terrorism". pp 339-359. They can be found in Y. Alexander and P. Leventhal, eds., op. cit.

¹⁷³ For an extensive list see, K. Kellen, 1987. "The Potential for Nuclear Terrorism: A Discussion". In Y. Alexander and P. Leventhal, eds., op. cit., p 107

¹⁷⁴ *Ibid*.

¹⁷⁵ J. Stern, op. cit. ch. 3

¹⁷⁶ K. C. Bailey, op. cit. p 5

¹⁷⁷ M. Henderson, 2001 "Nuclear reactors vulnerable to attack". In *The Times*, Sept. 27th, www.thetimes.co.uk ¹⁷⁸ The Chernobyl disaster in 1986 is a clear indication of the consequences that can occur even accidentally, as Mikhail Gorbachev said in his press release at the time. "For the first time, we confront the real force of nuclear energy out of control." This statement can be found at http://www.chernobyl.co.uk/. This site also offers a summary overview of the health, physiological, social, economic and political consequences of the Chernobyl

potential targets allowing terrorists to have a semblance of nuclear capabilities. ¹⁷⁹ Different methods of attack have been suggested. 180 Arguably, the most glaring threat is the realisation that nuclear facilities built in the 1960's and 1970's are designed to withstand the impact of some aircraft, for example, the Boeing 737. These facilities, however, may not be able to withstand the impact of a direct collision by the larger Boeing 757s¹⁸¹ (which were the 'missiles' used in the attacks on the World Trade Center), 767s and 777s. 182 This is not to mention the larger and more fuel-laden Boeing 747s. 183

An alternative threat that merits consideration concerns the use of radiological devices or 'dirty bombs'. In short, a 'dirty bomb' would consist of radioactive materials being attached to conventional explosives, spreading radiation through the detonation of the bomb. 184 Not all radioactive sources are potent enough to be used in a dirty bomb. 185 However, strong radioactive sources like Cesium and Cobalt, ¹⁸⁶ do pose a significant threat. Furthermore, the potential susceptibility to theft because of insecure locations, is a threat that

disaster. For a more in depth analysis of the incident and its consequences see,

http://www.nea.fr/html/rp/chernobyl/welcome.html. Also see, http://pro-resources.net/library.html

¹⁷⁹B. Ramberg, 1984. Nuclear Power Plants as Weapons for the Enemy: An Unrecognized Military Peril. Los Angeles and Oxford: University of California Press.

¹⁸⁰ G. Bunn and L. Zaitseva, 2001. "Guarding Nuclear Reactors and Materials from Terrorists and Thieves". Combating Nuclear Terrorism. Vienna: IAEA Symposium. p. 2; D. Hirsh, 1987. "The Truck Bomb and Insider Threats to Nuclear Facilities". In Y. Alexander and P. Leventhal eds., op. cit., pp. 207-222

¹⁸¹ P. Leventhal, 2001. A Review of Security Issues at Nuclear Power Plants. Statement before the House Committee on Energy and Commerce Subcommittee on Oversight and Investigations. Full statement can be found at http://www.nci.org/01NCI/12/react-prot.htm.

This was also confirmed in a personal correspondence with an anonymous interviewee at the French delegation to the UN.

¹⁸³ The NRC currently "has no criterion that requires nuclear power plant containment vessels to be designed to withstand the crash of a Boeing 747" and "the NRC did not specifically consider attacks by aircraft such as Boeing 757s or 767s, and nuclear power plants were not specifically designed to withstand such crashes." Excerpt from open letter from Sen. E. Markey to NRC, 2001. "Markey calls response to nuclear terrorism threat "inadequate and unacceptable"" http://www.nci.org/01NCI/10/markey-1610.htm

¹⁸⁴ Council on Foreign Relations "Dirty Bombs",

http://www.terrorismanswers.com/weapons/dirtybomb.html#O1

¹⁸⁵ IAEA Press Release, 13th March 2003. "Stronger Controls Needed to Prevent Terrorist 'Dirty Bombs'" http://www.iaea.org/worldatom/Press/P release/2003/prn0303.shtml

¹⁸⁶ H. Kelly, 2002. Testimony to the Senate Committee on Foreign Relations. p. 5 www.fas.org/nuke/ (Pdf file).

has been increasingly noted.¹⁸⁷ The use of dirty bombs by terrorist organisations is a verifiable threat. For example, an Al- Qaeda operative has already been detained on suspicion that he was planning a terrorist attack, in the United States, using such a device.¹⁸⁸ Also, a second instance was the flagrant warning by Chechen rebels in 1995, who placed a container of strong radioactive materials in a public park in Moscow.¹⁸⁹ It is regarded in some quarters that the likelihood of terrorists using 'dirty bomb' threats has increased over time.¹⁹⁰

These two types of threat are credible sources of concern, primarily because the responsibility for ensuring the security of nuclear reactors and other nuclear facilities predominantly falls on the state and is outside the umbrella of responsibilities of the NNPR. Other than grave environmental consequences demonstrated by radiological dispersal, ¹⁹¹ it is of consequence to the NNPR because "...in addition to national measures there is, however, an indispensable need for a number of international measures to ensure that nuclear security is effective worldwide. This is important because *security is only as good as its weakest link*." ¹⁹² This implies that the regime is dependent on all member states to provide adequate safety measures for their nuclear facilities. This lack of jurisdiction, by the NNPR, over domestic safekeeping of nuclear facilities is magnified when dealing with radioactive

¹⁸⁷ IAEA Press Release, 13th March 2003, op. cit. D. Kobyakov and N. Florquin, 2002. "Dirty Bomb' Threat Awakens Dormant Disarmament Conference", www.cns.miis.edu/pubs/week/020826.htm. G. Allison interview for PBS, 2002. "Preparing for Terrorism" http://www.pbs.org/wgbh/nova/dirtybomb/allison.html

¹⁸⁸ J. Ashcroft, 2002. "Transcript of the Attorney General John Ashcroft Regarding the transfer of Abdullah Al Muhajir (Born Jose Padilla) To the Department of Defense as an Enemy Combatant", www.usdoj.gov/ag/speeches/2002/061002agtranscripts.htm

¹⁸⁹ H. Kelly op. cit. p. 3

¹⁹⁰ J. Pate, G. Ackerman, K. McCloud, 2000. 2000 WMD Terrorism Chronology: Incidents Involving Sub-National Actors and Chemical, Biological, Radiological, or Nuclear Materials http://cns.miis.edu/pubs/reports/cbrn2k.htm. They note an increase in radiological threats between 1999 and 2000. For an overview of the effects of 'dirty bombs', including the radius of potentially affected areas see, H. Kelly, op. cit.

