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UK Emergency Preparedness - Prepared for What?

A paper prepared for the Belfast Solicitors Association Continuing Professional Development Programme, 19th October 2007

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Abstract

We live in a world of increasing risk. Social and global processes continually construct new kinds of risk. Managing risk is an increasingly important function of government and in the UK has risen up the political agenda in recent years. There is evidence that the recent reform of the UK system of civil protection has been strongly influenced by the terrorist threat. Similar patterns can be seen in Europe and North America. The broader agenda of societal resilience and preparedness has been overshadowed by a security agenda. There is a danger that too great a focus on one form of threat can divert attention from the broader range of threats that we face in the future. This paper posits that preparedness should not be confined to institutional capacity but should include the wider public. There is a danger that neglecting the public will only serve to widen the gulf between state and citizen and weaken resilience.

Keywords

Resilience, societal preparedness, disasters, risk, terrorism, globalisation, civil liberties

Introduction

Profound change during the 20th century shaped the risk landscape and societal attitudes to risk. Beck argues that the Industrial Revolution, the first modernity, saw radical changes in everyday life. Loyalty to traditional social structures, particularly family and gender and the church were gradually replaced by the state, with the state becoming an increasingly important actor in mitigating increasing technological risk.¹ Polanyi posits that the rise of the state and the destruction of the social orders that had existed prior to the Industrial Revolution were necessary part of the development of modern market economies. The powerful modern state was needed to push changes in social structure that allowed for a competitive capitalist economy, and that a capitalist economy required a strong state to mitigate its harsher effects.² The post-Second World War was a period of social reconstruction and the creation of political institutions pledged to secure European unity. The signing of the Charter of the United Nations on 26 June 1948, the Universal Declaration of Human Rights on 10 December 1948 and The Declaration of the Rights of the Child on 20 November 1959, are significant milestones in the expression and pursuit of universal human rights.³ The creation in Britain of the welfare state through the Beveridge Plan of 1942 and the implementation of Keynesian economic policies of full employment and high levels of public expenditure helped to create a social democratic welfare state and a consensus that reinforced the loyalty of its citizens. Civil protection was expressed in two ways. The 1948 Civil Defence Act formed the basis for civil protection in the event of a nuclear attack and was articulated through Protect and Survive. The growing amount of regulatory control designed to make work and everyday life safer. The state derived its legitimacy in this area from its declared mastery of danger and ability to manage disruptive situations epitomised by Macmillan's assertion in 1957 that Britons "have never had it so good."⁴

Changing Perceptions of Risk

This consensus remained in place from the late 1940s until the onset of The New Right in the late 1970s and attempts at the deconstruction of the welfare state.^{5 6} Further social change during the latter half of the 20th century, for example women entering the workplace, the shift from full-time to part-time employment, the erosion of lifetime job security in both blue-collar and white-collar occupations and changing family and social structures, began to modernize the foundations of the first modernity. Individualism deepened its hold. A more educated and mobile information society placed less value on the institutions and structures than earlier generations and increasingly questioned their legitimacy and relevance. Beck terms this reflexive modernity where meaning and identity are grounded in self.

The corollary to this was a shift in perception of risk. Beck terms this the Risk Society. As Beck asserts, "The driving force in the class society can be summarized in the phrase: I am *hungry!* The collective disposition of the risk society, on the other hand, is expressed in the statement: I *am afraid!*"⁷ Rapid socio-economic and technological change in North American and European societies had altered the risk landscape and societal responses. Risk Society is characterised by an increasingly questioning and sceptical public that, whilst accepting societal and technological change, are increasingly fearful of its consequences. For example the BSE (bovine spongiform encephalopathy) epidemic in the UK undermined trust in government.

With increasing access to information through the internet, people are increasingly likely to challenge officialdom, for example the “Dodgy Dossier” that provided the evidence for justification of the invasion of Iraq, was shown to be plagiarised from a number of unattributed sources.⁸ Today the questioning of “expert witnesses” is common practice in the courtroom as is the use of the internet to diagnose symptoms prior to a visit to a medical practitioner. Access to official documents serves to confirm public suspicion that governments cover up information for political purposes, for example the recent revelation that the government suppressed the findings of the enquiry into the Windscale accident.⁹

Risk is defined as the interaction people with hazard, some natural in origin, for example floods and others socially constructed, for example technology. Protecting the public from events that could harm well-being is embedded within governance structures. In many instances this approach to protecting the public has been effective. But with risk becoming increasingly globalised, national governments are experiencing considerable difficulties in formulating effective responses. In Europe and North America the terrorist threat seems to have transfixed governments. As opposed to a broader agenda of societal preparedness the effort is increasingly on security. This only serves to deepen the social divide between those that make the rules and those to whom the rules apply. To great a focus on a single source of threat weakens societal preparedness.