¹⁹¹www.nea.fr/html/rp/chernobyl/c02.html.

¹⁹² IAEA Document, 2001. "Protection Against Nuclear Terrorism", S/2001/1164. p. 1 (Italics added)

materials that are not necessarily under the direct supervision and control of the member state. Secondly, these types of threat have the potential to be instigated by non-state actors. As has already been mentioned, the current NNPR is state-centric and it is beyond its aegis to identify non-state actors as having any form of nuclear capabilities. In light of the threats outlined above, there is considerable inconsistency with the provisions created by the regime and the reality on the ground. These apparent lacunas are the 'blindspot' of the NNPR.

September 11th and the NNPR

The initial question posed concerns the propensity for a crisis to cause regime actors to revise the role of the regime. To a certain extent, part of the answer to this question is in the affirmative. Although there will not be wholesale review of regime tasks, the implications of the crisis cannot be ignored. It is important to understand that the challenge of NT has been on the domestic agenda for some states since the mid-1970s. 193 Within the organisational apparatus of the NNPR the threat had not gone unnoticed either, "...the IAEA, for the past twenty five years, always considered the possibility of a nuclear terrorist attack, be it against nuclear facilities or using nuclear materials." ¹⁹⁴ The challenge of NT has been looming on the horizon for some time. September 11th has crystallised those fears. Even though the events of September 11th do not directly impinge on the NNPR's realm of responsibilities, the magnitude of those attacks has created an atmosphere where discussion and consideration concerning more lethal forms of terrorism is inevitably necessary. In other words, September 11th has not forcibly linked NT to the NNPR but it has had a galvanising effect on a range of actors 'to do something'. In short, "...the significance of 9/11 was not so much, that as vet, it placed terrorism within the regime, it has not officially done this. It served as a catalyst for

debate and discussion among members of the [NNPR], who try to devise unilateral, bilateral and multilateral responses to the challenge, in a way that is consistent and complementary to the existing [NNPR]."¹⁹⁵ Turning to Oran Young's causal mix of endogenous and exogenous forces on regime change. In this instance, September 11th is an exogenous force on the NNPR. Moreover, it is the actors within the regime that are, in part, the endogenous forces and can initiate change, "...they represent internal forces associated with the functioning of institutions in contrast to outside forces that impact the operation of regimes." This question provides an initial point of departure to the more in-depth question concerning the potential for change to the NNPR, emanating from the endogenous forces, in response to the issue of NT. To facilitate such an investigation it is necessary to understand the stance of the different actors operating in the NNPR with regard to NT, before and after the events of September 11th.

Before 9/11

As mentioned previously, states and organisations have been aware of the threat of NT since the mid-1970s. However, there would seem to have been little concerted effort among the parties to reconcile the issue of NT to the NNPR. This can be explained by two factors. Firstly, as discussed at length in the section detailing the framework of the NNPR, it is due to the state-centric approach of the regime. In terms of the perception of threat to interests, the threat has been identified as coming from the state level. Therefore, before September 11th, the focus of both member states and organisations had predominantly been

¹⁹³ Personal correspondence: Mr. R.Rydell, UNDDA, June 2002.

¹⁹⁴ Personal correspondence: Mr. G:Zlauvinen, IAEA, June 2002.

¹⁹⁵ Personal correspondence: Mr. R.Rydell, UNDDA, June 2002.

¹⁹⁶ O. Young, op. cit. p. 149.

placed on state-based issues such as, proliferation, disarmament, safeguard systems and export controls. Arguably, the threat of NT was over-shadowed by these state-centric issues.

Secondly, the preference of member states to contend with the issue outside the parameters of the regime. It can be argued that at the state level, there was clear recognition and definition of what constituted NT. 197 Following on from this indicator, the issue can been seen to be clearly placed on the domestic agenda. This is clear from the example of the United States. Its preferred approach was to deal with the issue of nuclear terrorism at a national level from which they could then initiate bilateral and multilateral action. 198 Although the US has been the leading state in confronting issues relating to nuclear insecurity, 199 it's preference in this respect has been to operate outside the boundaries of the NNPR.

From an organisational standpoint there was further little impetus concerning NT. For example, the UNSC had been unable to pass a convention on international terrorism, let alone a convention specifying nuclear terrorism in general.²⁰⁰ Part of the problem had been the actual definition of what constitutes an act of terrorism.

As stated earlier, organisational interest was determined, for the most part, by member states' interests. However, some steps had been taken to reduce the possibility of certain types of threat such as theft, principally by the introduction of the Convention on the Physical Protection of Nuclear Materials (CPPNM). Under the auspices of the IAEA and known also

¹⁹⁷ Y. Alexander and P. Leventhal, eds., op. cit., pp. 51-88

¹⁹⁸ For example, the Nunn-Lugar Initiative (1991) the implementation of this resulted, in part, in the nuclear materials protection, control and accountability programme (MPC&A). The MPC&A have worked extensively in addressing problems of nuclear accountability in the former Soviet Union. National Research Council, 1997. Proliferation Concerns: Assessing U.S. Efforts to Help Contain Nuclear and Other Dangerous Materials and Technologies in the Former Soviet Union. Washington: National Academy Press. pp ix-20 ¹⁹⁹ M. Bunn op. cit. pp. 71-73

²⁰⁰ Personal correspondence: Mr. R. Rydell, UNDDA, June, 2002; T. Deen, 1998. "UN Split on new plan to fight nuclear terrorism". NY: *Jane's Defence Weekly*, 29, 11, p. 6.;

as INFCIRC/274/Rev.1, the scope of the convention, "...shall apply to nuclear material used for peaceful purposes while in international nuclear transport." Other than omitting weapons-grade materials and peaceful materials not in international transport, other oversights include a lack of enforcement capacity, or the use of inspections to ensure adequate security is in place.²⁰² Furthermore, the IAEA has issued guidelines on, 'The Physical Protection of Nuclear Material and Nuclear Facilities', these are housed INFCIRC/225/Rev.3 established in 1993 and INFCIRC/225/Rev.4 established in 1999.²⁰³ These guidelines, acknowledging that member states are ultimately responsible for nuclear materials and facilities in their jurisdiction and their security concerns other member states, provide non-mandatory recommendations on how best to protect the material.²⁰⁴ The guidelines are not linked to the CPPNM. In fact, the last review of the CPPNM in May 2001. in the IAEA's Final Report of Experts, "...rejects any reference to INFCIRC/225 recommendations in the CPPNM, even a requirement that they be taken into account. It rejects international oversight of how each state applies physical protection standards in practice." 205 On the one hand, the legally binding CPPNM obliges member states to ensure the security of nuclear materials during a very narrow window. On the other hand, there is a set of guidelines that states may follow to ensure the security of nuclear materials and facilities for the majority of the time. This reflects apparent gaps in the organisational