The Changing Response to Disastrous Events

Civil protection as we understand it today has its origins post World War Two. The bi-polar era post World War Two defined the characteristics of national approaches to civil protection in both Europe and North America. It was predicated on preparing for a nuclear attack, in essence civil defence. As the bi-polar era drew to a close, the emphasis on civil defence had begun to shift to civil protection.^{10 11 12} The 1986 Civil Defence in Peacetime Act reformed the existing civil defence framework but retained the emphasis on local response with government departments responsible for coordinating intervention for larger events. Events such as Kings Cross, 1987, Zeebrugge, 1987, Clapham rail crash, 1988 and Hillsborough, 1989 kept civil protection on the political agenda, but successive reviews found the existing arrangements to be adequate. Two events, the BSE epidemic and Y2K or Millennium Bug, revealed the lack of public trust and the inadequacy of the existing framework. Despite re-assurances from the government that BSE was not harmful to humans, the media was able to demonstrate that the government had not been honest. A number of scientists believed that consumption of infected beef products could be harmful. This was later shown to be the case when the link between BSE and CJD (Cruetzfeldt-Jacob Disease) was exposed in the press. The government of the day was seen to have misled the public. The BSE epidemic exposed the cleavage between government and society in terms of trust in managing disruptive events and can be characterised by the phrase “do not believe it until it has been officially denied.”¹³ The Y2K or Millennium Bug event exposed the lack of legislative capacity to control with the government having to exhort organisations to ensure that their systems were compliant.¹⁴ The floods and Fuel Blockade of 2000 propelled the UK government into action and a review of civil protection measures was commenced in early 2001. It was during this review that the terrorist attacks in the USA took place. The impact of

theses attacks on the reform process can be characterised by an increasing emphasis on institutional resilience and capacity.

Civil protection is predicated on an all-hazards or comprehensive approach that incorporates response, recovery, mitigation and preparedness.¹⁵ The all-hazards approach aims to reduce risk from to civil, natural, technological, biological and instrumental disruptions. Acceptable levels of risk are embedded in norms and standards and are part of the governance structure that regulates societal activities. General acceptance by the public of the regulatory framework governing risk management is a necessary component of effective civil protection along with an emergency management function that meets societal expectations. This approach can be characterised as legally based, professionally staffed, well funded and organised. Training and exercising is aimed at improving the response function of emergency management professionals, evaluating communications systems, standardising procedures, testing and evaluating equipment and investigating stress on the responders. Alerting the public to potentially hazardous events is done through a variety of warning and informing systems.^{16 17 18 19 20 21 22}

Public preparedness and education is crucial aspect of civil protection.²³ Unlike Hollywood portrayals people do not act irrationally in disastrous situations.²⁴ Though the focus is on the emergency response functions such as the “Blue Light” services, the first responders in a disaster are those at the scene. For example in 2005 bombings it took some time before the nature of the events was realised and the emergency services were able to respond. In that period the survivors of the attack were the first responders. This highlights the need to ensure the public as an integral part of preparedness, an area that has been neglected in the UK reform process.²⁵

The reforms to UK emergency management were needed and welcome. They have, for example, by replacing discretion with a duty to prepare plans, introducing standardised procedures for risk assessment and procedures for continuity of function ensured an integrated approach. However the reforms feature the hierarchical top-down structure that typify a command and control approach. Its focus is on institutional resilience and organisational preparedness. The contextual changes to civil protection can be characterised as having moved from the militaristic Command and Control approach of the bi-polar era to a more participatory and collaborative system and back to the militaristic style post September 11 2001.²⁶ In Europe, and particularly the UK, the terrorist attack of September 11 2001 has reinforced an institutional and security focus. Though more resources were dedicated to the emergency function in the UK, the majority of this was directed towards the security services and providing equipment for the emergency services for responding to CBRN (Chemical, Biological, Radiological and Nuclear) events. This has been further strengthened in reaction to the London and Madrid bomb attacks.²⁷ Terrorism, like many hazards is unlikely to disappear in the foreseeable future, with the UK Security Minister claiming that the fight against radicalism in the UK could last for a further 15 years.²⁸ The UK is no stranger to terrorist attacks and in response to Republican terrorism had introduced a number of physical measures. These were drawn from experience in Belfast in the “beat the bombers” campaign with the adoption of territorial approaches and even suggestions of making the financial district a walled city. The outcome was the implementation of a Belfast style ring of steel around the financial district. In 1997 CCTV (Closed Circuit Television) systems