UN Press Release L/2992, 2002, on Ad Hoc Committee on Assembly Resolution 51/210

http://www.iaea.org/worldatom/Documents/Infcircs/Others/inf274r1.shtml

²⁰² G. Bunn op. cit.

²⁰³ Each version prescribes different protective recommendations and there is some confusion as to which set of guidelines to follow. G. Bunn and L. Zaitseva, 2001. "Guarding Nuclear Reactors and Materials from Terrorists and Thieves". Combating Nuclear Terrorism. Vienna: IAEA Symposium. p. 5

http://www.iaea.org/worldatom/Programmes/Protection/inf225rev4/rev4 content.html for complete guidelines to INFCIRC/225/Rev.4

http://www.iaea.org/worldatom/Programmes/Protection/inf225rev4/rev4_objective.html

²⁰⁵ G. Bunn and L. Zaitseva, op. cit. p. 13

framework regarding rules and procedures. In sum, before 9/11, neither state nor organisational actors took little action to counter the threat of NT within the auspices of the NNPR. At the state level, the greater interest was to develop bilateral and multilateral agreements outside the regime. To some extent, the organisational level outlined several conventions relating to nuclear security issues but were heavily constrained as to the extent they were able to oblige their recommendations upon member states.

After 9/11

Having established that September 11th has provided some impetus in stimulating actors towards reviewing the tasks of the regime in light of the potential for NT, it is crucial to identify the nature of the potential change that exists. It is important to reiterate that the indicators used as causal processes occurring among actors, thereby identifying momentum towards concrete change within the regime. This is predominantly geared towards the organisational level actors; however, it remains relevant to use these indicators with regard to the state level actors as well.

State Level Actors

At the state level, in terms of recognition and definition, the adoption of Resolution 1373²⁰⁶ by the UNSC, only three weeks after the terrorist attacks of September 11th demonstrated volition by states to tackle the gambit of international terrorism, using the UN as a venue for this multilateral action. The value of this resolution is relatively vague, since it groups together all forms of terrorism under the umbrella of international terrorism. States at

²⁰⁶ UN Resolution S/Res/1373 (2001) focuses on the financing and harbouring of terrorist groups by states.

a unilateral level have also been more willing to label terrorism pertaining to weapons of mass destruction under one appropriate heading.²⁰⁷

At the state level, nuclear terrorism is subsumed into wider issue-areas of international terrorism or considered under the heading of WMD terrorism. This is not necessarily wrong but nuclear terrorism as a distinctive form of terrorism loses some of its impact in these approaches. If it is considered that, "...the regime is a foundation and a tool against nuclear terrorism," then placing all types of terrorism under broad categories would arguably remove some of the effectiveness that is inherent in the NNPR.

With regard to perception of threat to interests, for some states, since the September 11th attacks, international terrorism is now a priority in the realm of foreign and domestic policy.²⁰⁹ For the United States, this is not surprising considering that September 11th was a direct attack on its fundamental security. It has been argued that, despite increased sharing of intelligence, the US has been somewhat unilateral in its approach to the global war against terrorism,²¹⁰ regardless of calls to keep multilateral channels open.²¹¹ At this level, it is evident that the perception of threat to interests has altered state behaviour significantly. Its impact on the NNPR is worth noting.

It is apparent that the range of interests and preferences of member states represented in the NNPR²¹² and reflected in the principles and norms have not changed in light of September 11th. In other words, the indirect nature of the September 11th attacks has not

²⁰⁷ S. Walt, 2001. "Beyond bin Laden: Reshaping U.S. Foreign Policy". In *International security*, 26, 3, p. 64

²⁰⁸ Personal correspondence: Mr. V. Mantels and Ms. S.Nurro, UNDDA, June, 2002

²⁰⁹ P. Heymann, op. cit. p. 27; B. Posen, op. cit. p. 53; S. Walt, op. cit. p. 56. Also the Homeland Security Department represents, "the most significant transformation of the US government in over half a century." http://www.whitehouse.gov/deptofhomeland/.

²¹⁰Personal correspondence: Mr. V. Mantels, Ms. S. Nurro and Mr. R. Rydell, UNDDA, June, 2002

²¹¹ S. Walt, op. cit. pp. 75-78

²¹² Personal correspondence: Mr G. Zlauvinen, IAEA, June, 2002

caused a change in the fundamental assumptions of the NNPR. Interestingly, September 11th has had a reinforcing effect on established principles and norms of the NNPR that dictate state relations. That is to say, the views and interests of the member states represented in the NNPR have been consolidated by the terrorist attacks of September 11th. The US, for example, is increasing its resistance to ratify and comply with the CTBT, "...the attacks of 11th September 2001 have reinforced a longer term trend in US foreign policy towards unilateralism. Driven by a Republican Congress, however, the US rejected a number of key international agreements [such as] the Comprehensive Test Ban Treaty (CTBT)... The September 2001 attacks have significantly reinforced this trend."²¹³ However, the US has continued to be at the forefront of stemming the tide of proliferation between states.²¹⁴ In contrast, member states such as Australia, Canada and Sweden who form groups such as the Middle Powers Initiative (MPI) and the New Agenda Coalition (NAC), have intensified their claims linking proliferation issues to disarmament and therefore the NWS, like the US, should increase their efforts towards disarmament.²¹⁵ Furthermore, the NAC states have been galvanised in their quest for complete disarmament and will push the provisions made by the NWS in the NPT review session of 2000.²¹⁶ Thus, the fundamental principles underpinning the NNPR have been bolstered, as opposed to being questioned, by the events of September 11th.

²¹³ A. Cottey, 2002. "September 11th 2001 One Year On: A New Era in World Politics?" London: Basic Publications, http://www.basicint.org/terrorism/cottey.htm.