equipped with ANPR (Advanced Number Plate Recognition Technology) technology were introduced around the financial district and the Docklands peninsula. ANPR is now used to monitor the London congestion charge and is being rolled out across the UK. Following the September 11th attack further physical measures were introduced around potential target buildings, for example, concrete blockers around the US embassy and in 2003 a ring of concrete around the Houses of Parliament.²⁹

The September 11th 2001 attack initiated a debate over the nature of cities and particularly whether or not iconic buildings would become terrorist targets or even if they had future. Related to this are other debates that have focused on the nature of city life:

“The terrorist attack on the World Trade Center is propelling a civic debate over whether to change the way Americans experience and ultimately build upon urban public spaces. Are a city’s assets – density, concentration, monumental structures – still alluring?”³⁰

Though some target hardening has occurred in the UK post September 11th the approach is more focused on “softer” measures such as CCTV and more recently security measures such as biometric passports. In reality the UK has become a surveillance society. The UK has a DNA database with some 4 million records, there are 6 million fingerprint records, mobile phone records are routinely stored and lifestyles tracked through credit and loyalty cards. Though there are concerns that this level of intrusion may have on individual privacy and freedom, a Panorama survey conducted in October 2007, found that 66 percent of the British public would be in favour of a law requiring all adults to give a DNA sample for crime prevention purposes. A surveillance society implies a lack of trust and fosters suspicion with employers installing keystroke monitors and parents tracking children through webcams and GPS. A report by the Surveillance Studies Network for the Information Commissioner points out that social relationships are built on trust. Excessive surveillance undermines this and can be viewed as a slow form of social suicide.³¹ In addition there are a series of issues such as accountability, transparency and privacy with regard to databases containing personal information and a range of social and ethical questions that we have not as yet fully engaged with.

Conceptualising the Changes

Though the reform of UK civil protection was needed, the lack of focus on public preparedness is a concern. The focus on security has done little to bridge the gap between the public and government. The direction of reform appears to be building a security state as opposed to a social security state, where surveillance is an everyday routine necessary to preserve our way of life.³² The UK reforms have been bannered as UK Resilience, which is defined as:

“The ability at every level to detect, prevent, prepare for and if necessary handle and recover from disruptive challenges.”³³

Though the term resilience is increasingly used in the disaster community to describe the characteristics of response to disruptive events, the practice in the UK and USA is very different from that in Japan and Australia. In those countries the focus is on

societal preparedness whereas in the UK and USA it focus is on institutional preparedness. In the USA post September 11th 2001 the emphasis and responsibility for disaster management shifted as FEMA (Federal Emergency Management Agency), established in 1979 to bring together a number of agencies responsible for civil protection, merged with the newly formed Department of Homeland Security (DHS). The focus of the new department on security and changes in budget priorities weakened the effectiveness of FEMA's all-hazards programmes.^{34 35} The inadequate response and performance of the FEMA and DHS bureaucracy during and after hurricane Katrina illustrates the problems caused by the new structures.³⁶ An intelligence capability similar to that in the UK has been developed in the USA. Resilience is increasingly being expressed as securitization. Government rhetoric such as "War on Terror" has militarized the discourse on terrorism. Sir Ken Macdonald QC, the Director of Public Prosecutions in remarks made to members of the Criminal Bar Association on 23 January 2007, demonstrate how widespread concerns are:-

"London is not a battlefield. Those innocents who were murdered on July 7, 2005 were not victims of war. And the men who killed them were not, as in their vanity they claimed on their ludicrous videos, 'soldiers'... We need to be very clear about this. On the streets of London, there is no such thing as a 'war on terror'." ³⁷

By invoking the imagery of war and using unreliable information as the basis for the invasion of another country deflects attention from what is really needed. Stephen Flynn argues this very convincingly when he points that domestic negligence is increasing the vulnerability of the USA not only to terrorism but a range of other potential disasters. The recent collapse of the I-35W road bridge is an example. In 2005 this bridge was one of thousands across the USA rated as "structurally deficient" on the federal National Bridge Inventory database. Other areas include preparedness for an avian flu, neglect of flood defences on many waterways and the lack of investment in electrical infrastructure that is increasingly stressed during periods of high demand. But public spending priorities have been directed to security.³⁸ In Europe there are similar problems. Europe will become increasingly dependent on imported energy supplies, many of these from politically unstable areas. Not only is access to these supplies vulnerable, the infrastructure to transport, store and process these supplies is vulnerable to both natural and instrumental hazards. The response to this looming problem is to advocate a marketisation agenda that is likely to appeal to neoliberal sentiments rather than reduce vulnerability to disruptions. It is interesting to note that the EU which has acted to ensure peace and security in Europe by a process of mutual self-interest is now beginning to act in ways in the energy arena that jeopardise its founding principles.

In terms of addressing the broader agenda of societal preparedness it is vital that the partnership between government and the public is renewed.³⁹ Threats such as climate change an variability will need broad societal commitment and as Stern points out considerable investment both to tackle mitigation and adaptation.⁴⁰ We already have experienced the threat that a changing climate can bring, for example, the European heat wave of 2003 that resulted in 35 000 deaths, hurricane Katrina in 2005 that resulted in 1800 deaths and an estimated \$80 billion of damages and the unprecedented floods in the UK of 2007 that fortunately claimed few lives but has left a bill of some £3 billion.

Renewing the partnership between government and the public requires good governance that exhibits characteristics as participation, transparency, equity, efficiency and accountability. Risk management similarly requires good governance to be effective, essentially confidence in the rule makers by those to whom the rules apply. Public trust in government to manage risk still remains low, for example, research in the USA into public views of the ability of government to handle disasters, reveals low levels of confidence in the ability of government to protect communities from terrorist attacks.⁴¹ With respect to climate risks recent research of public views into their perception of the ability of government to effectively tackle climate change remains low in Europe and the USA. In the UK the public has more confidence in environmental organisations and the academic community to tell the truth about climate change. The research also finds that in Europe national governments are not necessarily considered reliable and credible in diffusing information or taking decisions about climate change.⁴² Resilient responses to the many threats we face means that public preparedness is essential. To a large extent this will require on leadership at the community level and well as an enabling environment that recognises the importance of the citizen. This will be a difficult challenge.

Concluding Comments

Terrorism is one of many threats that societies in the develop world face. Both institutional and social capacity is needed for effective responses. The UK response to terrorism has been to reinforce institutional capacity, develop an approach to surveillance that risks undermining social cohesion and declaring a War on Terror as a means of justifying military interventions. However there is increasing scepticism over the effectiveness of the UK approach and counter arguments that focus on preparedness and resilient communities are more effective in defending ways of life.⁴³ Others argue that an effective political response to the terrorist threat should be sought in law with a global alliance against terrorism based on the law.⁴⁴ Developing such an approach with the international community will be difficult, for example, in agreeing a definition for terrorism, but the United Nations has made progress with the publication of its Global Counter-Terrorism Strategy.^{45 46} But the goal of trying to establish an international convention and legal system that provides the space for the exercise of law in crimes against humanity is a far more appealing approach than the current position where trust and social cohesion risks being undermined in the name of security. We live in an era where society faces global risks, none more challenging than climate change, described by the UK Chief Scientist, Sir David King, as a greater threat than terrorism. No single nation can deal with this threat. The international community has laboured hard to craft an agreement based on law that can unite the world around this common problem. The Kyoto Protocol is arguably a weak solution to the problem of climate change. However what it does shows is that an international approach to problems is possible. And now that the globalising genie is out of the bottle we will need to find international vehicles for agreeing actions and judging their implementation and effectiveness if we are to solve problems such as climate change and terrorism. In Europe we have made progress in realising environmental improvements through the use of the directive. Where there is an enabling top-down environment, the pace of improvements and the level of local involvement is impressive. The UK approach has much to learn. The first step would be to democratise civil protection at ward, council and regional levels. The second would be to foster an environment where each of us is not regarded as a potential threat. The

third would be to start re-building trust between government and the public. But this must be a two way process. Not only do we need to build trust with politicians and political processes, politicians also need to learn to trust us. Mutual trust is the first step towards a safer society.