²¹⁴ Personal correspondence: Mr. R. Rydell, UNDDA, June 2002.

²¹⁵ MPI Briefing Paper, 2002. "Priorities for Preserving the Nuclear Non-Proliferation Treaty in the New Strategic Context". San Francisco: Global Security Institute; Personal correspondence: Mr. R. Rydell, UNDDA, June 2002.

²¹⁶ These relate to the '13 Steps to Disarmament', personal correspondence: Mr. R. Rydell, UNDDA, June 2002. See also, http://www.acronym.org.uk/textonly/un/na2000.htm

Strongly tied to the above are issues concerning the final indicator: agendadevelopment. The preponderance of weight in determining the agenda lies with states. Unquestionably, September 11th has put international terrorism, including nuclear terrorism, at the forefront of the global agenda. The United States has been a driving force in the war on terror and has pursued the issue through a range of methods. 217 Post September 11th, there has been an increased commitment to the MPC&A programme. 218 Furthermore, the Department of Homeland Security has made the prevention of "...importation of nuclear materials a top priority,"²¹⁹ thereby strengthening the United States resolve to prevent further proliferation. The United States is also pursuing a National Missile Defence programme, 220 which underlines a certain lack of faith in the NNPR. The relative positions of movements such as the MPI and the NAC with that of the United States illustrates the differences in interests that exist between member states of the regime. This demonstrates how each camp will further its own agenda, making full cooperation with regard to the best interests for the regime extremely difficult. This also shows the willingness to place in the ascendancy the interests of individual member states over the interests of the regime.

However, agenda-development is susceptible to new information. Proof of this is in the fact that the issue of nuclear terrorism has been placed on the agenda of the preparatory committee for the NPT 2005 review conference. Although not on the original agenda for the 2002 preparatory committee, it was discussed at the request of several member state

²¹⁷ B. Posen, op. cit. pp. 42-55

²¹⁸ Remarks by Energy Secretary Spencer Abraham, 2002, CEIP, Washington, DC http://www.energy.gov/HQDocs/speeches/2002/mayss/CarnegieEndowment.html.

http://www.whitehouse.gov/deptofhomeland/sect5.html.

²²⁰ Defense and Security, 2003. "The September 11 Attack and the United States Armed Forces" www.fpa.org/newsletter info2428/newsletter info sub list.htm?section=The%20September%2011%20Attack %20and%20the%20United%20States%20Armed%20Forces.

delegations. Moreover, the issue will gain further prominence in future meetings in the build up to the next review conference.²²¹

Organisational Level Actors

In terms of recognition and definition, the IAEA has demonstrated significant momentum towards specifying the nature of NT, potentially laying the foundation for changes within the NNPR. In response to September 11th, the General Conference called for the Director General to present a report to the Board of Governors. The document clearly outlines the types of acts of NT considered as threats as well as outlining possibilities of further measures that could be taken by the Agency. The document states on the first page. "It considers the following threats from acts of nuclear terrorism by a subnational group:

- acquisition of a nuclear weapon;
- acquisition of nuclear material to construct a nuclear weapon or to cause a radiological hazard;
- acquisition of other radioactive materials to cause a radiological hazard;
- violent acts against nuclear facilities to cause a radiological hazard."

This is a firm example of recognising and defining the problem at the organisational level. It demonstrates a propensity for knowledge being accumulated and rapidly assessed by organisational actors. It is an encouraging first step towards developing and adapting the organisational level of the NNPR towards meeting the challenge of NT. This would suggest

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²²¹ UN Document, 2002. "Preparatory Committee for the 2005 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons" NPT/CONF.2005/PC.I/21 pp. 12-16 http://daccess-ods.un.org/access.nsf/Get?OpenAgent&DS=NPT/CONF.2005/PC.I/21&Lang=E;

Personal correspondence: Mr G. Zlauvinen, IAEA, June 2002
²²² IAEA Document, 2001. "Protection Against Nuclear Terrorism", S/2001/1164. p. 1

that the IAEA be blessed with a small degree of independence and autonomy.²²³ However, the more important issue involves the ability for the knowledge to take root among the regime actors. The extent to which this can lead to concrete changes within the regime is determined, largely, by two factors. Initially, funding is a critical issue and the same document calls for US\$ 12million to start their programmes, with the figure rising to US\$ 20million per year to maintain them.²²⁴ To date, the IAEA has raised only half of the initial amount through voluntary contributions by member states and other donors.²²⁵ Despite this shortfall in the financial stake, there have been some efforts by the Board of Governors to encourage more voluntary contributions towards this extra-budgetary fund.²²⁶

The inability to generate the required level of funding relates to the second factor. It has been put forward previously that the IAEA is a potential hotbed for the growth of epistemic communities. However, relating to the issue of NT there is no such community developing. In part, this can be explained by the fact that insufficient concrete evidence is available to make a convincing case about the impact of NT on the NNPR. Although September 11th forces questions to be asked about the regime relating to NT, it does not firmly link the two topics. September 11th does not constitute direct evidence of the NT challenge to the NNPR because the attacks did not involve nuclear capabilities. Therefore, an influential epistemic community within the NNPR that possesses the necessary information, relating to causal and principled beliefs about NT, ²²⁷ will be absent until more information becomes available. This will have an impact on the development of a consensus between

²²³ K. Colijn, op. cit.. In B. Reinalda and B. Verbeek, eds. op.cit., pp.98-100

²²⁴ *Ibid.* p. 12

²²⁵ http://www.iaea.org/worldatom/Press/Focus/Nuclear Terrorism/

²²⁶ International Conference on Security of Radioactive Sources, 2003. "Findings of the President of the conderence". p. 3 http://www.iaea.org/worldatom/Press/Focus/RadSources/PDF/findings.pdf
²²⁷ P. Haas, *op. cit.* 18

actors since, "...the more extensive the reach of an epistemic community, the more power that will be exercised by states on behalf of the community's consensual understanding." This means that without consensus there will be divisions among actors as to the precise nature of NT and its challenge to the NNPR, inevitably constricting the possibility of developing counteracting measures. A further explanation contributing to the lack of an NT epistemic community is that other 'traditional' issues in the nuclear field such as, arms control and disarmament, are the central focus of attention between decision-makers and their relevant epistemic communities. 229