References

- ¹ Ulrich Beck, *Risk Society: Towards a New Modernity* (London: Sage, 1992); Ulrich Beck, *Ecological Politics in an Age of Risk* (Cambridge: Polity Press, 1995).
- ² Karl Polanyi, *Karl 1944, The Great Transformation: The Political and Economic Origins of Our Time*.
- ³ Rees, S. W., S. (Ed.), 2000, *Human Rights, Corporate Responsibility-A Dialogue*. NSW: Pluto Press.
- ⁴ BBC News, 1957: Britons 'have never had it so good' On This Day. Available at: http://news.bbc.co.uk/onthisday/hi/dates/stories/july/20/newsid_3728000/3728225.stm
- ⁵ Tomlinson, J., 1996, *Citizenship and Sovereignty*. *Australian Journal of Social Issues*, 31(1), 3-17.
- ⁶ Culpitt, I., 1992, *Welfare & Citizenship*. London: Sage.
- ⁷ Ulrich Beck, *Risk Society: Towards a New Modernity* (London: Sage, 1992), P44
- ⁸ Rangwala, G., 2003, *Intelligence? the British dossier on Iraq's security infrastructure*. Available at: <http://www.casi.org.uk/discuss/2003/msg00457.html>
- ⁹ Paul Dwyer, *Windscale: A nuclear disaster*, BBC News online. 5th October 2007. Available at: <http://news.bbc.co.uk/1/hi/sci/tech/7030281.stm>
- ¹⁰ O'Brien, G., Read, P., 2005, *Future UK emergency management: new wine, old skin?* *Disaster Prevention and Management*, Vol. 14 No. 3, pp. 353-361, Emerald Group Publishing Limited
- ¹¹ FEMA, 2006, *FEMA History*. Available at:- <http://www.fema.gov/about/history.shtm>
- ¹² Alexander, D., 2002, *From civil defence to civil protection – and back again*, *Disaster Prevention and Management*, Volume 11. Number 3. pp. 209±213. Emerald
- ¹³ Bruna De Marchi and Jerome R. Ravetz, *Risk management and governance: a post-normal science approach*, *Futures* 31 (1999) 743–757. Pergamon
- ¹⁴ O'Brien and Read, 2005
- ¹⁵ McEntire, D. A., Fuller, C., Johnston, C., W., Weber, R., 2003, *A Comparison of Disaster Paradigms: The Search for a Holistic Policy Guide*, *Public Administration Review* May/June 2002, Vol. 62 No. 3, pp 267-281. Blackwell.
- ¹⁶ Perry, R., W., Peterson D., M., 1999, *The impacts of disaster exercises on participants*, *Disaster Prevention and Management* Volume 8, Number 4, pp. 241±254. Emerald
- ¹⁷ Alexander, D., 2000, *Scenario methodology for teaching principles of emergency management*, *Disaster Prevention and Management* Volume 9, Number 2, 2000, pp. 89±97. Emerald
- ¹⁸ Alexander, D., 2003, *Towards the development of standards in emergency management training and education*, *Disaster Prevention and Management* Volume 12 . Number 2 . 2003 . pp. 113-123. Emerald
- ¹⁹ Schaafstal A., M., Johnston, J. H., Oser R., L., 2001, *Training teams for emergency management* *Computers in Human Behavior* 17 (2001)615–626. Pergamon
- ²⁰ Paton, D., Jackson, D., 2002, *Developing disaster management capability: an assessment centre approach*, *Disaster Prevention and Management* Volume 11 . Number 2 . 2002 . pp. 115±122. Emerald
- ²¹ Cassidy, T., 2002, *Problem-solving style, achievement motivation, psychological distress*

and response to a simulated emergency, *Counselling Psychology Quarterly*, 2002, Vol.15, No.4, pp.325–332. Taylor and Francis

²² Perry, R., W., Lindell, M., K., 2003, Preparedness for Emergency Response: Guidelines for the Emergency Planning Process, *Disasters*, 2003, 27(4): 336–350

²³ McEntire, D. A., Myers, A., 2004, Preparing communities for disasters: issues and processes for government readiness, *Disaster Prevention and Management Volume 13 · Number 2 · 2004* · pp. 140–152. Emerald

²⁴ Enrico L Quarantelli, “Disaster Planning, Emergency Management and Civil Protection: The Historical Development of Organized Efforts to Plan For and to Respond to Disasters,” (Disaster Research Center [DRC] preliminary paper 227, University of Delaware: 1995), <http://www.udel.edu/DRC/preliminary/pp301.pdf>; “Organizational Behavior in Disasters and Implications for Disaster Planning,” *Federal Emergency Management Agency: National Emergency Training Center 1*, no. 2 (1984): 1-31.

²⁵ O’Brien and Read, 2005

²⁶ Alexander, 2002

²⁷ O’Brien, G., (2006), UK Emergency Preparedness – A step in the right direction? *Journal of International Affairs*, Spring/Summer 2006, vol. 59, no. 2. pp 63 -85 © The Trustees of Columbia University in the City of New York, USA.

²⁸ BBC News Online, 2007, Terror fight “may take 15 years”, 8th July 2007. Available at: <http://news.bbc.co.uk/1/hi/uk/6281388.stm>

²⁹ Coaffee, 2004, “Rings of Steel, Rings of Concrete and Rings of Confidence: Designing out Terrorism in Central London Pre and Post September 11th,” *International Journal of Urban and Regional Research* 28, no. 1 (2004), 201-211.

³⁰ Anthony Vidler, “The City Transformed: Designing Defensible Space,” *New York Times*, 23rd September 2001

³¹ Surveillance Studies Network, 2006, A Report on the Surveillance Society for the Information Commissioner. Available at: http://www.ico.gov.uk/upload/documents/library/data_protection/practical_application/surveillance_society_full_report_2006.pdf

³² Dee M, 2002, The New Citizenship of the Risk and Surveillance Society – From a Citizenship of Hope to a Citizenship of Fear? Paper presented to the Social Change in the 21st Century Conference Centre for Social Change Research Queensland University of Technology 22 November 2002

³³ Great Britain. Cabinet Office Civil Contingencies Secretariat, 2004, p. 1

³⁴ Berginnis C., 2005, House Reorganization of Authorizing Committees involving FEMA programs, Letter to the Honorable Dennis Hastert, Speaker of the House of Representatives, 6 January 2005. Available at: http://www.floods.org/PDF/ASFPM_Letter_FEMAinDHS_House_Jan05.pdf

³⁵ Elliston J., 2004, Disaster in the making, *The Independent Weekly*, September 22, 2004: <http://www.indyweek.com/gyrobase/Content?oid=oid%3A22664>

³⁶ Dynes R. Rodriguez H., 2006, Finding and Framing Katrina: The Social Construction of Disaster. Published on: Jun 11, 2006: *Understanding Katrina: Perspectives from the Social Sciences*. Available at: http://understandingkatrina.ssrc.org/Dynes_Rodriguez/

³⁷ Cited in Shami Chakrabarti and Gareth Crossman, 2007, The First Victim of War... Compromising Civil Liberties, published in ‘Britain and Security’, The Smith Institute.

³⁸ Stephen Flynn, 2007, *The Edge of Disaster: Rebuilding a Resilient Nation*, Random House, New York, USA. ISBN 978-1-4000-6551-6.

³⁹ Bermann, D., A., Redlener, I., 2006, National Preparedness Planning: the historical context and current state of the US public's readiness, *Journal of International Affairs*, Spring/Summer 2006, vol. 59, no. 2. pp 87 - 103 © The Trustees of Columbia University in the City of New York, USA.

⁴⁰ Stern Review, 2007, *Stern Review: The Economics of Climate Change*, HM Treasury. Available at: http://www.hm-treasury.gov.uk/independent_reviews/stern_review_economics_climate_change/stern_review_report.cfm

⁴¹ Berman and Redlener, 2006

⁴² Lorenzoni, I. and Pidgeon, N.F (2006) Public views on climate change: European and USA perspectives. *Climatic Change*, 77, 73-95.

⁴³ Coaffee J., 2006, *From Counterterrorism to Resilience, The European Legacy*, Vol 11 No. 4 pp389-403. Routledge

⁴⁴ Ulrich Beck, 2002, *The Silence of Words and Political Dynamics in the World Risk Society*, Logos 1.4

⁴⁵ Ben Saul, 2006, *Defining Terrorism in International Law*. ISBN13: 9780199295975. ISBN10: 0199295972

⁴⁶ United Nations, 2006, *Global Counter-Terrorism Strategy*. Available at: <http://www.un.org/terrorism/strategy-counter-terrorism.html>