A lack of consensus among regime actors deriving from a scarcity of consensual knowledge concerning the issue suggests 'learning' will not happen at the organisational level of the NNPR. Consensus over what defines a problem is a fundamental starting point. In the words of Ernst Haas, "...our conceptions of what constitutes a problem to be solved by way of public policy have been irretrievably infected by the results of scientific knowledge about nature and society that have gained widespread acceptance." The lack of required proof to satisfy the actors will translate into a lack of political volition to act. Quite simply, "if the political will is there, then implementation is made easier." Despite some significant advances at the organisational level in terms of recognition and definition of the problem, this reflects only incremental adaptation that may be insufficient to deal with the complete spectrum of the NT threat. ²³² In the long run, this has the potential to evolve into quantifiable

²²⁸ E. Adler and P. Haas, op. cit. p. 389

E. Adler, 1992. "The emergence of cooperation: national epistemic communities and the international evolution of the idea of nuclear arms control". In *International Organization*, 46, 1, pp. 105-115

²³⁰ E. Haas, 1990. op. cit. p. 22

²³¹ Personal correspondence: Mr V. Mantels and Ms. S. Nurro: UNDDA, June 2002,

²³² F. Haas, 1990, op. cit. p. 97-108

changes to rules and procedures, but in the short run it will likely remain restricted to the protagonist seeking to expand the current boundaries of knowledge and acceptance.

With regard to the interests of organisations, it can be said that, "organizations respond to changes in the perceptions of interest and value that occur at the level of the member states." The organisations of the NNPR are the repository of the interests of member states but their position as organisations can channel the interests of member states into a broader range of issues. For example, at a recent conference entitled, 'Security of Radioactive Sources', dealing principally with "orphan" sources of highly radioactive materials, the central finding to counter this threat suggested, "...an international initiative to facilitate the location, recovery and securing of such radioactive sources throughout the world should be launched under the IAEA's aegis." This expansion of the perception as to the function of the IAEA demonstrates momentum that could lead to changes in the rules and procedures within the regime.

The most pressing issue at the organisational level, in response to September 11th, is the call for greater effort to be placed on the protection of nuclear materials.²³⁵ Understandably, the CPPNM, coupled with INFCIRC 225/Rev.3 and Rev.4, have become the focus towards formulating a combined and corresponding set of rules, governing the physical protection of nuclear materials and facilities in all settings.²³⁶ Momentum exists towards changing this set of arrangements incorporating the following recommendations, "…nuclear

²³³ *Ibid.* p. 173

International Conference on Security of Radioactive Sources, 2003. "Findings of the President of the conderence". p. 3 http://www.iaea.org/worldatom/Press/Focus/RadSources/PDF/findings.pdf

²³⁵ In all the interviews conducted, the issue of strengthening IAEA safeguards and the physical protection of nuclear material was the mainstay of how the NNPR could most effectively respond to the terrorist attacks of September, 11th.

²³⁶ See, G. Bunn and L. Zaitseva, op. cit. pp. 1-14

material in domestic use, storage and transport, as well as protection of nuclear material and facilities from sabotage,"²³⁷ demonstrating the ability for the organisational level to incorporate and disseminate knowledge in light of new information.

This situation represents the clearest opportunity to initiate some substantial change within the regime, as some key rules and procedures would be revised should the recommendations cited above come into force. However, the reality on the ground suggests that, for the time being, it will be left to the responsibility of individual member states to ensure the safety of nuclear materials and facilities under their supervision. This leaves the regime susceptible to "...variation from state to state in the manner of protecting comparable facilities – variation especially in the threats to guard against [sabotage]" The success in the broadening of this convention relies on the accord given to it by member states. The CPPNM provides the initial point of discussion for the prescriptive element presented in the concluding chapter.

Inherent in this maintenance of the status quo is the inability, so far, to arrive at a consensus among parties concerning the primacy of legislating multilaterally for more comprehensive security of nuclear materials and facilities. Admittedly, this would require substantial resolve on the part of member states to overcome issues relating to national sovereignty.²³⁹ The argument can be made that it is in the interest of all actors in the regime to prevent acts of NT that can potentially be destabilising and destructive. Despite the efforts of the Board of Governors to increase the impetus on physical protection,²⁴⁰ the interests of the regime are often secondary to the interests of individual member states. Even though

²³⁷ IAEA Document, 2001. "Protection Against Nuclear Terrorism", S/2001/1164. p. 6

²³⁸ G. Bunn and L. Zaitseva, op. cit. p. 13

²³⁹ Personal correspondence: Mr. R. Rydell, UNDDA, June 2002.

²⁴⁰ G. Bunn and L. Zaitseva, op. cit. p. 13

regimes can facilitate cooperation between member states, cooperation is not necessarily achieved, as would seem to be the case here. This emphasises important shortcomings of the NNPR that can, potentially, be exploited by terrorists seeking to obtain and employ nuclear capabilities.

With regard to agenda development of the NNPR, its ability to influence the development of the regime's agenda is narrow in scope. As previously stated, the potential for knowledge to be more easily accessible and more objectively disseminated exists, since the IAEA, although heavily influenced by national interests, still has to consider the wider interests of the regime. However, without sufficient support from member states, it is unable to render fully its knowledge into more practical applications, such as influencing the wider agenda. It is unable to force the programme and although it plays an integral part at meetings and conventions, (such as the NPT Review Conference) it is in large part reacting to requirements of member states. On the other hand, internally, the IAEA does have the capability of influencing its own agenda that can have repercussions on potential changes to rules and procedures. However, to some extent, this reflects the larger picture since the Board of Governors recommends the annual programme to the General Conference.²⁴¹ Although there is some mobilisation by some actors towards placing NT high on the agenda, there are many other issue-areas that require attention that will have their own advocates.

A Changing NNPR?

There will not be a change of regime due to the events of September 11th. Moreover, the prevalent train of thought among member states is to "...strengthen what is existing..."²⁴²

²⁴¹ http://www.iaea.org/worldatom/About/Policy/Board/

²⁴² Personal correspondence: Mr. V. Mantels and Ms. S.Nurro, UNDDA, NY, June 2002. This belief was a strong theme in all the interviews undertaken. Mr. JC. Brunet, French delegation to the UN; Mr. G. Zlauvinen,

within the regime. That is to say, by reinforcing the established institutional framework on preventing proliferation, improving physical protection and pushing the disarmament agenda among certain member states, this will necessarily have a constraining effect on the potential for NT.²⁴³ This trend demonstrates that actors within the regime are in fact seeking to consolidate the principles and norms of the regime. This appears to be an important consequence of the impact of September 11th on the NNPR that is worthy of further research that is outside the scope of this thesis.

However, simply consolidating principles and norms is an insufficient response. These are static elements that are rooted in conceptions that do not evolve over time. As illustrated in the previous section on NT, the current NNPR cannot fully accommodate the entirety of the NT issue. An initial way to counter this is for the rules and procedures within the regime to demonstrate a level of flexibility to be in tune with an ever-changing external setting. Otherwise, under certain conditions, the regime will be adversely affected as, "...reliant or static regimes, where decision-making procedures are not sufficiently developed to react to external changes, can turn out to be brittle in the face of external changes." 244

Do the indicators used point towards concrete change within the regime? From the evidence provided above, it would seem that elements of the NNPR, under the management of the organisational actors, do show potential to lead to changes in some rules and procedures. The most compelling case being for the CPPNM to become a more encompassing convention, possibly incorporating parts of INFCIRC 225/Rev.3 and Rev.4 into its framework. It is also noted that the IAEA would seem to be going under significant

IAEA and Mr. R. Rydell, UNDDA, all shared this point of view. Also, G. Quester, 1981. "In defense of some optimism". In *International Organization*, 35, 1. p. 7, makes this point too.

²⁴³ Personal correspondence: Mr. R. Rydell, UNDDA, June 2002.

²⁴⁴ Levy et al. op. cit. p. 278.

change since September 11th. The increasing awareness of the threat of NT is forcing the organisation to adapt and adopt new roles so it can more readily confront problems associated with this threat, thus demonstrating some degree of autonomy and independence. Therefore, it is possible to make the argument that the organisational level is privy to its own knowledge. Accordingly, there is some scope for optimism with regard to the regime adapting more direct measures to counter NT.

This brings to mind Young's developmental and adaptive changes as described in chapter two. Development and adaptation can occur without challenging the basic tenets of the regime by signalling a coherent movement towards issues that are gaining prominence. Similarly, Haas's 'adaptation' also identifies that new arrangements within the regime are feasible to a certain extent without disrupting the initial purpose of the regime. The current NNPR with regard to the challenge from NT resembles these conditions. However, a central determinant of what restricts the organisational level from fully implementing this knowledge is that this knowledge is not consensual.

The optimism ends there. In short, there is not widespread acceptance among the other regime actors of what the organisational level knows. 'Learning', as defined by Ernst Haas, by regime actors will not be apparent. Primarily, this is because 'learning' requires 'consensual knowledge' and, with regard to NT, there is not the necessary consensus required among the actors of the NNPR to invoke this criterion. This has been explained because September 11th did not provide a direct challenge to the NNPR. As a result, there is insufficient evidence to sustain a strong case that can be maintained by an epistemic community seeking to disperse a cause and effect belief system. This type of community is critical to the development of consensus among actors. In other words, consolidating the

principles and norms and redressing some rules and procedures will go some way to meeting the challenge of NT. However, the challenge at a number of levels will remain outside the parameters of the regime with the result that it will be incapable of responding to and coping with an NT threat.

In summary, the potential for NT exists. It can be conceived of as a credible challenge to the NNPR and it is a challenge that lies outside the current boundaries of the state-centric NNPR. In terms of the causal impact of crisis on the regime, the challenge of NT is not a new phenomenon and September 11th did not directly effect the NNPR. However, the magnitude of the attack has necessarily brought increasing consternation over the possibility of NT. In investigating the potential for regime change, the following inter-linking indicators of change were used to identify causal processes that may demonstrate momentum towards actual regime change: recognition and definition of the problem, perceived threats to interests and agenda-development.

It is considered improbable that a change of regime would occur as a consequence of the indirect crisis event. The principles and norms of the regime, governed by the interests of member states, would not change. This is partly explained by the preference of states to confront the issue as a subset of a larger issue area. This has a corollary effect of placing the specific issue of NT outside of the NNPR. Moreover, as exhibited in the perception of threat to interests, the crisis had a reinforcing effect on the established principles and norms and this consolidating trend was reflected in the interests of differing groups of member states in their attempts to develop the agenda.

With regard to changes within the regime at the organisational level, causal processes consisting of recognising and defining the problem and in furthering certain organisational

interests exhibits an ability to adapt and develop in light of new knowledge. This is viewed optimistically up to a point, since the extent of changes to rules and procedures is identified as being restricted. A lack of an epistemic community to develop consensus among regime participants concerning the issue is considered a primary cause of the restrictive nature of potential change. The indicator of agenda-development suggested dominance by the member states with very little impact by organisational level actors. The potential for changes to take place is addressed in the predictive and prescriptive element of the conclusion, which succeeds this chapter.

Conclusion

This thesis set out to answer the following two inter-linked questions: Can a crisis cause regime actors to revise the role of the regime? What is the potential for regime change?

The answer to the first question was that an indirect crisis event could cause regime actors to revise the role of the regime. By acting as a catalyst, the impact of a crisis motivates the actors to review the role of the regime, represented by a considerable degree of institutional momentum within a regime.

With regard to the second question, it was deemed that an indirect crisis is insufficient to hasten a change of regime, translated here as meaning a change in the principles and norms guiding the regime. It was argued that the potential for changes to rules and procedures, signifying a change within a regime, does exist. Furthermore, this potential for change will be more apparent at the organisational level than at the state level. However, the scope for this change at the organisational level is limited.

To offer a more comprehensive and nuanced understanding of the dynamics between the independent and dependent variables, the causal mechanisms of a regime were investigated through a synthesis approach. Combining rationalist and weak-cognitivist assumptions increased the explanatory capacity for assessing the interactive relationship between member states and organisations.

In doing so, it was explained that the scope for change within the regime would be limited by two factors. Initially, member states will prefer to handle the issues arising from the crisis outside the venue of the regime, so denying the organisational actors significant

capacity to respond to the issues highlighted by the crisis. Furthermore, as consensus among actors remains a prerequisite for significant change to occur, it was observed that an indirect crisis is lacking in force to bring the actors to an agreed consensus. Moreover, for consensus to become accepted among a wide array of actors within the regime, thus becoming 'consensual knowledge', an epistemic community is required to call attention to the knowledge and disseminate it among key decision-making actors. Without such distribution, knowledge remains localised at the point of origin.

The case study focused on the September 11th terrorist attacks as the indirect crisis for the NNPR. NT was considered as a credible challenge to the NNPR. Potential regime change was investigated with regard to this challenge and examined both before and after the September 11th attacks.

Summary of the Results

An argument has been presented suggesting that NT is a genuine challenge. NT can be conceived of as a credible challenge to the NNPR, as well as being a challenge outside of the current boundaries of the state-centric regime. Having established the potential for NT, its primary purpose in the context of this thesis is to provide a subject against which potential regime change can be tested.

The case study verified several of the theoretical suppositions made previously; it also revealed a significant factor that is worth further investigation elsewhere, namely, the galvanising effect on established principles and norms. It was found that September 11th did not have a direct impact upon the NNPR. However, the extent and nature of the attack has necessarily brought increasing consternation over the possibility of NT. Even though the challenge of NT is not a new issue, the ramifications of September 11th spurred actors at both

state and organisational level to re-evaluate the challenge. Inter-linking indicators of change: recognition and definition of the problem, perceived threats to interests and agenda-development, were used to as causal processes that could identify concrete changes within the regime.

An initial assumption was that a change of regime would be unlikely as a consequence of an indirect crisis event. The case study revealed this to be true and advanced proof to this effect. All three indicators demonstrated that the principles and norms of the regime, reflections of the interests of member states, would not change as a result of September 11th. This could be partly explained by states preferring to confront the issue of NT within the broader issue of international terrorism or WMD terrorism. Given this approach, NT is situated outside of the current gamut of the responsibilities of the NNPR.

As an avenue for future research, the perception of threat to the interests of member states indicated that the crisis had a buttressing effect on the established principles and norms. This trend was confirmed in the galvanising of specific interests of differing factions of member states in their attempts to develop the agenda. Further investigation into this reinforcing aspect of an indirect crisis should be pursued, as well as further consideration as to whether or not this is sufficient action with regard to NT.

The case study showed that a restricted amount of change within the regime, with regard to rules and procedures among organisational actors could occur. Recognising and defining the problem and in furthering organisational interests displays an ability to adapt and develop in light of new information. This suggested a small degree of autonomy and independence among organisational actors reflecting that the knowledge available to them is not completely bound by national interests, despite member states having the majority say.

However, a critical factor determining the restriction of this knowledge is the lack of consensus surrounding the issue. Conspicuous by its absence, is the lack of an epistemic community willing to promote the issue of NT among regime participants at both the international and national level.

Predictions

This thesis makes three fundamental predictions. Critically, despite implicit concerns about nuclear terrorism already found in existing institutional mechanisms within the NNPR, the challenge of NT will, for the time being, remain in the 'blindspot' of the regime. Predominantly, this is because there is a lack of consensus among actors willing to incorporate the specific threat emanating from non-state actors within the regime's aegis. The predominant focus of the actors within the regime will remain on state-level crises such as the North Korean question and ensuring the security of the former Soviet nuclear archipelago. However, it can be suggested that the belief that nuclear capabilities will remain solely as the domain of nation-states is gradually eroding over time. This prediction is made barring an actual incident of NT. If nuclear or radiological attacks, precipitated by non-state actors, occur, they will have severe repercussions on this principle, undermining the legitimacy and credibility of the NNPR. Thus, currently, events to date including September 11th have not led to a proactive reassessment of the roles and responsibilities of the regime with regard to NT.

A second prediction, linked to the above, is made outlining the preference of individual states to continue tackling the challenge of NT within their own domestic setting, partly as a subset of wider terrorism issues. This places the emphasis on dealing with NT outside the NNPR. If this is the case, the viability of certain premises of the regime is

dependent on individual member states. There will be a continued increase in bilateral cooperation between certain states over the security and accountability of nuclear material. Yet, there will not be an extensive multilateral arrangement focusing specifically on the challenge of NT. This will be the case, even though there is scope to adapt and develop the existing NNPR towards this issue.

From this, it is further predicted that, as a consequence of September 11th, the actors within the regime will focus on strengthening the existing framework already in place. For member states, this will be conducted in accordance with their individual interests. Conflict will undoubtedly arise between groups of states with opposing interests, predominantly over the issues of disarmament and proliferation. September 11th will exacerbate these divisions. For the organisational level of the NNPR the primary focus will be to push for a more extensive CPPNM, however, the success of this initiative will be dependent on the willingness of member states to allow such measures to be implemented. The CPPNM provides the initial discussion point for the prescriptive element presented here.

Prescriptions

What then should be done? With regard to adapting and developing the NNPR in light of the challenge from NT, the most promising avenue of multilateralism is the development of a fully encompassing CPPNM. In part, a comprehensive CPPNM, integrating important rules and procedures determined by the IAEA, would force member states to ensure the integrity and security of nuclear materials and facilities in their domain to be compliant to international safeguard standards set by the NNPR, the depository of which would be the IAEA. Arguably, the venue for this could be the NPT Review in 2005. The issue of NT has been recognised and defined within the NNPR. Furthermore, NT has been placed on the

preliminary agenda for this review conference and will continue to gain importance. The window of opportunity to adopt a more comprehensive CPPNM in light of this challenge should not be missed. Subsequently, the outcomes of the 2005 NPT Review offers scholars a further chance to investigate and measure the potential for regime change. This is because it will be the first formalised gathering of the member states since the September 11th terrorist attacks.

Within the IAEA and other organisational apparatus operating within the NNPR, the development of cells to research and investigate specifically the potential for NT to provide information and recommendations to member states should be developed. Thus establishing proactive base to confront the challenge of NT. This adaptation would be an important measure in evolving the awareness of the issue and would be a first step in placing NT within the responsibilities of the regime. Accordingly, as a way of improving the consensual base of available knowledge, there should be stronger ties forged between the organisations within the regime and organisations in member states. There are links between the communities. The closer that these organisations can work together the greater the chance of developing knowledge that is adaptable to the changing environment. In the long term, this may go some way to enhancing the possibility towards increased consensus over the issue of NT. The issue of 'rapprochement' between organisations at the international and domestic level for the potential evolution of an epistemic community warrants further investigation.

Finally, with regard to the member states, cooperation and agreement over suitable actions are the by-word of what needs to be done. To do this, consensus between actors is a

²⁴⁵ C. Gwin, 2002. "NTI Commits \$5 Million To Help Secure Vulnerable Nuclear Weapons Material." NTI Press Release.

necessity. In response to crisis there will be a lag in establishing what is the acceptable course to take among all parties. In the words of one official, "...people need time to contemplate the issues, they need time to develop multilateral responses. Then they need time to hammer out a political consensus, so that everyone is in agreement. For a global problem like terrorism you can't have partial halfway measures, they are no good, where some states are doing things and other states are not doing anything. You have to have a truly unified global approach, these are very big challenges that take a while to work out."246 This is especially so in the case of the NNPR and NT. Even though September 11th did not directly effect the regime and thereby not bring the challenge of NT under immediate scrutiny, NT does pose a credible challenge to the regime. Growing consensus towards this knowledge, however unlikely in the short term, is the regime's first line of defence against the challenge.

²⁴⁶ Personal correspondence: Mr. R. Rydell, UNDDA, June 2002

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Personal Communications

- Mr. J. C. Brunet, French Delegation to the UN. New York: June 2002
- Mr. V. Mantels, Political Affairs Officer, WMD Branch, UNDDA. New York: June 2002
- Ms. S. Nurro, WMD Branch, UNDDA. New York: June 2002
- Mr. R. Rydell, Senior Analyst UNDDA. New York: June 2002
- Mr. G. Zlauvinen, Representative of the IAEA to the UN, June 2002

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Appendix 1

Abbreviations

CCPNM Convention on the Physical Protection of Nuclear Materials

CTBT Comprehensive Test Ban Treaty

IAEA International Atomic Energy Agency

INFCE International Nuclear Fuel Cycle Evaluation

INFCIRC Information Circular

IO International Organisation

MPC&A Materials Protection, Control and Accountability Programme

MPI Middle Powers Initiative

NAC New Agenda Coalition

NNPR Nuclear Nonproliferation Regime

NPT Nuclear Proliferation Treaty

NSG Nuclear Suppliers Group

NT Non-state Nuclear Terrorism

NNWS Non-nuclear Weapon States

NWS Nuclear Weapon States

UNDDA United Nations Department for Disarmament Affairs

UNSC United Nations Security Council

WMD Weapons of Mass Destruction

Appendix 2

Certificates of Ethical Acceptability of Research Involving Humans

[#] McGill

Montreal, QC H3A 2T5

Research Ethics Board Office
McGill University
345 Sherbrooke Street West
James Administration Bldg., rm 429

Tel: (514) 398-6831 Fax: (514) 398-4853

Ethics website: www.mcgill.ca/rgo/reshum.html

Research Ethics Board I Certificate of Ethical Acceptability of Research Involving Humans

Project Title: Regime Change: The Nuclear Nonproliferation Regime and the Threat of Nuclear Terrorism	
Applicant's Name: J.P. Thompson	Department: Political Science
Undergraduate Student () Master's Student (x)	Ph.D. student ()
Supervisor's Name: Dr. T.V. Paul	
This project was reviewed on	by
1) Department Review: For research projects graduate students as part of their course work – course n	that are carried out by undergraduate or
(Signature of departmental designate/ date)	
2) Expedited Review 3)	Full Review
3/06/02 Signature/Date	
John Galaty; Ph.D. Chair, REB I	

Approval Period: \(\) \

I, the undersigned, <u>J. Claude Bruind</u>, am aware that this interview with Jean-Philippe Thompson, student at McGill University, is for the sole purpose of his Master's thesis. I have no objections to my professional perspective being used as a source of research in this manner. I will inform the interviewer if I prefer to remain anonymous and/or if I do not wish to have the interview recorded.

I prefer to remain anonymous

yes/ no

I object to having the interview recorded

yes/ no

Other comments:

Signature

In brief, this is a Master's thesis that is focused upon two issues. Primarily, the thesis seeks to investigate the impact of crisis on an international regime. From this, the thesis is seeking to study questions pertaining to the possibility of regime change.

I, the undersigned, V. HANTELS, am aware that this interview with Jean-Philippe Thompson, student at McGill University, is for the sole purpose of his Master's thesis. I have no objections to my professional perspective being used as a source of research in this manner. I will inform the interviewer if I prefer to remain anonymous and/or if I do not wish to have the interview recorded.

I prefer to remain anonymous

I object to having the interview recorded

yes/ no

Other comments:

Signature

Contact Information: JP Thompson

5241 rue St. Denis

Montreal H2J 2M1

Tel: 1514 272 5474

Email: jthomp10@sympatico.ca

In brief, this is a Master's thesis that is focused upon two issues. Primarily, the thesis seeks to investigate the impact of crisis on an international regime. From this, the thesis is seeking to study questions pertaining to the possibility of regime change.

I, the undersigned, TAZI WORRO, am aware that this interview with Jean-Philippe Thompson, student at McGill University, is for the sole purpose of his Master's thesis. I have no objections to my professional perspective being used as a source of research in this manner. I will inform the interviewer if I prefer to remain anonymous and/or if I do not wish to have the interview recorded.

I prefer to remain anonymous

yes(no)

I object to having the interview recorded

yes (no

Other comments:

Contact Information: JP Thompson

5241 rue St. Denis

Montreal H2J 2M1

Tel: 1514 272 5474

Email: jthomp10@sympatico.ca

I, the undersigned, <u>PANDY VIACH</u>, am aware that this interview with Jean-Philippe Thompson, student at McGill University, is for the sole purpose of his Master's thesis. I have no objections to my professional perspective being used as a source of research in this manner. I will inform the interviewer if I prefer to remain anonymous and/or if I do not wish to have the interview recorded.

I prefer to remain anonymous

yes/ no

I object to having the interview recorded

yeś/ no

Other comments:

Signature

In brief, this is a Master's thesis that is focused upon two issues. Primarily, the thesis seeks to investigate the impact of crisis on an international regime. From this, the thesis is seeking to study questions pertaining to the possibility of regime change.

I, the undersigned, <u>EUSTAVE</u> ZLAUVINEN, am aware that this interview with Jean-Philippe Thompson, student at McGill University, is for the sole purpose of his Master's thesis. I have no objections to my professional perspective being used as a source of research in this manner. I will inform the interviewer if I prefer to remain anonymous and/or if I do not wish to have the interview recorded.

I prefer to remain anonymous

yes (no)

I object to having the interview recorded

yes (no)

Other comments: $M \geq$

Signature

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